# Annual Management Report for Shellfish Fisheries in the Bering Sea-Aleutian Islands Management Area, 2015/16

by

Justin M. Leon

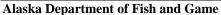
Janis Shaishnikoff

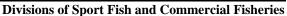
**Ethan Nichols** 

and

Miranda Westphal

February 2017







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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative		all standard mathematical	
deciliter	dL	Code	AAC	signs, symbols and	
gram	g	all commonly accepted		abbreviations	
hectare	ha	abbreviations	e.g., Mr., Mrs.,	alternate hypothesis	$H_A$
kilogram	kg		AM, PM, etc.	base of natural logarithm	e
kilometer	km	all commonly accepted		catch per unit effort	CPUE
liter	L	professional titles	e.g., Dr., Ph.D.,	coefficient of variation	CV
meter	m		R.N., etc.	common test statistics	$(F, t, \chi^2, etc)$
milliliter	mL	at	@	confidence interval	CI
millimeter	mm	compass directions:		correlation coefficient	
		east	E	(multiple)	R
Weights and measures (English)		north	N	correlation coefficient	
cubic feet per second	ft <sup>3</sup> /s	south	S	(simple)	r
foot	ft	west	W	covariance	cov
gallon	gal	copyright	©	degree (angular )	0
inch	in	corporate suffixes:		degrees of freedom	df
mile	mi	Company	Co.	expected value	E
nautical mile	nmi	Corporation	Corp.	greater than	>
ounce	OZ	Incorporated	Inc.	greater than or equal to	≥
pound	lb	Limited	Ltd.	harvest per unit effort	HPUE
quart	qt	District of Columbia	D.C.	less than	<
yard	yd	et alii (and others)	et al.	less than or equal to	≤
		et cetera (and so forth)	etc.	logarithm (natural)	ln
Time and temperature		exempli gratia		logarithm (base 10)	log
day	d	(for example)	e.g.	logarithm (specify base)	log <sub>2,</sub> etc.
degrees Celsius	°C	Federal Information		minute (angular)	'
degrees Fahrenheit	°F	Code	FIC	not significant	NS
degrees kelvin	K	id est (that is)	i.e.	null hypothesis	$H_{O}$
hour	h	latitude or longitude	lat or long	percent	%
minute	min	monetary symbols		probability	P
second	S	(U.S.)	\$, ¢	probability of a type I error	
		months (tables and		(rejection of the null	
Physics and chemistry		figures): first three		hypothesis when true)	α
all atomic symbols		letters	Jan,,Dec	probability of a type II error	
alternating current	AC	registered trademark	®	(acceptance of the null	
ampere	A	trademark	ТМ	hypothesis when false)	β
calorie	cal	United States		second (angular)	"
direct current	DC	(adjective)	U.S.	standard deviation	SD
hertz	Hz	United States of		standard error	SE
horsepower	hp	America (noun)	USA	variance	
hydrogen ion activity (negative log of)	pН	U.S.C.	United States Code	population sample	Var var
parts per million	ppm	U.S. state	use two-letter		
parts per thousand	ppt, ‰		abbreviations (e.g., AK, WA)		
volts	V				
VOILS	•				

## FISHERY MANAGEMENT REPORT NO. 17-10

# ANNUAL MANAGEMENT REPORT FOR SHELLFISH FISHERIES OF THE BERING SEA-ALEUTIAN ISLANDS MANAGEMENT AREA, 2015/16

by

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

February 2017

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## **ABSTRACT**

The Alaska Department of Fish and Game (ADF&G) manages commercial and subsistence shellfish fisheries in the territorial waters and Exclusive Economic Zone (EEZ) of the Bering Sea and Aleutian Islands in the northern Pacific Ocean. This report presents details on commercial and subsistence shellfish fisheries harvest, participation, and value in the Bering Sea and Aleutian Islands (BSAI) areas, excluding king crab fisheries north of Cape Romanzof (61°49′N lat). In 2015/16, 3 species of king crab, snow crab, Tanner crab, Dungeness crab, and giant Pacific octopus were taken in BSAI fisheries. Historical and current fishery management practices, a summary of the most recent commercial fishery, and general stock status information are presented.

Key words:

Red king crab *Paralithodes camtschaticus*, golden king crab *Lithodes aequispinus*, scarlet king crab *Lithodes couesi*, snow crab *Chionoecetes opilio*, Tanner crab *C. bairdi*, Dungeness crab *Metacarcinus magister*, giant Pacific octopus *Octopus dofleini*, blue king crab *P. platypus*, grooved Tanner crab *C. tanneri*, triangle Tanner crab *C. angulatus*, green sea urchins *Strongylocentrotus droebachiensis*, pandalid shrimp, hair crab *Erimacrus isenbeckii*, sea snails, Community Development Quota, Crab Rationalization, Individual Fishing Quota, catch per unit effort, Exclusive Economic Zone, subsistence, guideline harvest level, Board of Fisheries, Fishery Management Plan, National Marine Fisheries Service, Bering Sea, Aleutian Islands, North Peninsula, observer deployment, catcherprocessor, catcher vessel, floating processor, bycatch, National Oceanic and Atmospheric Administration, legal tallies, confidential interviews, United States Coast Guard, retained catch, species composition sample, size frequencies

### INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) manages all commercial and subsistence shellfish fisheries occurring in the territorial waters and Exclusive Economic Zone (EEZ) of the Bering Sea and Aleutian Islands. The Aleutian Islands comprise waters west of Scotch Cap Light (164°44.72′W long), east of the Maritime Boundary Agreement Line of 1990, south of Cape Sarichef (58°36′N lat), to 171°W long westward, and north to 55°30′N lat. The Bering Sea (including Bristol Bay) comprises waters north of Cape Sarichef (54°36′N lat) and west of the Maritime Boundary Agreement Line of 1990, excluding Norton Sound Section. King crab in the Bering Sea north of Cape Romanzof, including Norton Sound, are managed by ADF&G's Nome office and are not included in this report. Waters of the Bering Sea and Aleutian Islands (BSAI) support the largest and most valuable commercial crab fisheries in Alaska.

The BSAI is divided into registration areas for king crab management, and into districts for Tanner crab, Dungeness crab, and miscellaneous shellfish management. Major BSAI king and Tanner crab fisheries are managed under a federal fisheries management plan (FMP) that establishes a cooperative management structure deferring king and Tanner crab management to the State of Alaska with federal oversight. Other crab and miscellaneous shellfish fisheries are managed solely under state jurisdiction. Beginning with the 2005/06 season, major BSAI crab fisheries are managed under the federal crab rationalization (CR) program. The CR program has resulted in consolidation of harvesting and processing sectors and substantially changed fishing practices.

Species commercially harvested during the 2015/16 season in the BSAI include red king crab *Paralithodes camtschaticus*, golden king crab *Lithodes aequispinus*, blue king crab *P. platypus*, snow crab *Chionoecetes opilio*, Tanner crab *C. bairdi*, Dungeness crab *Metacarcinus magister*, and giant Pacific octopus *Octopus dofleini*. Historically, waters of the BSAI have supported commercial harvests of grooved Tanner crab *C. tanneri*, triangle Tanner crab *C. angulatus*, green sea urchins *Strongylocentrotus droebachiensis*, pandalid shrimp, hair crab *Erimacrus isenbeckii*, and sea snails of several species; however, fisheries for these species are currently either closed

due to low abundance or not commercially pursued. A fishery for weathervane scallop *Patinopectin caurinus* occurs in the BSAI and is summarized in a separate report.

In 2015/16, 78 catcher vessels, 2 catcher-processors, and 9 shorebased processors were involved in harvesting and processing shellfish resources in the BSAI. Shellfish landings totaled approximately 80.7 million pounds.

In order by volume, the Bering Sea snow crab fishery was the largest shellfish fishery during 2015/16, with a harvest of 40.6 million pounds, followed by the eastern Bering Sea Tanner fishery with a harvest of 11.3 million pounds, Bristol Bay red king crab fishery with a harvest of 9.97 million pounds, western Bering Sea Tanner with a harvest of 8.4 million pounds, eastern Aleutian Islands golden king crab fishery with a harvest of 3.3 million pounds, western Aleutian Islands golden king crab fishery with a harvest of 2.5 million pounds, and the Saint Matthew Island Section blue king crab fishery with a harvest of 0.16 million pounds. Fisheries for red and blue king crabs in the Pribilof District and for red king crab in the eastern and western Aleutian Islands, as well as Bering Sea Korean hair crab were closed due to low abundance.

State and federal management agencies and the public utilize data collected by onboard crab fishery observers. Observer coverage is required on all vessels that process crabs at sea, whereas catcher-vessel observer coverage levels vary by fishery. Depending on the fishery and vessel type, observer coverage is either secured and paid for by industry (pay-as-you-go) or by using funds acquired through cost-recovery crab fishing or federal grants. Observer coverage levels are detailed in a separate document.

## **ALEUTIAN ISLANDS SHELLFISH FISHERIES**

## ALEUTIAN ISLANDS KING CRAB MANAGEMENT AREA

#### **DESCRIPTION OF AREA**

The Aleutian Islands king crab management area's eastern boundary is the longitude of Scotch Cap Light (164°44.72′W long), the northern boundary is a line from Cape Sarichef (54°36′N lat) to 171°W long, north to 55°30′N lat, and the western boundary the Maritime Boundary Agreement Line as described in the Maritime Boundary Agreement between the United States and the Union of Soviet Socialist Republics signed in Washington, June 1, 1990 (Figure 1-1). Area O encompasses territorial waters of the state of Alaska (0–3 nautical miles) and waters of the Exclusive Economic Zone (3–200 nautical miles).

## ALEUTIAN ISLANDS RED KING CRAB

## **Historical Background**

Historically, the red king crab resource in the Aleutian Islands was harvested in 2 registration areas. The Adak Registration Area (Area R) consisted of those waters in the Aleutian Islands west of 172°W long, and the Dutch Harbor Registration Area (Area O) encompassed waters east of 172°W long. The boundary line separating the Adak and Dutch Harbor areas was changed to 171°W long prior to the 1984/85 season (ADF&G 1985a; Figure 1-2). As the fleet moved westward, Registration Area S was established in 1967 for waters around Amchitka Island and Petrel Bank and was merged into Area R in 1978 (ADF&G 1991). In March 1996, the Alaska Board of Fisheries (BOF) established the Aleutian Islands king crab Registration Area (Area O) by combining the Dutch Harbor and Adak Registration areas to improve management of the increasingly important golden king crab resource in the Aleutian Islands. Combining the Adak and Dutch Harbor areas has not impacted management of red king crab in the Aleutian Islands (ADF&G 1999a).

Domestic fisheries for red king crab in both the Adak and Dutch Harbor Registration Areas began in 1961 and rapidly developed. The Adak Area reached peak harvest of 21 million pounds in 1964/65, whereas the Dutch Harbor Area reached maximum production of 33 million pounds in 1966/67 (Table 1-1). The Aleutian Islands red king crab fishery had a maximum fishery value of \$21 million in the 1980/81 season (Table 1-2).

In the late 1970s, guideline harvest level (GHL) ranges were established using a blend of pot survey results and fishery data. Historic fishery GHLs set in the late 1970s ranged from 8 million to 25 million pounds for Dutch Harbor and from 0.5 million to 3.0 million pounds for Adak (ADF&G 1978). GHLs were often modified inseason based on fishery performance (Table 1-1).

Pot surveys in the western Aleutian Islands were conducted from 1975 to 1977 to provide red king crab catch per unit of effort (CPUE), fecundity, and relative abundance information (ADF&G 1978). Pot surveys were conducted on an annual basis in the Dutch Harbor Area until

1990 when trawl surveys were implemented to survey areas in a more timely fashion and to reduce gear selectivity inherent to pot fishing activities (Urban 1992).

Fluctuating annual harvest levels characterized fisheries in the Dutch Harbor and Adak areas; the Dutch Harbor fishery harvest declined from a high of 22.7 million pounds during the 1967/68 season to a low of 0.4 million pounds by the 1982/83 season. Commercial fishing for red king crab in the Dutch Harbor Area has been closed since the 1983/84 season.

Adak fishery harvest in the 1995/96 season was only 39,000 pounds. After the 1995/96 season the fishery was closed. In 1996 and 1997, a catcher-processor vessel was permitted to target red king crab on Petrel Bank in conjunction with their directed golden king crab fishing. The goals of this project were to enumerate, tag, and collect biological data from all red king crab captured and to recapture tagged crab. During this 2-year period, a total of 926 crab were tagged along the north side of Amchitka Island and along the south side of Semisopochnoi Island. While tagging was too limited to provide quantitative stock assessment data, it provided information on migration, molting cycle, and seasonal distribution (Byersdorfer 1998).

Portions of the Adak area were opened during the 1998/99, 2000/01, and 2001/02 seasons in order to assess the status of red king crab stocks without recent abundance information (Table 1-2). A limited commercial fishery was opened on November 1, 1998, for stock assessment purposes. Using historic catch information, a GHL of 5,000 pounds was established east of 179°W long and a GHL of 10,000 pounds was set west of 179°E long. During the limited fishery, crab not retained for commercial use were tagged and released. In addition, vessel operators were required to document all red king crab fishing activities in a logbook. The Petrel Bank area (the region between 179°E long and 179°W long) was not opened based on prior population data from that area (Byersdorfer 1998).

Three vessels registered to harvest red king crab in the Aleutian Islands during the 1998/99 season, but only 1 recorded landings. The GHL was not reached in either open area and the fishery was closed by emergency order on July 31, 1999. Observers were required on all vessels participating in the 1998/99 fishery.

In order to gain information on red king crab abundance in the Petrel Bank area, 2 commissioner's permit surveys were conducted in January/February and November, 2001. Due to budget constraints, the surveys were designed so fishermen could retain and sell all legal male red king crab captured to cover survey expenses. The commissioner's permit specified stations to be fished, soak times, and effort levels. Capture of red king crab from both surveys indicated healthy levels of legal males; however, red king crab female and sublegal abundance was low. Legal male CPUE for the combined surveys was 28. Survey CPUEs are not directly comparable to previous commercial fishery CPUEs because pot lifts in prior commercial fisheries were not conducted in a systematic manner and may have occurred in different fishing locations (Bowers et al. 2002).

Given the survey legal male abundance, a limited commercial fishery on Petrel Bank was opened during the 2002/03 and 2003/04 seasons with a GHL of 500,000 pounds. Based on expected effort, this was considered the minimum GHL that could be managed inseason. Because of uncertainty in status of sublegal and female red king crab and to provide for overall stock protection, ADF&G adopted a management strategy that would close the fishery prior to achieving the GHL if legal male CPUE dropped below 10 crab per pot.

Thirty-three vessels participated in the 2002/03 Petrel Bank red king crab fishery. CPUE for the Petrel Bank fishery was 18 legal crab per pot lift and the fleet harvested 505,642 pounds (Table 1-1). The 2002/03 Petrel Bank fishery had a value of \$3.29 million (Table 1-2).

During the 2003/04 Petrel Bank red king crab fishery 479,113 pounds were harvested by 30 vessels in 91 hours. The fleet pulled 5,774 pots and average CPUE was 10 legal crab per pot lift (Table 1-1). Exvessel price averaged \$5.14 per pound for a total value of \$2.45 million (Table 1-2).

Petrel Bank red king crab fishery was closed in 2004/05 and 2005/06 due to low levels of sublegal and female crab in the 2002/03 and 2003/04 fisheries, along with low legal male CPUE toward the end of the 2003/04 fishery. The Aleutian Islands red king crab fishery has been closed since 2004/05 (Table 1-1; Figure 1-3).

In 2005 the Crab Rationalization (CR) program was implemented for the major Bering Sea and Aleutian Islands (BSAI) crab fisheries, including Aleutian Islands red king crab (west of 179°W long). Observers have been required on all crab catcher-processors since 1988 and on all catcher vessels targeting red king crabs in the Aleutian Islands since 1995. Observer coverage on golden king crab vessels provides red king crab incidental harvest data, although red king crab bycatch in golden king crab gear is minimal due to the limited overlap in distribution of the 2 species. Observer coverage is set at 100% for vessels targeting red king crab in the Aleutian Islands.

In addition to commercial fisheries, subsistence and sport fisheries have targeted red king crab in the vicinity of Unalaska Island. The subsistence red king crab fishery opens June 1 and closes January 31. Historically, though many subsistence permits were issued, very few were returned. On average, 15 permits were returned per year between 1988 and 1994. The reported average annual harvest for those years was 135 king crab.

To address conservation concerns for the eastern Aleutian Islands red king crab stock, in March 1999, waters between 168°W long and 164°44′W long were closed to sport fishing and the subsistence daily bag limit of king crab was reduced from 6 to 1 crab per person per day. Subsistence regulations also require king and Tanner crab subsistence fishermen operating in the Aleutian Islands between 168°W long and 164°44′W long obtain a subsistence permit before fishing.

Subsistence information has been collected by ADF&G for the past 16 years. An average of 222 permits have been issued annually with an approximate 63% return rate. The returned permits accounted for an estimated average annual harvest of 1,080 king crab for 1999–2015. Harvest estimates generated from returned subsistence permits indicate an average of 1,165 king crab were harvested annually between 1999 and 2011, substantially less than estimates generated by a 1994 survey of 15% of households in Unalaska, where 6,892 king crab were estimated to have been taken (ADF&G 1999b). In recent years, king crab harvest has been substantially less than in the past with only 67 king crab harvested for an estimated harvest of 145 crab in 2015 (Table 1-3).

## 2015/16 Commercial Fishery East of 171°W Longitude

The commercial red king crab fishery in the Aleutian Islands east of 171°W long was closed during the 2015/16 season due to low stock abundance.

## 2015/16 Commercial Fishery 171°W Longitude to 179°W Longitude

The commercial red king crab fishery in the Aleutian Islands between 171°W long and 179°W long was closed during the 2015/16 season due to low stock abundance.

## 2015/16 Fishery West of 179°W Longitude

The IFQ and CDQ commercial red king crab fisheries in the Aleutian Islands west of 179°W long were closed during the 2015/16 season due to low stock abundance.

## **2015 Subsistence Fishery**

In 2015, ADF&G issued 206 subsistence permits, of which 95, or 46%, were returned. Returned permits reported a total harvest of 67 king crab with harvest ranging from 0 to 20 king crab per permit. Estimates generated from the subsistence permits indicate that approximately 145 king crab were taken (Table 1-3). The majority of subsistence-caught king crab in the Unalaska Island area are taken with pot gear, though some king crab are taken by divers using SCUBA gear.

## Fishery Management and Stock Status East of 171°W Longitude

The red king crab fishery in this area was not included in CR. A fisherman may not be concurrently registered for both the commercial red king crab and golden king crab fisheries east of 171°W longitude as outlined in 5 AAC 39.670(c)(6) Bering Sea/Aleutian Islands Individual Fishing Quota (IFQ) Crab Fisheries Management Plan, which states that a vessel operator may not have king crab from an IFQ fishery and a non-IFQ fishery on board the vessel at the same time.

A portion of the eastern Aleutian Islands were surveyed by bottom trawl during the summers of 2000 and 2003–2011. Survey results show a severely depressed population with only 0 to 5 red king crab captured in any year. The 2011 survey captured 0 red king crab (Spalinger 2012).

In December 2007, the North Pacific Fishery Management Council (NPFMC) amended the Federal Fishery Management Plan (FMP) for Bering Sea/Aleutian Islands King and Tanner Crabs by adopting new overfishing definitions for BSAI crabs and removing eastern Aleutian Islands red king crab from the FMP. The State of Alaska has sole management jurisdiction over this stock.

## Fishery Management and Stock Status 171°W Longitude to 179°W Longitude

The red king crab fishery from 171°W long to 179°W long was not included in the CR program. Consistent with regulation for the area east of 171°W long, a fisherman may not be registered to fish in the commercial red king crab and golden king crab fisheries concurrently between 171°W long and 179°W long as outlined in 5 AAC 39.670(c)(6) *Bering Sea/Aleutian Islands Individual Fishing Quota (IFQ) Crab Fisheries Management Plan*.

In November of 2002, ADF&G conducted a pot survey in the area between 172°W long and 179°W long. The survey area was developed in consultation with industry and focused on historically important areas of red king crab abundance in the Adak, Atka, and Amlia Islands areas. These areas had been closed to commercial red king crab fishing since the 1998/99 season and had not been previously surveyed. The 116 survey stations were divided between state waters (56 stations) and federal waters (60 stations).

Ten vessels conducted 1,085 pot lifts in 61 stations. Survey catches were poor and only 4 legal males were captured during the survey. Due to poor survey catches and high operation costs, many vessels were unable to fulfill their survey commitment and only 34% of the survey was completed. The completed portion of the survey indicated that red king crab around Adak, Atka, and Amlia Islands were severely depressed (Granath 2003).

In September 2015, a reconnaissance survey sought to determine if populations of red king and Tanner crabs around Adak was sufficient for a commercial fishery. The survey encompasses the 2002 survey grounds along with other areas of interest. One vessel pulled 730 pots throughout the 13 day survey. Catch rates of red king crab were extremely low with a total of 442 red king crab caught in 14 pots; 23 legal males, 74 prerecruit males, 140 juveniles, and 205 females were caught in Sitkin Sound and Adak Strait. Of the 442 crab caught, 88% were caught in 2 pots in Sitkin Sound. Catch rates of Tanner crab were low and highly aggregated. A total of 2,458 Tanner crab were caught in 87 pots; 1,578 legal males, 274 prerecruit males, 358 juveniles, and 248 females. Of the 2,458 Tanner crab caught, 92% of the total catch and 99% of the legal males came from Sitkin Sound; 8 pots accounted for 48% of the total catch and 63% of the legal males (Hilsinger et al. 2016). This reconnaissance survey confirmed that crab stocks around Adak continue to be depressed and below levels to support commercial fishing at this time.

## Fishery Management and Stock Status West of 179°W Longitude

West of 179°W long, a vessel may be registered to fish in the commercial red king crab and golden king crab fisheries concurrently; however, only single-line pots may be operated in areas open to red king crab fishing and only longline pots may be operated in areas open to golden king crab fishing. Likewise, red king crab may only be retained from single-line pots and golden king crab may only be retained from longline pots. The Petrel Bank red king crab fishery is restricted to 250 pots per vessel (5 AAC 34.625 (d)).

Shell condition and size composition data from the 2001 commissioner's permit survey, as well as the 2002/03 and 2003/04 commercial fisheries in Petrel Bank indicate that primarily older, postrecruit crabwere prevalant. Proportions of sublegal and female red king crab did not change significantly from the 2001 surveys to the 2002/03 or 2003/04 commercial fisheries. Average weight and carapace length (CL) of legal male red king crab increased from 2001 to 2003. Average weight and CL of legal male red king crab increased from the surveys to 7.4 pounds and 162 mm in 2002/03 up to 8.0 pounds and 168 mm in 2003/04.

The 2003/04 fishery cumulative CPUE was 10 legal crab per pot and did not drop below the 10 legal crab per pot benchmark. Fishery CPUE climbed during the first 36 hours from 8.5 to 15.0 crab per pot and steadily dropped for the remainder of the fishery with the exception of the morning of October 28, when most pots had soaked for an additional 12 hours. Compared to the 2001 combined survey CPUE of 28 and 2002/03 fishery CPUE of 18, performance during the 2003/04 fishery was below average.

The harvest-based management approach using only legal male CPUE as a threshold was developed to help maintain multiple size and age classes on the grounds to promote rebuilding. Using a threshold of legal male CPUE alone does not protect the stock. Because the 2001 survey catch of sublegal and female crab was low, thresholds were not developed for those stock components. After the 2001 surveys, ADF&G staff expressed concern about overall stock status. While legal male catch was encouraging, the lack of sublegal and female crab was concerning. Two additional years of fishery information failed to indicate healthy levels of those stock

components. Based on fishery performance and the lack of recruitment of legal sized crab, it was likely that the fishery would fail to stay above the threshold criteria of 10 crab per pot if a fishery were prosecuted in 2004/05. Following the 2003/04 fishery, ADF&G closed the Petrel Bank red king crab fishery.

A survey was conducted on the Petrel Bank red king crab stock in November of 2006. This information was compared to the 2001 industry survey and the 2002/03 and 2003/04 commercial fisheries to evaluate current stock status. Due to differences in fishing practices between the 2001 survey, the 2002/03 and 2003/04 commercial fisheries, and the 2006 survey, a direct CPUE comparison was not possible. However, the legal male red king crab catch rate during the 2006 survey was lower than during the 2001 survey and recent commercial fisheries. The 2006 survey CPUE of legal males was 1.2 crab per pot from 170 stations fished (Gish 2007). Red king crab captured during the survey were predominately larger, mature-sized male crab, and the size distribution of surveyed crab provided no near term expectation for significant recruitment of legal males. Although males estimated to be new recruits to legal size accounted for 36% of the 2006 survey catch of legal crab, recruitment occurring since the 2001 survey has been insufficient to rebuild legal male abundance to levels of the early 2000s. Spatial distribution of legal males during the 2006 survey decreased from the 2001 survey distribution and was limited to the northwestern portion of the Petrel Bank. Distribution of red king crab was also restricted relative to harvest location during the last 2 commercial fisheries.

ADF&G conducted a survey of the red king crab stock on the Petrel Bank in November 2009. The 2009 survey was designed to sample the areas previously surveyed in 2001 and 2006, and those areas commercially fished in 2002/03 and 2003/04. The 2009 survey had 117 stations fished in common with the 2006 survey. For the stations fished in common with the 2006 survey, the 2009 survey indicated that legal sized male crab had decreased by 15%, female crab had decreased by 57%, and sublegal males had decreased by 85%. Legal-male CPUE declined from 1.7 in 2006 to 1.5 in 2009 for those stations fished during both years. The mean carapace length of males increased from 151 mm in 2006 to 166 mm CL in 2009. The lack of prerecruit males and females and the increase in mean carapace length in males from the 2006 survey to the 2009 survey indicate an aging population with little recruitment. Additionally, in the 2009 survey 59% of the catch of all red king crab captured occurred in just 3 stations, suggesting limited distribution of red king crab in the area (Gish 2010).

A catcher-processor conducted a commissioner's permit test fishery from October 15 to December 15, 2009, in waters west of Petrel Bank while concurrently fishing for golden king crab. The intent of this test fishery was to ascertain the presence or absence of red king crab in 5 survey blocks selected by a fisherman with experience harvesting red king crab in the area. Pots fished could be set in depths of 100 fathoms or less and had to be legal red king crab gear for the Aleutian Islands, except the escape webbing was closed to help retain sublegal and female crab. A total of 18 red king crab pots were set and pulled in 4 of the 5 survey blocks resulting in the capture of 1 legal sized red king crab. The commissioner's permit allowed for the test fishery to continue from January 1 to February 15, 2010, but no test fishing activity occurred during this time period. Results of the test fishery suggest that the red king crab population west of Petrel Bank remains severely depressed (Unpublished memorandum, 2009 Western Aleutian Islands Red King Crab Commissioner's Permit Test Fishery, ADF&G, Jeanette Alas; Dutch Harbor, Alaska).

## ALEUTIAN ISLANDS GOLDEN KING CRAB

## **Historical Background**

The golden king crab *Lithodes aequispinus* fishery in the Aleutian Islands has never failed to open due to low stock abundance, making it unique among western Alaska king crab fisheries. Golden king crab inhabit greater depths than most other commercially exploited king crabs (Blau et al. 1996). The depths and steep bottom topography of the inter-Aleutian Island passes inhabited by golden king crab necessitate the use of longline rather than single-pot gear. No other major king crab fisheries in Alaska exist in which longline pot gear is the only legal gear type.

Historically, golden king crab were taken as incidental harvest during red king crab fisheries in the Adak (Area R) and Dutch Harbor (Area O) Registration Areas. One landing of golden king crab was reported from the Adak Area during the 1975/76 season, but directed fishing for golden king crab did not occur in either management area until the 1981/82 season (ADF&G 1984). From the 1981/82 season through the 1995/96 season, golden king crab were harvested in separate directed fisheries occurring in the Adak and Dutch Harbor Registration Areas.

During the 1981/82 season, 14 vessels landed 1.2 million pounds of golden king crab in 76 landings from the Adak Area (Table 1-4). By the following season, harvest had reached 8.0 million pounds with 99 vessels participating in the fishery. Peak harvest in the Adak Area fishery occurred during the 1986/87 season when 12.9 million pounds of golden king crab were harvested for an exvessel value of \$37.6 million (Table 1-5). Initially, the fishery was managed based on size, sex, and season restrictions. Catches were monitored inseason (ADF&G 1999a) and after the initial fishery, harvest levels were based on harvest expectations generated from the catch in prior seasons (ADF&G 1983a). The majority of golden king crab harvested in the Adak Area were taken in the North Amlia and Petrel Bank Districts (Figure 1-2).

Initial catches of golden king crab in the Dutch Harbor Area were similar to those observed in the Adak Area fishery (ADF&G 1984). Harvest was incidental to the red king crab fishery and effort only increased as red king crab stocks decreased in abundance. Six vessels harvested 116,000 pounds of golden king crab during the 1981/82 Dutch Harbor red king crab season (Table 1-4). The following season, 49 vessels participated in the directed golden king crab fishery, harvesting 1.2 million pounds. Peak golden king crab harvest in the Dutch Harbor Area occurred during the 1995/96 season when 2.0 million pounds were harvested for a total value of \$5.2 million (Table 1-5). The Dutch Harbor Area harvest was primarily from the Islands of Four Mountains and Yunaska Island area (Figure 1-1). The golden king crab stock in the Dutch Harbor Area was not surveyed for abundance prior to 1991 and the fishery was managed based on a historical average catch of 1.6 million pounds annually (ADF&G 1999a).

The average weight of golden king crab harvested in both the Dutch Harbor and Adak Areas declined from 1981 to 1995, ranging from a high of 7.6 pounds during the 1983/84 season to 4.2 pounds during the 1992/93 season in the Dutch Harbor Area and 5.5 pounds in the 1981/82 season to 3.9 pounds in the 1993/94 season in the Adak Area (Table 1-4; Figure 1-4 and 1-5). In 1984, the BOF adopted an ADF&G proposal to lower the legal size for golden king crab in the Aleutian Islands from 6.5 inches to 6.0 inches carapace width (CW), and establish the Dutch Harbor Area as a permit fishery. The regulation decreasing the legal size did not, however, reverse the trend of slowly declining catch rates in the area west of 171° W long. Dutch Harbor area CPUE slowly declined, from a peak of 14 legal crab per pot during the 1984/85 season to 6

crab during the 1994/95 season; and Adak Area CPUE declined from 12 legal crab per pot in the 1985/86 season to 5 crab in the 1995/96 season.

In March 1996, the BOF restructured management of king crabs in the Aleutian Islands. Formerly, the Aleutian Islands king crab populations had been managed using the Adak and Dutch Harbor Registration Areas that were established for red king crab fisheries. However, during the 1970s and 1980s, red king crab fisheries declined in the Aleutian Islands whereas the golden king crab fishery gained importance. Consequently, the BOF realigned management areas in the Aleutian Islands to more accurately reflect golden king crab stock distribution and patterns in fishing effort. The BOF, therefore, combined the Adak and Dutch Harbor areas as the Aleutian Islands Registration Area O and directed ADF&G to manage golden king crab in the areas east and west of 174°W long as 2 distinct stocks. The BOF also stipulated that a conservative management plan be initiated and that all vessels registered for the fishery continue to carry an onboard observer for all fishing activities.

In 1996/97, when the initial golden king crab fishery in the new king crab Registration Area O occurred, GHLs were established at 3.2 million pounds for the area east of 174°W long, and 2.7 million pounds for the area west of 174°W long (Table 1-4). Compared to the combined Adak and Dutch Harbor Area fisheries from prior years, there was reduced effort and harvest during the 1996/97 fishery. Eighteen vessels harvested 5.8 million pounds, down from 28 vessels taking 7.0 million pounds in 1995/96 (Table 1-4). This reduction in effort was likely due to the departure of vessels for the 1996 Bristol Bay red king crab season, which re-opened to commercial fishing for the first time since 1993.

Since the 1996/97 season, effort and harvest in the Aleutian Islands east of 174°W long remained relatively stable. During the 1997/98 season, 13 vessels harvested 3.5 million pounds in an 84-day season. CPUE averaged 7 legal crab per pot lift and crab averaged 4.5 pounds each. The fishery west of 174°W long has experienced greater variability in catch and effort. During the 1997/98 season 9 vessels harvested 2.4 million pounds (Table 1-4). The GHL west of 174°W long was not reached and the fishery was not closed. The fleet averaged 7 legal crab per pot lift with landed crab averaging 4.3 pounds. The 1997/98 Aleutian Islands golden king crab fishery had a total value of \$12.5 million (Table 1-5).

Prior to the 1998/99 season opening, the Aleutian Islands golden king crab GHL east of 174°W long was reduced from 3.2 million pounds to 3.0 million pounds. Fishery performance trends and data from tag recoveries indicated that the 0.2 million pound GHL reduction for the area east of 174°W long was necessary in order to comply with the then existing overfishing definition specified in the federal FMP (NPFMC 1998).

The 1998/99 fishery east of 174°W long was similar to the prior 2 seasons. Fourteen vessels registered and harvested 3.2 million pounds in a 68-day season (Table 1-4; Table 1-5). The catch rate was 9 legal crab per pot lift with an average weight of 4.4 pounds. West of 174°W long, effort declined significantly from the prior 2 seasons. A fleet of 3 vessels harvested 1.7 million pounds, or 63% of the GHL. The fleet averaged 12 legal crab per pot lift with an average weight of 4.0 pounds per crab (Table 1-4). The 1998/99 fishery had a total value of \$9.3 million, the lowest in 14 years (Table 1-5).

In July 1999, the BOF changed the opening of Registration Area O golden king crab fishery from September 1 to August 15 in order to accommodate fishermen that participate in both the Aleutian Islands golden king and Bristol Bay red king crab (BBR) fisheries. The BBR fishery

opening changed from November 1 to October 15, which reduced the amount of fishing time available to the golden king crab fleet prior to the Bristol Bay opening. The change in opening date for Area O golden king crab was designed to provide adequate fishing time to harvest the golden king crab GHL east of 174°W long, prior to the opening of the BBR fishery.

In the 2000/01 fishery east of 174°W long, 15 vessels registered and harvested 3.1 million pounds. The CPUE was 10 legal crab per pot, with a 4.4 pound average weight. West of 174°W long, a fleet of 12 vessels harvested 2.9 million pounds. The CPUE was 7 legal crab per pot, and the average weight per crab was 4.1 pounds (Table 1-4). With a total value of \$19.5 million, the 2000/01 season was the most valuable golden king crab fishery in 6 years (Table 1-5).

From 2001/02 to 2004/05, between 18 and 19 vessels harvested an average of 2.97 million pounds per year in the area east of 174°W long (Table 1-4). CPUE ranged from 11 to 18 crab per pot lift and legal males averaged 4.4 to 4.6 pounds. In the area west of 174°W long, 6 to 9 vessels harvested an average of 2.69 million pounds per year. Legal males averaged 4.0 pounds and CPUE ranged from 7 to 12 crab per pot lift.

The number of vessels fishing and the average number of pots per vessel in the eastern portion of the Aleutian Islands golden king crab fishery remained fairly constant from the 1994/95 season to the 2004/05 season (Table 1-4; Figure 1-6). In the western portion of the Aleutian Islands golden king crab fishery, there has been a decrease in the number of vessels registered per season with a dramatic increase in the number of pots registered per vessel (Figure 1-7). The availability of a shorebased processing facility in Adak has contributed to shorter seasons, especially in the western Aleutians. The implementation of CR in 2005 decreased participation further with the consolidation of quota onto fewer vessels. Under rationalization the season is open from August 15 to May 15 of the following year.

In 2005, in conjunction with the CR program, the BOF adopted regulations for a CDQ fishery in conjunction with the Eastern Aleutian Islands golden king crab fishery and an Adak Community Allocation (ACA) fishery in conjunction with the Western Aleutian Islands golden king crab fishery.

Participation in the rationalized golden king crab fishery has remained low relative to historic levels. In the 2005/06 fishery, 8 vessels participated in the IFQ fishery and harvested 97% of the 5.1 million pound IFQ TAC, with a CPUE of 23 legal crab per pot lift (Table 1-4). CDQ and ACA harvest was confidential for the 2005/06 season. Seven vessels participated in the 2006/07 fishery and harvested 4.7 million pounds of the 5.1 million pound IFQ TAC, with a CPUE of 22 legal crab per pot lift; the 2006/07 CDQ and ACA fisheries are confidential. In 2007/08, effort decreased further, with only 5 vessels participating in the fishery. Despite the smaller fleet size, 4.9 million pounds of the 5.1 million pound IFQ TAC were harvested. Catch rates in the 2007/08 season increased from the prior season by 1 legal crab per pot lift overall.

In March 2008, the BOF increased the Aleutian Islands golden king crab TAC and placed levels in regulation at 3.15 million pounds for the fishery east of 174°W long and 2.835 million pounds for the fishery west of 174°W long, until a stock assessment model is established by ADF&G. Additionally, the BOF defined the portion of the Aleutian Islands east of 174°W long as a separate fishery from the area west of 174°W long; as a result, vessels could no longer fish both areas concurrently.

Three vessels participated in the 2008/09 golden king crab fishery east of 174°W long harvesting 3.14 million pounds, or 99.8% of the CDQ and IFQ combined TAC (Table 1-4). Average weight remained the same as the previous season at 4.7 pounds. Legal-male CPUE was 27, 1 less than the CPUE in the previous season, but still one of the highest catch rates on record. Three vessels participated in the 2008/09 golden king crab fishery west of 174°W long. The harvest was 2.3 million pounds, or 88% of the IFQ TAC; the ACA fishery is confidential. The average weight was 4.3 pounds, similar to the 2006/07 and 2007/08 seasons. Legal-male CPUE was 23, an increase from the 2007/08 CPUE of 21.

Three vessels participated in the 2009/10 fishery east of 174°W long and harvested 100% of the IFQ and CDQ TACs. The fleet averaged 26 legal crab per pot lift, 1 less than the 2008/09 season. Average weight was also slightly less than the 2008/09 season at 4.6 pounds. Three vessels participated in the 2009/10 golden king crab fishery west of 174°W long and harvested 97% of the IFQ TAC. The fleet averaged 25 legal crab per pot lift, which marked the highest catch rate on record for the fishery. Average weight increased slightly from previous seasons and was 4.4 pounds (Table 1-4).

Since the 2007/08 season, 5 vessels participated in Aleutian Islands golden king crab fisheries. Due to the limited participation, most data for the fishery west of 174°W long is confidential. Average weight of crab in the fishery west of 174°W long was 4.4 pounds overall for the years 2007/08 to 2015/16. Average CPUE for the IFQ fishery west of 174°W long was 21 for 2007/08 to 2014/15; with CPUEs declining from 21 in 2007/08 to 15 in 2014/15. For the fishery east of 174°W long, 3 vessels have participated each season from 2007/08 to 2015/16. Average weight for legal sized males was approximately 4.7 pounds with an overall CPUE of 32 for 2007/08 to 2015/16. CPUE have been fairly steady in this fishery over the last 9 years and have even increased slightly over the last 3 seasons (Table 1-4). CPUEs for golden king crab in the Aleutian Islands have been determined by the North Pacific Fisheries Management Council's Crab Plan Team to be hyperstable due to current fishing practices (Siddeek et al. 2013). Since the CPUE exhibits traits of hyperstability, any changes in CPUE over time should be considered significant and may indicate significant changes in population abundance.

## **2015/16 Fishery**

Five vessels participated in the 2015/16 Aleutian Islands golden king crab fishery and landed almost 90% of the combined IFQ TACs for the fisheries east and west of 174°W long. Both fisheries had a combined average of 22 legal crab per pot lift, a decrease from previous seasons. Average weight was 4.4 pounds, which was less than other CR seasons (Table 1-4).

## 2015/16 Fishery East of 174°W Longitude

During the 2015/16 fishery east of 174°W long, 3 vessels participated and landed 3.30 million pounds. The fleet averaged 36 legal crab per pot lift, a decrease from previous peak of 41 in 2014/15. Average weight of crab landed was 4.6 pounds (Table 1-4). The fleet registered 4,300 pots, which was 350 pots less than the previous season. Landing data is confidential for all weeks because fewer than 3 vessels made landings in any one week, except for the weeks of September 4, when 321,482 pounds were harvested, and September 18, when 632,944 pounds were harvested. Fishing operations were completed the last full week of October. Most fishing effort concentrated around Amukta Pass in ADF&G statistical area 705232 (Table 1-6).

## IFQ fishery East of 174°W longitude

Three vessels participated in the Aleutian Islands golden king crab IFQ fishery east of 174°W long. The IFQ fleet harvested 2,971,480 pounds of the 2.979-million pound TAC (Table 1-4). Three shorebased processors processed golden king crab from the eastern Aleutian Islands. Exvessel price paid for live, whole crab averaged \$3.65 per pound, leading to a fishery value of \$10.67 million, a 9% increase from the 2014/15 fishery (Table 1-5).

#### CDQ Fishery East of 174°W longitude

The 2015/16 eastern Aleutian Islands (east of 174°W long) CDQ golden king crab allocation was 331,000 pounds and all the CDQ TAC was harvested (Table 1-4). All CDQ groups were allocated a portion of the harvest, but only 4 groups participated; 2 groups transferred their quota to other CDQ groups. Each participating group used 1 vessel to harvest their allocation and 1 vessel harvested for 2 groups. Exvessel price was \$3.58 per pound, for a total CDQ fishery value of \$1.18 million (Table 1-5).

## 2015/16 Fishery West of 174°W Longitude

The 2015/16 Western Aleutians Islands golden king crab (WAG) TAC was 2.980 million pounds and 2 vessels participated. Due to fishery participation being less than 3 vessels both the IFQ and ACA fisheries are confidential, and total fishery harvest is also confidential (Table 1-4).

## IFQ fishery West of 174°W longitude

Two vessels participated in the Aleutian Islands golden king crab IFQ fishery west of 174°W long. The IFQ TAC was not fully realized for the 2015/16 season.

## CDQ Fishery West of 174°W longitude

Two vessels participated in the Aleutian Islands golden king crab ACA fishery west of 174°W long. The full ACA allocation was achieved for the 2015/16 season.

## **Fishery Management and Stock Status**

Crab Rationalization introduced several regulatory changes in the Aleutian Islands golden king crab fishery. The fishery is managed under a total allowable catch (TAC) rather than a GHL. Qualified participants are issued Individual Fishing Quota (IFQ) shares by National Marine Fisheries Service (NMFS) which IFQ holders may harvest at any time the season is open. Harvesters may use gear cooperatively, transporting and fishing another vessel's gear if registered to do so. Additionally, observer coverage requirements have decreased. Prior to rationalization, vessels harvesting golden king crab in the Aleutian Islands were required to carry an observer during 100% of their fishing activities. Current regulations still require 100% observer coverage for catcher-processors; however, onboard observers are required for only 50% of the total golden king crab weight harvested by each catcher vessel during each of 3 trimesters as outlined in 5 AAC 39.645 (d)(4)(A).

ADF&G surveyed a small portion of golden king crab habitat in the Aleutian Islands during the summer of 1997 (Blau et al. 1998). Prior to that, ADF&G performed the only survey of this area in 1991 (Blau and Pengilly 1994). Mark–recapture data from the 1997 survey suggested that the commercial fishery was annually removing a minimum of 20% of the legal male crab present in the area surveyed. In the late 1990s the FMP specified that the golden king crab stock in the Aleutian Islands was considered overfished when fishing mortality (F) exceeds 0.2 (NPFMC

1998). During the 1997/98 season, the GHL of 3.2 million pounds in the area east of 174°W long was exceeded by approximately 300,000 pounds. Therefore, to maintain a long-term average harvest at 3.2 million pounds, the 1998/99 GHL in this area was reduced to 3.0 million pounds (D. Pengilly, Regional Shellfish/Groundfish Research Coordinator, ADF&G, Kodiak, personal communication).

Only a small portion of the area in which golden king crab are commercially harvested has been surveyed. Stations surveyed in 1997 were surveyed again in 2000, 2003, and 2006. Tag-recovery rates changed only slightly even though approximately one-third fewer legal sized male crab were tagged in 2000 than in 1997. Harvest rates as indicated by tag returns in the 2000/01 season were similar to those in 1997/98. Shell condition composition data indicated the stock was stable, and size composition of the retained catch has changed very little (Watson and Gish 2002). In 2014, methods for an industry cooperative in-fishery survey began testing. ADF&G personnel are deployed on eastern Aleutian Islands golden king crab fishing vessels and survey pots on the first pull of the season. Survey efforts are funded by test-fishery funds. The in-fishery survey is still being tested with the hopes that the data will one day be informative to a stock assessment model.

Beginning with CR in 2005/06, federal regulation requires 50% of western Aleutian Islands A share IFQ be delivered west of 174°W long. For the 2009/10 season, NMFS issued an emergency rule exempting IFQ holders from this landing regulation effective February 18, 2010, through August 17, 2010, due to the lack of a processing facility open in the west region. The emergency rule was extended another 180 days, with an expiration date of February 20, 2011; with the extension, the emergency rule was in effect for the 2010/11 and 2011/12 fishing seasons.

A stock assessment model is currently under development for Aleutian Islands golden king crab. When completed, this model could be used to generate estimates of abundance and other fishery parameters (S. Siddeek, Biometrician, ADF&G, Juneau; personal communication).

#### ALEUTIAN ISLANDS SCARLET KING CRAB

#### **Historical Background**

Scarlet king crab may be harvested under authority of a commissioner's permit issued by ADF&G and authorized in 5 AAC 34.082 *Permits for Lithodes couesi king crab*. These permits were historically issued in conjunction with an Aleutian Islands golden king crab registration. Scarlet king crab are typically found in waters deeper than 200 fathoms and have been taken as incidental harvest in the golden king crab and deepwater Tanner crab fisheries in the Aleutian Islands. Limited directed fishing has occurred; however, there is no indication of a large biomass. Since 1992, annual harvest of scarlet king crab in the Aleutian Islands has ranged from 0 pounds to a peak of 63,000 pounds in 1995, when 8 vessels made 25 landings. Exvessel value peaked in 1995 when the fishery was worth approximately \$186.5 thousand. Since 1996, effort and harvest in this fishery have been minimal (Table 1-7).

## 2015 Fishery

No vessels registered to harvest scarlet king crab in the Aleutian Islands in 2015.

## **Fishery Management and Stock Status**

With the implementation of CR, scarlet king crab were no longer allowed to be retained as an incidental species during the Aleutian Islands golden king crab fishery per 5 AAC 39.670(c)(6) Bering Sea/Aleutian Islands Individual Fishing Quota (IFQ) Crab Fisheries Management Plan. The plan states that a vessel operator may not have crab from an IFQ fishery and a non-IFQ fishery on board the vessel at the same time. In December 2007, the NPFMC amended the FMP adopting new overfishing definitions for BSAI crabs and removing Aleutian Islands scarlet king crab from the FMP and providing the state of Alaska with sole jurisdiction over the fishery. No surveys are conducted, nor are any estimates of population abundance made for scarlet king crab in the Aleutian Islands; consequently, stock status and distribution are not well known. Scarlet king crab males 5.5 inches or greater in CW may be taken under the conditions of a commissioner's permit as incidental harvest in a non-IFQ fishery or in a directed fishery.

## EASTERN ALEUTIAN TANNER CRAB DISTRICT

#### **DESCRIPTION OF DISTRICT**

The Eastern Aleutian District (EAD) for Tanner crab encompasses all waters of Registration Area J between the longitude of Scotch Cap Light at 164°44′W long, west to 172°W long, and south of the latitude of Cape Sarichef (54°36′N lat; Figure 1-8). Area J encompasses territorial waters of Alaska (0–3 nautical miles) and waters of the Exclusive Economic Zone (3–200 nautical miles).

#### TANNER CRAB

# **Historical Background**

The EAD has not supported harvests of Tanner crab as large as those recorded in other districts of Area J. Tanner crab in EAD are found only in a few major bays and inlets of the eastern Aleutian Islands and the directed fishery was relatively small in volume and geographically limited until the late 1970s. The fishery began in Akutan and Unalaska bays and subsequently expanded to include all areas of known Tanner crab distribution in the EAD. Harvest of Tanner crab has typically remained under 1 million pounds per year. Only in the 3 consecutive seasons from 1976/77 to 1978/79 did harvest exceed 1 million pounds, reaching a peak of 2.5 million pounds in the 1977/78 season (Table 1-8). The EAD Tanner crab fishery reached a maximum exvessel value of \$0.95 million in 1977/78 (Table 1-9). Harvest declined to a low of 50,038 pounds in 1991. Between 1973/74 and 1994, vessel participation ranged from 4 vessels in 1992 to 31 vessels in 1982. Commercial fishing for Tanner crab was not permitted in the EAD from 1995 through 2002 due to low stock abundance. In 2003, the directed fishery remained closed; however, a survey around Unalaska, Akutan, and Akun Islands permitted vessels under 58 feet in overall length to retain all legal sized Tanner crab captured in ADF&G-designated survey stations (ADF&G, "Eastern Aleutian Islands Tanner Crab Survey," news release, November 15, 2002).

Since 2004, the EAD Tanner crab fishery has opened each year in at least 1 of the 3 sections (Unalaska Bay, Makushin/Skan Bay, and Akutan Bay), with the exception of 2014. Harvest information for 2004, 2006–2013, and 2015–2016 is confidential due to limited processor or vessel participation. Vessel participation since 2004 ranged from 1 vessel in most recent seasons to 25 vessels in 2005 (Table 1-8).

The Tanner crab subsistence fishing season runs from January 1 to December 31. Between 1988 and 1994, an average of 15 subsistence permits per year were returned and accounted for a harvest of approximately 121 Tanner crab annually. A survey of 15% of Unalaska households in 1994 generated an estimated total subsistence Tanner crab harvest of 10,957 crab (ADF&G 1999b).

During the past 16 years, an average of 222 subsistence permits have been issued annually. On average, approximately 63% of permits are returned. The returned permits account for an average annual reported harvest of 2,236 Tanner crab with individual annual harvests ranging from 0 to 914 crab per permit holder. Harvest estimates generated from the subsistence harvest permits indicate an average of 3,574 Tanner crab were harvested annually between 1999 and 2015 (Table 1-3).

## **2015 Commercial Fishery**

The 2015 commercial Tanner crab fishery in the EAD opened on January 15 with a GHL of 35,000 pounds in the Makushin/Skan Bay Section. The minimum mature male abundance thresholds were not met in the Unalaska/Kalekta Bay or Akutan Bay Sections, and subsequently were not opened to commercial fishing. One vessel preseason registered for the 2015 fishery resulting in a limit of 50 pots per vessel. One vessel registered for the fishery and participated. Due to limited vessel participation, harvest information is confidential. The fishery closed on February 13 in the Makushin/Skan Bay Section in anticipation of achieving the GHL.

## 2015 Subsistence Fishery

In 2015, ADF&G issued 206 subsistence permits, of which 95, or 46%, were returned. The returned permits account for a reported harvest of 1,243 Tanner crab (Table 1-3). Estimates generated from the subsistence permits indicate that approximately 2,695 Tanner crab were taken, with harvest ranging from 0 to 60 Tanner crab per permit holder. Most subsistence Tanner crab harvested in the EAD in 2015 were taken with pot gear, though some were taken by divers using SCUBA gear.

#### **Fishery Management and Stock Status**

The EAD Tanner crab fishery has a total of 300 pots allowed in the fishery with no more than 50 pots per vessel. Pots may be operated to take Tanner crab only from 8:00 p.m. until 5:59 p.m. with a soak time of 14 hours from 6:00 p.m. until 7:59 p.m. Depending on the anticipated rate of harvest, ADF&G requires fishermen report daily or triweekly the number of pot lifts, number of crab retained, and any other information considered necessary for management or conservation of the stock. In the EAD, waters of Unalaska Bay enclosed by a line from Cape Cheerful (54°N lat, 166°40.33′W long) to Priest Rock (54°N lat, 166°22.50′W long) are closed to harvest of Tanner crab by vessels over 58 feet in overall length. In 2005, the BOF expanded vessel length restrictions in the EAD to vessels under 58 feet overall length when the GHL for Tanner crab is 1,000,000 pounds or less. The EAD Tanner crab fishery was not included in the CR program, and remains an open access fishery.

In December 2007, the NPFMC amended the FMP adopting new overfishing definitions for BSAI crabs and removing Aleutian Islands Tanner crab from the FMP and providing the state of Alaska with sole jurisdiction over the fishery. In March 2008, the BOF adopted 5 AAC 35.509 *Eastern Aleutian District Tanner crab harvest strategy*, which placed the existing interim harvest strategy in regulation and subdivided the EAD into sections allowing for greater management

precision. The proposal adopted by the board was identical to the management measures that ADF&G had implemented on an interim basis.

Prior to 1990, sporadic pot surveys were used to generate a Tanner crab abundance index in the eastern Aleutian Islands (Urban 1992). Pot surveys and fishery data were used to establish harvest levels of 0 to 250,000 pounds (ADF&G 1983b). Since 1990, trawl surveys and occasional pot surveys have been used to estimate abundance and are used in conjunction with fishery data for management purposes.

In 2015, Akutan Bay, Unalaska/Kalekta Bay, and Makushin/Skan Bay were surveyed with trawl gear using the ADF&G research vessel Resolution (Spalinger 2015). Total estimated abundance for the area surveyed was 3.6 million crab, a 51% decrease from 7.5 million crab in 2014. The decrease in abundance from the 2014 survey occurred across all sexes and size classes throughout the survey area except for juvenile females, juvenile males less than 70 mm, and recruit-sized males—all of which showed slight increases in abundance.

The 2015 legal male population estimate of 0.08 million crab represents a decrease of 50% from 0.16 million crab in 2014. There was a declining trend that began in the 2007 survey that persisted through 2011; a substantial increase in legal male abundance was seen 2012, followed by another period of decline. The 2015 estimate of legal male abundance is the lowest recorded since 1995. The number of recruit-sized legal males increased nearly 53%, whereas the postrecruit estimate decreased by 86%.

The 2015 legal male Tanner crab abundance is far below average relative to the trawl survey time series from 1990 to 2010. In 2015, the most notable decreases in abundance from the 2014 survey were the recruit, postrecruit, and legal males in Akutan Bay, which decreased by 100% (currently estimated at 0) and the postrecruit males in the Unalaska/Kalekta Bay Section, which also decreased by 100% (currently estimated at 0). Based on trawl survey estimates, the EAD Tanner crab stock appears to be depressed.

#### **GROOVED TANNER CRAB**

## **Historical Background**

Similar to other deepwater crab fisheries in the Aleutian Islands, the first harvest of grooved Tanner crab *Chionoecetes tanneri* in the EAD occurred in the early 1980s as incidental harvest in the Dutch Harbor golden king crab fishery. Directed fishing for this species began in 1993, when a single vessel participated in a fishery that lasted from July until December. The grooved Tanner crab fishery in the EAD typically occurred between March and December. Peak harvest in the EAD occurred in 1995 when 9 vessels landed 0.879 million pounds (Table 1-10). One vessel harvested grooved Tanner crab in the EAD in 2001 and 2004; data from both years is confidential due to limited participation. From 2002 to 2003 and 2005 to 2015, there was no grooved Tanner crab effort in the EAD.

Limited data has been collected regarding abundance, distribution, and stock status of deepwater crab species in the BSAI. During the 1993 season, ADF&G utilized data collected by onboard observers to restrict harvest to males of 5 inches or greater CW. In 1994, pursuant to permit provisions described in 5 AAC 35.511 *Permits for tanneri and angulatus Tanner crab in Registration Area J*, ADF&G required that vessels registered for this fishery carry an observer for all of their fishing activities. Data collected by observers has documented incidental harvest as well as fishing practices and has aided ADF&G in developing further management measures.

In 1997, ADF&G established GHLs for grooved Tanner crab in the Eastern Aleutian, Bering Sea, and Alaska Peninsula Districts where most historical harvests had occurred. Harvest levels were derived using catch information from previous seasons and data collected by onboard observers. A GHL of 200,000 pounds was established for each of the aforementioned areas, and smaller harvest levels of 100,000 pounds were established for the Kodiak and Western Aleutian Districts to allow for exploratory fishing. In addition, the department required that all pots be equipped with at least 2 escape rings of 4.5 inches minimum diameter (ADF&G 1999a).

## 2015 Fishery

No vessels registered to harvest grooved Tanner crab in the EAD during 2015.

## **Fishery Management and Stock Status**

Given poor fishery performance and declining harvests of the mid 1990s, ADF&G re-evaluated deepwater Tanner crab harvest levels in 2000. A GHL range of 50,000 to 200,000 pounds was established for the EAD. The GHL was set as a range to provide greater flexibility for inseason management and to better inform the public of ADF&G's management goals for the fishery. The fishery will be managed so that the upper end of the GHL range is reached only when catch rates similar to or greater than those documented prior to the harvest declines of the mid 1990s are observed. In addition to new GHL requirements, ADF&G specified that four 4.5-inch escape rings be placed on the lower third of each pot and required that pots be fished over multiple depth strata. Observers required on all vessels registered for the fishery will collect biological and fishery data.

Grooved Tanner crab population in the EAD is not surveyed; consequently, no estimates of population abundance are available for this stock. Fishery data from the mid-1990s is the primary source of information regarding abundance and stock status. Fishing effort was concentrated in 3 statistical areas immediately to the south of Unalaska Island and commercial fishery data suggests that, at least in the area historically fished, the population was heavily exploited in the early to mid-1990s.

In December 2007, the NPFMC amended the FMP adopting new overfishing definitions for BSAI crabs and removing Aleutian Islands grooved Tanner crab from the FMP, providing the state of Alaska with sole jurisdiction over the fishery.

## TRIANGLE TANNER CRAB

#### **Historical Background**

Triangle Tanner *Chionoecetes angulatus* crab have been incidentally harvested in the eastern Aleutian grooved Tanner crab fishery, where the species has occurred in small numbers. Prior to 1995 and the beginning of the directed fishery, no harvest of triangle Tanner crab was reported on fish tickets; however, shellfish observers stationed on board vessels participating in the grooved Tanner crab fishery observed small numbers of triangle crab harvested in 1994 (ADF&G 1999a). Two vessels targeted triangle Tanner crab in the EAD during the 1995 and 1996 seasons; harvest information from those fisheries is confidential (Table 1-11). From 1997 to 2000, and 2002 to 2015, no vessels registered to harvest triangle Tanner crab in the EAD. One vessel participated in 2001; harvest information is confidential.

## 2015 Fishery

No vessels harvested triangle Tanner crab in the EAD during 2015.

## **Fishery Management and Stock Status**

In the EAD, triangle Tanner crab are harvested under a permit authorized in 5 AAC 35.511 *Permits for tanneri and angulatus Tanner crab in Registration Area J.* Surveys of population abundance are not conducted for triangle Tanner crab, thus the status of this stock is unknown. Because of the paucity of population data for this species and the history of the fishery, additional fishing for triangle Tanner crab in the EAD is limited to incidental harvest during the grooved Tanner crab fishery. Vessels registered to fish for grooved Tanner crab are permitted to retain triangle Tanner crab up to 50% of the weight of the target species onboard the vessel.

In December 2007 the NPFMC amended the FMP adopting new overfishing definitions for BSAI crabs and removing Aleutian Islands triangle Tanner crab from the FMP and providing the State of Alaska with sole jurisdiction over the fishery.

## WESTERN ALEUTIAN TANNER CRAB DISTRICT

#### **DESCRIPTION OF DISTRICT**

The Western Aleutian District (WAD) of Registration Area J includes all waters west of 172°W long, east of the United States-Russia Maritime Boundary Line of 1990, and south of Cape Sarichef (54°36′N lat; Figure 1-8). Area J encompasses territorial waters of Alaska (0–3 nautical miles) and waters of the Exclusive Economic Zone (3–200 nautical miles).

#### TANNER CRAB

## **Historical Background**

Most Tanner crab in the WAD have been taken incidentally to the directed red king crab fishery. Commercial harvest has ranged from a high of 839,000 pounds during the 1981/82 season to less than 8,000 pounds in 1991/92 (Table 1-12). No commercial harvest of Tanner crab has occurred in the WAD since 1996/97 as the fishery has been closed. The WAD Tanner crab fishery reached a maximum value of just over \$1 million in the 1981/82 season (Table 1-12). Most harvest has occurred within a few bays near Adak and Atka Islands.

#### **2015/16 Fishery**

The WAD Tanner crab fishery was not opened during the 2015/16 season.

#### **Fishery Management and Stock Status**

No stock assessment surveys are conducted for Tanner crab in the WAD; thus no population estimates are available. Stock status is currently unknown. Past fisheries were managed using GHLs set from commercial catch data (ADF&G 1985b).

In December 2007, the NPFMC amended the FMP by adopting new overfishing definitions for BSAI crabs, removing Aleutian Islands Tanner crab from the FMP, and providing the state of Alaska with sole jurisdiction over the fishery.

## **GROOVED TANNER CRAB**

## **Historical Background**

In the WAD, harvest of grooved Tanner crab first occurred in conjunction with the developing golden king crab fishery in the Adak Area during the late 1970s. Overall effort has been minimal with 2 or fewer vessels participating during most years, with the exception of 1995, when 6 vessels harvested approximately 146,000 pounds (Table 1-13).

To prevent overharvest ADF&G restricted harvest to males of 5 inches or greater CW in 1993. In addition, beginning in 1994, and according to provisions provided in 5 AAC 35.511 *Permits for tanneri and angulatus Tanner Crab in Area J*, all vessels registered for the fishery were required to carry an onboard observer for all fishing activities. Using information collected by onboard observers and historic catch information, ADF&G established GHLs for grooved Tanner crab in the WAD in 1997. The GHL was set at 100,000 pounds to allow for exploratory fishing and incidental harvest (ADF&G 1999a). The fishery was closed in 2000 due to insufficient data to inform a fishery and has remained closed to date.

In addition to harvests of Tanner and grooved Tanner crabs, fishermen have reported incidental triangle Tanner crab catch during the grooved Tanner crab and golden king crab fisheries in the WAD. Currently, there is no directed fishery for triangle Tanner crab.

## 2015 Fishery

WAD was not open to commercial fishing for grooved Tanner crab in 2015.

## **Fishery Management and Stock Status**

No stock assessment surveys have been conducted for grooved Tanner crab in WAD; therefore, no estimates of population abundance are available. Fishery data from the mid-1990s indicates the western Aleutian Islands may not support grooved Tanner crab populations as large as the eastern Aleutian Islands and the Bering Sea.

In December 2007, the NPFMC amended the FMP by adopting new overfishing definitions for BSAI crabs, removing Aleutian Islands grooved Tanner crab from the FMP, and providing the state of Alaska with sole jurisdiction over the fishery.

## ALEUTIAN DISTRICT DUNGENESS CRAB

#### **DESCRIPTION OF DISTRICT**

The Aleutian District for Dungeness crab *Metacarcinus magister* management includes all waters of Registration Area J west of the longitude of Scotch Cap Light (164°44′W long), south of the latitude of Cape Sarichef Light (54°35.89′N lat), and east of the United States-Russia Maritime Boundary Line of 1990 (Figure 1-9). Area J encompasses territorial waters of Alaska (0–3 nautical miles) and waters of the Exclusive Economic Zone (3–200 nautical miles).

## HISTORICAL BACKGROUND

Islands in the Aleutian Chain are separated by deep passes with swift currents and are closely bordered on the north by the Aleutian Basin and to the south by the Aleutian Trench. Dungeness crab inhabit bays, estuaries, and other shallow water habitats, areas that are sparsely and widely

dispersed in the Aleutian Islands. Therefore, populations of Dungeness crab are small and fishing effort has been low within the district.

The Aleutian District Dungeness crab fishery has occurred primarily as a small-vessel, summer fishery in the vicinity of Unalaska Island. Some larger-vessel effort has occurred in other locales within the district, but fishing in these areas has been sporadic. The first reliable reports of commercial harvests of Dungeness crab were in 1970. Since 1974, harvests have ranged from no effort during several seasons to a peak of 92,000 pounds in 1984/85 (Table 1-14), with most of the catch that year coming from Unalaska and Makushin Bays.

In addition to commercial harvest, Dungeness crab have also been taken in subsistence and sport fisheries occurring in the vicinity of Unalaska Island. Subsistence harvest reports returned to ADF&G between 1988 and 1994 indicate that Dungeness crab harvests were larger than those documented for both red king and Tanner crabs. On average, 15 harvest reports were returned per year and Dungeness crab harvest averaged 686 crab per year with a range of 5 to 1,906 crab per year (ADF&G 1999b). Currently, reports are not required for the subsistence taking for Dungeness and no estimate of current Dungeness harvest is available; it is believed to be small relative to subsistence harvest of king and Tanner crabs.

### **2015/16 FISHERY**

One vessel registered to harvest Dungeness crab during the 2015/16 season and harvest is confidential due to limited vessel participation.

#### FISHERY MANAGEMENT AND STOCK STATUS

The Aleutian Islands Dungeness crab fishery is managed using size, sex, and season restrictions. Only male Dungeness crab 6.5 inches (165 mm) or greater in CW may be retained in the Aleutian District from 12:00 noon May 1 to 11:59 p.m. October 31. No stock assessment is available and limited biological and fishery data have been collected through dockside sampling. The stock status of this species in the Aleutian Islands is unknown, but the resource is believed to be limited by availability of suitable Dungeness crab habitat.

## **ALEUTIAN DISTRICT SHRIMP**

#### **DESCRIPTION OF DISTRICT**

The Aleutian District of Registration Area J, as described for shrimp, includes all Bering Sea and Pacific Ocean waters west of the longitude of Scotch Cap Light at 164°44.72′W long and east of the United States-Russia Maritime Boundary Line of 1990, excluding waters east of the longitude of Cape Sarichef (Figure 1-10). Area J encompasses territorial waters of Alaska (0–3 nautical miles) and waters of the Exclusive Economic Zone (3–200 nautical miles). The Aleutian District includes 4 sections: Unalaska Bay, Makushin Bay, Usof Bay, and Beaver Inlet.

#### HISTORICAL BACKGROUND

Commercial fishing for shrimp in the Aleutian District began in the 1960s with Russian and Japanese participation. Most harvests occurred northwest of the Pribilof Islands, with some harvests as large as 30,000 metric tons per year (NMFS 1999). In 1972, a domestic trawl fishery began targeting northern pink shrimp *Pandalus borealis* in the vicinity of Unalaska Island. Catch and effort increased and harvest peaked in 1977/78 at 6.8 million pounds (Table 1-15). Sharp

declines in catches after 1978 led to a reduction in season length. Between 1983 and 1991 no fishing occurred; however, in 1992, 4 catcher-processors targeted shrimp northwest of the Pribilof Islands. Low concentrations of shrimp were located and all 4 vessels departed the fishery after making a total of 6 landings for 72,133 pounds. Since 1992, interest in Aleutian District shrimp fishery has remained at a very low level. Several vessels registered to fish, but made no landings until 1999 when 2 vessels registered for the fishery; catch information is confidential. Initial catches were composed primarily of northern pink shrimp. As the fishery progressed, sidestriped shrimp *Pandalopsis dispar* became the dominant species in the catch. The fishery was closed on July 9, 1999, because ADF&G did not possess adequate information regarding the abundance and distribution of these species and it was not possible to manage a trawl fishery in accordance with 5 AAC 39.210 *Management plan for high impact emerging fisheries*. This fishery has not opened to trawl gear since that time.

## **2015 FISHERY**

The Aleutian District was not open to commercial fishing for shrimp with trawl gear in 2015. There is no closed season for shrimp fishing with pots in the Aleutian Islands and there was no participation during the 2015 season.

## FISHERY MANAGEMENT AND STOCK STATUS

Limited population information exists for the shrimp stocks of the Aleutian Islands. The last extensive commercial activity occurred in the 1970s and trawl surveys conducted by ADF&G and NMFS do not target shrimp. However, in 2000, NMFS performed a pilot deep-sea trawl survey on the continental slope. During this survey, sidestriped shrimp was the most abundant shrimp species encountered, found primarily on the continental slope east of Zhemchug Canyon at an average depth of 214 fathoms. NMFS conducted an eastern Bering Sea continental slope survey again in 2002. Sidestriped and northern pink shrimp were the most abundant shrimp species encountered although extensive data was not collected (Hoff and Britt 2003). Shrimp are also encountered during the NMFS summer Bering Sea trawl survey. The most abundant species caught on the survey are northern pink shrimp which are found along the outer shelf between the 100 and 200 meter depth contours and humpy shrimp *Pandalus goniurus*, which are usually found in waters less than 100 meters.

## ALEUTIAN DISTRICT MISCELLANEOUS SHELLFISH

#### **DESCRIPTION OF DISTRICT**

The Aleutian Islands portion of miscellaneous shellfish Registration Area J, includes all waters south of the latitude of Cape Sarichef (54°36′N lat), west of the longitude of Scotch Cap Light (164°44′W long), and east of the United States-Russia Maritime Boundary Line of 1990 (Figure 1-11). Area J encompasses territorial waters of Alaska (0–3 nautical miles) and waters of the Exclusive Economic Zone (3–200 nautical miles).

#### HISTORICAL BACKGROUND

Miscellaneous shellfish species are typically harvested in relatively small amounts compared to the Aleutian Islands commercial king and Tanner crab fisheries. Miscellaneous shellfish species include hair crab *Erimacrus isenbeckii*, sea urchins *Strongylocentrotus spp*, red sea cucumbers *Parastichopus californicus*, snails, *Paralomis multispina* crab, octopi, and weathervane scallops

Patinopecten caurinus. Weathervane scallops are summarized in a separate statewide annual management report. Prior to 1999, ADF&G regulated new and emerging shellfish fisheries under authority of a commissioner's permit as described in 5 AAC 38.062 Permits for octopi, squid, hair crab, sea urchins, sea cucumbers, sea snails, and other marine invertebrates. Terms of commissioner's permits were general and not fully developed. As a result, miscellaneous shellfish fisheries were often conducted without prior knowledge of stock abundance or distribution, and harvest limits were not established. Since 1999, requests for commissioner's permits have decreased in frequency; however, when permits have been issued, permit terms have been crafted to promote data gathering.

Octopus and sea urchins are the only miscellaneous shellfish other than weathervane scallops that were harvested in the Aleutian Islands from 1996 to 2015.

Octopus have been retained in the directed octopus fishery (commissioner's permit) and as incidental harvest to Aleutian Islands groundfish fisheries; this report only addresses octopus harvest beginning in 1996. Vessels have only participated in the directed octopus fishery during 5 of the last 15 seasons (Table 1-16). All harvest information for years where directed harvest for octopus occurred is confidential except for 2004, when 14 vessels harvested 230,492 pounds of octopus and made 43 landings. In Aleutian Islands groundfish fisheries, incidental octopus harvest may be retained. Harvest of octopus in State of Alaska waters has occurred every year since 1996. Incidental octopus harvest has been highly variable, ranging from a low of 3,063 pounds in 2002 to a high of 151,205 pounds in 2004 (Table 1-16).

Sea Urchins were harvested by commercial divers in 1996; 6 vessels participated in the fishery, harvesting 3,701 pounds and making 15 landings. No vessels have registered to fish for sea urchins since 1996.

## **2015 FISHERIES**

## **Octopus**

No vessels registered to harvest octopus during 2015. In 2015, 41,258 pounds of octopus were retained as incidental harvest to other commercial fisheries in territorial waters of the Aleutian Islands (Table 1-16).

#### Red Sea Cucumber and Sea Urchin

No vessels or divers registered for either red sea cucumber or red sea urchin fisheries in the Aleutian Islands in 2015.

## **Other Miscellaneous Shellfish Species**

No vessels were registered for any other miscellaneous shellfish species in the Aleutian Islands in 2015.

#### FISHERY MANAGEMENT AND STOCK STATUS

Octopus biomass is not assessed in the Aleutian Islands; thus, no population data is available. ADF&G has not developed a management plan for this species. In addition to incidental harvest, which is limited to 20% of the weight of the target species, directed fishing may also occur under the authority of a commissioner's permit. A fishing logbook is required for the directed fishery and only pots or dive gear may be used.

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**TABLES AND FIGURES** 

 $Table \ 1-1.-Aleutian \ Islands \ red \ king \ crab \ commercial \ fishery \ data, \ 1960/61-2015/16.$ 

			Numb	er of						Average	
Season	Location	Vessels	Landings	Crab <sup>a</sup>	Pots lifted	GHL/TACb	Harvest <sup>a,c</sup>	Deadloss <sup>c</sup>	Weight <sup>c</sup>	CPUE <sup>d</sup>	Lengthe
1960/61	East of 172°W	NA	NA	NA	NA	-	NA	NA	NA	NA	NA
	West of 172°W	4	41	NA	NA	-	2,074,000	NA	NA	NA	NA
1961/62	East of 172°W	4	69	NA	NA	-	533,000	NA	NA	NA	NA
	West of 172°W	8	218	NA	NA	-	6,114,000	NA	NA	NA	NA
	TOTAL	NA	287	=	-	-	6,647,000	-	-	=	=
1962/63	East of 172°W	6	102	NA	NA	-	1,536,000	NA	NA	NA	NA
	West of 172°W	9	248	NA	NA	-	8,006,000	NA	NA	NA	NA
	TOTAL	NA	350	-	-	-	9,542,000	-	-	-	-
1963/64	East of 172°W	4	242	NA	NA	-	3,893,000	NA	NA	NA	NA
	West of 172°W	11	527	NA	NA	-	17,904,000	NA	NA	NA	NA
	TOTAL	NA	769	=	-	-	21,797,000	-	-	=	=
1964/65	East of 172°W	12	336	NA	NA	-	13,761,000	NA	NA	NA	NA
	West of 172°W	18	442	NA	NA	-	21,193,000	NA	NA	NA	NA
	TOTAL	NA	778	=	-	-	34,954,000	-	-	=	=
1965/66	East of 172°W	21	555	NA	NA	-	19,196,000	NA	NA	NA	NA
	West of 172°W	10	431	NA	NA	-	12,915,000	NA	NA	NA	NA
	TOTAL	NA	986	-	-	-	32,111,000	-	-	_	-
1966/67	East of 172°W	27	893	NA	NA	-	32,852,000	NA	NA	NA	NA
	West of 172°W	10	90	NA	NA	-	5,883,000	NA	NA	NA	NA
	TOTAL	NA	983	-	-	-	38,735,000	-	-	-	-
1967/68	East of 172°W	34	747	NA	NA	-	22,709,000	NA	NA	NA	NA
	West of 172°W	22	505	NA	NA	-	14,131,000	NA	NA	NA	NA
	TOTAL	NA	1,252	-	-	-	36,840,000	-	-	_	-
1968/69	East of 172°W	NA	NA	NA	NA	-	11,300,000	NA	NA	NA	NA
	West of 172°W	30	NA	NA	NA	-	16,100,000	NA	NA	NA	NA
	TOTAL	-	-	_	-	-	27,400,000	-	-	_	
1969/70	East of 172°W	41	375	NA	72,683	-	8,950,000	NA	NA	NA	NA
	West of 172°W	33	435	NA	115,929	-	18,016,000	NA	6.5	NA	NA
	TOTAL	NA	810	_	188,612	-	26,966,000	-	-	_	-

Table 1-1.—Page 2 of 4.

			Nur	nber of						Average	
Season	Location	Vessels	Landings	Crab <sup>a</sup>	Pots lifted	GHL/TACb	Harvest <sup>a,c</sup>	Deadloss <sup>c</sup>	Weight <sup>c</sup>	$CPUE^d$	Lengthe
1970/71	East of 172°W	32	268	NA	56,198	-	9,652,000	NA	NA	NA	NA
	West of 172°W	35	378	NA	124,235	-	16,057,000	NA	NA	NA	NA
	TOTAL	NA	646	-	180,433	-	25,709,000	-	-	-	-
1971/72	East of 172°W	32	210	1,447,692	31,531	-	9,391,615	NA	6.5	46	NA
	West of 172°W	40	166	NA	46,011	-	15,475,940	NA	NA	NA	NA
	TOTAL	NA	376	-	77,542	-	24,867,555	-	-	-	-
1972/73	East of 172°W	51	291	1,500,904	34,037	-	10,450,380	NA	7.0	44	NA
	West of 172°W	43	313	3,461,025	81,133	-	18,724,140	NA	5.4	43	NA
	TOTAL	NA	604	4,961,929	115,170	-	29,174,520	=	5.9	43	-
1973/74	East of 172°W	56	290	1,780,673	41,840	10,000,000 <sup>f</sup>	12,722,660	NA	7.1	43	NA
	West of 172°W	41	239	1,844,974	70,059	$20,000,000^{\mathrm{f}}$	9,741,464	NA	5.3	26	148.6
	TOTAL	NA	529	3,625,647	111,899	$30,000,000^{\mathrm{f}}$	22,464,124	-	6.2	32	-
1974/75	East of 172°W	87	372	1,812,647	71,821	11,500,000 <sup>f</sup>	13,991,190	NA	7.7	25	NA
	West of 172°W	36	97	532,298	32,620	$20,000,000^{\mathrm{f}}$	2,774,963	NA	5.2	16	148.6
	TOTAL	NA	469	2,344,945	104,441	35,000,000 <sup>f</sup>	16,766,153	=	7.1	22	-
1975/76	East of 172°W	79	369	2,147,350	86,874	14,500,000 <sup>f</sup>	15,906,660	NA	7.4	25	NA
	West of 172°W	20	25	79,977	8,331	15,000,000 <sup>f</sup>	411,583	NA	5.2	10	147.2
	TOTAL	NA	394	2,227,327	95,205	19,500,000 <sup>f</sup>	16,318,243	-	7.3	23	-
1976/77	East of 172°Wg	72	226	1,273,298	65,796	14,500,000 <sup>f</sup>	9,367,965	NA	7.4	19	NA
	East of 172°Wh	38	61	86,619	17,298	14,500,000	830,458	NA	9.6	5	NA
	West of 172°W	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
	TOTAL	NA	287	1,359,917	83,094	14,500,000 <sup>f</sup>	10,198,423	-	7.5	16	-
1977/78	East of 172°Wg	33	227	539,656	46,617	8.0–14.5 million <sup>f</sup>	3,658,860	NA	6.8	12	NA
	East of 172°Wi	6	7	3,096	812	0.0–14.J IIIIIIIIII	25,557	NA	8.3	4	NA
	West of 172°W	12	18	160,343	7,269	0.25-2.5 million	905,527	NA	5.7	22	152.2
	TOTAL	NA	252	703,095	54,698		4,589,944	-	6.5	13	-

Table 1-1.—Page 3 of 4.

			Nun	nber of						Average	
Season	Location	Vessels	Landings	Crab <sup>a</sup>	Pots lifted	GHL/TACb	Harvest <sup>a,c</sup>	Deadloss <sup>c</sup>	Weight <sup>c</sup>	CPUE <sup>d</sup>	Lengthe
1978/79	East of 172°W	60	300	1,233,758	51,783	5.0 - 13.0 million <sup>f</sup>	6,824,793	NA	5.5	24	NA
	West of 172°W	13	27	149,491	13,948	0.5–3.0 million	807,195	1,170	5.4	11	NA
	TOTAL	NA	327	1,383,249	65,731		7,631,988	-	5.5	21	-
1979/80	East of 172°W	104	542	2,551,116	120,554	17.0–25.0 million <sup>f</sup>	15,010,840	NA	5.9	21	NA
	West of 172°W	18	23	82,250	9,757	0.5–3.0 million	467,229	24,850	5.7	8	152
	TOTAL	NA	565	2,633,366	130,311		15,478,069	-	5.9	20	-
1980/81	East of 172°Wg	114	830	2,772,287	231,607	7.0–17.0 million <sup>f</sup>	17,660,620	NA	6.4	12	NA
	East of 172°Wi	54	120	182,349	30,000	7.0-17.0 IIIIIII0II	1,392,923	NA	7.6	6	NA
	West of 172°W	17	52	254,390	20,914	0.5–3.0 million	1,419,513	54,360	5.6	12	149
	TOTAL	NA	1,002	3,209,026	282,521		20,473,056	-	6.4	11	-
1981/82	East of 172°W	92	683	741,966	220,087	7.0–17.0 million <sup>f</sup>	5,155,345	NA	6.9	3	NA
	West of 172°W	46	106	291,311	40,697	0.5–3.0 million	1,648,926	8,759	5.7	7	148.3
	TOTAL	NA	789	1,033,277	260,784		6,804,271	-	6.6	4	-
1982/83	East of 172°W	81	278	64,380	72,924	2.0–3.0 million	431,179	NA	6.7	1	-
	West of 172°W	72	191	284,787	66,893	0.5–3.0 million	1,701,818	7,855	6.0	4	150.8
	TOTAL	NA	469	349,167	139,817		2,132,997	-	6.1	3	-
1983/84	West of 172°W	106	248	298,958	60,840	0.5–3.0 million	1,981,579	3,833	6.6	5	157.3
1984/85	West of 171°W	64	106	196,276	48,642	1.5–3.0 million	1,296,385	0	6.6	4	155.1
1985/86	West of 171°W	35	82	156,097	29,095	0.5-2.0 million	868,828	0	5.6	5	152.2
1986/87	West of 171°W	33	69	126,204	29,189	0.5-1.5 million	712,543	800	5.7	4	NA
1987/88	West of 171°W	71	103	211,692	43,433	0.5–1.5 million	1,213,892	6,900	5.7	5	148.5
1988/89	West of 171°W	73	156	266,053	64,334	1.0 million	1,567,314	557	5.9	4	153.1
1989/90	West of 171°W	56	123	193,177	54,213	1.7 million	1,105,971	759	5.7	4	151.5
1990/91	West of 171°W	7	34	146,903	10,674	NA	828,105	0	5.6	14	148.1
1991/92	West of 171°W	10	35	165,356	16,636	NA	951,278	0	5.8	10	149.8
1992/93	West of 171°W	12	30	218,049	16,129	NA	1,286,424	5,000	6.0	14	151.5
1993/94	West of 171°W	12	21	119,330	13,575	NA	698,077	7,402	5.9	9	154.6
1994/95	West of 171°W	20	31	30,337	18,146	1.0–1.5 million	196,967	1,430	6.5	2	157.5
1995/96	West of 171°W	4	12	6,880	1,986	1.0–1.5 million	38,941	235	5.7	3	153.6
1996/97-1997/9	8	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC

Table 1-1.—Page 4 of 4.

			Numb	er of						Average	
Season	Location	Vessels	Landings	Crab <sup>a</sup>	Pots lifted	GHL/TAC <sup>b</sup>	Harvest <sup>a,c</sup>	Deadloss <sup>c</sup>	Weight <sup>c</sup>	CPUE <sup>d</sup>	Length <sup>e</sup>
1998/99	West of 174°W	1	CF	CF	CF	15,000	CF	CF	CF	CF	CF
1999/00		FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
2000/01 <sup>j</sup>	Petrel Bank <sup>k</sup>	1	3	11,299	496	FC	76,562	0	6.8	23	161.0
$2001/02^{1}$	Petrel Bank <sup>k</sup>	4	5	22,080	564	FC	153,961	82	7.0	39	159.5
2002/03	Petrel Bank <sup>k</sup>	33	35	68,300	3,786	500,000	505,642	1,311	7.4	18	162.4
2003/04	Petrel Bank <sup>k</sup>	30	31	59,828	5,774	500,000	479,113	2,617	8.0	10	167.9
2004/05-2015/16		FC	FC	FC	FC	FC	FC	FC	FC	FC	FC

*Note*: NA = Not available, FC = fishery closed, CF = confidential.

<sup>&</sup>lt;sup>a</sup> Deadloss included.

b Guideline harvest level (GHL). Total allowable catch (TAC) for Aleutian Islands Red King Crab west of 179°W long beginning with 2005/06 season.

<sup>&</sup>lt;sup>c</sup> In pounds.

d Number of retained crab per pot lift.

Number of retained crab per pot lift.

carapace length in millimeters.

GHL includes all king crab species. Golden king crab incidental to red king crab.

6.5 inch minimum legal size for portion of the season.

8.0 inch minimum legal size for portion of the season.

7.5 inch minimum legal size for portion of the season.

January/February Petrel Bank survey (fish ticket harvest code 15).

Those waters of king crab Registration Area O between 179°E long, 179°W long, and north of 51°45' N lat.

November Petrel Bank survey (fish ticket harvest code 15).

Table 1-2.—Aleutian Islands red king crab fishery economic performance and season dates, 1960/61-2015/16.

			alue	Seaso	on length
Season	Location	Exvessela	Total	Days	Dates
1960/61-1967/68		NA	NA	365	01/01-12/31
1968/69	East of 172°W	NA	NA	73	01/01-03/15
	West of 172°W	NA	NA	NA	NA-03/15
1969/70	East of 172°W	NA	NA	153	09/15-02/15
	West of 172°W	NA	NA	122	09/15-01/13
1970/71	East of 172°W	NA	NA	117	09/15-01/10
	West of 172°W	NA	NA	79	11/01-03/3
1971/72	East of 172°W	NA	NA	38	09/15-10/23
	West of 172°W	NA	NA	45	11/01-12/1
1972/73	East of 172°W	NA	NA	23	10/01-10/2
	West of 172°W	NA	NA	108	11/01-02/17
1973/74	East of 172°W	\$0.65	\$8,269,729	24	11/01-11/2
	West of 172°W	NA	NA	35	11/01-12/0
	TOTAL	-	-	-	
1974/75	East of 172°W	\$0.37	\$5,176,740	75	11/01-01/14
	West of 172°W	\$0.35	\$971,237	118	11/01-02/20
	TOTAL	NA	\$6,147,977	-	
1975/76	East of 172°W	\$0.42	\$6,680,797	71	11/01-01/1
	West of 172°W	\$0.38	\$156,402	47	11/01-12/1
	TOTAL	NA	\$6,837,199	-	
1976/77	East of 172°W <sup>b</sup>	\$0.64	\$5,995,497	37	11/01-12/0
	East of 172°W°	\$0.79	\$656,061	31	12/13-01/13
	West of 172°W	FC	FC	FC	FO
	TOTAL	NA	\$6,651,558	-	
1977/78	East of 172°W <sup>b</sup>	\$0.99	\$3,622,271	84	09/15-12/0
	East of 172°W <sup>d</sup>	\$1.35	\$34,502	28	12/08-01/0
	West of 172°W	\$1.36	\$1,231,517	28	02/20-03/20
	TOTAL	NA	\$4,888,290	-	
1978/79	East of 172°W	\$1.35	\$9,213,471	71	09/10-11/20
	West of 172°W	\$1.23	\$992,850	36	02/21-03/29
	TOTAL	NA	\$10,206,321	-	
1979/80	East of 172°W	\$0.90	\$13,509,756	122	09/10-01/10
	West of 172°W	\$0.68	\$317,716	76	01/15-04/0
	TOTAL	NA	\$13,827,472	-	
1980/81	East of 172°W <sup>b</sup>	\$1.02	\$18,013,832	73	11/01–01/12
	East of 172°W <sup>d</sup>	\$1.03	\$1,434,711	31	01/15-02/1
	West of 172°W	\$0.92	\$1,305,952	72	01/15-03/2
	TOTAL	NA	\$20,754,495	_	
1981/82	East of 172°W	\$2.30	\$11,617,293	107	11/01-02/1
· -	West of 172°W	\$2.01	\$3,314,341	107	11/01-02/1
	TOTAL	NA	\$14,931,634	-	11,01 02/1
1982/83	East of 172°W	\$3.43	\$1,478,944	66	11/01–01/1
1704/03					
	West of 172°W	\$3.44	\$5,854,254	76	11/01–01/1
	TOTAL	NA	\$7,333,198	-	

Table 1-2.—Page 2 of 2.

		Val	ue	Sease	on length
Season	Location	Exvessel <sup>a</sup>	Total	Days	Dates
1983/84	East of 172°W	FC	FC	FC	FC
	West of 172°W	\$3.53	\$6,796,816	340	11/10-12/16
1984/85	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$2.10	\$2,872,111	97	11/10-02/15
1985/86	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$2.15	\$1,948,530	107	11/01-02/15
1986/87	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$3.87	\$2,756,380	107	11/01-02/15
1987/88	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$4.00	\$4,855,732	107	11/01-02/15
1988/89	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$5.00	\$7,836,570	34	11/01-12/04
1989/90	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$4.20	\$4,697,977	107	11/01-02/15
1990/91	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$4.00	\$3,312,420	107	11/01-02/15
1991/92	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$3.00	\$2,853,834	107	11/01-02/15
1992/93	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$5.05	\$6,496,441	76	11/01-01/15
1993/94	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$3.87	\$2,701,558	107	11/01-02/15
1994/95	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$5.50	\$1,083,319	27	11/01-11/28
1995/96	East of 171°W	FC	FC	FC	FC
	West of 171°W	\$2.81	\$109,424	107	11/01-02/15
1996/97–1997/98		FC	FC	FC	FC
1998/99	West of 174°W	CF	CF	272	11/01–7/31
1999/00		FC	FC	FC	FC
2000/01 <sup>e</sup>		FC	FC	FC	FC
$2001/02^{f}$		FC	FC	FC	FC
2002/03	Petrel Bank <sup>g</sup>	\$6.51	\$3,291,729	2	10/25-10/27
2003/04	Petrel Bank <sup>g</sup>	\$5.14	\$2,449,189	4	10/25-10/29
2004/05-2015/16	sed NA – not available CF	FC	FC	FC	FC

*Note*: FC = fishery closed, NA = not available, CF = confidential.

<sup>&</sup>lt;sup>a</sup> Average price per pound.

b 6.5 inch minimum legal size for this portion of the season.

<sup>&</sup>lt;sup>c</sup> 8.0 inch minimum legal size for this portion of the season.

d 7.5 inch minimum legal size for this portion of the season.

<sup>&</sup>lt;sup>e</sup> January/February Petrel Bank survey (fish ticket harvest code 15).

<sup>&</sup>lt;sup>f</sup> November Petrel Bank survey (fish ticket harvest code 15).

 $<sup>^</sup>g$  Those waters of king crab Registration Area O between 179°E long, 179°W long, and north of 51°45' N lat.

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Table 1-3.—Subsistence king and Tanner crabs harvest from the Eastern Aleutian Islands, west of Scotch Cap Light and east of 168°W long, 1999–2015.

		Permits			Hai	rvest <sup>a</sup>	
Year	Number issued	Number returned	Percent returned	King crab reported	King crab estimated	Tanner crab reported	Tanner crab estimated
1999	179	80	45	787	1,761	1,432	3,204
2000	193	137	71	523	737	916	1,290
2001	200	153	77	1,149	1,502	1,703	2,226
2002	231	179	77	1,080	1,394	2,451	3,163
2003	229	160	70	387	554	4,600	6,584
2004	225	144	64	225	352	4,714	7,366
2005	241	182	76	866	1,147	5,447	7,213
2006	256	185	72	1,796	2,485	1,439	1,991
2007	203	122	60	1,359	2,265	1,542	2,570
2008	242	176	73	1,188	1,634	889	1,222
2009	219	168	77	641	836	2,014	2,625
2010	215	119	55	160	289	2,479	4,479
2011	189	124	66	188	287	1,453	2,215
2012	261	120	46	246	535	2,005	4,361
2013	241	106	44	583	1,326	1,923	4,372
2014	238	107	45	236	525	1,757	3,908
2015	206	95	46	67	145	1,243	2,695
1999–2015 Average	222	139	63	675	1,080	2,236	3,574

<sup>&</sup>lt;sup>a</sup> Estimated harvest, in number of crab, from waters surrounding Unalaska Island.

Table 1-4.—Aleutian Islands golden king crab general, Individual Fishing Quota (IFQ), Community Development Quota (CDQ), and Adak Community Allocation (ACA) fishery harvest data, 1981/82–2015/16.

-			Number of					Number of	f pots		Average	
Season	Location	Vessels <sup>a</sup>	Landings	Crab <sup>b</sup>	GHL/TAC <sup>c</sup>	Harvest <sup>b,d</sup>	Deadloss <sup>d</sup>	Registered	Lifted	Weight <sup>d</sup>	CPUE <sup>e</sup>	Length
1981/82	East of 172°W	6	16	22,666	-	115,715	8,752	NA	2,906	5.1	8	158
	West of 172°W	14	76	217,700	-	1,194,046	22,064	2,647	24,627	5.5	9	160
	TOTAL	NA	92	240,458	-	1,319,761	30,816	2,647	27,533	5.4	9	NA
1982/83	East of 172°W	49	136	227,471	-	1,184,971	47,479	NA	29,369	5.2	8	158
	West of 172°W	99	501	1,509,001	-	8,006,274	220,743	13,111	150,103	5.3	10	158
	TOTAL	NA	637	1,737,109	-	9,191,245	268,222	13,111	179,472	5.3	10	NA
1983/84	East of 172°W	47	132	238,353	-	1,810,973	45,268	4,514	29,595	7.6	8	NA
	West of 172°W	157	1,002	1,534,909	-	8,128,029	171,021	17,406	226,798	5.3	7	NA
	TOTAL	NA	1,134	1,773,262	-	9,939,002	216,289	21,920	256,393	5.6	7	<u>-</u>
1984/85	East of 171°W	13	67	327,440	-	1,521,142	70,362	1,394	24,044	4.6	14	161
	West of 171°W	38	85	643,597	-	3,180,095	125,073	5,270	64,777	4.9	10	157
	TOTAL	NA	152	971,274	-	4,701,237	195,435	6,664	88,821	4.8	11	NA
1985/86	East of 171°W	11	59	364,097	-	1,733,878	25,223	1,479	31,322	4.8	12	156
	West of 171°W	53	386	2,452,216	-	11,024,759	197,753	7,057	205,279	4.5	12	151
	TOTAL	NA	445	2,816,313	-	12,758,637	222,976	8,536	236,601	4.5	12	NA
1986/87	East of 171°W	17	71	400,389	-	1,869,180	9,510	1,575	37,585	4.7	11	NA
	West of 171°W	62	528	2,940,238	-	12,869,564	276,741	12,958	395,435	4.4	7	150
	TOTAL	NA	599	3,340,627	-	14,738,744	286,251	14,533	433,020	4.4	8	_
1987/88	East of 171°W	23	77	301,227	-	1,388,983	25,060	3,591	42,867	4.6	7	150
	West of 171°W	57	380	1,873,349	-	7,868,022	167,110	10,687	263,863	4.2	7	147
	TOTAL	NA	457	2,174,576	-	9,257,005	192,170	14,278	306,730	4.3	7	NA
1988/89	East of 171°W	21	57	323,783	-	1,546,113	23,960	4,215	41,371	4.8	8	154
	West of 171°W	73	455	2,164,650	-	9,080,929	125,500	23,627	280,556	4.2	8	149
	TOTAL	NA	512	2,488,433	-	10,627,042	149,460	27,842	321,927	4.3	8	NA
1989/90	East of 171°W	13	70	424,067	-	1,852,249	17,421	5,635	43,346	4.4	10	151
	West of 171°W	65	505	2,478,846	-	10,169,803	99,866	14,724	314,457	4.1	8	149
	TOTAL	NA	575	2,902,913	-	12,022,052	117,287	20,359	357,803	4.1	8	NA
1990/91	East of 171°W	16	67	391,135	-	1,699,675	42,800	5,225	53,592	4.3	7	148
	West of 171°W	13	167	1,312,116	-	5,250,687	176,583	7,380	161,222	4.0	8	145
	TOTAL	24	234	1,703,251	-	6,950,362	219,383	12,605	214,814	4.1	8	NA
1991/92	East of 171°W	11	53	346,176	-	1,490,830	45,100	3,760	42,600	4.3	8	148
	West of 171°W	16	206	1,494,595	-	6,185,362	96,848	7,635	191,626	4.1	8	145
	TOTAL	20	259	1,840,771		7,676,192	141,948	11,395	234,226	4.2	8	NA
1992/93	East of 171°W	10	46	337,559	-	1,404,452	37,200	4,222	38,348	4.2	9	148
	West of 171°W	18	128	1,190,769	-	4,886,745	104,215	8,236	164,873	4.1	7	147
	TOTAL	22	174	1,528,328	-	6,291,197	141,415	12,458	203,221	4.1	8	NA

Table 1-4.—Page 2 of 6.

			Number of					Number of	f pots		Average	
Season	Location	Vessels <sup>a</sup>	Landings	Crab <sup>b</sup>	GHL/TAC <sup>c</sup>	Harvest <sup>b,d</sup>	Deadloss <sup>d</sup>	Registered	Lifted	Weight <sup>d</sup>	CPUE <sup>e</sup>	Length
1993/94	East of 171°W	4	14	217,788	-	915,460	7,324	2,334	22,490	4.2	10	149
	West of 171°W	21	148	1,179,742	-	4,635,683	165,358	11,970	212,164	3.9	6	148
	TOTAL	21	162	1,397,530	-	5,551,143	172,682	14,304	234,654	4.0	6	NA
1994/95	East of 171°W	14	45	384,353	-	1,750,267	35,938	7,378	67,537	4.6	6	148
	West of 171°W	34	247	1,539,866	-	6,378,030	242,190	15,604	319,006	4.1	5	150
	TOTAL	35	292	1,924,219	-	8,128,297	278,128	22,982	386,543	4.2	5	NA
1995/96	East of 171°W	17	42	431,867	1,500,000	1,993,980	65,156	10,325	65,030	4.6	7	150
	West of 171°W	25	141	1,150,466	5-6 million	4,966,426	248,226	14,213	227,991	4.3	5	147
	TOTAL	28	183	1,582,333	-	6,960,406	313,382	24,538	293,021	4.4	5	NA
1996/97	East of 174°W	14	71	731,909	3,200,000	3,290,862	185,203	9,040	113,460	4.5	6	NA
	West of 174°W	13	99	602,968	2,700,000	2,524,910	75,506	8,805	99,267	4.2	6	NA
	TOTAL	18	170	1,334,877	5,900,000	5,815,772	260,709	17,845	212,727	4.4	6	147
1997/98	East of 174°W	13	74	780,610	3,200,000	3,501,055	131,481	9,720	106,403	4.5	7	147
	West of 174°W	9	96	569,550	2,700,000	2,444,628	79,564	5,240	86,811	4.3	7	148
	TOTAL	15	167	1,350,160	5,900,000	5,945,683	211,045	14,960	193,214	4.4	7	147
1998/99	East of 174°W	14	55	740,011	3,000,000	3,247,863	82,113	8,295	83,378	4.4	9	148
	West of 174°W	3	44	426,257	2,700,000	1,694,030	21,218	1,930	35,975	4.0	12	146
	TOTAL	16	99	1,149,542	5,700,000	4,939,248	103,331	10,225	119,298	4.3	10	147
1999/00	East of 174°W	15	60	709,332	3,000,000	3,069,886	67,574	9,514	79,129	4.3	9	147
	West of 174°W	15	113	676,558	2,700,000	2,768,902	104,852	10,564	107,040	4.1	6	147
	TOTAL	17	173	1,385,890	5,700,000	5,838,788	172,426	20,078	186,169	4.2	7	147
2000/01	East of 174°W	15	50	704,702	3,000,000	3,134,079	55,999	10,598	71,551	4.4	10	147
	West of 174°W	12	100	705,613	2,700,000	2,884,682	53,158	8,910	101,239	4.1	7	145
	TOTAL	17	150	1,410,315	5,700,000	6,018,761	109,157	19,508	172,790	4.3	8	146
2001/02	East of 174°W	19	45	730,030	3,000,000	3,178,652	50,030	12,927	62,639	4.4	12	147
	West of 174°W	9	90	686,738	2,700,000	2,740,054	43,519	8,491	105,512	4.0	7	145
	TOTAL	21	134	1,416,768	5,700,000	5,918,706	93,549	21,418	168,151	4.2	8	146
2002/03	East of 174°W	19	43	643,886	3,000,000	2,821,851	55,425	11,834	52,042	4.4	12	148
	West of 174°W	6	73	664,823	2,700,000	2,640,604	32,101	6,225	78,979	4.0	8	146
	TOTAL	22	116	1,308,709	5,700,000	5,462,455	87,526	18,059	131,021	4.2	10	147
2003/04	East of 174°W	18	37	643,074	3,000,000	2,977,055	76,006	12,518	58,883	4.6	11	149
	West of 174°W	6	60	676,633	2,700,000	2,688,773	49,321	7,140	66,236	4.0	10	146
	TOTAL	21	96	1,319,707	5,700,000	5,665,828	125,327	19,658	125,119	4.3	11	147
2004/05	East of 174°W	19	32	637,536	3,000,000	2,886,817	43,576	13,165	34,848	4.5	18	148
	West of 174°W	6	51	685,465	2,700,000	2,688,234	43,560	7,240	56,846	3.9	12	146
	TOTAL	22	83	1,323,001	5,700,000	5,575,051	87,136	20,405	91,694	4.2	14	147

Table 1-4.—Page 3 of 6.

			Number of					Number of	pots		Average	
Season	Location	Vessels <sup>a</sup>	Landings	Crab <sup>b</sup>	GHL/TAC <sup>c</sup>	Harvest <sup>b,d</sup>	Deadloss <sup>d</sup>	Registered	Lifted	Weight <sup>d</sup>	CPUE <sup>e</sup>	Length
2005/06	East of 174°W											
	IFQ	7		560,906	2,700,000	2,567,781	23,791	-	21,898	4.6	26	-
	CDQ	3		CF	300,000	CF	CF	-	CF	CF	CF	-
	TOTAL	7	CF	CF	3,000,000	CF	CF	-	CF	CF	CF	151
	West of 174°W											
	IFQ	3		571,014	2,430,000	2,384,567	26,500	-	27,503	4.2	21	-
	ACA	1	CF	CF	270,000	CF	CF	-	CF	CF	CF	-
	TOTAL	3	CF	CF	2,700,000	CF	CF	-	CF	CF	CF	148
	Aleutian Islands											
	IFQ	8		1,131,920	5,130,000	4,952,348	50,291	9,833	49,401	4.4	23	-
	CDQ/ACA	4		CF	570,000	CF	CF	CF	CF	CF	CF	-
	TOTAL	8	CF	CF	5,700,000	CF	CF	CF	CF	CF	CF	149
2006/07	East of 174°W											
	IFQ	6		585,676	2,700,000	2,692,010	31,311	-	23,839	4.6	25	-
	CDQ	3		CF	300,000	CF	CF	-	CF	CF	CF	-
	TOTAL	6	CF	CF	3,000,000	CF	CF	-	CF	CF	CF	152
	West of 174°W											
	IFQ	3		462,529	2,430,000	2,002,190	19,768	-	22,694	4.3	20	-
	ACA	2		CF	270,000	CF	CF	-	CF	CF	CF	-
	TOTAL	4	CF	CF	2,700,000	CF	CF	-	CF	CF	CF	150
	Aleutian Islands											
	IFQ	7		1,048,205	5,130,000	4,694,200	51,079	9,300	46,533	4.5	22	-
	CDQ/ACA	4	CF	CF	570,000	CF	CF	CF	CF	CF	CF	-
	TOTAL	7	CF	CF	5,700,000	CF	CF	CF	CF	CF	CF	150
2007/08	East of 174°W											
	IFQ	4		566,838	2,700,000	2,689,997	21,042	-	20,496	4.8	28	-
	CDQ	3		66,415	300,000	300,000	516	-	2,157	4.5	31	-
	TOTAL	4	42	633,253	3,000,000	2,989,997	21,558	-	22,653	4.7	28	153
	West of 174°W											
	IFQ	3		524,894	2,430,000	2,248,103	23,183	-	25,616	4.2	21	-
	ACA	1	CF	CF	270,000	CF	CF	-	CF	CF	CF	-
	TOTAL	3	CF	CF	2,700,000	CF	CF	-	CF	CF	CF	149
	Aleutian Islands	s Area Total										
	IFQ	4	5 66	1,091,732	5,130,000	4,938,100	44,225	7,600	46,112	4.5	23	_
	CDQ/ACA			CF	570,000	CF	CF	CF	CF	CF	CF	_
	TOTAL	4		CF	5,700,000	CF	CF	CF	CF	CF	CF	151

Table 1-4.—Page 4 of 6.

			Number of					Number of			Average	
Season	Location	Vessels <sup>a</sup>	Landings	Crab <sup>b</sup>	GHL/TAC <sup>c</sup>	Harvest <sup>b,d</sup>	Deadloss <sup>d</sup>	Registered	Lifted	Weight <sup>d</sup>	CPUE <sup>e</sup>	Length
2008/09	East of 174°W											
	IFQ	3	29	600,380	2,835,000	2,829,423	24,117	-	21,855	4.7	27	-
	CDQ	3	8	66,566	315,000	315,000	1,408	-	2,611	4.7	25	-
	TOTAL	3	37	666,946	3,150,000	3,144,423	25,525	-	24,466	4.7	27	151
	West of 174°W											
	IFQ	3	38	519,530	2,551,500	2,252,114	22,802	-	22,351	4.3	23	-
	ACA	1	CF	CF	283,500	CF	CF	-	CF	CF	CF	-
	TOTAL	3	CF	CF	2,835,000	CF	CF	-	CF	CF	CF	148
	Aleutian Islands Aı	rea Total										
	IFQ	5	67	1,119,910	5,386,500	5,081,537	46,919	7,500	44,206	4.5	25	-
	CDQ/ACA	4	CF	CF	598,500	CF	CF	CF	CF	CF	CF	-
	TOTAL	5	CF	CF	5,985,000	CF	CF	CF	CF	CF	CF	149
2009/10	East of 174°W											
	IFQ	3	32	611,574	2,835,000	2,835,474	31,622	4,600	23,442	4.6	26	-
	CDQ	3	7	68,312	315,000	315,000	1,662	4,600	2,856	4.6	24	_
	TOTAL	3	39	679,886	3,150,000	3,150,474	33,284	4,600	26,298	4.6	26	152
	West of 174°W			·			,	·	ĺ			
	IFQ	3	38	561,445	2,551,500	2,478,313	33,069	5,050	22,746	4.4	25	-
	ACA	1	CF	CF	283,500	CF	CF	CF	CF	CF	CF	_
	TOTAL	3	CF	CF	2,835,000	CF	CF	CF	CF	CF	CF	150
	Aleutian Islands Aı	rea Total										
	IFQ	5	70	1,173,019	5,386,500	5,313,787	64,691	8,450	46,188	4.5	25	_
	CDQ/ACA	4	CF	CF	598,500	CF	CF	CF	CF	CF	CF	_
	TOTAL	5	CF	CF	5,985,000	CF	CF	CF	CF	CF	CF	150
2010/11	East of 174°W											
	IFQ	3	30	604,471	2,835,000	2,833,188	69,329	4,600	23,737	4.7	7 25	5
	CDQ	3	5	66,047	315,000	315,000	2,190	4,540	2,114	4.8	3 31	
	TOTAL	3	35	670,983	3,150,000	3,148,188	71,519	4,600	25,851	4.7	7 26	5 15.
	West of 174°W			· ·	· ·		·	,	·			
	IFQ	3	35	562,060	2,551,500	2,537,161	32,628	4,675	26,587	4.5	5 21	l
	ACA	1	CF	CF	283,500	CF	CF	CF	CF	CF		
	TOTAL	3	CF	CF	2,835,000	CF	CF	CF	CF	CF		
	Aleutian Islands A	rea Total			, , ,							
	IFQ	5	65	1,166,531	5,386,500	5,370,349	101,957	9,175	50,324	4.6	5 23	3
	CDQ/ACA	4	CF	CF	598,500	CF	CF	CF	CF	CF		
	TOTAL	5	CF	CF	5,985,000	CF	CF	CF	CF	CF	F CF	15

Table 1-4.-Page 5 of 6.

			Number of					Number of	pots		Average	
Season	Location	Vessels <sup>a</sup>	Landings	Crab <sup>b</sup>	GHL/TAC <sup>c</sup>	Harvest <sup>b,d</sup>	Deadloss <sup>d</sup>	Registered	Lifted	Weight <sup>d</sup>	CPUE <sup>e</sup>	Length
2011/12	East of 174°W											
	IFQ	3	34	603,766	2,835,000	2,835,270	22,641	3,850	16,075	4.7	38	-
	CDQ	3	7	65,062	315,000	315,104	1,543	3,850	1,840	4.8	35	-
	TOTAL	3	41	668,828	3,150,000	3,150,374	24,184	3,850	17,915	4.7	37	151
	West of 174°W											
	IFQ	3	36	550,688	2,551,500	2,536,744	33,075	4,292	22,586	4.6	24	-
	ACA	1	CF	CF	283,500	CF	CF	CF	CF	CF	CF	-
	TOTAL	3	CF	CF	2,835,000	CF	CF	CF	CF	CF	CF	148
	Aleutian Islands A	Area Total										
	IFQ	5	70	1,154,454	5,386,500	5,372,014	55,716	7,742	38,661	4.6	29	-
	CDQ/ACA	4	CF	CF	598,500	CF	CF	CF	CF	CF	CF	-
	TOTAL	5	CF	CF	5,985,000	CF	CF	CF	CF	CF	CF	149
2012/13	East of 174°W											
	IFQ	3	37	621,059	2,979,000	2,984,118	77,158	3,680	18,793	4.8	33	-
	CDQ	3	8	66,607	331,000	330,997	2,276	3,680	2,034	5.0	33	-
	TOTAL	3	45	687,666	3,310,000	3,315,115	79,434	3,680	20,827	4.8	33	153
	West of 174°W											
	IFQ	3	33	603,709	2,682,000	2,654,644	51,130	6,500	29,330	4.4	21	-
	ACA	1	CF	CF	298,000	CF	CF	CF	CF	CF	CF	-
	TOTAL	3	CF	CF	2,980,000	CF	CF	CF	CF	CF	CF	150
	Aleutian Islands A	Area Total										
	IFQ	5	70	1,224,768	5,661,000	5,638,762	128,288	10,180	48,123	4.6	27	-
	CDQ/ACA	4	CF	CF	629,000	CF	CF	CF	CF	CF	CF	-
	TOTAL	5	CF	CF	6,290,000	CF	CF	CF	CF	CF	CF	151
2013/14	East of 174°W											
	IFQ	3	35	628,962	2,979,000	2,970,517	27,462	4,100	18,272	4.7	34	-
	CDQ	3	7	70,116	331,000	331,544	2,470	4,100	2,415	4.7	29	-
	TOTAL	3	42	699,078	3,310,000	3,302,061	29,932	4,100	20,687	4.7	32	151
	West of 174°W											
	IFQ	3	30	618,660	2,682,000	2,672,523	86,405	6,720	37,705	4.3	16	-
	ACA	1	CF	CF	298,000	CF	CF	CF	CF	CF	CF	-
	TOTAL	3	CF	CF	2,980,000	CF	CF	CF	CF	CF	CF	152
	Aleutian Islands A											
	IFQ	5	65	1,247,622	5,661,000	5,643,040	113,867	10,820	55,977	4.5	25	-
	CDQ/ACA	4	CF	CF	629,000	CF	CF	CF	CF	CF	CF	-
	TOTAL	5	CF	CF	6,290,000	CF -continued-	CF	CF	CF	CF	CF	151

Table 1-4.—Page 6 of 6.

			Number of			<u></u>		Number o	f pots		Average	
Season	Location	Vessels <sup>a</sup>	Landings	Crab <sup>b</sup>	GHL/TAC <sup>c</sup>	Harvest <sup>b,d</sup>	Deadloss <sup>d</sup>	Registered	Lifted	Weight <sup>d</sup>	CPUE <sup>e</sup>	Lengthf
2014/15	East of 174°W											
	IFQ	3	28	624,347	2,979,000	2,976,016	26,795	4,650	14,648	4.8	43	-
	CDQ	3	5	69,127	331,000	331,000	2,881	4,650	1,758	4.8	39	-
	TOTAL	3	41	693,474	3,310,000	3,307,016	29,676	4,650	16,406	4.8	41	152
	West of 174°W											
	IFQ	2	33	566,520	2,682,000	2,384,653	60,621	4,018	36,781	4.2	15	-
	ACA	1	CF	CF	298,000	CF	CF	CF	CF	CF	CF	-
	TOTAL	2	CF	CF	2,980,000	CF	CF	CF	CF	CF	CF	148
	Aleutian Islands	Area Total										
	IFQ	5	61	1,190,867	5,661,000	5,360,669	87,416	8,668	51,429	4.5	29	-
	CDQ/ACA	4	CF	CF	629,000	CF	CF	CF	CF	CF	CF	-
	TOTAL	5	CF	CF	6,290,000	CF	CF	CF	CF	CF	CF	150
2015/16	East of 174°W											
	IFQ	3	28	644,434	2,979,000	2,971,480	51,868	4,300	16,270	4.6	40	-
	CDQ	3	6	73,430	331,000	331,000	1,292	4,300	2,211	4.5	33	-
	TOTAL	3	34	717,864	3,310,000	3,302,480	53,160	4,300	18,481	4.6	36	152
	West of 174°W											
	IFQ	2	CF	CF	2,682,000	CF	CF	CF	CF	CF	CF	-
	ACA	1	CF	CF	298,000	CF	CF	CF	CF	CF	CF	-
	TOTAL	2	CF	CF	2,980,000	CF	CF	CF	CF	CF	CF	147
	Aleutian Islands	Area Total										
	IFQ	5	CF	CF	5,661,000	CF	CF	CF	CF	CF	CF	-
	CDQ/ACA	4	CF	CF	629,000	CF	CF	CF	CF	CF	CF	-
	TOTAL	5	CF	CF	6,290,000	CF	CF	CF	CF	CF	CF	150
Note: CF	= confidential, NA	= not availa	able.									
	essels fished both	east and wes	t of 174°W lo	ong, thus total r	number of vessels	reflects the e	ntire Aleutian I	slands.				
b Deadlos	ss included.			-								
C -:: 1-1:	na hamiast lavial (C	TTT \ 4 4 1 1	11 11 41	L (TLACE) C	1005/06 1							

<sup>&</sup>lt;sup>c</sup> Guideline harvest level (GHL), total allowable catch (TAC) from 2005/06 forward.

d In pounds.

Number of retained crab per pot lift.
Carapace length in millimeters.

Table 1-5.—Aleutian Islands golden king crab general, Individual Fishing Quota (IFQ), Community Development Quota (CDQ), and Adak Community Allocation (ACA) fishery economic performance, 1981/82–2015/16.

		Value		Season length			
Season	Location Fishery	Exvessela	Total <sup>b</sup>	Days	Dates		
1981/82	East of 172°W	\$2.05	\$0.22	75	11/01-01/15		
	West of 172°W	\$2.06	\$2.41	227	11/01-06/15		
	TOTAL	\$2.06	\$2.63				
1982/83	East of 172°W	\$3.00	\$3.41	105	11/01-02/15		
	West of 172°W	\$3.01	\$23.43	166	11/01-04/15		
	TOTAL	\$3.01	\$26.84				
1983/84	East of 172°W	\$3.05	\$5.38	105	11/01-02/15		
	West of 172°W	\$2.92	\$23.23	157	11/10-04/15		
	TOTAL	\$2.94	\$28.61				
1984/85	East of 171°W	\$1.35	\$1.96	229	07/01-02/15		
	West of 171°W	\$2.00	\$6.11	240	11/10-07/08		
	TOTAL	\$1.79	\$8.07				
1985/86	East of 171°W	\$2.00	\$3.86	121	07/01-10/31		
	West of 171°W	\$2.50	\$27.80	288	11/01-08/15		
	TOTAL	\$2.43	\$31.66				
1986/87	East of 171°W	\$2.85	\$5.30	182	07/01-12/31		
	West of 171°W	\$3.00	\$37.56	288	11/01–08/15		
	TOTAL	\$2.98	\$42.86				
1987/88	East of 171°W	\$2.85	\$3.87	62	07/01-09/02		
	West of 171°W	\$3.00	\$23.51	289	11/01–08/15		
	TOTAL	\$2.98	\$27.38				
1988/89	East of 171°W	\$3.00	\$4.57	93	09/01-12/04		
	West of 171°W	\$3.20	\$28.66	288	11/01–08/15		
	TOTAL	\$3.17	\$33.23				
1989/90	East of 171°W	\$3.50	\$6.42	104	09/01-02/15		
	West of 171°W	\$3.00	\$30.18	288	11/01–08/15		
	TOTAL	\$3.08	\$36.61				
1990/91	East of 171°W	\$3.00	\$5.03	68	09/01-11/09		
	West of 171°W	\$3.00	\$15.22	288	11/01–08/15		
	TOTAL	\$3.00	\$20.25				
1991/92	East of 171°W	\$2.00	\$2.81	74	09/01–11/15		
	West of 171°W	\$2.50	\$15.39	289	11/01–08/15		
	TOTAL	\$2.41	\$18.20				
1992/93	East of 171°W	\$2.50	\$3.30	76	09/01–11/17		
	West of 171°W	\$2.05	\$9.86	288	11/01–08/15		
100000	TOTAL	\$2.15	\$13.16		00/04 00/04		
1993/94	East of 171°W	\$2.15	\$1.95	212	09/01-03/01		
	West of 171°W	\$2.50	\$11.18	288	11/01–08/15		
10010	TOTAL	\$2.44	\$13.13		00/04 40/50		
1994/95	East of 171°W	\$4.00	\$6.88	57	09/01–10/28		
	West of 171°W	\$3.33	\$20.43	288	11/01–08/15		
1005/05	TOTAL	\$3.48	\$27.31	20	00/01 10/00		
1995/96	East of 171°W	\$2.60	\$5.15	38	09/01–10/09		
	West of 171°W	\$2.10	\$9.57	289	11/01–08/15		
1006/07	TOTAL	\$2.25	\$14.72		00/04 15/5		
1996/97	East of 174°W	\$2.23	\$6.93	115	09/01–12/25		
	West of 174°W	\$2.23	\$5.60	365	09/01–08/31		
	TOTAL	\$2.23	\$12.53				

Table 1-5.—Page 2 of 3.

			Value	<del></del>		n length
Season	Location	Fishery	Exvessel <sup>a</sup>	Total <sup>b</sup>	Days	Dates
1997/98	East of 174°W		\$2.25	\$7.58	84	09/01-11/24
	West of 174°W		\$2.10	\$4.96	365	09/01-
	TOTAL		\$2.19	\$12.54		
1998/99	East of 174°W		\$1.87	\$5.92	68	09/01-11/07
	West of 174°W		\$2.04	\$3.41	365	09/01-08/31
	TOTAL		\$1.92	\$9.33		
1999/00	East of 174°W		\$3.26	\$9.78	55	09/01-10/25
	West of 174°W		\$3.09	\$8.23	348	09/01-08/14
	TOTAL		\$3.15	\$18.01		
2000/01	East of 174°W		\$3.50	\$10.77	40	08/15-09/24
	West of 174°W		\$3.09	\$8.75	286	08/15-05/28
	TOTAL		\$3.33	\$19.52		
2001/02	East of 174°W		\$3.30	\$10.26	26	08/15-09/10
	West of 174°W		\$2.93	\$7.87	227	08/15-03/30
	TOTAL		\$3.16	\$18.13		
2002/03	East of 174°W		\$3.30	\$9.13	23	08/15-09/07
	West of 174°W		\$3.50	\$9.13	205	08/15-03/08
	TOTAL		\$3.38	\$18.26		
2003/04	East of 174°W		\$3.46	\$10.05	24	08/15-09/08
	West of 174°W		\$3.83	\$10.11	175	08/15-02/06
	TOTAL		\$3.61	\$20.16		
2004/05	East of 174°W		\$3.18	\$9.05	14	08/15-08/29
_00.700	West of 174°W		\$3.09	\$8.16	141	08/15-01/03
	TOTAL		\$3.14	\$17.21		00, 10 01, 00
2005/06	East of 174°W	IFQ	\$2.53	\$6.50	273	08/15-05/15
_000,00	2450 01 17 1 17	CDQ	CF	CF	273	08/15-05/15
		TOTAL	CF	CF		00, 10 00, 10
	West of 174°W	IFQ	\$2.05	\$4.89	273	08/15-05/15
	***************************************	ACA	CF	CF	273	08/15-05/15
		TOTAL	CF	CF	_,,	00/10 00/10
2006/07	East of 174°W	IFQ	\$1.77	\$4.71	273	08/15-05/15
2000/07	East of 171 W	CDQ	CF	CF	273	08/15-05/15
		TOTAL	CF	CF	273	00/15 05/15
	West of 174°W	IFQ	\$1.33	\$2.64	273	08/15-05/15
	West of 174 W	ACA	CF	CF	273	08/15-05/15
		TOTAL	CF	CF	273	00/15 05/15
2007/08	East of 174°W	IFQ	\$2.11	\$5.63	273	08/15-05/15
2007/00	Last of 174 W	CDQ	\$2.11	\$0.65	273	08/15-05/15
		TOTAL	\$2.12	\$6.28	273	00/15 05/15
	West of 174°W	IFQ	\$1.63	\$3.63	273	08/15-05/15
	West of 174 W	ACA	CF	CF	273	08/15-05/15
		TOTAL	CF	CF	213	00/15-05/15
2008/09	East of 174°W	IFQ	\$3.32	\$9.31	273	08/15-05/15
2000/UJ	Last Of 1/4 W	CDQ	\$3.52 \$3.58	\$9.31 \$1.12	273 273	08/15-05/15
		TOTAL	\$3.36 \$3.34	\$10.43	213	00/13-03/13
	West of 174°W				272	08/15-05/15
	West of 1/4 W	IFQ ACA	\$1.87 CF	\$4.17 CF	273 273	08/15-05/15
		TOTAL	CF CF	CF CF	213	00/13-03/13
		IUIAL		UF		

Table 1-5.—Page 3 of 3.

			Value		Seaso	n length
Season	Location	Fishery	Exvessela	Total <sup>b</sup>	Days	Dates
2009/10	East of 174°W	IFQ	\$1.96	\$5.50	273	08/15-05/15
		CDQ	\$2.06	\$0.65	273	08/15-05/15
		TOTAL	\$1.97	\$6.13		
	West of 174°W	IFQ	\$1.93	\$4.72	273	08/15-05/15
		ACA	CF	CF	273	08/15-05/15
		TOTAL	CF	CF		
2010/11	East of 174°W	IFQ	\$3.01	\$8.31	273	08/15-05/15
		CDQ	\$3.19	\$1.00	273	08/15-05/15
		TOTAL	\$3.02	\$9.31		
	West of 174°W	IFQ	\$3.32	\$8.31	273	08/15-05/15
		ACA	CF	CF	273	08/15-05/15
		TOTAL	CF	CF		
2011/12	East of 174°W	IFQ	\$3.83	\$10.77	273	08/15-05/15
	2450 01 17 1 17	CDQ	\$3.82	\$1.20	273	08/15-05/15
		TOTAL	\$3.83	\$11.97		30, 20
	West of 174°W	IFQ	\$3.84	\$9.62	273	08/15-05/15
	West of The W	ACA	CF	CF	273	08/15-05/15
		TOTAL	CF	CF	2.0	00/10 00/10
2012/13	East of 174°W	IFQ	\$3.44	\$9.99	273	08/15-05/15
2012/13	Lust Of 174 W	CDQ	\$3.44	\$1.13	273	08/15-05/15
		TOTAL	\$3.44	\$11.12	213	00/13 03/13
	West of 174°W	IFQ	\$3.33	\$8.67	273	08/15-05/15
	West of 174 W	ACA	CF	CF	273	08/15-05/15
		TOTAL	CF	CF	213	00/13 03/13
2013/14	East of 174°W	IFQ	\$3.51	\$10.33	273	08/15-05/15
2013/17	Last Of 174 W	CDQ	\$3.50	\$1.15	273	08/15-05/15
		TOTAL	\$3.51	\$11.48	213	00/13 03/13
	West of 174°W	IFQ	\$3.49	\$9.03	273	08/15-05/15
	West of 174 W	ACA	CF	CF	273	08/15-05/15
		TOTAL	CF	CF	213	00/13-03/13
2014/15	East of 174°W	IFQ	\$3.33	\$9.82	273	08/15-05/15
2014/13	Last Of 174 W	CDQ	\$3.25	\$1.07	273	08/15-05/15
		TOTAL	\$3.23	\$10.89	213	06/13-03/13
	West of 174°W	IFQ	\$3.16	\$7.35	273	08/15-05/15
	West of 1/4 W	ACA	\$5.16 CF	of 7.55 CF	273 273	08/15-05/15
		TOTAL	CF CF	CF CF	213	06/13-03/13
2015/16	East of 174°W				272	00/01 04/20
2015/16	East of 1/4°W	IFQ CDO	\$3.65 \$3.59	\$10.67	273 273	08/01-04/30 08/01-04/30
		CDQ	\$3.58	\$1.18	213	08/01-04/30
	XXI . C 47 40XX	TOTAL	\$3.64	\$11.85	252	00/01 04/2
	West of 174°W	IFQ	\$3.25	\$6.99	273	08/01-04/30
		ACA	CF	CF	273	08/01-04/30
	onfidential	TOTAL	CF	CF		

Note: CF = confidential.

a Average price per pound.
b Millions of dollars.

Table 1-6.—Aleutian Islands golden king crab Individual Fishing Quota (IFQ), Community Development Quota (CDQ), and Adak Community Allocation (ACA) harvest by statistical area, 2015/16.

			2012	/13			
Statistical		Number of				Ave	rage
area	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	Weight <sup>b</sup>	CPUE <sup>c</sup>
695239	24	31,212	1,117	161,576	1,244	5.2	28
715202	37	108,512	3,798	515,057	13,378	4.7	29
795200	24	31,142	1,493	137,219	2,742	4.4	21
805103	25	28,788	1,441	126,826	2,589	4.4	20
805132	29	78,697	3,388	341,552	6,621	4.3	23
805133	8	2,595	133	11,658	272	4.5	20
805201	25	31,041	1,288	136,447	2,819	4.4	24
815100	23	18,800	1,060	82,031	1,716	4.4	18
815131	21	15,004	789	66,908	1,170	4.5	19
815132	7	12,967	383	56,859	1,098	4.4	34
825132	13	11,555	514	52,093	1,045	4.5	22
825201	11	16,640	916	75,249	1,265	4.5	18
825202	6	3,252	214	14,296	213	4.4	15
835130	14	19,440	866	88,640	1,608	4.6	22
835200	16	43,536	2,497	193,204	3,243	4.4	17
845130	13	31,172	1,613	140,615	3,166	4.5	19
845202	16	72,957	3,510	324,886	6,747	4.5	21
855200	14	20,146	1,387	90,481	2,026	4.5	15
855231	12	14,424	1,161	63,978	1,248	4.4	12
Other <sup>d</sup>	73	768,702	25,975	3,588,184	80,851	4.5	22
Total	81	1,360,582	53,543	6,267,759	135,061	4.6	25

2	<u> 1</u>	3	/1	4

Statistical		Number of				Ave	rage
area	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	Weight <sup>b</sup>	CPUE <sup>c</sup>
715202	34	80,879	2,819	387,109	4,354	4.8	29
725201	29	59,768	2,044	281,330	2,891	4.7	29
795200	34	40,147	2,207	174,620	6,138	4.4	18
805103	29	21,962	1,334	94,364	2,635	4.3	16
805132	32	64,348	3,258	277,254	8,201	4.3	20
805201	29	20,597	1,125	89,231	3,241	4.3	18
815100	25	27,209	1,402	116,417	3,891	4.3	19
815131	26	13,912	737	59,851	2,171	4.3	19
815132	21	8,974	495	39,243	1,996	4.4	18
Other <sup>d</sup>	76	1,048,165	47,101	4,753,157	87,394	4.5	20
Total	76	1,385,961	62,522	6,272,575	122,912	4.5	22

Table 1-6.—Page 2 of 2.

	2014/15											
Statistical		Number of				Average						
area	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	Weight <sup>b</sup>	CPUE <sup>c</sup>					
695239	18	63,894	1,552	314,870	3,030	4.9	41					
715202	19	65,534	1,553	306,493	2,753	4.7	42					
Other <sup>d</sup>	77	1,199,358	54,849	5,368,305	90,094	4.4	20					
Total	77	1,328,786	57,954	5,989,668	95,877	4.5	23					

## 2015/16

Statistical		Number of				Average		
area	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	Weight <sup>b</sup>	CPUE <sup>c</sup>	
695200	11	47,878	1,630	233,485	2,963	4.9	29	
695239	20	47,430	1,241	225,352	3,754	4.8	38	
705232	26	197,322	4,044	877,947	17,375	4.5	49	
715202	26	102,639	2,640	469,845	9,071	4.6	39	
725201	18	64,550	2,081	318,969	3,603	4.9	31	
Other <sup>d</sup>	84	779,771	42,691	3,308,280	78,035	4.2	17	
Total	84	1,239,590	54,327	5,433,878	114,801	4.4	22	

Deadloss included.

b In pounds.

c Number of retained crab per pot lift.

d Combination of statistical areas (44-2012/13, 69-2013/14, 73-2014/15 and 2015/16) in which landings were made by fewer than 3 vessels.

Table 1-7.—Aleutian Islands scarlet king crab fishery data, 1992–2015.

			Numb	per of				Avei	rage	Valu	e
Year	Location	Vessels	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	Weight <sup>b</sup>	CPUE <sup>c</sup>	Exvesseld	Total <sup>e</sup>
1992	Dutch Harbor	0	0	0	0	0	0	0	0	0	0
	Adak	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
1993	Dutch Harbor/Adak	0	0	0	0	0	0	0	0	0	0
1994	Dutch Harbor	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
	Adak	5	9	6,613	7,370	21,269	10,829	3.2	1	\$1.24	\$26.4
	TOTAL	6	CF	CF	CF	CF	CF	CF	CF	CF	CF
1995	Dutch Harbor	3	7	6,270	5,706	13,871	1,755	2.2	1	\$3.01	\$41.8
	Adak	6	18	19,544	15,046	49,126	2,066	2.5	1	\$2.95	\$144.9
	TOTAL	8	25	25,814	20,752	62,997	3,821	2.4	1	\$2.96	\$186.5
1996	<b>Dutch Harbor</b>	3	10	9,967	8,071	20,538	3,911	2.1	1	\$1.78	\$37.1
	Adak	4	13	10,199	18,547	24,161	1,861	2.4	<1	\$1.80	\$43.5
	TOTAL	7	23	20,166	26,618	44,699	5,772	2.2	<1	\$1.79	\$80.6
1997	Aleutian Islands	3	12	2,698	21,217	6,720	408	2.5	<1	\$1.40	\$9.4
1998	Aleutian Islands	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
1999	Aleutian Islands	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
2000	Aleutian Islands	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
2001	Aleutian Islands	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
2002	Aleutian Islands	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
2003	Aleutian Islands	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
2004	Aleutian Islands	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
2005-2006	Aleutian Islands	0	0	0	0	0	0	0	0	\$0.00	\$0.00
2007	Aleutian Islands	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
2008-2015	Aleutian Islands	0	0	0	0	0	0	0	0	\$0.00	\$0.00

*Note:* CF = confidential.

<sup>&</sup>lt;sup>a</sup> Deadloss included.

b In pounds.

c Number of retained crab per pot lift.
d Average price per pound.
e Thousands of dollars.

Table 1-8.—Eastern Aleutian District Tanner crab fishery data, 1973/74–2015.

			Nun	nber of					Aver	age
Season	Location	Vessels	Landings	Crab <sup>a</sup>	Pots lifted	$\mathrm{GHL}^{\mathrm{b}}$	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	Weight <sup>b</sup>	CPUE <sup>c</sup>
1973/74		6	14	210,539	NA	-	498,836	NA	2.4	60
1974/75		NA	CF	CF	CF	CF	CF	CF	CF	CF
1975/76		8	13	219,166	4646	_	534,295	NA	2.4	47
1976/77		12	35	544,755	9640	-	1,239,569	NA	2.3	57
1977/78		15	198	1,104,631	29855	-	2,494,631	NA	2.3	37
1978/79		20	174	542,081	18618	_	1,280,115	NA	2.4	29
1979/80		18	107	352,819	18040	-	886,487	NA	2.5	20
1981		29	119	264,238	21771	_	654,514	NA	2.5	12
1982		31	138	332,260	30109	-	739,694	NA	2.2	11
1983		23	107	250,774	22168	-	547,830	NA	2.2	11
1984		16	91	104,761	11069	_	239,585	NA	2.3	9
1985		7	56	78,930	6295	_	181,407	60	2.3	13
1986		8	37	73,187	10244	_	167,339	400	2.3	7
1987		8	65	72,098	5915	-	162,097	115	2.2	12
1988		20	130	129,478	11011	_	309,918	2,000	2.4	12
1989		12	108	144,593	14615	_	326,196	2,300	2.3	10
1990		10	75	68,859	6858	70,000	155,648	0	2.3	10
1991		5	27	21,511	1849	70,000	50,038	0	2.3	12
1992		4	29	42,096	2963	80,000	98,703	0	2.3	14
1993		7	34	51,441	3530	_	118,609	0	2.3	15
1994		8	119	71,760	6303	-	166,080	40	2.3	11
1995-2002		FC	FC	FC	FC	FC	FC	FC	FC	FC
2003 <sup>d</sup>		3	10	6,695	191	-	15,138	9	2.3	35
2004	Unalaska Bay	10	CF	CF	CF	47,219	CF	CF	2.3	CF
	Makushin/Skan Bay	9	CF	CF	CF	87,891	CF	CF	2.3	CF
	TOTAL	14 <sup>e</sup>	CF	CF	CF	135,110	CF	CF	2.3	CF
2005	Unalaska Bay	25	79	14,249	696	35,304	34,022	0	2.4	20
2006	Makushin/Skan Bay	10	CF	CF	CF	87,241	CF	CF	2.4	CF
2007	Akutan Bay	3	CF	CF	CF	35,000	CF	CF	2.2	CF
	Unalaska Bay	12	CF	CF	CF	49,000	CF	CF	2.5	CF
	TOTAL	13 <sup>e</sup>	CF	CF	CF	84,000	CF	CF	2.4	CF

Table 1-8.—Page 2 of 2.

			Numbe	er of					Avei	rage
Season	Location	Vessels	Landings	Crab <sup>a</sup>	Pots lifted	$GHL^b$	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	Weight <sup>b</sup>	CPUE <sup>c</sup>
2008	Unalaska Bay	11	CF	CF	CF	60,000	CF	CF	2.4	CF
2009	Akutan Bay	1	CF	CF	CF	35,000	CF	CF	2.3	CF
	Makushin/Skan Bay	1	CF	CF	CF	35,000	CF	CF	2.4	CF
	Unalaska Bay	10	CF	CF	CF	58,000	CF	CF	2.2	CF
	TOTAL	11 <sup>e</sup>	CF	CF	CF	128,000	CF	CF	2.3	CF
2010	Akutan Bay	3	CF	CF	CF	45,000	CF	CF	2.1	CF
	Unalaska Bay	7	CF	CF	CF	74,000	CF	CF	2.3	CF
	TOTAL	8 <sup>e</sup>	CF	CF	CF	119,000	CF	CF	2.2	CF
2011	Akutan Bay	2	CF	CF	CF	35,000	CF	CF	2.2	CF
	Makushin/Skan Bay	3	CF	CF	CF	35,000	CF	CF	2.3	CF
	TOTAL	3 <sup>e</sup>	CF	CF	CF	70,000	CF	CF	2.2	CF
2012	Makushin/Skan Bay	1	CF	CF	CF	35,000	CF	CF	2.2	CF
2013	Unalaska Bay	6	CF	CF	CF	35,000	CF	CF	2.5	CF
2014		FC	FC	FC	FC	FC	FC	FC	FC	FC
2015	Makushin/Skan Bay	1	CF	CF	CF	35,000	CF	CF	2.3	CF
	= not available, CF = confid	ential, FC = fisl	hery closed.							
	ss included beginning 1980.									
b In poun										
	r of retained crab per pot lift		<i>5</i> 1	.L -11£ .L L						
-	/February survey (fish ticket		5, exploratory s	snellfish nai	vest).					
vessel(s	s) participated in multiple se	cuons.								

Table 1-9.-Eastern Aleutian District Tanner crab fishery economic performance and season dates, 1973/74-2015.

		Value		Date		
Season	Location	Exvessel <sup>a</sup>	Total <sup>b</sup>	Opened	Closed	
1973/74		NA	-	1-Oct	31-Jul	
1974/75		NA	-	18-Jan	15-Oct	
1975/76		\$0.20	\$0.11	20-Jan	15-Oct	
1976/77		\$0.30	\$0.38	7-Nov	15-Jun	
1977/78		\$0.38	\$0.95	1-Nov	15-Jun	
1978/79		\$0.52	\$0.67	1-Nov	15-Jun	
1979/80		\$0.52	\$0.46	1-Nov	15-Jun	
1981		\$0.58	\$0.38	15-Jan	15-Jun	
1982		\$1.25	\$0.92	15-Feb	15-Jun	
1983		\$1.20	\$0.66	15-Feb	15-Jun	
1984		\$0.98	\$0.23	15-Feb	15-Jun	
1985		\$0.96	\$0.17	15-Jan	15-Jun	
1986		\$1.66	\$0.28	15-Jan	15-Jun	
1987		\$2.03	\$0.33	15-Jan	15-Jun	
1988		\$2.18	\$0.67	15-Jan	10-Apr	
1989		\$2.72	\$0.88	15-Jan	7-May	
1990		\$1.97	\$0.31	15-Jan	9-Apr	
1991		\$1.25	\$0.06	15-Jan	31-Mar	
1992		\$2.07	\$0.20	15-Jan	31-Mar	
1993		\$1.70	\$0.20	15-Jan	31-Mar	
1994		\$2.11	\$0.35	15-Jan	31-Mar	
1995-2003		FC	FC	FC	FC	
2004	Unalaska Bay	CF	CF	15-Jan	19-Jan	
	Makushin/Skan Bay	CF	CF	15-Jan	3-Feb	
2005	Unalaska Bay	\$2.58	\$0.09	15-Jan	18-Jan	
2006	Makushin/Skan Bay	CF	CF	15-Jan	21-Jan	
2007	Akutan Bay	CF	CF	15-Jan	31-Mar	
	Unalaska Bay	CF	CF	15-Jan	19-Jan	
2008	Unalaska Bay	CF	CF	15-Jan	29-Jan	
2009	Akutan Bay	CF	CF	15-Jan	31-Mar	
	Makushin/Skan Bay	CF	CF	15-Jan	31-Mar	
	Unalaska Bay	CF	CF	15-Jan	11-Feb	
2010	Akutan Bay	CF	CF	15-Jan	31-Mar	
	Unalaska Bay	CF	CF	15-Jan	10-Feb	
2011	Akutan Bay	CF	CF	15-Jan	31-Mar	
	Makushin/Skan Bay	CF	CF	15-Jan	18-Mar	
2012	Makushin/Skan Bay	CF	CF	15-Jan	10-Feb	
2013	Unalaska Bay	CF	CF	15-Jan	26-Jan	
2014		FC	FC	FC	FC	
2015	Makushin/Skan Bay	CF	CF	15-Jan	13-Feb	

Note: NA = not available, FC = fishery closed, CF = confidential.

Average price per pound.

Millions of dollars.

Table 1-10.—Eastern Aleutian District grooved Tanner crab fishery data, 1993–2015.

		Numl	per of				Aver	age	Value	e
Year	Vessels	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	Weight <sup>b</sup>	CPUE <sup>c</sup>	Exvessel <sup>d</sup>	Total <sup>e</sup>
1993	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
1994	4	28	429,777	37,246	754,983	19,151	1.8	12	\$1.61	\$1.18
1995	9	57	511,125	77,443	879,386	30,348	1.7	7	\$1.70	\$1.44
1996	4	25	54,903	21,994	104,680	7,496	1.9	3	\$1.00	\$0.10
1997-2000	0	0	0	0	0	0	0	0	\$0.00	\$0.00
2001	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
2002-2003	0	0	0	0	0	0	0	0	\$0.00	\$0.00
2004	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
2005-2015	0	0	0	0	0	0	0	0	\$0.00	\$0.00

Note: CF = confidential.

a Deadloss included.

Table 1-11.—Eastern Aleutian District triangle Tanner crab fishery data, 1993–2015.

_		Number	of				Avera	age	Valu	e
Year	Vessels	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	Weight <sup>b</sup>	CPUE <sup>c</sup>	Exvesseld	Total <sup>e</sup>
1993-1994	0	0	0	0	0	0	0	0	\$0.00	\$0.0
1995	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
1996	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
1997-2000	0	0	0	0	0	0	0	0	\$0.00	\$0.0
2001	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
2002-2015	0	0	0	0	0	0	0	0	\$0.00	\$0.0
2002–2015 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0										

b In pounds.

c Number of retained crab per pot lift.
d Average price per pound.
e Millions of dollars.

Table 1-12.—Western Aleutian District Tanner crab fishery data, 1973/74–2015/16.

		Num	ber of				Aver	age	Value	
Season	Vessels	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	Weight <sup>b</sup>	CPUE <sup>c</sup>	Exvessel <sup>d</sup>	Total
1973/74	7	12	31,079	2,390	71,887	NA	2.3	13	NA	NA
1974/75	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
1975/76	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
1976/77	0	0	0	0	0	0	0	0	\$0.00	(
1977/78	6	7	103,190	2,700	237,512	NA	2.3	38	\$0.38	\$90,255
1978/79	6	9	84,129	4,730	197,244	0	2.3	18	\$0.53	\$104,539
1979/80	10	12	147,843	5,952	337,297	NA	2.3	25	\$0.52	\$175,394
1980/81	9	23	95,102	7,327	220,716	0	2.3	13	\$0.54	\$119,187
1981/82	17	43	364,164	21,910	838,697	6,470	2.3	17	\$1.30	\$1,081,895
1982/83	61	125	225,491	40,450	488,399	7,662	2.2	6	\$1.27	\$610,536
1983/84	31	86	171,576	20,739	384,146	200	2.2	8	\$0.95	\$364,749
1984/85	31	41	75,009	13,416	163,460	1,000	2.2	6	\$1.30	\$211,198
1985/86	15	30	98,089	7,999	206,814	0	2.1	12	\$1.40	\$289,540
1986/87	8	24	19,874	10,878	42,761	200	2.1	2	\$1.50	\$63,842
1987/88	15	37	63,545	7,453	141,390	200	2.2	9	\$2.10	\$296,499
1988/89	36	77	69,280	18,906	148,997	233	2.1	4	\$1.00	\$148,764
1989/90	12	30	22,937	6,204	48,746	3,810	2.1	4	\$1.00	\$44,936
1990/91	5	21	6,901	1,309	14,779	125	2.1	5	\$1.25	\$18,318
1991/92	8	8	3,483	986	7,825	NA	2.2	4	\$1.00	\$7,825
1992/93	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
1993/94-1994/95	0	0	0	0	0	0	0	0	\$0.00	\$0.00
1995/96	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
1996/97-2015/16	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
Notes: NA = not availab  a Deadloss included. b In pounds. c Number of retained cra d Average price per pour	b per pot lift.	lential. FC = fis	shery closed							

Table 1-13.—Western Aleutian District grooved Tanner crab fishery data, 1992–2015.

		Numb	er of				Ave	rage	Valu	ie
Year	Vessels	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	Weight <sup>b</sup>	CPUE <sup>c</sup>	Exvesseld	Total <sup>e</sup>
1992	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
1993	0	0	0	0	0	0	0	0	\$0.00	\$0.00
1994	2	CF	CF 76,97	CF	CF	CF	CF	CF	CF	CF
1995	6	18	2	17,374	145,660	17,160	1.9	4	\$2.22	\$0.29
1996	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
1997-1999	0	0	0	0	0	0	0	0	\$0.00	\$0.00
2000-2015	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
Note: CF = com Deadloss incl In pounds. Number of red Average price Millions of do	uded. tained crab pe e per pound.	= fishery closed er pot lift.								

Table 1-14.—Aleutian District Dungeness crab fishery data, 1974–2015/16.

			per of				Avera			
Year <sup>a</sup>	Vessels	Landings	Crab <sup>b</sup>	Pots lifted	Harvest <sup>b,c</sup>	Deadloss <sup>c</sup>	Weight <sup>c</sup>	CPUE <sup>d</sup>	Exvessel <sup>e</sup>	Tota
1974	3	13	24,459	3,399	60,517	NA	2.4	8	NA	NA
1975	NA	CF	CF	CF	CF	CF	CF	CF	CF	CF
1976/77-1977/78	0	0	0	0	0	0	0	0	\$0.00	\$0
1978/79-1979/80	NA	CF	CF	CF	CF	CF	CF	CF	CF	CF
1980/81-1981/82	0	0	0	0	0	0	0	0	\$0.00	\$0
1982/83-1983/84	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
1984/85	4	50	40,128	13,555	91,739	NA	2.3	3	\$1.35	NA
1985/86	4	19	8,590	1,706	17,830	0	2.1	5	NA	NA
1986/87	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
1987/88	6	43	13,247	2,987	26,627	0	2.0	4	\$0.95	\$25,296
1988/89	6	45	10,956	2,599	22,915	4	2.1	4	\$0.81	\$18,558
1989/90	4	31	5,165	2,078	11,124	0	2.2	2	\$0.91	\$10,123
1990/91	3	11	8,379	1,345	17,482	117	2.1	6	\$1.20	\$20,838
1991/92	4	14	3,654	732	7,412	0	2.0	5	\$1.25	\$9,265
1992/93	4	13	2,854	555	5,649	0	2.0	5	\$0.83	\$4,689
1993/94	5	12	3,448	797	7,531	10	2.2	4	\$0.78	\$5,866
1994/95	0	0	0	0	0	0	0	0	\$0.00	\$0
1995/96	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
1996/97	0	0	0	0	0	0	0	0	\$0.00	\$0
1997-98	2	CF	CF	CF	CF	CF	CF	CF	CF	CF
1998/99-2000/01	0	0	0	0	0	0	0	0	\$0.00	\$0
2001/02-2002/03	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
2003/04-2004/05	0	0	0	0	0	0	0	0	\$0.00	\$0
2005/06	1	CF	CF	CF	CF	CF	CF	CF	CF	CF
2006/07-2014/15	0	0	0	0	0	0	0	0	\$0.00	\$0
2015/16	1 <sup>f</sup>	CF	CF	CF	CF	CF	CF	CF	CF	CF
Note: CF = confidentia  a Season dates 1/1–12  b Deadloss included. c In pounds. d Number of retained of Average price per per f  Not an actual vessel,	/31 in 1974 and crab per pot lift bund	d 1975. Season	dates 5/1–1/	Theginning in 197	6/77.					

Table 1-15.—Aleutian Islands District trawl shrimp fishery data, 1972–2015.

			Number of			Value		
Year	Season dates	Vessels	Landings	Tows	Harvest <sup>a</sup>	Exvessel <sup>b</sup>	Total	
1972	01/01-12/01	2	CF	CF	CF	CF	CF	
1973	01/01-12/01	1	CF	CF	CF	CF	CF	
1974	01/01-12/01	7	88	721	5,749,407	NA	NA	
1975	01/01-12/01	3	14	54	467,196	NA	NA	
1976	01/01-12/01	8	66	689	3,670,609	\$0.07	\$256,943	
1977/78	02/01-03/01	7	93	1,372	6,800,393	\$0.12	\$816,047	
1978/79	04/01-03/01	7	74	1,007	4,946,350	\$0.15	\$741,953	
1979/80	04/01-02/01	7	68	799	3,292,049	\$0.20	\$658,410	
1980	03/01-12/01	5	60	711	2,454,829	\$0.23	\$564,611	
1981	03/01-12/02	6	45	551	2,185,326	\$0.22	\$480,772	
1982	05/01-06/01	6	CF	CF	CF	CF	CF	
1983-1991	-	0	0	0	0	\$0.00	\$0	
1992	01/01-12/01	4	6	94	72,133	NA	NA	
1993-1998	-	0	0	0	0	\$0.00	\$0	
1999	01/01-07/09	2	CF	CF	CF	CF	CF	
2000-2015	FC	FC	FC	FC	FC	FC	FC	

Notes: CF = confidential, NA = not available, FC = fishery closed.

a In pounds.
b Average price per pound.

Table 1-16.—Aleutian Islands octopus directed fishery and incidental harvest data, 1996–2015.

-		Directed harvest <sup>a</sup>	I	ncidental harves	ıt <sup>b</sup>	
Year	Vessels	Landings	Harvest <sup>c</sup>	Vessels	Landings	Harvest <sup>c</sup>
1996	2	21	CF	26	87	36,292
1997	0	0	0	19	44	22,431
1998	1	2	CF	16	44	18,375
1999	0	0	0	32	76	87,420
2000	0	0	0	24	37	5,911
2001	0	0	0	19	47	7,120
2002	0	0	0	12	21	3,063
2003	0	0	0	27	89	102,104
2004	14	43	230,492	38	135	151,205
2005	1	2	CF	22	82	57,552
2006	0	0	0	33	114	133,182
2007	0	0	0	31	96	46,782
2008	1	<sup>d</sup> 1	CF	26	45	35,480
2009	0	0	0	13	21	8,782
2010	0	0	0	21	48	42,376
2011	0	0	0	13	17	8,187
2012	0	0	0	18	58	14,917
2013	0	0	0	20	129	50,309
2014 <sup>e</sup>	0	0	0	16	136	65,637
2015	0	0	0	17	84	41,258

*Note:* CF = confidential.

Directed octopus harvest from Commissioner's permit fishery.
Octopus incidentally taken from state waters.
In pounds. Discards at sea included.

Harvest was incidental to Pacific cod fishery; however, vessel exceeded octopus bycatch limits and was illegally landed on directed octopus card.

<sup>&</sup>lt;sup>e</sup> From 2014 on, octopus is reported based on date of landing rather than date fish tickets were entered.

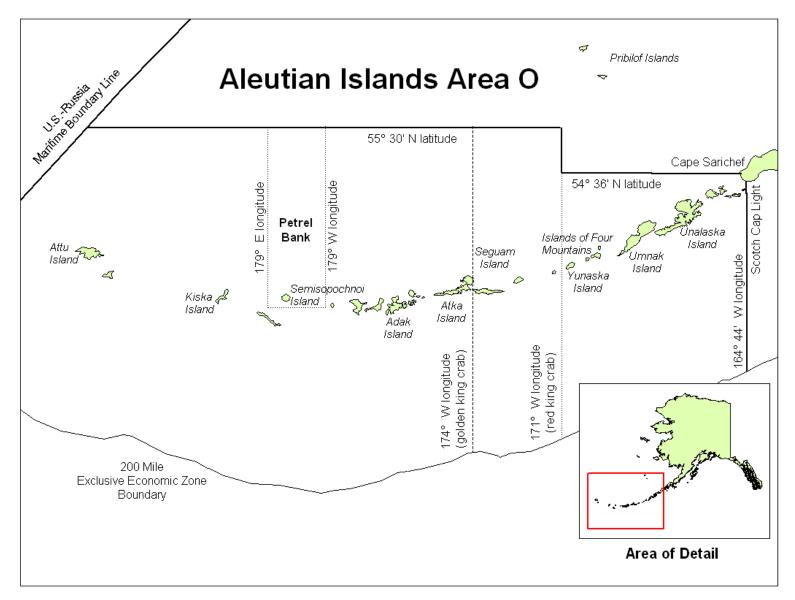


Figure 1-1.—Aleutian Islands Area O red and golden king crab management area.

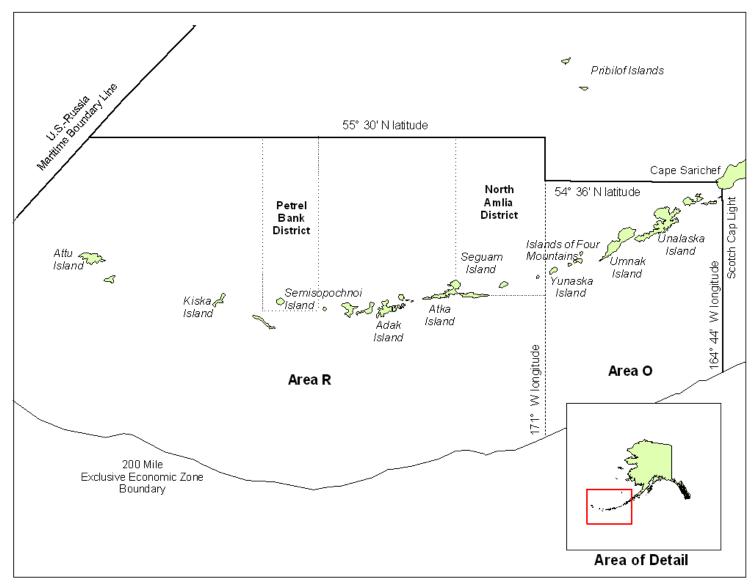


Figure 1-2.—Adak (Area R) and Dutch Harbor (Area O) king crab Registration Areas and Districts 1984/85–1996/97.

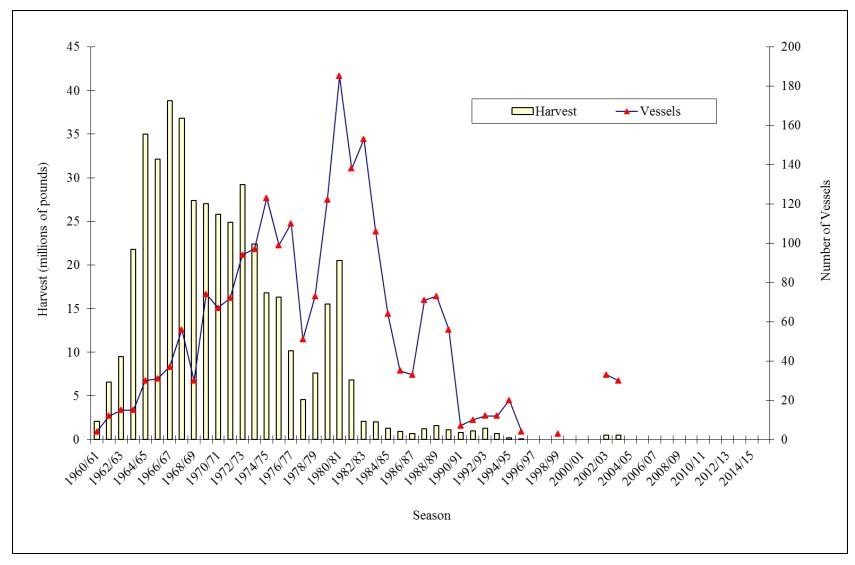


Figure 1-3.—Aleutian Islands red king crab fishery harvest and vessel effort, 1960/61–2015/16.

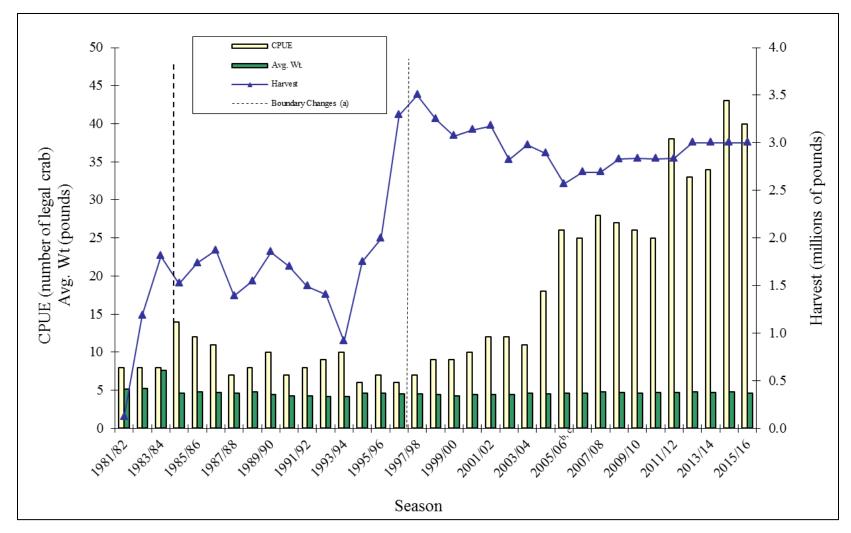


Figure 1-4.—Eastern Aleutian Islands golden king crab fishery harvest, fishery performance and average weight data for the 1981/82–2015/16 seasons.

- <sup>a</sup> Western boundary of the fishery changed from 172°W to 171°W long prior to 1984/85 and from 171°W to 174°W long prior to the 1996/97 season.
- b First rationalized crab season.
- <sup>c</sup> Beginning in 2005/06, information reflects IFQ only; CDQ information omitted due to confidentiality.

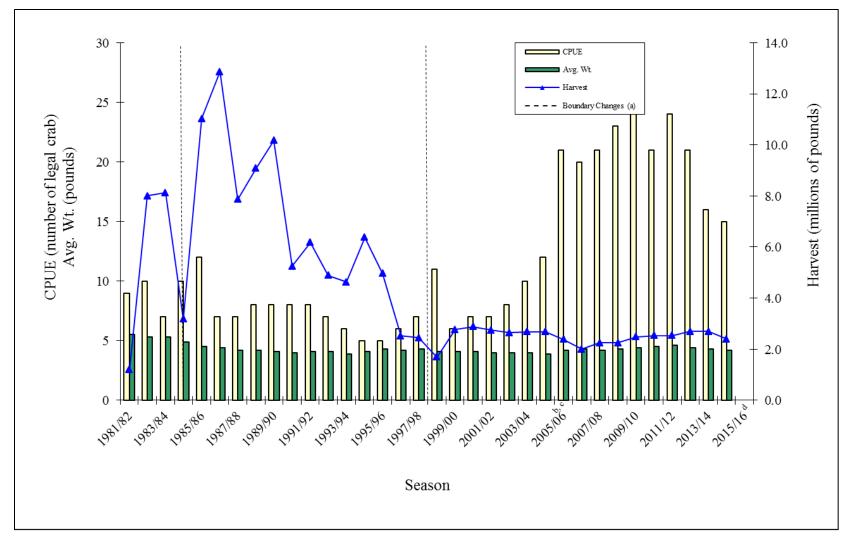


Figure 1-5.—Western Aleutian Islands golden king crab fishery harvest, fishery performance and average weight data for the 1981/82–2015/16 seasons.

<sup>&</sup>lt;sup>a</sup> Eastern boundary of the fishery changed from 172°W to 171°W long prior to 1984/85 and from 171°W to 174°W long prior to the 1996/97 season.

<sup>&</sup>lt;sup>b</sup> First rationalized crab season.

<sup>&</sup>lt;sup>c</sup> Beginning in 2005/06, harvest information only reflects IFQ, CDQ information omitted due to confidentiality.

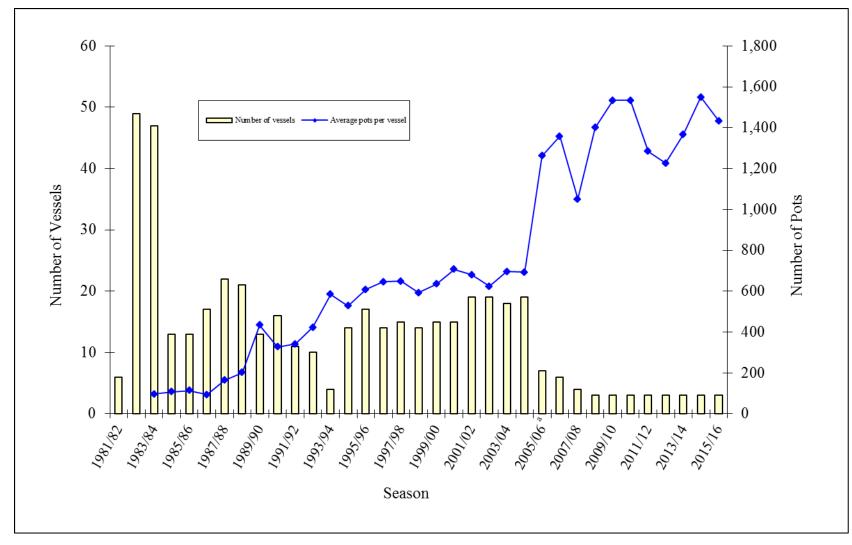


Figure 1-6.—Eastern Aleutian Islands golden king crab fishery vessel registrations and average number of pots per vessel 1981/82–2015/16, includes Community Development Quota fishery.

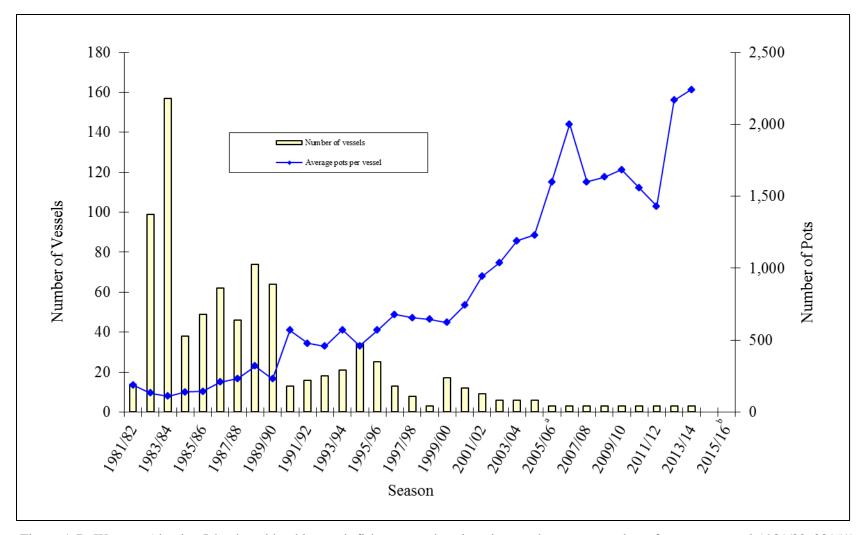


Figure 1-7.—Western Aleutian Islands golden king crab fishery vessel registrations and average number of pots per vessel 1981/82–2015/16, includes Adak Community Allocation fishery.

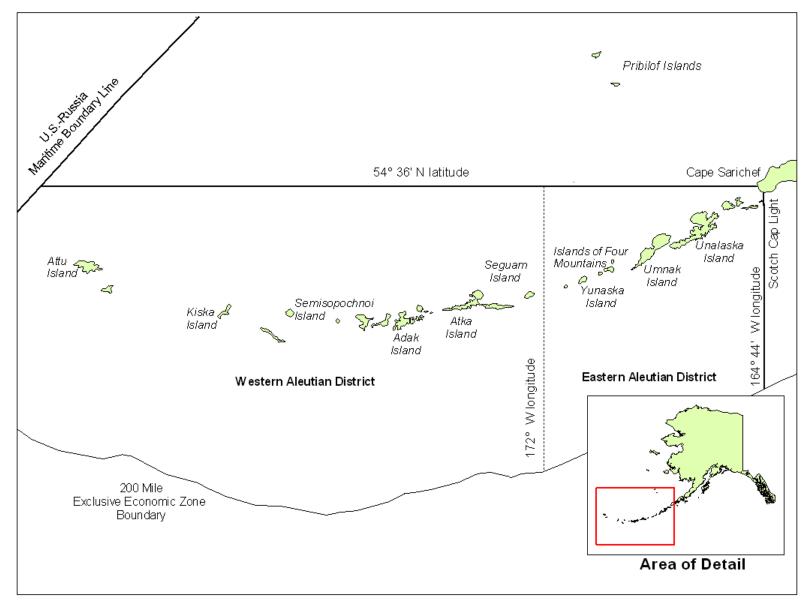


Figure 1-8.–Eastern and Western Aleutian Tanner crab Districts of Registration Area J.

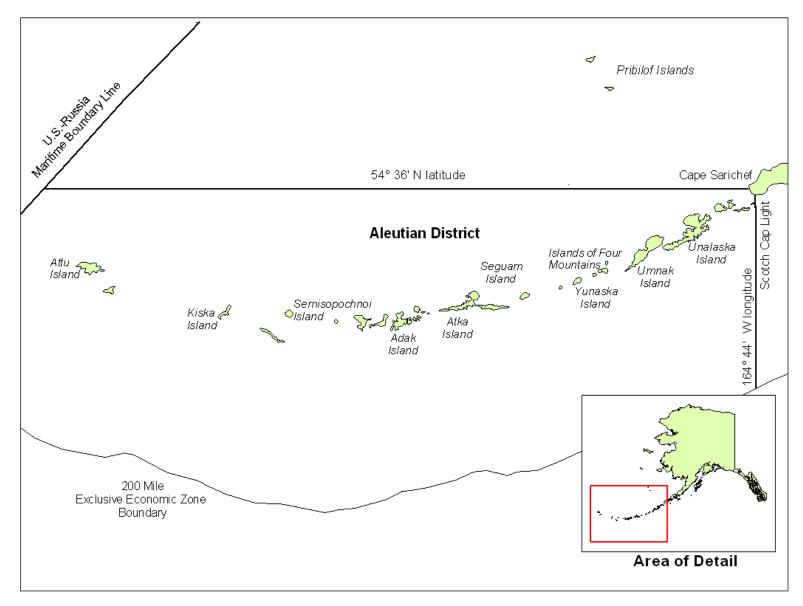


Figure 1-9.—Aleutian District of Registration Area J for Dungeness crab management.

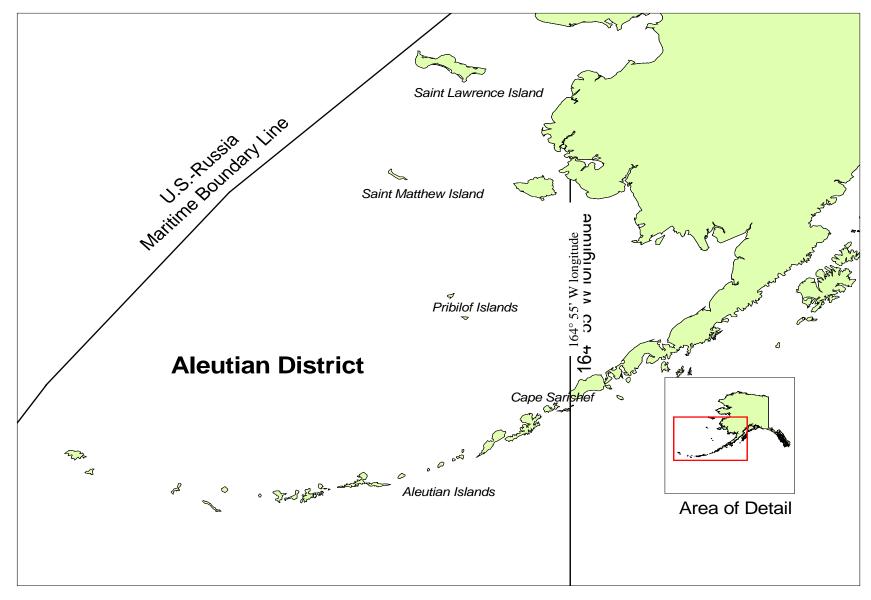


Figure 1-10.—Aleutian District of Registration Area J for shrimp management.

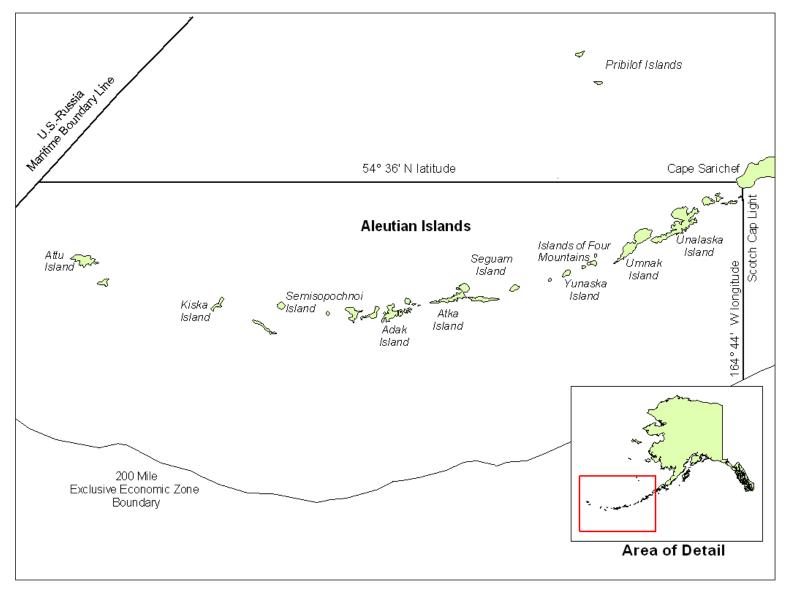


Figure 1-11.—Aleutian Islands portion of miscellaneous shellfish Registration Area J.

## BERING SEA SHELLFISH FISHERIES

## BRISTOL BAY KING CRAB REGISTRATION AREA T

## **DESCRIPTION OF AREA**

Bristol Bay king crab Registration Area T includes all territorial waters of Alaska (0–3 nautical miles) and all waters of the Exclusive Economic Zone (EEZ; 3–200 nautical miles) north of Cape Sarichef (54°36′N lat), south of Cape Newenham (58°39′N lat), and east of 168°W long (Figure 2-1).

## BRISTOL BAY RED KING CRAB

## **Historical Background**

Commercial fishing for red king crab *Paralithodes camtschaticus* in the eastern Bering Sea began with Japanese harvests in 1930. Japanese participation ended in 1940 and resumed again from 1953 until 1974. A Russian king crab fleet operated in the eastern Bering Sea from 1959 through 1971. U.S. fishermen entered the eastern Bering Sea fishery with trawl gear in 1947. U.S. effort and catches declined in the 1950s, with no catch reported in 1959. A period of low catches followed through 1966. With the decline of king crab stocks in other management areas of Alaska, U.S. effort in Bristol Bay increased from 1966 through 1980. In 1980, 236 vessels harvested a record 129.9 million pounds (Table 2-1, Figure 2-2). Exvessel value of the Bristol Bay red king crab (BBR) fishery was highest in 1980 at \$115.3 million. Product value peaked in 2011/12 at \$9.06 per pound. The lowest fishery value was in 1982 at \$8.9 million (Table 2-2, Figure 2-3). Since 1980, king crab stocks throughout Alaska, including Bristol Bay, declined sharply and have not recovered to pre-1981 levels. Closures of the BBR fishery occurred in 1983, 1994, and 1995.

In 1980, the Alaska Board of Fisheries (BOF) defined the area of the Bering Sea south of Cape Newenham and east of 168°W long as Registration Area T (Bristol Bay), an exclusive registration area. During a king crab registration year, vessels registered for this area are prohibited from fishing in any other exclusive or superexclusive king crab registration area, and may only register for nonexclusive areas.

The National Marine Fisheries Service (NMFS) has conducted annual trawl abundance index surveys of the eastern Bering Sea since 1968. This multispecies (crab and groundfish) survey is conducted during the summer. In 1983, the NMFS trawl survey of the Bering Sea indicated a record low number of legal male red king crab and the lowest total red king crab population since the survey began in 1968. Small female crab carrying fewer eggs and high predator abundance were also noted. Consequently, the fishery was closed for the 1983 season. The fishery reopened in 1984 and catches slowly increased to 20.4 million pounds in 1990. Due to the large number of catcher-processors and floating processors in the fishery and the inability of the Alaska Department of Fish and Game (ADF&G) to monitor processing on vessels at sea, an onboard observer program was initiated in 1988.

Fishing effort increased dramatically from 89 vessels in 1984 to 300 vessels in 1991 (Table 2-1, Figure 2-3). The number of pots also increased, with almost 90,000 pots registered for the 1991 fishery compared to just under 22,000 pots registered in 1984. Due to the high number of pots in the fishery, the BOF established a 250-pot-per-vessel limit for the 1992 BBR fishery. This action was intended to improve inseason management by extending the length of the fishing season as well as reducing potential for pot loss and gear conflict. Immediately following the 1992 BBR fishery, NMFS suspended the 250-pot limit due to inconsistencies between state regulations and provisions of the Federal Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs (FMP), mandating application of pot limits in a nondiscriminatory manner (NPFMC 1998). In spring 1993, the BOF set pot limits based on overall vessel length. Beginning in 1993, vessels greater than 125 feet in overall length were limited to 250 pots, and vessels 125 feet or less in overall length were allowed a maximum of 200 pots. Pot limits were administered and enforced through a buoy tag program.

The 1994 NMFS summer trawl survey results of the eastern Bering Sea indicated a decline in all size classes of both male and female red king crab in Bristol Bay. Compared to observations made during the 1993 survey, the abundance index of large male crab decreased 25%. Based on 1994 survey results, large female abundance was estimated at 7.5 million crab, which was below the minimum threshold of 8.4 million spawning female crab necessary to open a fishery. Consequently, the BBR fishery was closed for the 1994 season.

To address potential measurement errors in area-swept trawl abundance estimates, ADF&G developed a length-based analysis (LBA) model for estimating population abundance. This model, first used for the 1995 season, incorporates a variety of data sources including dockside and observer data, as well as data collected on the NMFS survey. The LBA is less susceptible to year-to-year variations in factors unrelated to population abundance and produces an estimate of abundance based on several data sources. Analysis of the 1995 NMFS survey using the LBA model indicated no significant difference in the abundance of mature male and female red king crab from the 1994 survey (Zheng et al. 1995). Based on these combined results, the BBR fishery remained closed for the 1995 season.

Due to the depressed status of the BBR population, in March 1996 the BOF adopted a revised harvest strategy to promote stock rebuilding. One of the most significant changes to the harvest strategy was a reduction in the exploitation rate of mature male crab from 20% to 15%, based on an effective spawning biomass (ESB) of 55 million pounds or more.

Results from LBA incorporating the 1996 NMFS survey data indicated increased abundance in all size classes of male and female red king crab compared to the 1995 estimate (Zheng et al. 1996). The 1996 survey indicated an increase in the number of large females to 10.2 million crab, above the threshold of 8.4 million large female crab necessary to open a fishery. This was a significant increase relative to the prior 2 years. Based on a 10% mature male exploitation rate, the 1996 guideline harvest level (GHL) was set at 5.0 million pounds. The 1996 fishery lasted 4 days and a total of 8.4 million pounds were harvested, exceeding the GHL by 68% (Table 2-1, Table 2-2).

Using LBA, the 1999–2002 fisheries exploitation rate was 10%. ESB ranged from a low of 37.7 million pounds in 2002 to a high of 47.0 million pounds in 1999. The BOF modified the BBR harvest strategy in 2003, implementing a 12.5% harvest rate on mature males, based on an ESB greater than or equal to 34.75 million pounds but less than 55 million pounds. ESB substantially

increased in 2003 and an exploitation rate of 15% was applied to mature males. The 2004 BBR fishery was 80 hours in length. Only the 2002 season was shorter, at 68 hours (Table 2-2).

To address difficulty in managing at low GHLs, the BOF held a special meeting in August of 1997, implementing tiered pot limits and vessel preseason registration requirements. Also adopted were regulations that extended the tank inspection window for the BBR fishery from 24 to 30 hours and allowed fishermen to leave baited pots on the fishing grounds when a fishery closure announcement is made with less than 24 hours of advance notice. Tiered pot limits were based on vessel overall length, the preseason GHL, and the number of vessels that preseason registered for the fishery. New pot limit regulations were adopted with a sunset provision of December 31, 1998, and made permanent at the 1999 BOF meeting. At the March 1999 meeting, the BOF passed antiprospecting regulations; however, the antiprospecting regulations were amended in 2000. Vessels were prohibited from participating in the Bristol Bay red king crab fishery if the vessel participated in pot, longline, or trawl gear fisheries in that portion of Registration Area T north of 55°30′N lat and east of 164°W long during the 30 days immediately prior to the opening of the red king crab season. However, an exception was made for vessels participating in a directed walleye pollock *Gadus chalcogrammus* fishery with trawl gear in Area T north of 55°30'N lat and east of 164°W long during the 14 days prior to the red king crab season. Vessels fishing for walleye pollock were exempted from the antiprospecting regulation if they delivered to an offshore processor or had 100% federal groundfish onboard observer coverage for the entire 14 days prior to the opening of the BBR fishery. The BOF also adopted a regulation moving the opening date of the commercial red king crab fishery from November 1 to October 15 to improve fleet and industry efficiency by reducing the hiatus between the BBR fishery and Bering Sea king crab fisheries, which opened on September 15.

In 1998, the fishery was allocated by federal law into Community Development Quota (CDQ) and general fishery components. The initial CDQ allocation was 3.5% of the harvest. The CDQ allocation increased to 5.0% of the harvest in 1999, to 7.5% of the harvest in 2000, and then to 10% of the total allowable catch (TAC) in 2005/06 at the start of the Crab Rationalization (CR) program. The CDQ program is described in another section of this report.

The American Fisheries Act (AFA), passed by U.S. Congress in 1998, gave walleye pollock fishermen exclusive fishing privileges in the Bering Sea/Aleutian Islands (BSAI) walleye pollock fishery. To protect interests of fishermen not directly benefited by the AFA, sideboards were established for AFA fishermen qualified to participate in BSAI crab fisheries. To implement AFA sideboards, the BOF developed a management plan requiring ADF&G to manage AFA vessels with a harvest cap equally apportioned between all AFA-qualified vessels or through a cooperative fishery when 100% of AFA-qualified participants agree to the cooperative. The harvest cap specified for AFA-qualified vessels was implemented for the first time in the 2000 BBR fishery and was set at 10.96% of the general fishery GHL. The AFA harvest cap was in effect for the 2000–2004 seasons and was never exceeded. AFA sideboard restrictions were eliminated with the implementation of the CR program in 2005.

The 2005/06 season was the first to operate under the CR program. Under the CR program, TAC (annual harvest quota) replaced GHL. Ninety percent of the TAC was available to Individual Fishing Quota (IFQ) shareholders and 10% for CDQ groups. The fishing season was expanded from October 15 through January 15, and pot limits were increased to 450 pots per vessel, with provisions allowing for vessel operators to share pot gear. The BOF repealed the 450 pot limit in 2008.

Implementation of the CR program resulted in a decrease in vessel participation. Vessel effort declined from an average of 243 vessels per year in the 5 years prior to CR to 89 vessels in 2005/06 season. Participation decreased to 65 vessels in the 2010/11 season and has stabilized to an average of 63 vessels since then (Table 2-1). Season length has substantially increased since the beginning of CR, from seasons lasting 3 to 5 days in the 5 years prior to CR, to a regulatory 93-day season during CR (Table 2-2). Since CR, the majority of the harvest occurs by mid-November; however, fishing effort has occurred until the season closure in mid-January. Vessels averaged 28 fishing days over the past 3 seasons. In all years since CR, harvest has been within 0.5% of the TAC.

Total catch per unit effort (CPUE) for both IFQ and CDQ harvests during the 2005/06 season was 24 legal crab per pot lift. In the 2006/07 season, CPUE increased to 34 legal crab per pot lift, the highest since 1980 (Table 2-1). CPUE decreased in the 2010/11 season, to 18 legal crab per pot lift and then rebounded to 28 for the 2012/13 season.

#### 2015/16 Season

The 2015/16 BBR fishery opened October 15 with a combined IFQ and CDQ TAC of 9.974 million pounds (Table 2-1). Sixty 3 vessels participated in the fishery and harvested 9.970 million pounds, of which less than 2% was deadloss. The fleet registered 12,470 pots, an average of 198 pots per vessel. Total effort for the 2015/16 fishery was 48,008 pot lifts, a 18% decrease from 2014/15. The average vessel was active in the fishery for 14 days. Despite the fishing season lasting through January 15, nearly the entire harvest occurred by early November, with the last delivery occurring the week of November 21 (Table 2-3).

CPUE was 31 legal crab per pot, the highest CPUE in 10 years. Similar to the prior 3 seasons, harvest was spread over 13 ADF&G statistical reporting areas (Table 2-4). Nearly 63% of the harvest occurred in ADF&G statistical area 635600. Sampling of delivered catch indicated 86% of crab measured were new-shell, more than 2014/15. Average carapace length was 153 mm, 1 mm less than in 2014/15. The percentage of recruit-sized crab in the commercial harvest decreased from 58% in 2014/15 to 56%, and was the lowest percent of recruit-sized crab in the commercial harvest since the 2013/14 season (Table 2-5).

BBR cost recovery was conducted by ADF&G in 2015 and 201,471 pounds were harvested. At an exvessel price of \$6.09 per pound, the total value of cost recovery was \$1,219,998. The 21-day charter occurred from October 1 to October 21 and from October 13 to October 22 (Table 2-6).

#### IFQ Fishery

The 2015/16 TAC of the BBR IFQ fishery was 8,976,600 pounds (Table 2-1). Sixty three vessels harvested nearly 100% of the TAC. Harvesters were paid an average price of \$7.03 per pound, the third highest BBR exvessel value since the inception of the fishery. The total exvessel IFQ fishery value was \$61.8 million (Table 2-2).

## CDQ Fishery

The 2015/16 BBR CDQ fishery allocation was 997,400 pounds (Table 2-1). Five of the six CDQ groups participated in the fishery. The remaining group transferred their entire allocation to another group. No group exceeded their allocation. Eight vessels made 11 landings for an overall

harvest of 997,400 pounds (Table 2-1), and fishery value was approximately \$7.0 million (Table 2-2).

## **Port Sampling**

During the 2015/16 BBR fishery, ADF&G personnel sampled red king crab from vessels without onboard observers at shorebased processors in King Cove, Akutan, Kodiak, Saint Paul, and Dutch Harbor. Biological data collected on landed red king crab consisted of carapace length, shell condition, and average weight. Confidential interviews, supplemented by daily fishing log records, were conducted with vessel captains to acquire detailed information regarding statistical reporting areas fished, effort, and fishery performance. Data was collected by ADF&G port samplers from 108 of the 152 total landings (IFQ and CDQ) during the 2015/16 BBR fishery.

#### **Stock Status**

Based on 2015 NMFS trawl survey area-swept estimates, biomass has decreased since 2014 (Daly et al. 2015): mature male biomass decreased 33%, legal male biomass decreased 25%, and mature female biomass decreased 48%. The estimated legal male biomass of 60 million pounds was slightly below the 20-year average of 60 million pounds. The estimated mature female biomass of 58 million pounds was lower than the 20-year average of 71 million pounds.

The 2015 NMFS trawl survey of Bristol Bay was conducted in early June. Red king crab were caught in 67 of the 136 survey stations within the Bristol Bay management district, with the majority of mature males concentrated in the central and southwest sections.

Data from the NMFS trawl survey is incorporated into the LBA model used by the BBR regulatory harvest strategy to determine the fishery TAC. The harvest strategy may be found in 5 AAC 34.816 *Bristol Bay red king crab harvest strategy*. LBA model results indicated an ESB of 47 million pounds; therefore, an exploitation rate of 12.5% was applied to mature male red king crab for a 2016 TAC of 9.974 million pounds.

Additional stock status information and details on federal overfishing levels and annual catch limits for BBR may be found in the 2015 Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions (NPFMC 2015).

# BERING SEA KING CRAB REGISTRATION AREA Q

#### **DESCRIPTION OF AREA**

The Bering Sea king crab Registration Area Q southern boundary is a line from 54°36′N lat, 168°W long, to 54°36′N lat, 171°W long, to 55°30′N lat, 171°W long, to 55°30′N lat, 173°30′E long. The northern boundary is the latitude of Point Hope (68°21′N lat). The eastern boundary is a line from 54°36′N lat, 168°W long, to 58°39′N lat, 168°W long, to Cape Newenham (58°39′N lat). The western boundary is the United States-Russia Maritime Boundary Line of 1990 (Figure 2-4). Area Q is divided into 2 districts: the Pribilof District, which includes waters south of Cape Newenham; and the Northern District, which includes all waters north of Cape Newenham. The Northern District is subdivided into 3 sections. The Saint Matthew Island Section includes waters north of Cape Newenham and south of Cape Romanzof (61°49′N lat). The Norton Sound Section includes all waters north of Cape Romanzof, and south of 66°N lat. The Kotzebue Sound Section encompasses all remaining waters of the district. Registration Area Q includes both the territorial

waters of Alaska and the EEZ. The Norton Sound Section and Kotzebue Sound Section are not addressed in this report.

## PRIBILOF DISTRICT RED AND BLUE KING CRAB

## **Historical Background**

The Pribilof District king crab fishery began in 1973, when vessels targeted blue king crab in the vicinity of Saint George and Saint Paul Islands. The first reported catch in this area was 1.3 million pounds taken by 8 vessels between July 1973 and October 1974. The average weight of crab was 7.3 pounds and the CPUE was 26 legal crab per pot lift. By the 1980/81 season, fishing effort increased to 110 vessels harvesting 11.0 million pounds, the largest catch on record. However, fishery CPUE declined to 9 legal crab per pot lift and continued to decline to a low of 2 crab per pot by the 1986/87 season, with a harvest of 0.26 million pounds taken by 16 vessels (Table 2-7, Figure 2-5). Due to low annual survey population estimates, the blue king crab fishery was closed for the 1988/1989 season and remained closed through the 1994 season.

In 1993, the BOF adopted pot limits based on overall vessel length for all king crab fisheries in the Bering Sea. In the Pribilof District, pot limits were established at 50 pots for vessels over 125 feet in overall length and 40 pots for vessels 125 feet or less in overall length.

The 1993 NMFS summer trawl survey of the Bering Sea indicated a marked increase in abundance of red king crab around the Pribilof Islands. Although no threshold abundance level for opening the red king crab fishery was established in regulation for the Pribilof District, survey results indicated a harvestable surplus of legal sized male red king crab. A red king crab fishery in the Pribilof District opened for the first time in September 1993 with a GHL of 3.4 million pounds; 112 vessels participated, but only 2.6 million pounds were harvested. In 1994, the Pribilof District again opened to red king crab with a GHL of 2.0 million pounds; however, only 1.3 million pounds were taken by 104 vessels (Table 2-7).

In 1995, an increase in blue king crab abundance and a continued harvestable surplus of red king crab resulted in a combined red and blue king crab GHL of 2.5 million pounds. However, subsequent declines in red and blue king crab abundance over the next 3 years, 1996–1998, resulted in a combined GHL for 1998 of only 1.286 million pounds, including the CDQ fishery. The CDQ allocation for 1998 was 3.5% of the total harvest and is the only year the CDQ fishery has opened in the Pribilof District fishery since the implementation of the CDQ program. Poor fishery performance during the 1996–1998 seasons resulted in annual harvests below the fishery GHL. The Pribilof red and blue king crab fishery has been closed since 1999.

The value of the Pribilof District red king crab fishery peaked at \$13.0 million in 1993 with an exvessel price of \$4.98 per pound. The value of the Pribilof District blue king crab fishery peaked at \$13.6 million in 1981/82, with an exvessel price of \$1.50 per pound. (Table 2-8, Figure 2-6).

The Pribilof blue king crab stock was declared overfished by NMFS in September 2002. ADF&G developed a rebuilding harvest strategy as part of a comprehensive rebuilding plan for the stock (Zheng and Pengilly 2003). The rebuilding harvest strategy adopted by the BOF (5 AAC 34.918) includes a minimum estimated spawning biomass of 13.2 million pounds for 2 consecutive years, a harvest rate of 10% of mature males or 20% of legal males (whichever is less), and a 500,000 pound minimum general fishery GHL (TAC).

ADF&G conducted pot surveys targeting red and blue king crabs in the Pribilof District in 2003, 2005, 2008, and 2011. The objectives of the surveys were to determine the distribution and relative abundance of red and blue king crabs in the district. In addition, a cost-recovery fishery was introduced in an effort to cover survey overhead and related expenses. A total of 696 pots were pulled during the 2003 survey with an overall legal male red and blue king crab CPUE of less than 1 crab per pot lift. An additional 202 pots were pulled as part of the cost-recovery effort. Only 146 legal male red king crab were caught and sold from the Pribilof District, thus the chartered vessel was redirected to Bristol Bay for the remainder of cost-recovery efforts. Results from the pot surveys suggested the highest catch of blue king crab occurred at stations with low red king crab catch and stations with high red king crab catch had low blue king crab catch. Distribution of red and blue king crabs in the Pribilof District was patchy and stations with high blue king crab catch were interspersed among stations that showed greater red king crab abundance. Catch rates of male red and blue king crabs during the 2005 survey were lower than those of the 2003 survey (Gish 2006). Catch rates of red and blue king crab in the 2008 survey were greater but generally comparable to the 2003 and 2005 surveys (Gish 2010).

The Pribilof District red and blue king crab fisheries were included in the CR program implemented in 2005/06; however, neither fishery has been open since the closure in 1999.

#### 2015/16 Season

The blue king crab fishery in the Pribilof District was not opened in 2015/16 due to continued low abundance. The stock remains well below the threshold level of abundance required for a fishery opening. Due to significant uncertainty surrounding estimated red king crab abundance and concerns for blue king crab bycatch in a directed red king crab fishery, the red king crab fishery also remained closed for the 2015/16 season.

#### **Stock Status**

The Pribilof blue king crab stock was declared overfished September 2002 and the stock has remained severely depressed. Results from the 2015 Pribilof District blue king crab stock assessment indicated the stock remained well below the minimum spawning biomass threshold for a fishery opening and would not have met the minimum IFQ TAC. Data from the 2015 NMFS trawl survey indicated that Pribilof District blue king crab were caught at only 9 of the 86 trawl survey stations. Though biomass estimates are imprecise due to the small number of tows yielding crab, the legal-size male biomass estimate was 0.94 million pounds, well below the most recent 20-year average biomass of 2.8 million pounds, but an increase from the 2014 estimate of 0.51 million pounds (Daly et al. 2015).

Given the continued low abundance of blue king crab in the Pribilof District and distribution of the stock, ADF&G statistical areas 685730, 695730, 685700, 695631, 695632, 695700, 695701, 705701, 705703, 705730, the northwest half of 685630, and the northeast half of 705630 were closed to crab fishing.

No formal harvest strategy has been developed for Pribilof District red king crab. The fishery has been closed since the 1999 season due to imprecision of abundance estimates, little sign of recruitment, and concerns about bycatch of blue king crab. Data from the 2015 NMFS trawl survey indicated that male Pribilof District red king crab were caught at 9 of 35 survey stations and female crab were found in 5 stations with the centers of distribution for both males and females within a 40 nm by 40 nm region around Saint Paul Island. Past fishery and trawl survey

data have indicated the potential for bycatch of blue king crab during a directed fishery on the Pribilof red king crab stock. Pot surveys performed by ADF&G between 2003 and 2016, as well as an attempt at cost-recovery fishing on Pribilof red king crab in 2003, demonstrated the difficulty of establishing a TAC for Pribilof red king crab on the basis of the trawl survey estimates, and prosecuting a fishery on Pribilof red king crab without risking bycatch of Pribilof blue king crab (Gish 2010).

## SAINT MATTHEW ISLAND SECTION BLUE KING CRAB

## **Historical Background**

The Saint Matthew Island Section of the Northern District commercial blue king crab fishery began in 1977, with a commercial harvest of 1.2 million pounds. In 1978, the catch increased to 2.0 million pounds (Table 2-9). Catches decreased in 1979 and 1980 due to lack of effort. In 1981, several vessels returned to the Saint Matthew Island Section during the Norton Sound Section king crab fishery. Catches were strong and after the Norton Sound Section closed, additional vessels moved into the Saint Matthew Island Section, taking 4.6 million pounds of blue king crab. Catch and effort peaked in 1983 when 164 vessels harvested 9.5 million pounds. In subsequent seasons, catches remained below 4.7 million pounds (Figure 2-7).

In 1993, the BOF moved the opening date of the Saint Matthew Island king crab fishery from September 1 to September 15, concurrent with the king crab fishery in the Pribilof District. This action was taken to better distribute effort between the Pribilof and Saint Matthew islands king crab fisheries, thereby reducing the number of vessels participating in each fishery. Differential pot limits were established in 1993 for the Saint Matthew Island Section; vessels over 125 feet in overall length were limited to 75 pots, and vessels 125 feet in overall length or less were limited to a maximum of 60 pots.

In 1998, the first year the CDQ program was implemented, legal male abundance decreased by 21% from the 1997 level, which resulted in a total fishery GHL of 4.1 million pounds (Table 2-9). The 1998 season closed inseason due to poor fishery performance and observer information indicating a relatively high incidental capture rate of sublegal male and female crab. The harvest in 1998 was 2.9 million pounds, and CPUE was 7 legal crab per pot lift, the second lowest CPUE on record. The 1998 season lasted 11 days, the longest since a 17-day opening in 1983 (Table 2-10), when 9.5 million pounds were harvested. Exvessel value peaked in 1983 at \$25.8 million and since 1994 has not exceeded \$15.0 million (Table 2-10, Figure 2-8). In contrast, the number of vessels participating increased from 87 in 1994 to 132 in 1998. Average weight per crab ranged from 4.0 to 5.0 pounds, depending on the percentage of recruits entering the fishery. The average weight per crab in 1998 was 4.7 pounds (Table 2-9).

From 1999 to 2008/09, the fishery remained closed because regulatory abundance thresholds were not met. The stock declined after the 1998 fishery and was declared overfished by NMFS based on results of the 1999 survey. Subsequently, a rebuilding plan was developed and implemented in 2000 (NPFMC 2000).

The St. Matthew Island blue king crab fishery re-opened in 2009/10 under the CR program. After a fishery closure that lasted from 1999 until 2008/09, the 2009/10 TAC was 1.167 million pounds with 10% of the TAC allocated to the CDQ fishery. IFQ harvest was 0.46 million pounds and there was no CDQ harvest. Seven vessels participated in the fishery and had a CPUE of 10 legal crab per pot. Exvessel value was \$2.19 per pound (Table 2-10). The 2010/11 TAC was 1.6

million pounds; however, similar to the 2009/10 season, the TAC was not reached. CPUE during the 2010/11 season was 10 legal crab per pot. During the 2009/10 and 2010/11 seasons, fishermen reported difficulty locating high concentrations of crab. Fishermen were unable to achieve the 2.4 million pound TAC in 2011/12 but did achieve the 1.6 million pound TAC in 2012/13. The fishery closed in 2013/14 in response to low population abundance observed in the NMFS trawl survey. The fishery reopened in 2014/15 but with a greatly reduced TAC; below 1 million pounds for the first time in the fishery's history (Table 2-9).

#### 2015/16 Season

The 2015/16 Saint Matthew Island Section blue king crab fishery opened October 15 with a combined IFQ and CDQ TAC of 411,000 pounds (Table 2-9). Three vessels participated and harvested 106,449 pounds, or 26% of the total TAC. The pot limit for the 2015/16 season was 250 pots per vessel. The fleet registered 595 pots, averaging 198 pots per vessel. Total effort for the 2015/16 fishery was 5,475 pot lifts, over a 40% decrease from 2014/15, with a CPUE of 4 legal crab per pot. Harvest during the 2015/16 season was spread over 6 ADF&G statistical reporting areas with 96% of the harvest occurring in ADF&G statistical areas 735930 and 736001 (Table 2-11). On average, vessels were active in the fishery for 30 days, though the fishery was open for 110 days. All harvest concluded by mid-November.

Average carapace length was 131.5 mm and the percentage of recruit-sized crab in the commercial harvest decreased to 48%, down 14% from the last nonconfidential open season of 2012/13 (Table 2-9).

## IFQ Fishery

The 2015/16 Saint Matthew Island section blue king crab fishery IFQ TAC was 369,900 pounds. Three vessels participated in the fishery and harvested 106,449 pounds, of which less than 2% was deadloss. CPUE was 4 legal crab per pot, which is roughly half the last non-confidential open season of 2012/13 (Table 2-9). The average price per pound for blue king crab in the IFQ fishery was \$4.03 with an IFQ exvessel fishery value of \$0.4 million (Table 2-10).

## CDQ Fishery

The 2015/16 Saint Matthew Island Section blue king crab CDQ allocation was 41,100 pounds (Table 2-9). No CDQ harvest occurred during the 2015/16 season.

## **Port Sampling**

All vessels that participated in the Saint Matthew Island Section blue king crab fishery carried onboard observers during 100% of fishing activity. Therefore no ADF&G port sampling activity occurred during this fishery.

#### **Stock Status**

After a 10-year closure and rebuilding plan, the Saint Matthew Island blue king crab stock reached the rebuilt level and opened for the 2009/10 season, based on the 2009 NMFS areaswept abundance estimate. During the 2015 NMFS bottom trawl survey, blue king crab were captured at 20 of 56 trawl survey stations (Daly et al. 2015). The legal male biomass estimate of 7.9 million pounds was an increase of 1% from the 2014 estimate, and higher than the previous 20-year average biomass estimate of 6.7 million pounds. The estimated mature female abundance decreased 61% from the 2014 estimate and was the lowest estimate since 2006. Blue

king crab abundance estimates in the St. Matthew Island Section have a high degree of uncertainty.

ADF&G conducted triennial pot surveys in the Saint Matthew Island Section from 1995 to 2013, with a focus on the nearshore waters with bottom topography unsuitable to trawl surveys. From 2013 to 2015, in response to a request for more detailed information from the stock assessment authors, the survey was conducted on an annual basis. Results from the 2013 triennial pot survey showed continued low abundance in the stock.

## PRIBILOF DISTRICT GOLDEN KING CRAB

## **Historical Background**

Golden king crab are found in commercial concentrations in a few deep canyons in the Bering Sea. As with many other crab fisheries in the Bering Sea, the fishery for golden king crab was pioneered by foreign fishing fleets. A domestic fishery developed during the 1982/83 season after the BOF directed ADF&G to regulate fishing for golden king crab in the Pribilof District by emergency order (ADF&G 1984). By the 1984 season, the BOF directed ADF&G to manage the Area Q golden king crab fishery under authority of a commissioner's permit that allowed the fishery to develop and expand into new areas (ADF&G 1985).

The first domestic harvest of golden king crab in the Bering Sea occurred in June 1982 when 2 vessels fished. Effort increased to 10 vessels during the following season with a harvest of 69,970 pounds. In 1983, the size limit for golden king crab in the Pribilof District was reduced from 6.5 inches to 5.5 inches. Effort in the Pribilof District peaked during the 1983/84 season when 50 vessels harvested 856,475 pounds of golden king crab. From 1984 to 1992, no more than 2 vessels participated each year. Since the 1983/84 season, annual harvest has not exceeded 350,000 pounds (Table 2-12). The Pribilof District golden king crab fishery reached a maximum exvessel value of \$1.1 million in 1995, and the highest price fishermen received per pound was \$3.99 in 1994 (Table 2-13). Most harvest in the Pribilof District has occurred in deep water south of the Pribilof Islands.

In March 1993, the BOF implemented pot limits for all king crab fisheries in the Bering Sea. Current pot limits in the Pribilof District are 40 pots for vessels 125 feet or less in overall length, and 50 pots for vessels greater than 125 feet in overall length.

In 2000, the Pribilof District golden king crab fishery GHL was set at 150,000 pounds (Table 2-12), 50,000 pounds less than the first GHL established for the 1999 season. This reduction in GHL better complied with guidelines outlined in the FMP and was based on the average harvest from 1983 to 1997 and has been in place since 2000. From 1999 through 2002, fishery harvest has ranged from 127,000 pounds to 177,000 pounds, with CPUE ranging from 5 to 15 legal crab per pot lift and an exvessel value from \$0.39 to \$0.44 million (Tables 2-12 and 2-13). Since 2003, participation has ranged from 0 to 5 vessels, however harvest is confidential.

The Pribilof District golden king crab fishery was not included in the CR program. The golden king crab fishery is managed through commissioner's permit on a calendar year basis. Inseason management is based on catch reports provided by processors and observers. Fishing is restricted to depths of 100 fathoms or greater. Starting in 2001, 100% observer coverage was required for each vessel registered for the fishery to provide fishery and biological data that has not previously been available. In addition, vessel logbooks, issued with the commissioner's permit, require vessels to provide fishing operation locations, effort, and bycatch estimates that

supplement data collected by observers. With the issuance of a Bering Sea Deepwater King and Tanner Crabs Commissioner's Permit, vessels may also legally retain small percentages of certain nontarget species during the Pribilof District golden king crab fishery. These include scarlet king crab *Lithodes couesi*, grooved Tanner crab *Chionoecetes tanneri*, and triangle Tanner crab *C. angulatus*.

#### 2015 Season

The 2015 Pribilof District golden king crab fishery had a GHL of approximately 130,000 pounds and was open January 1, 2015 through December 31, 2015. No vessels participated in the fishery.

#### **Stock Status**

The golden king crab fishery is managed using a GHL based on long-term average harvest. In 2009, the North Pacific Fishery Management Council (NPFMC) established a retained-catch overfishing level of 170,000 pounds based on the 1993–1999 average annual fishery harvest (NPFMC 2008). The time frame was based on years in which catch was not confidential. In 2010, the time frame for determining average catch was revised to 1993–1998; 1999 was excluded as that was the first year the fishery was managed under a GHL.

An acceptable biological catch of 180,000 pounds was set in 2012, by applying a 10% buffer on the Tier 5 harvest control rule overfishing level (NPFMC 2011). For 2015, the acceptable biological catch was reduced to 150,000 pounds by employing a 25% buffer on the overfishing level to account for uncertainty associated with limited stock condition data (NPFMC 2014). The GHL is established by reducing the acceptable biological catch to account for bycatch mortality of golden king crab in other fisheries.

Between 2002 and 2005, the average size of legal male golden king crab taken during the commercial fishery decreased and CPUE increased, which suggested a possible recruitment event. Stock biomass of golden king crab in the Pribilof Canyon area has been estimated using area-swept methods applied to NMFS upper continental slope trawl survey data in 2002 (Hoff and Britt 2003), 2004 (Hoff and Britt 2005), 2008 (Hoff and Britt 2009), 2010(Hoff and Britt 2011), and 2012 (Hoff 2013). Biomass estimates of golden king crab from the slope survey are highly uncertain and not currently used in fishery management. Survey data suggest biomass of golden king crab in the Pribilof Canyon (survey subarea 2) area has increased from 1.50 million pounds in 2002 to 2.03 million pounds in 2008 (Haaga et. al 2009), and further increased in 2010 to 3.6 million pounds (Hoff and Britt 2011), then decreased dramatically to 1.72 million pounds in 2012 (Hoff 2013). The 2014 NMFS continental slope survey was cancelled.

## NORTHERN DISTRICT GOLDEN KING CRAB

## **Historical Background**

A domestic fishery for golden king crab in the Saint Matthew Island Section of the Northern District began in the 1982/83 season. Since then, harvest has only occurred during 10 seasons. Harvest peaked during the 1987 season when 10 vessels harvested 414,000 pounds (Table 2-14). Since 1988, no more than 5 vessels have participated during any season and no effort has been made since 2003. The majority of golden king crab harvest in the Northern District has occurred west of Saint Matthew Island.

In 1993 the BOF developed pot limits for all king crab fisheries in the Bering Sea. Current pot limits for Northern District golden king crab are 60 pots for vessels 125 feet or less in overall length, and 75 pots for vessels greater than 125 feet in overall length.

The golden king crab fishery in the Bering Sea is managed using inseason catch reports provided by processors and observers. Starting in 2001, 100% observer coverage was required for each vessel registered for the fishery in order to provide fishery and biological data that was previously unavailable. In addition, vessel logbooks, issued with the commissioner's permit, require vessels to provide fishing operation locations, effort, and bycatch estimates that supplemented data collected by observers. Primary bycatch species include nonretained golden king crab, Pacific halibut, Pacific cod, and snow crab. Fishing is restricted to depths of 100 fathoms or greater.

The Northern District golden king crab fishery was not included in the CR program, and in December 2007, NMFS amended the FMP by removing Northern District golden king crab, which provided the state with sole jurisdiction over the fishery (NPFMC 2007).

#### 2015 Season

The fishery opened January 1 with a GHL range of 10,000 to 20,000 pounds and closed December 31, 2015. No vessels registered to fish for golden king crab in the Northern District in 2015.

#### **Stock Status**

The golden king crab population in the Northern District is not surveyed annually, but was surveyed in the NMFS upper continental slope trawl survey in 2002, 2004, 2008, 2010, and 2012 (Hoff 2013). Survey biomass estimates have not been used in management of the fishery. The current GHL range of 10,000 to 20,000 pounds is designed to allow for some exploratory fishing and data gathering.

## BERING SEA SCARLET KING CRAB

## **Historical Background**

Scarlet king crab are harvested under authority of a permit issued by the commissioner of ADF&G authorized in 5 AAC 34.082 *Permits for Lithodes couesi king crab*. Harvest of scarlet king crab in the Bering Sea has primarily occurred as incidental harvest in the grooved Tanner crab and golden king crab fisheries. Although vessels first registered to fish for Bering Sea scarlet king crab in 1992, no commercial landings occurred prior to 1995. In 1995, 4 vessels harvested 26,684 pounds (Table 2-15) valued at \$2.45 per pound. Scarlet king crab incidental harvest has been permitted since the species was first commercially exploited by the domestic fleet; however, in 2000 incidental harvest was capped at a rate of 5% of the weight of the target species.

Only 2 vessels participated in 1996. No vessels registered to fish for scarlet king crab from 1997 to 1999. A single vessel was permitted to retain scarlet king crab as incidental harvest during the grooved Tanner crab fishery in 2000 and 2001. No vessels registered to retain incidental catch of scarlet king crab in 2002. One vessel registered to retain scarlet king crab as incidental harvest in 2003 and 3 registered in 2004 during the Bering Sea golden king and deepwater Tanner crab fisheries. A single vessel registered for scarlet king crab in 2005 but none have registered since.

Due to limited participation in recent incidental fisheries for scarlet king crab, all harvest information is confidential.

#### 2015 Season

No vessels registered to fish for Bering Sea scarlet king crab in 2015.

## **Fishery Management and Stock Status**

Abundance estimates are unavailable for scarlet king crab. Onboard observers have been required on most vessels that targeted deepwater crab species since 1994 and have collected information detailing the size and sex composition of the retained and nonretained scarlet king crab and bycatch species. This information is used to help develop management measures for deepwater crab stocks. Currently, ADF&G does not intend to register vessels to fish directly for scarlet king crab in the Bering Sea. Retention of scarlet king crab captured in other deepwater crab fisheries is permitted in nonrationalized fisheries.

In December 2007, NMFS amended the FMP and removed Bering Sea scarlet king crab, which provided the state with sole jurisdiction over the fishery (NPFMC 2007).

## BERING SEA TANNER CRAB MANAGEMENT DISTRICT

#### **DESCRIPTION OF AREA**

The Bering Sea District of Tanner crab Registration Area J includes all waters of the Bering Sea north of Cape Sarichef at 54°36′N lat and east of the U.S.-Russia Maritime Boundary Line of 1990. This district is divided into the Eastern and Western Subdistricts at 173°W long. The Eastern Subdistrict is further divided into 2 sections: the Norton Sound Section includes waters north of the latitude of Cape Romanzof (61°49′N lat) and east of 168°W long, and the General Section includes waters to the south and west of the Norton Sound Section (Figure 2-9).

## BERING SEA TANNER CRAB

## **Historical Background**

The first reported U.S. harvest of Tanner crab occurred in 1968 as incidental harvest during the Bristol Bay red king crab fishery. In 1974, a directed Tanner crab fishery began. Harvest peaked at 66.6 million pounds during the 1977/78 season. In the fall of 1978, NMFS predicted sharp declines in Tanner crab abundance. As anticipated, Tanner crab stocks declined, and by 1983/84 the commercial harvest fell to 1.20 million pounds. Further stock declines led to fishery closure during the 1985/86 and 1986/87 seasons (Figure 2-10).

In 1992, in an effort to slow the harvest rate to provide sufficient time for inseason management of the Tanner crab fishery, the BOF restricted vessel operators to fishing a maximum of 250 pots. In 1993, in order to comply with federal law regarding application of pot limits in a nondiscriminatory manner, differential pot limits based on vessel length were implemented. Vessels 125 feet or less in overall length were limited to a maximum of 200 pots, and vessels greater than 125 feet in overall length were limited to a maximum of 250 pots.

he BOF additionally passed regulation in 1993 opening and closing the Eastern Subdistrict east of 168°W long to Tanner crab fishing concurrent with the regulatory opening and emergency order closure of the BBR fishery. If sufficient GHL remained after the BBR fishery was closed, the BOF allowed a reopening of the Eastern Subdistrict between 163°W and 173°W long for the

directed Tanner crab fishery 10 days after the closure of the BBR fishery. If the BBR fishery failed to open, only the Eastern Subdistrict, west of 163°W long, would open to a directed Tanner crab fishery on November 1. These BOF actions were based on observer bycatch data and historic harvest patterns which indicated the majority of female red king crab bycatch in the Bristol Bay red king crab and Bering Sea Tanner crab fisheries came from waters east of 163°W long.

During the 1994/95 and 1995/96 seasons, the Bristol Bay red king crab fishery did not open due to low stock abundance. As a result, the Tanner crab fishery opened on November 1 in the Eastern Subdistrict west of 163°W long. The commercial Tanner crab harvest in 1994/95 was 7.77 million pounds from a 7.5 million pounds GHL. In 1995/96, the GHL was reduced to 5.5 million pounds with a harvest of 4.23 million pounds (Figure 2-10).

The GHL for the 1996/97 Tanner crab fishery was 8.4 million pounds (Table 2-16). Due to poor fishery performance, the fishery was closed before the GHL was reached; a total of 1.8 million pounds was harvested. Based on poor fishery performance in 1996/97, and the 1997 NMFS survey which indicated significant decline in most segments of the Tanner crab population (Stevens et al. 1998a), the Bering Sea Tanner crab fishery was closed for the 1997/98 season. The 1998 NMFS survey indicated large male and female Tanner crab continued to decline to the lowest level in the history of the survey (Stevens et al. 1998b). Because the stock fell below the minimum stock size threshold established in the FMP, the stock was declared overfished by NMFS in 1998 and necessitated the establishment of a rebuilding plan.

In March 1999, the BOF adopted a revised harvest strategy as part of a comprehensive Bering Sea Tanner crab rebuilding plan. The harvest strategy included a minimum threshold on mature female biomass, applied harvest rates on mature male biomass based on the mature female biomass, and employed a maximum exploitation rate on legal male abundance.

Prerecruit crab abundance increased from 1998 to 1999; however, this trend reversed in 2000 and 2001. The stock remained below the fishery threshold level established in the harvest strategy, and the fishery remained closed through the 2004/05 season.

Based on results of the 2005 NMFS survey, the stock was estimated to be above the minimum mature female biomass threshold and the fishery opened for the 2005/06 season in the area west of 166°W long under the CR program with a combined IFQ and CDQ TAC of 1.62 million pounds. The abundance of exploitable legal male Tanner crab estimated for ADF&G statistical area 695700 was not included when computing the TAC for the area west of 166°W long. Although this statistical area accounted for approximately 27% of the exploitable legal male Tanner crab west of 166°W long estimated from the 2005 trawl survey, the area was closed to commercial fishing to protect Pribilof blue king crab. The 2005/06 season did not open in the area east of 166°W long because the TAC, as calculated according to the harvest strategy (1.02 million pounds), was below the minimum 4.0 million pound TAC. Forty-three vessels harvested Tanner crab during the 2005/06 season, but only 6 of those fished directly for Tanner crab with Tanner crab pot gear. The remainder were incidentally harvested Tanner crab caught while directly fishing for snow crab with snow crab gear. Only 0.953 million pounds (59%) of the 2005/06 TAC was harvested, apparently because many harvesters were unaware the Tanner crab season closed more than a month earlier than the snow crab season.

After the 2005/06 season, the BOF eliminated the minimum TAC for Bering Sea Tanner crab and defined the boundary separating the Bering Sea Tanner crab stocks at 166°W long, with

separate TACs for each area. The 2006/07 Bering Sea Tanner crab TAC was set at 1.88 million pounds for the area east of 166°W long for eastern Bering Sea Tanner Crab (EBT), and 1.09 million pounds for the area west of 166°W long for western Bering Sea Tanner Crab (WBT). TACs were increased in 2007/08 to 3.45 million pounds for the EBT fishery and 2.18 million pounds for the WBT fishery. The 2008/09 season TACs decreased to 2.8 million pounds for the EBT fishery and 1.5 million pounds for the WBT fishery. In 2009/10, the TAC for the EBT fishery dropped to a low of 1.35 million pounds, and the WBT fishery was closed. In 2010/11, the entire Bering Sea was closed. Although the fishery previously opened on October 15, recent catch and effort in the EBT fishery occurred January through March. Since the 2006/07 harvest of 2.12 million pounds, harvest continued to decrease until a low of 1.33 million pounds was harvested by 17 vessels in the 2009/10 season (Figure 2-10).

Like the EBT fishery, most catch and effort in the WBT fishery occurred January through March, with limited catch and effort during October and November. The WBT fishery has shown similar trends with vessel participation; however, harvest significantly decreased after the 2005/06 season with a low of 109,111 pounds harvested during the 2008/09 season (Figure 2-10).

Vessels fishing for Tanner crab in the 2006/07 and 2007/08 seasons were able to use Tanner crab gear, as well as snow or king crab gear to retain Tanner crab. Tanner crab catch information from all gear types was used to summarize CPUE, size frequencies, and bycatch for the entire 2006/07 and 2007/08 seasons; thus, the results are difficult to interpret.

Regulations adopted by the BOF in 2008 specify that Tanner crab fishermen may only use 1 type of pot gear—fisherman may either participate in a directed Tanner crab fishery using Tanner crab pots, or retain up to 5% Tanner crab caught while targeting red king crab (EBT only) or snow crab (WBT only).

In 2009/10, 1.32 million pounds of the 1.35 million pound TAC were harvested in the EBT fishery. The Tanner crab fishery west of 166°W long was closed; however, 3,778 pounds were recorded as being illegally harvested in the Bering Sea snow crab fishery. Both EBT and WBT were closed from 2010/11 through 2012/13 and both fisheries opened for the 2013/14 season with a combined TAC of 3.1 million pounds (the TAC for 2013/14 was calculated to be 6.2 million pounds but was halved as prescribed by the harvest strategy for a first year opener after a closure). The 2014/15 combined TAC of 15.1 million pounds was the largest seen since the mid-1990s and was based on a reduction in the size of exploitable males in the harvest strategy by the Board of Fisheries (2014) which, in turn, increased the number of males in the fishable population, thereby increasing the TAC and a large recruitment event seen in the NMFS trawl survey as well as in the stock assessment models. The stock assessment models as well as the survey also saw that despite a very large recruitment into the fishable male population of this stock, there was a precipitous decline in female abundance. The increased 2015/16 TAC of 19.7 million pounds was also in response to the recruitment event although a further decline in females was observed.

In March 2011, the BOF lowered the minimum legal size limit for Bering Sea Tanner crab from 5.5 inches CW to 4.8 inches in the area east of 166°W long, and to 4.4 inches CW in the area west of 166°W long. The BOF also modified the harvest strategy, employing exploitation rates on the portion of legal male crab 5.5 inches or greater in the area east of 166°W long, and 5.0 inches or greater in the area west of 166°W long. The minimum mature female biomass

threshold was modified based on long-term average (1975–2010) mature female biomass and the female size at maturity was reduced to 84 mm in the area east of 166°W long and to 79 mm in the area west of 166°W long. The board again modified the harvest strategy in 2014 lowering the size of exploitable males in EBT from 5.5 inches to 5.0 inches.

#### 2015/16 Season

The 2015/16 Bering Sea Tanner crab TAC was set at 11,272,000 pounds for the area east of 166°W long, and 8,396,000 pounds for the area west of 166°W long (Table 2-16). Harvesters were paid an average exvessel price of \$2.19 per pound for a total fishery value of \$42.6 million (Table 2-17). Both fisheries opened on October 15 and closed by regulation on March 31 (Table 2-18). Most fishing effort occurred in November through January. ADF&G statistical areas 635600 and 645600 in the area east of 166°W long and ADF&G statistical area 715700 in the area west of 166°W long harvested the most tanner crab (Table 2-19). Total Bering Sea Tanner crab harvest during the 2015/16 season was 19,642,378 pounds, or nearly 100% of the TAC. Harvesters were paid an average exvessel price of \$2.19 per pound for a total fishery value of \$42.6 million (Table 2-17).

Average CW was 138 mm, the same as 2014/15. Retained catch was 76% new shell. The average weight of landed crab was 1.8 pounds, the same as the average weight in 2014/15 (Table 2-20). Fifty seven percent of harvest occurred in the area east of 166°W long, and 43% occurred in the area west of 166°W long (Table 2-16).

#### IFQ Fishery

The 2015/16 Bering Sea Tanner crab fishery IFQ TACs were 10,144,800 pounds for the area east of 166°W long and 7,556,400 pounds for the area west of 166°W long (Table 2-16). Fortynine vessels harvested 10,138,305 pounds during the IFQ fishery east of 166°W long and 59 vessels harvested 7,539,465 pounds during the IFQ fishery west of 166°W long. Average weight of landed catch in the IFQ fishery in the area east of 166°W long was 1.9 pounds and average weight of landed catch in the IFQ fishery in the area west of 166°W long was 1.7 pounds. Average CPUE was 43 legal crab per pot lift in the IFQ fishery in the area east of 166°W long and average CPUE was 33 legal crab per pot lift in the IFQ fishery in the area west of 166°W long.

#### CDQ Fishery

The 2015/16 Bering Sea Tanner crab fishery CDQ TACs were 1,127,200 pounds for the area east of 166°W long and 839,600 pounds for the area west of 166°W long (Table 2-16). Eight vessels harvested 1,125,257 pounds during the CDQ fishery east of 166°W long and 10 vessels harvested 839,351 pounds during the IFQ fishery west of 166°W long. Average weight of landed catch in the CDQ fishery in the area east of 166°W long was 1.9 pounds and average weight of landed catch in the CDQ fishery in the area west of 166°W long was 1.7 pounds. Average CPUE was 47 legal crab per pot lift in the CDQ fishery in the area east of 166°W long and average CPUE was 33 legal crab per pot lift in the IFQ fishery in the area west of 166°W long.

## **Port Sampling**

ADF&G port samplers in Dutch Harbor, Saint Paul, King Cove, Akutan, and Kodiak collected data from vessels without onboard observers. Collected data included: carapace width, average weight, fishing effort, and location. Data was collected by dockside samplers from 143 of the

202 total landings in the area east of 166°W long and data was collected by dockside samplers from 142 of the 240 total landings in the area west of 166°W long during the Bering Sea Tanner crab fishery.

#### **Stock Status**

The Bering Sea Tanner crab stock met rebuilding criteria with 2 consecutive years above the rebuilt level in 2008/09; however, the stock continued to decline in 2010 and was once again determined to be overfished. The directed fisheries were both closed from 2010/11 to 2012/13. In 2013, NMFS adopted a new stock assessment model which showed the stock to not to be overfished. Both EBT and WBT fisheries were open for the 2013/14–2015/16 seasons. The estimated mature male biomass as of February 15, 2016 (the assumed time of mating) was 118.8 million pounds. The estimated total recruitment for 2015/16 was 80.7 million crab. Biomass for this stock remains at low levels compared to model-estimated historic levels. The stock is not currently considered to be overfished (NPFMC 2015).

Further information on Tanner crab stock status and federal overfishing levels may be found in the 2015 Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions (NPFMC 2015).

## BERING SEA SNOW CRAB

## **Historical Background**

The first commercial landings of snow crab from the Bering Sea were recorded in 1977, incidental to harvest of Tanner crab. Over the next 18 years, snow crab fishery performance and harvest showed considerable variability. From the 1978/79 to 1991 seasons, snow crab harvest ranged from 26.1 million pounds in 1983 to an all-time high of 328.6 million pounds in 1991. Subsequently, harvest decreased to 65.7 million pounds by 1996. Stock status improved between 1997 and 1999 when harvests averaged 188.7 million pounds (Table 2-21; Figure 2-11).

In 1995, the NPFMC included the Bering Sea snow crab stock in the CDQ program and in 1998, the first Bering Sea snow crab CDQ fishery took place. During the first year of the fishery, CDQ groups were allocated 3.5% of the overall GHL. This increased to 5% in 1999, 7.5% in 2000, and 10% in 2005/06 during crab rationalization.

In 1999, the NMFS trawl survey snow crab abundance estimate was 60% of the minimum stock size threshold defined in the FMP (NPFMC 1998). In response to significant stock decline, ADF&G initially reduced the 58% exploitation rate on 102 mm CW and larger male snow crab by 50%. The resultant 29% exploitation rate would have resulted in a removal rate from the estimated mature biomass close to the long-term average. In accordance with NMFS guidelines for stock rebuilding, the harvest rate was reduced to 22% of the 4-inch male biomass estimate. This also took into consideration handling mortality during the fishery and high natural mortality during the 6-month hiatus between the survey and the fishery opening.

In collaboration with the United States Coast Guard and industry, the 2000 snow crab season was delayed from January 15 to April 1 due to sea ice covering the majority of the fishing grounds (Table 2-22). The 2000 snow crab harvest of 33.3 million pounds exceeded the 28.5 million pound GHL by 17% (Table 2-23). The exvessel price for snow crab harvested in the 2000 fishery was 2-tiered due to concerns for higher than normal percentage of old-shell crab expected in the catch. Fishermen were offered \$1.84 per pound for new-shell crab and \$1.00 per pound for old-

shell crab. Fishermen reported encountering high percentages of old-shell crab in the first 2 days of the fishery, but thereafter located areas which contained predominantly new-shell crab. As a result, less than 10% of crab landed were old-shell crab (Table 2-24).

Analysis of the 2000 NMFS summer trawl survey of the eastern Bering Sea indicated a 19% decrease in the abundance of large male (≥102 mm CW) crab from the 1999 survey. However, small male (<102 mm CW) abundance increased 100% and large female (≥50 mm CW) abundance increased 212%. Due to the large increase in both small male and large female abundance, the spawning biomass, estimated at 472.7 million pounds, was slightly above the minimum stock size threshold of 460.8 million pounds. In the spring of 2000, the BOF adopted a harvest strategy which specified a stepped harvest rate on mature male crab that is dependent on estimated spawning biomass. The rebuilding plan specified an exploitation rate of 16.875% of the mature male biomass when the spawning biomass is between 460.8 and 921.6 million pounds, which resulted in a GHL for the 2001 season of 27.3 million pounds (Table 2-23).

The 2001 Bering Sea snow crab fishery harvest was 25.3 million pounds, or 93% of the GHL. The average exvessel price per pound in 2001 was \$1.53, which resulted in a general fishery value of \$37.95 million, a significant decrease from the 2000 fishery value of \$60.61 million (Table 2-25).

The 2002 GHL was initially calculated at 51.0 million pounds based on NMFS survey estimates. This constituted a harvest greater than 50% of the estimated exploitable legal male abundance. In accordance with harvest strategy requirements, the GHL was adjusted downward to not exceed 50% of the exploitable legal male abundance. The 2003 Bering Sea snow crab fishery harvest of 28.3 million pounds exceeded the GHL by 10.6%. Relatively little of the snow crab harvest occurred in the Eastern Subdistrict—a sharp contrast to the fisheries of the 1990s when the majority of the harvest occurred east of 173°W long. During 2003, approximately 6.6 million pounds (23%) of snow crab were harvested east of 173°W long. In contrast to 2002, the fleet did not encounter large numbers of old- or very-old-shell crab on the grounds in 2003 (Table 2-24). In the 2004 fishery, a harvest of 23.9 million pounds exceeded the GHL of 20.8 million pounds by 15%. A similar pattern followed in the 2005 fishery, where the 20.9 million pound GHL was overharvested by a similar percent. The 2005 fishery CPUE was higher than any previous year (Table 2-23).

The first rationalized season for snow crab opened on October 15, 2005, for the 2005/06 season. With the implementation of crab rationalization, CDQ groups were allocated 10% of the overall TAC. The season opened with a TAC of 37.2 million pounds and 78 vessels participated. A total of 36.97 million pounds were harvested. The average weight of crab was 1.51 pounds, 11% greater than the preseason estimate of 1.35 pounds and greater than any average weight for this fishery since 1981. Harvest from the Eastern Subdistrict accounted for 62% of the total snow crab harvest and 71% of the harvest was from areas south of 58°30'N lat. In general, harvest location shifted to the southeast compared to the previous 5 seasons. Total fishery CPUE for retained legal crab in the 2005/06 fishery was 203 crab per pot, the second highest CPUE since the 1999 season (Table 2-23). Compared to the short (less than 10 days) general fisheries of the prerationalized seasons, the 2005/06 season was prolonged and had varying levels of vessel participation, catch, effort, and catch rates over the 7.5-month period (Table 2-22). The majority of the fishing effort took place between January and March and occurred until the first week of May.

The TAC decreased slightly for the 2006/07 season to a rationalized season low of 36.6 million pounds, but increased in the following season to 63.0 million pounds, the highest since 1999. From 2007/08 until 2009/10, the TAC declined to 48.0 million pounds but then increased to 54.3 million pounds in 2010/11. Vessel participation fluctuated since rationalization, from a low of 69 vessels in 2006/07 and 2009/10, to a high of 78 vessels in 2005/06 and 2007/08. The CPUE reached a high of 349 retained crab per pot in 2007/08; more than 40% higher than the 2005/06 season and the highest on record for the fishery, likely due to efficiency gains achieved after the implementation of the CR program. Average catch rate decreased during the 2008/09 season to 281 retained crab per pot lift, and further decreased to 257 during the 2009/10 season, and decreased again to 256 during the 2010/11 seasons (Table 2-23). After rationalization, the TAC peaked in 2011/12 with a TAC of 88.9 million pounds, though catch rates were relatively low (224 CPUE) when compared to other postrationalization seasons. In general, CPUE has been decreasing from a peak of 349 in 2007/08. CPUE for the 2015/16 fishery was 136, which was the lowest CPUE seen since 2002. Harvest has typically been focused more on ADF&G statistical areas in the Eastern Subdistrict than the Western Subdistrict, with harvest occurring through the following spring; the 2015/16 fishery was no exception (Tables 2-26 and 2-27).

#### 2015/16 Season

The 2015/16 Bering Sea snow crab season opened on October 15 with a combined IFQ and CDQ TAC of 40,611,000 pounds (Table 2-21). The season closed by regulation on May 15 in the Eastern Subdistrict and on May 31 in the Western Subdistrict.

Seventy-four vessels participated in the fishery, with a harvest of 40,611,446 pounds, of which less than 1% was deadloss. The average catch rate was 137 retained crab per pot lift. The fleet registered 11,942 pots, an average of 161 pots per vessel. Total effort for the 2015/16 season was 217,054 pot lifts, a 25% decrease from the 2014/15 season.

Snow crab vessels were active in the fishery for an average of 49 days during the 2015/16 season, similar to previous seasons.

Average CW was 113 mm, 3 mm more than in 2014/15. Retained catch was 91% new shell. The average weight of landed crab was 1.4 pounds, 0.2 pounds higher than the average weight in 2014/15 (Table 2-24). Snow crab were similar in size in the Western Subdistrict and Eastern Subdistrict. Seventy percent of harvest occurred in the Eastern Subdistrict, and 30% from the Western Subdistrict (Table 2-23).

## IFQ Fishery

The 2015/16 Bering Sea snow crab fishery IFQ TAC was 36,549,900 pounds (Table 2-21). Effort for the IFQ fishery was 201,234 pot lifts with a CPUE of 133 retained crab per pot. Harvesters were paid an average price of \$1.97 per pound for snow crab which generated an IFQ exvessel fishery value of approximately \$71 million, the lowest fishery value in over the last 5 seasons. Landed crab averaged 1.4 pounds, an increase of 0.2 pounds from the 2014/15 fishery average weight.

## CDQ Fishery

The 2015/16 Bering Sea snow crab CDQ allocation was 4,061,100 pounds (Table 2-21). Eleven vessels made 26 landings for a total harvest of 4,061,098 pounds and had a fishery value of approximately \$8 million. All CDQ groups participated in the fishery.

## **Port Sampling**

ADF&G port samplers in Dutch Harbor, Saint Paul, King Cove, Akutan, and Kodiak collected data from vessels without onboard observers. Collected data included: carapace width, average weight, fishing effort, and location. Data was collected by dockside samplers from 257 of the 390 total landings during the 2015/16 snow crab fishery.

#### **Stock Status**

The Bering Sea snow crab stock was declared overfished in 1999 by NMFS and a rebuilding plan was implemented in 2000. The stock failed to rebuild within the required 10-year period. The assessment model was restructured in the 10 years the rebuilding plan was in place and a revised definition for  $B_{MSY}$  was developed. Using the new definition of  $B_{MSY}$ , the 2011 stock assessment model showed that the stock was rebuilt (NPFMC 2011, 2015).

Biomass estimates for mature male abundance increased from 279.0 million pounds in 2013/14 to 284.5 million pounds in 2014/15 and then decreased to 271.1 million pounds in 2015/16 (NPFMC 2015). A similar trend was seen in female biomass. Survey data indicates a possible large recruitment event although there is high uncertainty associated with those estimates. The stock is currently not considered to be overfished (NPFMC 2015).

#### BERING SEA GROOVED TANNER CRAB

## **Historical Background**

In 1988, the BOF authorized a commissioner's permit for deepwater Tanner crab under 5 AAC 35.511 *Permits for tanneri and angulatus Tanner crab in Registration Area J.* However, no commercial harvest of grooved Tanner crab *Chionoecetes tanneri* from the Bering Sea occurred until 1992. In 1993, ADF&G increased the legal size of male grooved crab from 89 mm (3.5 inches) CW to 127 mm (5 inches) CW. Six vessels harvested just under 659,000 pounds in 1993. The following year, differential pot limits, based on vessel size, were applied to vessels fishing for deepwater Tanner crab in the Bering Sea. Observers were deployed in 1994 to collect biological and fishery data on each registered vessel in the fishery. In 1994, effort decreased to 4 vessels with a harvest slightly over 322,000 pounds (Table 2-28).

At the March 1995 BOF meeting, pot limits were removed for deepwater permit fisheries. Effort increased significantly in 1995, when 8 vessels harvested close to 985,000 pounds with a fishery value exceeding \$2.0 million. Since 1995, the number of vessels registered for Bering Sea District grooved Tanner crab has not exceeded 4 vessels for any year. CPUE was highest in 1994 at 11 legal crab per pot lift and declined to 4 in 1996. Harvest decreased to 96,000 pounds in 1996. No vessel registered for the Bering Sea District grooved Tanner crab fishery from 1997 to 1999, only 1 vessel registered each year in 2000, 2001, and 2003, and 4 vessels registered for the fishery in 2004 (Table 2-28). Two additional vessels registered to retain grooved Tanner crab incidental to the Pribilof District golden king crab fishery, but did not land any grooved Tanner crab. The Bering Sea District grooved Tanner crab harvest in 2004 is confidential because only 1 processor participated in the fishery. One vessel registered to fish grooved Tanner crab in the Bering Sea during 2005. Most effort has been concentrated in a few statistical areas south of Saint George Island. No vessels have registered to fish for grooved Tanner crab since 2005.

In 1997, ADF&G set GHLs for grooved Tanner crab based on prior harvest information. In previous years, the Bering Sea, Alaska Peninsula, and Eastern Aleutian Districts supported the

largest catches of grooved Tanner crab. A GHL of 200,000 pounds was established for each of these Districts. A GHL of 100,000 pounds was established in the Western Aleutian District to allow for exploratory fishing. Additionally, due to concerns about handling mortality on undersized male and female deepwater crab caught and released, ADF&G began to require a minimum of 2 escape rings per pot with a minimum inside ring diameter of 4.5 inches.

Given fishery performance and a decline in the harvest of the mid 1990s, ADF&G reevaluated deepwater Tanner crab harvest levels in 1999. A GHL range of 50,000 to 200,000 pounds was established for the Bering Sea District. The GHL was set as a range to provide flexibility for inseason management and to better inform the public of the department's management goals for the fishery. The upper end of the GHL range may be allowed when catch rates similar to, or greater than, catch rates prior to the harvest decline of the mid-1990s are observed. In addition to the new GHL range, ADF&G mandated that four 4.5-inch escape rings be placed on the lower third of each pot, and required pots be fished over multiple depth strata.

## 2015 Fishery

No vessels registered to fish for grooved Tanner crab in the Bering Sea during 2015.

## **Stock Status and Fishery Management**

Fishery data is the primary source of information regarding stock status. Based on available information, the Bering Sea grooved Tanner crab stock was heavily exploited in the mid-1990s and catch rates decreased to a level where the commercial fishery was no longer economically viable. Since the late 1990s, the stock has been managed more conservatively and recent fishery performance data, although confidential, indicates that the stock has stabilized. The 2012 NMFS Bering Sea slope survey results indicate a biomass of 0.59 million pounds in the Pribilof Canyon (survey subarea 2; Hoff 2013). These estimates are highly uncertain and not currently used in fishery management.

In December 2007, NMFS amended the FMP and removed Bering Sea grooved Tanner crab, which provided the state of Alaska with sole jurisdiction over the fishery (NPFMC 2007).

## BERING SEA TRIANGLE TANNER CRAB

## **Historical Background**

Historically, triangle Tanner crab *Chionoecetes angulatus* were taken as incidental harvest in the grooved Tanner crab fishery. Vessel operators verbally reported retention of triangle Tanner crab before 1994. To obtain biological information on triangle Tanner crab ADF&G implemented 100% onboard observer coverage in 1994. That year, onboard observers documented a single incidence of triangle Tanner crab bycatch. Prior to 1995 this species had not been commercially harvested. In 1995, 4 vessels registered to retain triangle Tanner crab and harvested 40,991 pounds for a total fishery value of \$60,000. No vessel registered to fish triangle Tanner crab in the Bering Sea District in 1997, 1998, 1999, or 2002. Only 1 vessel delivered triangle Tanner crab as incidental harvest in 1996, 2000, 2001, and 2003. Four vessels registered to retain triangle Tanner crab incidental to the Pribilof District golden king and Bering Sea grooved Tanner crab fisheries in 2004. No vessels have registered to fish for triangle Tanner crab in the Bering Sea District since 2004 (Table 2-29).

Due to the lack of stock abundance data for this species, additional fishing for triangle Tanner crab in the Bering Sea District will be limited to incidental harvest during the grooved Tanner

crab and Pribilof District golden king crab fisheries. Vessels registered to fish for grooved Tanner crab were previously permitted to retain incidentally taken triangle Tanner crab up to 50% of the weight of grooved Tanner crab. In the Pribilof District golden king crab fishery, incidentally taken triangle Tanner crab may be retained up to 5% of the weight of the golden king crab onboard the vessel. This harvest level is consistent with the historic catches and allows for limited retention of this deepwater species that is believed to experience significant handling mortality when caught and released.

## 2015 Fishery

No vessel registered to fish for triangle Tanner crab in the Bering Sea District during 2015.

## **Stock Status and Fishery Management**

Fishery data is the primary source of information regarding stock status. Triangle Tanner crab are currently managed as bycatch only to other nonrationalized fisheries. The 2012 NMFS Bering Sea slope survey results indicate a biomass of 0.26 million pounds in the Pribilof Canyon (survey subarea 2), down from 2.8 million pounds estimated in the 2010 slope survey (Hoff and Britt 2011; Hoff 2013). These estimates are uncertain and not currently used in fishery management.

In December 2007, NMFS amended the FMP and removed Bering Sea triangle Tanner crab, which provided the state of Alaska with sole jurisdiction over the fishery (NPFMC 2007).

# BERING SEA DUNGENESS CRAB AND MISCELLANEOUS SHELLFISH SPECIES

#### **DESCRIPTION OF AREA**

The Bering Sea portion of Registration Area J for miscellaneous shellfish includes all Bering Sea waters of both the Territorial Sea and the EEZ north of the latitude of Cape Sarichef at 54°36′N lat and east of the United States-Russia Maritime Boundary Line of 1990 (Figure 2-12).

#### INTRODUCTION

Miscellaneous shellfish includes: hair crab *Erimacrus isenbeckii*, green sea urchins *Strongylocentrotus droebachiensis*, red sea cucumbers *Parastichopus californicus*, snails *Neptunea* and *Buccinum* spp., octopus *Enteroctopus dofleini*, and cherry crab *Paralomis multispina*. These species have been harvested in relatively small amounts when compared to the commercial king and Tanner crab fisheries in the Bering Sea.

Prior to 1999, commercial fishing for miscellaneous shellfish was allowed under authority of a commissioner's permit described in 5 AAC 38.062 Permits for Octopi, Squid, Hair Crab, Sea Urchins, Sea Cucumbers, Sea Snails, Coral, and Other Marine Invertebrates. Typical permit conditions were general and not fully developed on an individual species basis. Fisheries for miscellaneous shellfish occurred without prior knowledge of stock abundance or distribution and no harvest limits were established. More recently, ADF&G has developed species-specific permit terms when sufficient information has been available to do so.

Those species of current or historic interest in the Bering Sea include: *P. multispina*, hair and Dungeness crab *Metacarcinus magister*, octopus, and snails. Bering Sea Dungeness crab and

North Peninsula District shrimp do not fall under the miscellaneous species category, but are included in this section of the report due to low or infrequent harvest.

## BERING SEA HAIR CRAB

## **Description of Area**

The area for the Bering Sea hair crab fishery includes all waters north of 54°36′N lat, south of 60°N lat, east of the United States-Russia Maritime Boundary Line of 1990, and west of 168°W long (Figure 2-13). There is no formal hair crab registration area established in regulation; rather, the fishing area is set using the terms of a commissioner's permit.

## **Historical Background**

The fishery for hair crab in the Bering Sea was pioneered by the Japanese fleet during the 1960s and first commercially exploited by the U.S. fleet in 1979. In its early years, the domestic hair crab season was opened by emergency order concurrent with the Bering Sea Tanner crab fishery. In 1980, the BOF established a year-long season within 3 miles of the Pribilof Islands. Beginning in 1984, under conditions of a commissioner's permit issued by ADF&G, the year-round directed hair crab fishery was allowed to operate in all waters of the Bering Sea District; however, between 1979 and 1992 the majority of hair crab landed was reported as incidental catch in the Bering Sea Tanner crab fisheries.

In the fall of 1993, under the terms of the commissioner's permit, vessels that participated in the hair crab fishery were required to carry an observer during all fishing activities (ADF&G 1996). In 1994, hair crab pots were defined by the BOF as pots with a rigid tunnel opening in the top of the pot, with a tunnel perimeter not to exceed 26 inches and a base that does not exceed 48 inches in any one direction. Legal retention of hair crab is permitted only from hair crab pots.

Due to a steady increase in the number of vessels participating in the fishery, the Alaska Legislature authorized the Commercial Fisheries Entry Commission (CFEC) to regulate vessel licenses in the Bering Sea hair crab fishery. A temporary moratorium for new vessels entering the fishery went into effect in 1996.

Participation and harvest in the Bering Sea hair crab fishery has varied greatly over the history of the U.S. fishery. Effort and harvest reached a peak of 67 vessels and 2.4 million pounds in 1980/81 when harvests were incidental to the Tanner crab season. Between 1985 and 1990, effort was minimal due to low stock abundance. Since the 1996 CFEC moratorium, effort dropped from 19 vessels in 1996 to 3 vessels in 2000. In the 1990s, harvest peaked at 2.33 million pounds in the 1993/94 season (Table 2-30; Figure 2-14). Total fishery value peaked in 1995 at \$5.7 million. Since 1995, both effort and GHL have declined. During the 2000 season, only 1,546 pounds of hair crab were harvested, for a fishery value of \$5,000 (Table 2-31).

Since 1984, average weight and CPUE have shown substantial annual fluctuations. The highest CPUE of 10 legal crab per pot was recorded in 1983/84 and 1991, but CPUE was less than 1 legal crab per pot during the spring 1993 and 2000 seasons. Average weight of retained hair crab was highest during the early years of the U.S. fishery at 2.2 pounds, but decreased to 0.9 pounds in 1991. In the late 1990s, the average weight of retained hair crab was 1.6 pounds (Table 2-30).

Beginning in 1993, the hair crab season opening date was set at November 1, which conflicted with the Bristol Bay red king crab fishery. In 1998, ADF&G solicited comments from industry regarding a new opening date. A consensus was reached that the fishery would open 10 days

after the closure of the Pribilof District or Saint Matthew Island Section king crab fisheries, whichever closed later. The fishery opened on October 8 in 1998. In 1999, the BOF changed the Bristol Bay red king crab season opening to October 15; thus, the hair crab fishery was again in conflict. Consensus was reached with industry to open the fishery 10 days after closure of the Bristol Bay red king crab fishery. Subsequently, in 1999 and 2000, the hair crab season opened on October 30.

The GHL for Bering Sea hair crab is established using results of the NMFS Bering Sea trawl survey. Since there are no registration areas, districts, or sections established in regulation for hair crab, survey results are described in terms of Bering Sea king crab registration areas, districts, and sections (Figure 2-4). Male hair crabs greater than or equal to 3.25 inches in CW are defined as legal crab in the commissioner's permit for this fishery.

Historically, the majority of legal sized male hair crab encountered during the trawl survey have been found in the vicinity of the Pribilof Islands and the fishery harvest has occurred primarily in the area east of Saint Paul Island. During the 1999 survey however, 65% of the large male hair crab population in the Bering Sea were found in the Northern District instead of the traditional Pribilof District. Subsequently, in 2000, the Pribilof District was closed to commercial hair crab fishing due to low stock abundance, and for the first time a directed hair crab fishery was opened in the Northern District of king crab Registration Area Q. Given the experimental nature of the fishery, the low abundance of small male crab found during the 2000 survey, the relative size of the stock, and lack of fishery data from the Northern District, the harvest rate was set conservatively at 10% of the estimated large male hair crab abundance. Three vessels participated in the 2000 fishery and harvested approximately 1,500 pounds. As a result of low stock abundance, the Bering Sea has been closed to hair crab fishing since 2001.

In the 2002 legislative session, a bill was passed (AS.16.05.450) that gave CFEC authority to use a vessel-based limited entry program for Bering Sea hair crab and Alaska weathervane scallop fisheries. The statute was originally set to sunset in 2008; however, the statute was extended and was scheduled to sunset on December 30, 2013. In 2013, the legislature voted unanimously to extend the sunset on this provision 3 more years, making the new sunset date December 30, 2016. CFEC designates the Bering Sea hair crab administrative area as waters of the Bering Sea beyond 5 miles from shore, 20 AAC 05.1400–05.1420. A fishery within 5 miles of shore would be open to any vessel 58 feet or less and is not subject to the limited entry program.

#### 2015 Season

The 2015 Bering Sea hair crab fishery was closed in all districts due to low stock abundance.

#### **Stock Status**

In general, abundance of hair crab in the Pribilof District has decreased since the early 1990s. Large male abundance is currently at low levels and survey data does not indicate recruitment to the large male size class is likely in the near term. In 2013 and 2014, there was an increase in abundance in all districts but abundance has since severely declined except for large males and females in the Northern District which showed an increase in the 2015 NMFS trawl survey (Daly et al. 2015).

The 2015 survey estimates of biomass for male hair crab are well below the long-term average except for large males in the Northern District which are slightly above (Daly et al. 2015). Although estimates of hair crab abundance have a high degree of uncertainty, large fluctuation in

abundance estimates are apparent, with increasing population trends followed by periods of low abundance, with no directed fishery mortality. Currently, the Bering Sea hair crab population appears to be depressed and unable to support a commercial fishery.

## BERING SEA OCTOPUS

The most recent directed fishery for octopus in the Bering Sea occurred in 1995. Less than 3 vessels made landings; therefore, harvest information is confidential. Since 1995, all harvest in the Bering Sea has been incidental to other fisheries.

NMFS considers octopus a groundfish species, but the State of Alaska's regulation lists octopus as a shellfish species. A vessel registered for groundfish in state waters of Registration Area J using a miscellaneous finfish permit may retain incidentally caught octopus up to 20% of the weight of the target species as described in 5 AAC 38.417 (2). Octopus is primarily retained as bycatch in Pacific cod pot fisheries.

Since 1995, landed incidental octopus harvest from state waters ranged from 59 pounds in 1997 to 7,177 pounds in 2008. Harvest of octopus bycatch reported from federal waters is significantly higher. Before 2011, harvest from both state and federal waters peaked at 156,381 pounds in 2005, and vessel effort and landings peaked at 110 vessels and 375 landings in 2007. In 2015, harvest was 81,685 pounds by 131 vessels during 519 landings (Table 2-32).

Average exvessel value based on landed weight of octopus peaked in 2014, at \$18.87 per pound, a \$3.55 increase from the next most valuable year, 2005. On August 31, 2011, NMFS announced that retention of octopus in the Bering Sea-Aleutian Islands federal fisheries would be prohibited for the remainder of the year, limiting octopus bycatch harvest in 2011. To maintain consistency between parallel and federal groundfish fisheries, ADF&G included octopus caught in parallel fisheries to fall under federal rules and this has remained so to date. Since 2011, octopus harvest has been low and has averaged 62,000 pounds.

#### PARALOMIS MULTISPINA

Fishing for cherry crab *Paralomis multispina* is managed under the terms of a commissioner's permit under 5 AAC 38.062. Although 1 vessel was registered to fish for *P. multispina* in 1995, no commercial harvest was reported. One vessel participated in the 1996 fishery, for which landing data is confidential. No vessels have requested a commissioner's permit to fish for *P. multispina* in the Bering Sea District since 1996.

## SEA CUCUMBERS AND SEA URCHINS

ADF&G annually develops GHLs for red sea cucumbers and green sea urchins in the Westward Region. The Bering Sea Area opens October 1 under terms of a commissioner's permit as noted under 5 AAC 38.062. Historically, GHLs have been established at 5,000 pounds of eviscerated red sea cucumbers and 5,000 pounds round weight for green sea urchins. Fishing seasons are described in 5 AAC 38.411 and 5 AAC 38.412.

The small GHLs were established to permit conservative commercial exploration of areas that lacked historic harvest data and to allow ADF&G to collect critical information for future management purposes (Ruccio and Jackson 2000). No commercial harvest of either species occurred in the Bering Sea District in 2001. In 2002, a separate guideline harvest range of 30,000 to 60,000 pounds was established for the waters around Saint George Island. This harvest level

was based on abundance estimates obtained from dive survey data and marketing factors. One diver harvested green sea urchins in the Saint George Island area in 2002; therefore all harvest information is confidential. Since 2002, no divers have registered to harvest green sea urchins or red sea cucumbers.

In 2016, the GHL for the Bering Sea Area was set at 5,000 pounds each for red sea cucumbers and green sea urchins; however, there was no participation in the fishery.

#### **SNAILS**

## **Historical Background**

Commercial fishing for snails in the Bering Sea was initiated by the Japanese fleet in 1971 and continued until 1987; however, little information is available from this fishery. The Magnuson-Stevens Fishery Management and Conservation Act of 1976 required that foreign nations provide the United States with records concerning fisheries occurring inside the U.S. EEZ, and the Japanese began to provide fishing records following the passage of the act (MacIntosh 1979). NMFS recorded 14 vessels participated in 1971, 5 vessels in 1972, no vessels in 1973, and 6 vessels in 1974. No fishing occurred in 1975 and 1976. In 1977, records indicate that participation in the fishery increased to 3 vessels (MacIntosh 1980). In the 1980s, all fishing was conducted by catcher-processor vessels. The majority of the retained catch during this early fishery was composed of Pribilof neptune *Neptunea pribiloffensis*. Smaller components of the retained catch were composed of angular whelk *Buccinum angulossum* and ladder whelk *B. scalariforme* (MacIntosh 1980). Exvessel value was \$242,000 in 1977, increasing to \$1.3 million by 1979. Russian vessels began fishing for snails in the same area in 1989.

The Foreign Fisheries Observer Program assigned observers to Japanese catcher-processors in the years 1984–1987 and later to Russian vessels in 1989. The Russian venture only lasted 1 year with minimal return. Converted Tanner crab pots were used in the early foreign fishery. Pots were longlined in depths from 100 to 150 fathoms. Data from the Foreign Fisheries Observer Program showed the Japanese vessels pulled an average of 2,779 pots per day with an average soak time of 50 hours, whereas the Russian vessels averaged 1,219 pot lifts per day with an average soak time of 80 hours.

The U.S. fishery began in 1992 when 2 vessels registered to fish for snails. One vessel harvested snails as incidental harvest in the Tanner crab fishery and the second participated in a directed fishery for snails after the June closure of the hair crab fishery. Fishing for snails was limited to waters of the Bering Sea District west of 168°W long from 1994 to 1996. In 1997, snail fishing was limited to waters west of 164°W long.

Observer coverage was required as a condition of the commissioner's permit issued in 1993 under 5 AAC 39.210 (h) *Management plan for high impact emerging fisheries*. Minimal crab bycatch was observed in the area west of 168°W long. Bycatch of legal-sized king crab was less than 1 animal per pot. Female snow crab had the highest incidence of bycatch at 1 animal per pot (Tracy 1995).

Observer coverage was not required again until 1997 when 2 vessel operators expressed interest in fishing east of 168°W long. Vessels were restricted to grounds west of 164°W long and north of 54°36′N lat. These restrictions were conditions of the permit issued under 5 AAC 38.062 Permits for octopi, squid, hair crab, sea urchins, sea cucumbers, sea snails, coral, and other marine invertebrates. There was no bycatch of king crab; however, bycatch of Tanner crab was

observed. An estimated 17,300 female and 2,100 sublegal male Tanner crab, and 57,600 sublegal snow crab were captured in the 192,000 pots pulled.

In the 1997 fishery, average CPUE was 16 snails per pot, equal to the CPUE from vessels fishing northwest of the Pribilof Islands in the 1996 fishery. The majority of the catch for the 1997 season was composed of the genera *Neptunea* and *Buccinum*. Catches increased from 313,000 pounds in 1993 to 3.57 million pounds in 1996 and then declined to 932,000 pounds in 1997 (Table 2-33). The value of the fishery increased from \$130,000 in 1993 to \$1.10 million in 1996 and then dropped to \$310,000 in 1997 (Table 2-33). Since 1998, no fishing effort for snails has occurred in the Bering Sea.

#### 2015 Season

No vessels registered to harvest snails from the Bering Sea in 2015.

## **Stock Status**

The NMFS eastern Bering Sea trawl survey provides distribution and relative abundance information on Bering Sea snail populations. However, differential catchability of various species of snails makes accurate population estimates difficult.

## NORTH PENINSULA DISTRICT

#### **DESCRIPTION OF AREA**

The North Peninsula District for shrimp management includes all Bering Sea waters of both the Territorial Sea and the EEZ east of the longitude of Cape Sarichef at 164°55′30″W long (Figure 2-15).

The North Peninsula District for management of Dungeness crab includes all waters of both the Territorial Sea and the EEZ north of the latitude of Cape Sarichef at 54°36′N lat (Figure 2-16).

#### **SHRIMP**

No vessels have registered for the North Peninsula District pot or trawl shrimp fishery since 1994. Currently, shrimp fishing is not permitted in this district due to a lack of data.

## **DUNGENESS CRAB**

The North Peninsula Dungeness crab fishery is managed based on size, sex, and season restrictions. Fishing effort for Dungeness crab in the North Peninsula District has been sporadic, with few vessels participating. The fishery has typically occurred north of Unimak Island. In 1995, 6 vessels made 18 deliveries harvesting 134,407 pounds. Catch information from 1996 to 1998 is confidential, as less than 3 vessels participated in each of those years. The average annual harvest in the 3-year period from 1996 to 1998 was approximately 48,000 pounds. No vessels registered to fish in 1999, 2001, 2003, 2005, 2006, and 2008. One vessel, for which landings are confidential, participated in the 2000, 2004, 2007, and 2009 fisheries. In 2002, 2 vessels fished and harvest is confidential. In 2010, 5 vessels harvest 795,392 pounds with a CPUE of 6 legal male crab per pot. Harvesters were paid an average of \$1.73 a pound, generating a total fishery value of \$1.36 million, the highest on record for the North Peninsula District. Since 2010, harvest in the north peninsula Dungeness fishery has been low to nonexistent (Table 2-34).

#### 2015 Season

The North Peninsula Dungeness crab fishery opened May 1, 2015. One vessel registered for the 2015 season. Harvest information is confidential (Table 2-34).

## **Stock Status and Fishery Management**

There is no population data available to determine the status of the North Peninsula Dungeness crab stock. This fishery is managed using size, sex, and season restrictions. Male Dungeness crab with a CW of 165 mm or larger may be taken between 12:00 noon on May 1 through 12:00 noon on October 18.

## **BUOY IDENTIFICATION PROGRAM**

## INTRODUCTION AND BACKGROUND

Early 1990s BSAI crab fisheries were characterized by increased fishing effort, decreased GHLs, and short fishing seasons. In response, the BSAI crab industry submitted a petition regarding pot limits to the BOF. The petition was supported by data from ADF&G which indicated impaired conservation and management during low GHL fisheries due in part to the amount of gear fishing on the grounds. On March 20, 1991, the BOF adopted BSAI pot limit regulations. Effective August 1, 1992, regulations limited the number of pots a vessel could operate while harvesting BSAI king and Tanner crab. The buoy identification program was created to help implement pot limits and as per Alaska state statute designed to be self-supportive by generating funds.

Buoy identification stickers were first implemented during the 1992 Bristol Bay red king crab season, but were temporarily suspended due to product failure. Pot limit requirements for Bering Sea Tanner crab fisheries remained in effect until repealed by NMFS on November 30, 1992. Pot limits are an FMP category 2 management measure (NPFMC 1998). Category 2 measures may be adopted at the state level but are subject to the federal appeal process and must adhere to National Standards specified in the Magnuson-Stevens Fishery Management and Conservation Act requiring regulation application to be nondiscriminatory. Consequently, in February 1993 the BOF passed differential pot limit regulations. Pot limits varied by fishery and were based on vessel overall length. Vessels in excess of 125 feet in overall length are entitled to operate the maximum number of pots allowed for a fishery, and vessels 125 feet or less in overall length may fish 80% of the maximum pot limit. Further differential pot limit regulations for the Bristol Bay red king crab fishery were adopted on an interim basis August 27, 1997. The regulations created an 11-tier pot limit system dependent on fishery GHL and anticipated fleet size. The tiered system was made permanent in March of 1999.

With the implementation of crab rationalization in 2005, the BOF revised regulations to allow a maximum of 450 pots per vessel regardless of vessel length for Bering Sea king and Tanner crab fisheries. In addition, beginning in 2005, fishermen were allowed to use the same tags purchased for the IFQ fishery for the corresponding CDQ fishery. In March 2008, the BOF eliminated pot limits and tag requirements for the Bristol Bay red king crab, Bering Sea Tanner, and Bering Sea snow crab fisheries. Pot limits are still in effect for St. Matthew Island golden king crab, Pribilof District red/blue king crab, Pribilof District golden king crab, Eastern Aleutian Tanner crab, and Petrel Bank red king crab (Table 2-35).

# 2015/16 BUOY TAG SALES

For the 2015 Eastern Aleutian District Tanner crab fishery, 1 vessel purchased 50 tags (Table 2-36).

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**TABLES AND FIGURES** 

Table 2-1.—Bristol Bay red king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest data, 1966–2015/16.

		Nun	nber of			Number of		Number	of Pots	Avei	rage
Season	Fishery	Vessels	Landings	GHL/TAC <sup>a,b</sup>	Harvest <sup>a,c</sup>	crab <sup>c</sup>	Deadloss <sup>a</sup>	Registered	Lifted	Weight <sup>a</sup>	CPUE <sup>d</sup>
1966	General	9	15	-	997,321	140,554	NA	NA	2,720	NA	52
1967	General	20	61	-	3,102,443	397,307	NA	NA	10,621	NA	37
1968	General	59	261	-	8,686,546	1,278,592	NA	NA	47,496	NA	27
1969	General	65	377	-	10,403,283	1,749,022	NA	NA	98,426	NA	18
1970	General	51	309	-	8,559,178	1,682,591	NA	NA	96,658	NA	17
1971	General	52	394	-	12,955,776	2,404,681	NA	NA	118,522	NA	20
1972	General	64	611	-	21,744,924	3,994,356	NA	NA	205,045	NA	19
1973	General	67	441	-	26,913,636	4,825,963	NA	NA	194,095	5.6	25
1974	General	104	605	-	42,266,274	7,710,317	NA	NA	212,915	5.5	36
1975	General	102	592	-	51,326,259	8,745,294	1,639,483	NA	205,096	5.7	43
1976	General	141	984	-	63,919,728	10,603,367	875,327	NA	321,010	6.0	33
1977	General	130	1,020	-	69,967,868	11,733,101	730,279	NA	451,273	5.9	26
1978	General	162	926	-	87,618,320	14,745,709	1,273,037	NA	406,165	5.9	36
1979	General	236	889	-	107,828,057	16,808,605	3,555,891	NA	315,226	6.4	53
1980	General	236	1,251	70–120 million	129,948,463	20,845,350	1,858,668	78,352	267,292	6.2	37
1981	General	177	1,013	10-100 million	33,372,832	5,273,530	706,489	75,756	536,646	6.3	10
1982	General	89	253	10–20 million <sup>e</sup>	2,990,082	538,925	95,834	36,166	140,492	5.5	4
1983	General	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
1984	General	89	133	2.5–6 million	4,083,612	793,046	35,101	21,762	107,406	5.2	7
1985	General	125	130	3–5 million	4,090,305	780,791	6,436	30,117	84,443	5.2	9
1986	General	156	229	6–13 million	11,306,084	2,083,496	284,126	32,468	175,753	5.4	12
1987	General	227	311	8.5–17.7 million	12,289,067	2,122,341	120,388	63,000	220,971	5.8	10
1988	General	200	201	7,500,000	7,361,026	1,231,731	23,537	50,099	146,179	6.0	8
1989	General	207	287	16,500,000	10,156,849	1,667,405	81,334	55,000	205,528	6.1	8
1990	General	241	331	17,100,000	20,443,043	3,134,082	141,067	69,906	262,761	6.5	12
1991	General	300	322	18,000,000	16,971,365	2,597,994	106,853	89,068	227,555	6.5	12
1992	General	279	288	10,300,000	7,996,040	1,189,443	6,000	68,189	206,172	6.7	6
1993	General	291	360	16,800,000	14,534,504	2,246,477	133,514	58,881	253,794	6.5	9
1994-1995	General	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
1996	General	196	198	5,000,000	8,405,614	1,249,005	24,166	39,461	76,433	6.7	16
1997	General	256	265	7,000,000	8,756,490	1,315,969	13,771	27,499	90,427	6.7	15

Table 2-1.—Page 2 of 3.

		Num	iber of			Number of		Number of	of Pots	Avei	age
Season	Fishery	Vessels	Landings	GHL/TAC <sup>a,b</sup>	Harvest <sup>a,c</sup>	crab <sup>c</sup>	Deadloss <sup>a</sup>	Registered	Lifted	Weight <sup>a</sup>	CPUE <sup>d</sup>
1998	General	274	284	15,800,000	14,290,271	2,140,604	53,716	56,420	141,707	6.7	15
	CDQ	7	CF	525,115 <sup>g</sup>	CF	CF	CF	CF	CF	CF	23
	TOTAL	274	CF	16,400,000	CF	CF	CF	CF	CF	CF	15
1999	General	257	268	10,127,000	11,070,729	1,812,357	44,132	42,403	146,997	6.1	12
	CDQ	10	CF	580,641 <sup>g</sup>	CF	CF	CF	CF	CF	CF	29
	TOTAL	257	CF	10,660,000	CF	CF	CF	CF	CF	CF	13
2000 <sup>f</sup>	General	244	256	7,724,000	7,546,145	1,166,796	32,118	26,352	98,694	6.5	12
	CDQ	11	CF	$610,265^{g}$	CF	CF	CF	CF	CF	CF	20
	TOTAL	244	CF	8,350,000	CF	CF	CF	CF	CF	CF	12
2001 <sup>f</sup>	General	230	238	6,613,750	7,786,446	1,196,469	57,294	24,571	63,192	6.5	19
	CDQ	10	CF	617,623 <sup>g</sup>	CF	CF	CF	CF	CF	CF	29
	TOTAL	230	CF	7,150,000	CF	CF	CF	CF	CF	CF	19
2002 <sup>f</sup>	General	242	254	8,575,202	8,856,828	1,377,922	32,177	25,833	68,328	6.4	20
	CDQ	10	CF	$714,239^{g}$	CF	CF	CF	CF	CF	CF	30
	TOTAL	242	CF	9,270,489	CF	CF	CF	CF	CF	CF	21
2003 <sup>f</sup>	General	250	275	14,535,000	14,529,124	2,344,436	228,270	46,964	128,430	6.2	18
	CDQ	13	20	$1,167,040^{g}$	1,166,662	174,907	2,197	2,470	5,704	6.7	31
	TOTAL	250	296	15,713,000	15,695,786	2,519,343	230,467	46,964	134,134	6.2	18
2004 <sup>f</sup>	General	251	270	14,267,000	14,112,438	2,075,622	160,563	49,506	90,976	6.8	23
	CDQ	12	21	1,135,326 <sup>g</sup>	1,133,013	166,829	2,549	2,258	5,359	6.8	31
	TOTAL	251	294	15,424,000	15,245,451	2,242,451	163,112	49,506	96,335	6.8	23
2005/06	IFQ	89	264	16,496,100	16,478,458	2,460,856	77,507	15,713	96,335	6.7	25
	CDQ	13	32	1,832,900	1,830,877	271,718	8,781	2,095	15,376	6.7	18
	TOTAL	89	300	18,329,000	18,309,335	2,732,574	86,288	15,713	114,949	6.7	24
2006/07	IFQ	81	187	13,974,300	14,064,683	h 2,186,967	98,720	14,685	64,325	6.4	34
	CDQ	13	26	1,552,700	1,552,133	242,520	18,907	3,032	7,415	6.4	32
	TOTAL	81	217	15,527,000	15,616,816	2,429,487	117,627	14,685	71,740	6.4	34
2007/08	IFQ	74	246	18,344,700	18,327,780	2,817,766	131,954	11,885	101,739	6.5	28
	CDQ	10	35	2,038,300	2,038,285	323,537	8,430	2,109	11,475	6.3	28
	TOTAL	74	285	20,383,000	20,366,065	3,141,303	140,384	11,885	113,214	6.5	28

Table 2-1.—Page 3 of 3.

		Num	ber of			Number of		Number of	of Pots	Ave	rage
Season	Fishery	Vessels	Landings	GHL/TACa,b	Harvest <sup>a,c</sup>	crab <sup>c</sup>	Deadloss <sup>a</sup>	Registered	Lifted	Weight <sup>a</sup>	CPUE <sup>d</sup>
2008/09	IFQ	77	254	18,327,600	18,303,012	2,765,282	160,812	15,098	124,737	6.6	22
	CDQ	15	35	2,036,400	2,026,390	301,006	12,351	3,176	15,200	6.7	20
	TOTAL	78	289	20,364,000	20,329,402	3,066,288	173,163	15,347	139,937	6.6	22
2009/10	IFQ	70	210	14,408,100	14,331,803	2,277,434	111,467	14,977	107,058	6.3	21
	CDQ	11	23	1,600,900	1,600,851	259,787	10,740	3,067	11,463	6.2	23
	TOTAL	70	233	16,009,000	15,932,654	2,537,221	122,207	14,977	118,521	6.3	21
2010/11	IFQ	65	236	13,355,100	13,349,929	2,157,354	99,612	13,769	118,458	6.2	18
	CDQ	10	18	1,483,900	1,483,899	241,284	7,262	3,446	13,169	6.2	18
	TOTAL	65	254	14,839,000	14,833,828	2,398,638	106,874	13,769	131,627	6.2	18
2011/12	IFQ	62	150	7,050,600	7,050,195	1,151,945	30,155	12,090	41,086	6.1	28
	CDQ	9	11	783,400	783,399	127,109	1,913	2,765	4,080	6.2	31
	TOTAL	62	161	7,834,000	7,833,594	1,279,054	32,068	12,090	45,166	6.1	28
2012/13	IFQ	64	127	7,067,700	7,064,536	1,044,048	28,783	11,856	34,866	6.8	30
	CDQ	9	14	785,300	785,299	113,316	1,267	2,199	3,293	6.9	34
	TOTAL	64	141	7,853,000	7,849,835	1,157,364	30,050	11,856	38,159	6.8	30
2013/14	IFQ	62	144	7,740,000	7,740,479	1,117,452	60,587	11,269	41,695	6.9	27
	CDQ	10	12	860,000	859,997	125,253	2,162	2,288	4,232	6.9	30
	TOTAL	62	156	8,600,000	8,600,476	1,242,705	62,749	11,269	45,927	6.9	27
2014/15	IFQ	63	144	8,987,400	8,987,941	1,350,093	94,513	11,506	52,390	6.7	26
	CDQ	9	15	998,600	999,067	148,445	6,728	1,894	6,312	6.7	24
	TOTAL	63	159	9,986,000	9,987,008	1,498,538	101,241	11,506	58,702	6.7	26
2015/16	IFQ	63	141	8,976,600	8,972,564	1,350,438	177,969	12,470	44,485	6.6	30
	CDQ	8	11	997,400	997,400	147,345	4,864	1,786	3,523	6.8	42
	TOTAL	63	152	9,974,000	9,969,964	1,497,783	182,833	12,470	48,008	6.7	31

*Note:* NA = not available, FC = fishery closed.

Note: NA = not available, FC = fishery closed.

In pounds.

Guideline harvest level (GHL), total allowable catch (TAC) began in 2005/06.

Deadloss included.

Number of retained crab per pot lift.

Inseason revision to 4.7 million pounds.

Includes American Fisheries Act (AFA) harvest data.

Total GHL announced prior to general fishery opening, CDQ GHL adjusted based on general fishery harvest.

Pounds (and subsequent total) do not equal what was reported in previous AMR.

Table 2-2.—Bristol Bay red king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery economic performance and season dates, 1980–2015/16.

	_	Value		Se	eason length
Season	Fishery	Exvessel <sup>a</sup>	Total <sup>b</sup>	Days	Dates
1980	General	\$0.90	\$115.3	40	09/10-10/20
1981	General	\$1.50	\$49.3	91	09/10-12/15
1982	General	\$3.05	\$8.9	30	09/10-10/10
1983	General	FC	FC	FC	FC
1984	General	\$2.60	\$10.8	15	10/01-10/16
1985	General	\$2.90	\$12.1	8	09/25-10/02
1986	General	\$4.05	\$45.0	13	09/25-10/07
987	General	\$4.00	\$48.7	12	09/25-10/06
1988	General	\$5.10	\$37.6	8	09/25-10/02
989	General	\$5.00	\$50.9	12	09/25-10/06
1990	General	\$5.00	\$101.2	12	11/01-11/13
1991	General	\$3.00	\$51.2	7	11/01-11-08
1992	General	\$5.00	\$40.2	7	11/01-11/08
1993	General	\$3.80	\$55.1	9	11/01-11/10
1994–1995	General	FC	FC	FC	FC
996	General	\$4.01	\$33.6	4	11/01-11/05
997	General	\$3.26	\$28.5	4	11/01-11/05
998	General	\$2.64	\$37.4	5	11/01-11/06
2,7,0	CDQ	CF	CF		_ c
	TOTAL	CF	CF		
999	General	\$6.26	\$69.1	5	10/15-10/20
	CDQ	CF	CF		_ c
	TOTAL	CF	CF		
2000	General	\$4.81	\$36.0	4	10/16-10/20
	CDQ	CF	CF		_ c
	TOTAL	CF	CF		
2001	General	\$4.81	\$37.5	3	10/15-10/18
	CDQ	CF	CF		_ c
	TOTAL	CF	CF		
2002	General	\$6.14	\$54.2	3	10/15-10/18
	CDQ	CF	CF		_ c
	TOTAL	CF	CF		
2003	General	\$5.08	\$72.7	5	10/15-10/20
	CDQ	\$4.67	\$5.4		_ c
	TOTAL	\$5.05	\$78.1		
2004	General	\$4.71	\$65.7	3	10/15–10/18
	CDQ	\$3.97	\$4.5		_ c
	TOTAL	\$4.65	\$70.2		

Table 2–2.–Page 2 of 2.

		Value		Se	ason length
Season	Fishery	Exvessela	Total <sup>b</sup>	Days	Dates
2005/06	IFQ	\$4.24	\$69.5	93	10/15-01/15
	CDQ	\$3.12	\$5.7	93	10/15-01/15
	TOTAL	\$4.13	\$75.2		
2006/07	IFQ	\$3.48	\$48.0	93	10/15-01/15
	CDQ	\$3.16	\$4.8	93	10/15-01/15
	TOTAL	\$3.45	\$52.8		
2007/08	IFQ	\$4.19	\$76.2	93	10/15-01/15
	CDQ	\$3.85	\$7.8	93	10/15-01/15
	TOTAL	\$4.15	\$84.0		
2008/09	IFQ	\$4.98	\$90.3	93	10/15-01/15
	CDQ	\$5.02	\$10.1	93	10/15-01/15
	TOTAL	\$4.98	\$100.4		
2009/10	IFQ	\$4.44	\$63.1	93	10/15-01/15
	CDQ	\$4.43	\$7.0	93	10/15-01/15
	TOTAL	\$4.43	\$70.1		
2010/11	IFQ	\$6.28	\$83.2	93	10/15-01/15
	CDQ	\$6.28	\$9.3	93	10/15-01/15
	TOTAL	\$6.28	\$92.5		
2011/12	IFQ	\$8.95	\$62.8	93	10/15-01/15
	CDQ	\$9.06	\$7.1	93	10/15-01/15
	TOTAL	\$8.96	\$69.9		
2012/13	IFQ	\$7.27	\$51.2	93	10/15-01/15
	CDQ	\$7.30	\$5.7	93	10/15-01/15
	TOTAL	\$7.27	\$56.9		
2013/14	IFQ	\$6.37	\$49.0	93	10/15-01/15
	CDQ	\$6.35	\$5.4	93	10/15-01/15
	TOTAL	\$6.36	\$54.4		
2014/15	IFQ	\$6.04	\$53.7	93	10/15-01/15
	CDQ	\$6.10	\$6.1	93	10/15-01/15
	TOTAL	\$6.05	\$59.8		
2015/16	IFQ	\$7.03	\$61.8	93	10/15-01/15
	CDQ	\$7.03	\$7.0	93	10/15-01/15
	TOTAL	\$7.03	\$68.8		

Note: CF = confidential, FC = fishery closed.

<sup>a</sup> Average price per pound.

<sup>b</sup> Millions of dollars.

<sup>c</sup> CDQ fishery opened after general fishery.

Table 2-3.-Bristol Bay red king crab Community Development Quota (CDQ) and Individual Fishing Quota (IFQ) fishery harvest and effort by week, 2012/13-2015/16.

		Numl	per of		Number of			Aver	rage
2012/13	Week ending	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>
	20-Oct	55	78	5,559,889	826,810	24,464	28,656	6.7	29
	27-Oct	24	35	1,593,906	231,360	4,384	7,143	6.9	32
	3-Nov	11	17	387,455	55,153	738	1,170	7.0	47
	10-Nov	7	9	287,830	41,159	434	770	7.0	53
	17-Nov	1	CF	CF	CF	CF	CF	CF	CF
	24-Nov	1	CF	CF	CF	CF	CF	CF	CF
	Total	64	141	7,849,835	1,157,364	30,050	38,159	6.8	30
		Numl	per of		Number of			Aver	
2013/14	Week ending	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>
	19-Oct	29	45	3,385,280	491,459	28,743	17,069	6.9	29
	26-Oct	34	47	2,958,320	433,372	25,157	18,189	6.8	24
	2-Nov	24	39	1,640,538	230,672	8,096	7,798	7.1	30
	9-Nov	15	24	605,054	85,613	753	2,772	7.1	31
	16-Nov	1	CF	CF	CF	CF	CF	CF	CF
	Total	63	156	8,600,476	1,242,705	62,749	45,927	6.9	27
			per of		Number of			Aver	
2014/15	Week ending	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>
	18-Oct	55	77	6,046,198	928,495	64,694	35,160	6.5	26
	25-Oct	24	32	1,883,656	270,731	19,577	9,866	7.0	27
	1-Nov	19	28	1,494,185	217,896	12,193	9,131	6.9	24
	8-Nov	13	20	524,770	76,225	4,347	4,378	6.9	17
	15-Nov	1	CF	CF	CF	CF	CF	CF	CF
	Total	63	159	9,987,008	1,498,538	101,241	45,166	6.7	26
		Numl			Number of			Aver	
2015/16	Week ending	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>
	17-Oct	57	77	6,229,721	946,260	146,390	31,180	6.6	30
	24-Oct	20	29	1,871,059	275,140	34,200	7,512	6.8	37
	31-Oct	24	33	1,336,498	200,212	1,845	5,634	6.7	36
	7-Nov	6	7	346,125	49,573	347	1,248	7.0	40
	14-Nov	3	5	185,779	26,485	51	2,416	7.0	11
-	21-Nov	1	CF	CF	CF	CF	CF	CF	CF
	Total	64	152	9,969,964	1,497,783	182,833	48,008	6.7	31

Note: CF = Confidential

a Deadloss included.
b In pounds.
c Number of retained crab per pot lift.

Table 2-4.—Bristol Bay red king crab Community Development Quota (CDQ) and Individual Fishing Quota (IFQ) fishery harvest by statistical area, 2012/13–2015/16.

20	١1	$\sim$	/1	$\sim$
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Statistical	Num	ber of		Number of			Avera	age
area	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>
615601	28	54	747,035	109,206	1,556	3,034	6.8	36
615630	48	94	3,442,132	520,549	17,401	15,692	6.6	33
615700	9	17	317,947	50,125	2,170	1,774	6.3	28
625531	8	14	49,114	7,192	221	360	6.8	20
625600	34	75	2,246,000	320,040	6,120	10,975	7.0	29
625630	19	25	142,042	21,362	1,040	862	6.7	25
635530	23	47	862,281	122,608	1,469	4,864	7.0	25
635600	12	21	26,687	3,854	69	541	6.9	7
Otherd	-	-	16,598	2,428	5	57	6.8	43
Total	64	141	7,849,835	1,157,364	30,050	38,159	6.8	30

## 2013/14

Statistical	Num	ber of		Number of			Avera	age
area	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>
615601	23	48	503,641	71,627	3,072	2,514	7.0	28
615630	45	102	3,460,061	503,799	20,509	16,563	6.9	30
615700	14	25	549,819	79,639	4,667	2,487	6.9	32
625531	15	30	250,538	37,406	2,032	1,614	6.7	23
625600	39	88	1,639,245	236,040	13,312	10,175	6.9	23
625630	33	75	1,274,363	183,142	7,742	6,291	7.0	29
635530	22	44	522,508	73,577	8,265	3,687	7.1	20
635600	17	33	343,613	49,218	2,958	2,076	7.0	24
645530	5	7	11,725	1,685	27	226	7.0	7
Otherd	-	-	44,963	6,572	166	294	6.8	22
Total	63	156	8,600,476	1,242,705	62,749	45,927	6.9	27

2014/15

Statistical	Num	ber of		Number of			Avera	age
area	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>
615601	12	17	45,724	7,001	110	626	6.5	11
615630	38	71	2,163,608	331,170	14,756	13,013	6.5	25
615700	11	21	299,110	45,703	6,493	1,814	6.5	25
625531	3	4	1,149	174	0	24	6.6	7
625600	36	76	2,607,327	394,034	27,439	13,701	6.6	29
625630	38	78	1,783,753	273,319	21,021	10,913	6.5	25
635530	16	30	577,863	85,852	9,007	3,256	6.7	26
635600	34	77	1,829,439	265,740	16,482	11,481	6.9	23
635630	14	26	141,439	20,342	1,380	982	7.0	21
645530	5	12	415,357	57,387	4,061	2,042	7.2	28
645600	3	3	1,117	172	5	118	6.5	1
Other <sup>d</sup>	-	-	121,122	17,644	485	732	6.9	24
Total	63	159	9,987,008	1,498,538	101,241	58,702	6.7	26

Table 2-4.—Page 2 of 2.

				2015/16				_
Statistical	Num	ber of		Number of			Avera	age
area	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>
615601	9	15	13,154	2,105	130	300	6.3	7
615630	18	26	258,866	40,016	7,475	3,010	6.5	13
615700	3	5	436	65	14	156	6.7	0
625600	35	59	1,210,573	185,958	26,522	6,049	6.5	31
625630	30	47	802,428	124,792	12,493	5,170	6.4	24
635530	9	15	125,150	18,281	3,351	921	6.9	20
635600	59	131	6,244,829	931,692	107,219	26,686	6.7	35
635630	26	41	391,059	59,501	14,952	1,884	6.6	32
645530	10	20	415,797	61,212	5,641	1,662	6.8	37
645600	19	37	486,005	70,977	4,769	2,053	6.9	35
Otherd	-	-	21,667	3,184	267	117	6.8	27
Total	64	152	9,969,964	1,497,783	182,833	48,008	6.7	31

Deadloss included.

b In pounds.

c Number of retained crab per pot lift.

d Combination of statistical areas (3 - 2012/13, 5 - 2013/14, 7 - 2014/15, 3 - 2015/16) from which fewer than 3 vessels made landings from each statistical area.

Table 2-5.-Bristol Bay red king crab commercial fishery harvest composition by season, 1973-2015/16.

	Pe	rcent		Ave		Percent
Season	Recruit	Postrecruit <sup>a</sup>	Size limit <sup>b</sup>	Weight <sup>c</sup>	Length <sup>d</sup>	new shell
1973	63	37	61/4	5.6	NA	NA
1974	60	40	$6\frac{1}{4}$	5.5	NA	NA
1975 <sup>e</sup>	21	79	$6\frac{1}{4}$	5.7	NA	NA
1976	56	44	$6\frac{1}{2}$	6.0	148	73
1977	67	33	$6\frac{1}{2}$	5.9	148	87
1978	75	25	$6\frac{1}{2}$	5.9	147	93
1979	47	53	$6\frac{1}{2}$	6.4	152	90
1980	44	56	$6\frac{1}{2}$	6.2	151	89
1981 <sup>f</sup>	14	86	$6\frac{1}{2}$	6.3	151	53
1982	68	32	$6\frac{1}{2}$	5.5	145	75
1983	FC	FC	FC	FC	FC	FC
1984	59	41	$6\frac{1}{2}$	5.2	142	74
1985	66	34	$6\frac{1}{2}$	5.2	142	74
1986	65	35	$6\frac{1}{2}$	5.4	142	75
1987	77	23	$6\frac{1}{2}$	5.8	145	81
1988	64	36	$6\frac{1}{2}$	6.0	147	85
1989	66	32	$6\frac{1}{2}$	6.1	148	82
1990	46	54	6½	6.5	152	85
1991	55	45	$6\frac{1}{2}$	6.5	152	88
1992	44	56	6½	6.7	153	78
1993	57	43	6½	6.5	152	85
1994–1995	FC	FC	FC	FC	FC	FC
1996	49	51	$6\frac{1}{2}$	6.7	153	76
1997	51	49	$6\frac{1}{2}$	6.7	152	89
1998	44	56	$6\frac{1}{2}$	6.7	152	81
1999	69	31	6½	6.1	148	94
2000	50	50	6½	6.5	151	84
2001	47	53	$6\frac{1}{2}$	6.5	151	78
2002	56	44	$6\frac{1}{2}$	6.4	151	78
2003	53	47	6½	6.2	149	78
2004	42	58	$6\frac{1}{2}$	6.8	154	79
2005/06	38	62	6½	6.7	152	79
2006/07	60	40	6½	6.4	151	74
2007/08	48	52	6½	6.5	151	68
2008/09	48	52	6½	6.6	153	82
2009/10	64	36	6½	6.3	150	88
2010/11	71	29	$6\frac{1}{2}$	6.2	150	89
2011/12	75	25	6½	6.1	149	89
2012/13	50	50	6½	6.8	154	87
2013/14	46	54	6½	6.9	155	80
2014/15	58	42	6½	6.7	152	71
2015/16	56	44	6½	6.7	153	86

*Note:* NA = Not available, FC = Fishery closed.

<sup>a</sup> Legal sized old and new shell greater than 153 mm carapace length.

b Minimum carapace width in inches.

c In pounds.
d Carapace length in millimeters.
e 6½ inches after 11/01.

f 7 inches after 10/20.

Table 2-6.—Bristol Bay red king crab cost-recovery harvest data, 1990–2015.

			Number of		Pots	Aver	age	Va	lue		Charter length
Season	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>	Exvessel <sup>d</sup>	Total	Days	Dates
1990 <sup>e</sup>	3	80,701	9,567	24,540	870	5.9	16	\$5.10	\$286,421	30	08/07-09/07
1991 <sup>e</sup>	2	205,851	30,351	12,817	518	6.4	62	\$3.75	\$723,878	35	09/02-10/07
1992 <sup>e</sup>	1	74,089	11,213	3,000	670	6.3	17	\$5.24	\$372,506	15	10/08-10/23
1993 <sup>e</sup>	1	53,200	8,384	800	464	6.3	18	\$6.57	\$344,268	31	08/20-09/20
994 <sup>e</sup>	1	93,336	14,806	4,500	732	6.0	21	\$5.21	\$462,836	30	09/25-10/25
1995 <sup>e</sup>	2	80,158	14,123	2,339	564	5.5	26	\$6.65	\$517,496	31	08/01-08/31
1996 <sup>e</sup>	3	107,955	15,390	1,918	355	6.9	44	\$4.53	\$480,348	31	08/01-08/31
1997 <sup>e</sup>	4	154,739	21,698	18,040	658	6.3	37	\$3.55	\$485,281	28	07/25-08/21
1998 <sup>e</sup>	2	188,176	22,230	32,564	738	7.0	36	\$3.25	\$505,739	28	08/01-08/28
1999 <sup>f</sup>	4	185,944	29,368	410	1,239	6.3	24	\$6.18	\$1,148,695	34	09/25-10/11,10/25-11/10
2000 <sup>e</sup>	2	86,218	14,196	347	702	6.1	20	\$5.82	\$499,769	15	09/20-10/04
2001 <sup>f</sup>	3	120,435	17,605	138	597	6.8	29	\$5.18	\$623,138	36	09/22-10/10, 10/23-11/08
2002 <sup>f</sup>	2	96,221	14,528	181	277	6.6	52	\$6.45	\$619,761	27	09/23-10/09, 10/17-10/27
2003 <sup>e,g</sup>	1	33,817	5,327	143	584	6.4	9	\$5.56	\$187,227	34	09/01-10/04
2004 <sup>f</sup>	3	201,579	29,733	638	1,286	6.8	23	\$4.98	\$1,000,686	20	10/21–10/25, 10/23–10/31, 10/27–11/0
2005 <sup>f</sup>	4	208,828	30,585	1,500	1,376	6.8	22	\$5.07	\$1,051,153	19	11/12-12/02
2006 <sup>f</sup>	4	303,867	47,215	3,313	1,067	6.4	44	\$2.15	\$646,210	31	09/23-10/23
2007 <sup>f</sup>	4	145,619	22,951	469	734	6.3	31	\$4.02	\$583,503	22	10/02-10/23
2008	0	0	0	0	0	-	-	\$0.00	\$0	0	No cost recovery effort
2009 <sup>f</sup>	3	100,400	15,726	463	646	6.4	24	\$4.27	\$426,731	18	09/25-10/12
2010 <sup>f</sup>	3	72,787	11,462	69	556	6.4	21	\$5.50	\$399,949	25	09/27-10/20
2011 <sup>f</sup>	3	118,690	18,963	199	618	6.3	31	\$7.30	\$864,984	21	09/30-10/21
2012 <sup>f</sup>	7	134,712	18,388	286	726	7.3	25	\$8.51	\$1,143,965	14	10/09–10/22
2013 <sup>f</sup>	3	198,158	29,568	1,332	662	6.7	45	\$6.41	\$1,261,655	14	10/1–10/8, 10/12–10/17
2014 <sup>f</sup>	3	190,269	27,044	940	665	7.0	41	\$5.81	\$1,100,001	20	10/2-10/21
2015 <sup>f</sup>	3	201,471	29,191	1,143	755	6.9	39	\$6.09	\$1,219,998	21	10/1–10/11, 10/13–10/22
In pour Number Price p Bering Bering	er of retained oer pound. Sea and Al Sea and Al	d crab per pot eutian Islands eutian Islands	lift. shellfish resea shellfish resea l in the Pribilo	rch and observ			y.				

Table 2-7.—Pribilof District red and blue king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest data, 1973/74–2015/16.

		Numb	er of			Number of		Number o	f pots		Average	
Season	Species	Vessels	Landings	GHL/TACb	Harvest <sup>a, c</sup>	crab <sup>a</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	$CPUE^d$	Lengthe
1973/74	Blue king crab	8	13	-	1,276,533	174,420	NA	NA	6,814	7.3	26	NA
1974/75	Blue king crab	70	101	-	7,107,294	908,072	NA	NA	45,518	7.8	20	157.8
1975/76	Blue king crab	20	54	-	2,433,714	314,931	NA	NA	16,297	7.7	19	159.1
1976/77	Blue king crab	47	113	-	6,611,084	855,505	NA	NA	71,738	7.7	12	158.1
1977/78	Blue king crab	34	104	-	6,456,738	807,092	159,269	NA	106,983	7.9	8	158.9
1978/79	Blue king crab	58	154	-	6,395,512	797,364	63,140	NA	101,117	8.1	8	159.3
1979/80	Blue king crab	46	115	-	5,995,231	815,557	284,555	NA	83,527	7.7	10	155.9
1980/81	Blue king crab	110	258	5–8 million	10,970,346	1,497,101	287,285	31,636	167,684	7.3	9	155.7
1981/82	Blue king crab	99	312	5–8 million	9,080,729	1,202,499	250,699	25,408	176,168	7.6	7	158.2
1982/83	Blue king crab	122	281	5–8 million	4,405,353	587,908	51,703	34,429	127,728	7.5	5	159.8
1983/84	Blue king crab	126	221	4,000,000	2,193,395	276,364	4,562	36,439	86,428	7.9	3	159.9
1984/85	Blue king crab	16	25	0.5–1.0 million	306,699	40,427	NA	3,122	15,147	7.6	3	155.5
1985/86	Blue king crab	26	49	0.3–0.8 million	528,164	76,945	7,500	6,038	23,062	6.9	3	146.5
1986/87	Blue king crab	16	25	0.3–0.8 million	258,939	36,988	5,450	4,376	15,740	7.0	2	NA
1987/88	Blue king crab	38	68	0.3–1.7 million	701,337	95,130	9,910	9,594	40,707	7.4	2	152.7
1988/89 -	- 1992/93	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
1993	Red king crab	112	135	3,400,000	2,608,106	380,286	472	4,860	35,942	6.9	11	154.4
1994	Red king crab	104	121	2,000,000	1,338,953	167,520	2,929	4,675	28,976	8.0	6	162.1
1995	Red king crab	117	151	_	897,979	110,834	15,348	_	34,885	8.1	3	162.5
	Blue king crab	119	152	_	1,384,674	190,951	71,333	_	36,878	7.3	5	NA
	TOTAL	127	162	2,500,000	2,282,653	301,785	86,681	5,400	37,643	NA	8	
1996	Red king crab	66	90	_	200,304	25,383	319	_	29,411	7.9	<1	161.0
	Blue king crab	66	92	_	937,032	127,712	14,997	_	30,607	7.3	4	153.1
	TOTAL	66	92	1,800,000	1,137,336	153,095	15,316	2,730	30,607	7.4	5	_

Table 2-7.—Page 2 of 2.

		Number	of			Number of		Number of	f pots		Average	
Season	Species	Vessels La	ındings	GHL/TACb	Harvest <sup>a, c</sup>	crab <sup>a</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	$CPUE^d$	Lengthe
1997	Red king crab	53	110	_	756,818	90,641	18,807	_	28,458	8.4	3	164.3
	Blue king crab	51	105	_	512,374	68,603	16,747	_	27,652	7.5	3	163.6
	TOTAL	53	110	1,500,000	1,269,192	159,244	35,554	2,230	30,400	8.0	5	-
1998	General											
	Red king crab	57	84	_	510,365	68,129	8,703	_	23,381	7.5	3	-
	Blue king crab	57	83	_	516,306	68,419	21,599	_	22,965	7.5	3	-
	TOTAL	57	166	1,250,000	1,026,671	136,548	30,302	CF	46,346	7.5	3	-
	CDQ											
	Red king crab	1	CF	_	CF	CF	CF	CF	CF	CF	CF	CF
	Blue king crab	1	CF	_	CF	CF	CF	CF	CF	CF	CF	CF
	TOTAL	1	CF	35,958	CF	CF	CF	CF	CF	CF	CF	CF
	Pribilof District	Total										
	Red king crab	58	CF	_	CF	CF	CF	_	CF	CF	CF	158.8
	Blue king crab	58	CF	_	CF	CF	CF	_	CF	CF	CF	156.1
	TOTAL	58	CF	1,285,958	CF	CF	CF	CF	CF	CF	CF	CF
1999– 20	015/16	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
<ul> <li>a Deadl</li> <li>b Guide</li> <li>c In poud</li> <li>d Numb</li> </ul>	A = not available, Foss included. line harvest level (Conds. er of retained crabiace length in millin	GHL), total allo			2005/06.							

Table 2-8.-Pribilof District red and blue king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery economic performance and season length summary, 1980/81-2015/16.

		Value	e	Sea	ason length
Season	Species	Exvessela	Total <sup>b</sup>	Days	Dates
1980/81	Blue king crab	\$0.90	\$9.6	60	09/15-11/15
1981/82	Blue king crab	\$1.50	\$13.6	47	09/10-10/28
1982/83	Blue king crab	\$3.05	\$13.4	15	09/10-09/25
1983/84	Blue king crab	\$3.00	\$6.6	10	09/01-09/11
1984/85	Blue king crab	\$2.50	\$0.1	15	09/01-09/16
1985/86	Blue king crab	\$2.90	\$1.4	26	09/25-10/21
1986/87	Blue king crab	\$4.05	\$1.2	55	09/25-11/20
1987/88	Blue king crab	\$4.00	\$2.8	86	09/25-12/20
1988/89–1992	/93	FC	FC	FC	FC
1993	Red king crab	\$4.98	\$13.0	6	09/15-09/21
1994	Red king crab	\$6.45	\$8.6	6	09/15-09/21
1995	Red king crab	\$3.37	\$2.9	_	_
	Blue king crab	\$2.92	\$3.9	_	_
	TOTAL	_	\$6.8	7	09/15-09/22
1996	Red king crab	\$2.76	\$0.6	_	_
	Blue king crab	\$2.65	\$2.4	_	_
	TOTAL	_	\$3.0	11	09/15-09/26
1997	Red king crab	\$3.09	\$2.3	_	_
	Blue king crab	\$2.82	\$1.4	_	_
	TOTAL	_	\$3.7	14	09/15-09/29
1998	General				
	Red king crab	\$2.39	\$1.2	_	09/15-09/28
	Blue king crab	\$2.34	\$1.2	_	09/15-09/28
	TOTAL	_	\$2.4	13	09/15-09/28
	CDQ				
	Red king crab	CF	CF	_	_
	Blue king crab	CF	CF	_	_
	TOTAL	CF	CF	_	_
	Pribilof District Total				
	Red king crab	CF	CF	_	_
	Blue king crab	CF	CF	_	_
	TOTAL	CF	CF	13	_
1999–2015/1		FC	FC	FC	FC
W EG 6.1					

Note: FC = fishery closed, CF = confidential.

a Average price per pound.
b Millions of dollars.

Table 2-9.—Saint Matthew Island Section blue king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery data, 1977–2015/16.

		Nun	nber of			Number of		Number o			Average		Percent
Season	Fishery	Vessels	Landings	GHL/TAC <sup>a,b</sup>	Harvest <sup>c,d</sup>	crab <sup>c</sup>	Deadloss <sup>d</sup>	Registered <sup>e</sup>	Lifted	Weight <sup>d</sup>	CPUE <sup>f</sup>	Lengthg	Recruits <sup>h</sup>
1977	General	10	24	_	1,202,066	281,665	129,148	NA	17,370	4.3	16	130.4	7
1978	General	22	70	_	1,984,251	436,126	116,037	NA	43,754	4.5	10	132.2	NA
1979	General	18	25	_	210,819	52,966	128.8	NA	9,877	4.0	5	128.8	81
1980	General	2	CF	_	CF	CF	CF	CF	CF	CF	CF	CF	CF
1981	General	31	119	_	4,627,761	1,045,619	53,355	NA	58,550	4.4	18	NA	NA
1982	General	96	269	_	8,844,789	1,935,886	142,973	NA	165,618	4.6	12	135.1	20
1983	General	164	235	8,000,000	9,454,323	1,931,990	828,994	38,000	133,944	4.8	14	137.2	27
1984	General	90	169	2–4 million	3,764,592	841,017	31,983	14,800	73,320	4.5	11	135.5	34
1985	General	79	103	0.9–1.9 million	2,200,781	441,479	2,613	13,000	47,748	5.0	9	139.0	9
1986	General	38	43	0.2–0.5 million	1,003,162	219,548	32,560	5,600	22,073	4.6	10	134.3	10
1987	General	61	62	0.6–1.3 million	1,039,779	227,447	600	9,370	28,230	4.6	8	134.1	5
1988	General	46	46	0.7–1.5 million	1,325,185	302,098	10,160	7,780	23,058	4.4	30	133.3	65
1989	General	69	69	1,700,000	1,166,258	247,641	3,754	11,983	30,803	4.7	8	134.6	9
1990	General	31	38	1,900,000	1,725,349	391,405	17,416	6,000	26,264	4.4	15	134.3	4
1991	General	68	69	3,200,000	3,372,066	726,519	216,459	13,100	37,104	4.6	20	134.1	12
1992	General	174	179	3,100,000	2,475,916	545,222	1,836	17,400	56,630	4.6	10	134.1	9
1993	General	92	136	4,400,000	3,003,089	630,353	3,168	5,895	58,647	4.8	11	135.4	6
1994	General	87	133	3,000,000	3,764,262	827,015	46,699	5,685	60,860	4.6	14	133.3	60
1995	General	90	111	2,400,000	3,166,093	666,905	90,191	5,970	48,560	4.8	14	135.0	45
1996	General	122	189	4,300,000	3,078,959	660,665	36,892	8,010	91,085	4.7	7	134.6	47
1997	General	117	166	5,000,000	4,649,660	939,822	209,490	7,650	81,117	4.9	12	139.5	31
1998	General	131	255	4,000,000	2,869,655	612,440	15,107	8,561	89,500	4.7	7	135.8	46
	CDQ	1	CF	99,512	CF	CF	CF	CF	CF	CF	CF	CF	CF
	TOTAL	132	CF	4,099,512	CF	CF	CF	CF	CF	CF	CF	CF	CF
1999–2008/	/09	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC

Table 2-9.—Page 2 of 2.

		Nur	nber of			Number of		Number	of Pots		Average		Percent
Season	Fishery	Vessels	Landings	GHL/TAC <sup>a,b</sup>	Harvest <sup>c,d</sup>	crab <sup>c</sup>	Deadloss <sup>d</sup>	Registered <sup>e</sup>	Lifted	Weight <sup>d</sup>	CPUE <sup>f</sup>	Lengthg	Recruitsh
2009/10	IFQ	7	30	1,050,300	460,859	103,376	10,484	1,147	10,697	4.5	10	-	-
	CDQ	0	0	116,700	0	0	0	0	0	-	-	-	-
	TOTAL	7	30	1,167,000	460,859	103,376	10,484	1,147	10,697	4.5	10	130.0	57
2010/11	IFQ	11	63	1,440,000	1,107,668	261,502	9,253	1,615	25,301	4.2	10	-	-
	CDQ	3	7	160,000	156,314	37,167	953	745	4,045	4.2	9	-	-
	TOTAL	11	70	1,600,000	1,263,982	298,669	10,206	1,615	29,346	4.2	10	122.6	61
2011/12	IFQ	18	77	2,123,100	1,698,707	395,652	25,582	3,116	43,901	4.3	9	-	-
	CDQ	5	13	235,900	182,615	42,210	1,006	1,076	4,653	4.3	9	-	-
	TOTAL	18	90	2,359,000	1,881,322	437,862	26,588	3,116	48,554	4.3	9	125.7	62
2012/13	IFQ	17	84	1,467,000	1,453,054	341,692	19,806	2,881	32,910	4.3	10	-	-
	CDQ	4	8	163,000	163,000	37,694	1,246	620	4,155	4.3	9	-	-
	TOTAL	17	92	1,630,000	1,616,054	379,386	21,052	2,881	37,065	4.3	10	129.8	62
2013/14		FC	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
2014/15	IFQ	4	25	589,500	300,722	67,400	5,525	665	9,663	4.5	7	-	-
	CDQ	1	CF	65,500	CF	CF	CF	CF	CF	CF	CF	CF	CF
	TOTAL	4	CF	655,000	CF	CF	CF	CF	CF	CF	CF	CF	CF
2015/16	IFQ	3	14	369,900	106,449	24,407	1,439	595	5,475	4.4	4	-	-
	CDQ	0	0	41,100	0	0	0	0	0	-	-	-	-
	TOTAL	3	14	411,000	106,449	24,407	1,439	595	5,475	4.4	4	131.5	48

Note: NA = not available, CF = confidential, FC = fishery closed.

a Millions of pounds.
b Guideline harvest level (GHL), total allowable catch (TAC) began in 2005/06.

<sup>&</sup>lt;sup>c</sup> Deadloss included.

beachoss included.

d In pounds.

e Vessels may fish CDQ and IFQ concurrently, therefore pots are not double counted.

Number of retained crab per pot lift.

g Carapace length in millimeters.

h A recruit is a new crab that has reached legal size and enters the target population.

Table 2-10.—Saint Matthew Island Section blue king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery economic performance and season length summary, 1977–2015/16.

		Value		Season	Length
Season	Fishery	Exvessela	Total <sup>b</sup>	Days	Dates
977	General	\$1.00	\$1.10	70	06/07-08/16
978	General	\$0.95	\$1.80	50	07/15-09/03
979	General	\$0.70	\$0.10	40	07/15-08/24
980	General	CF	CF	50	07/15-09/03
981	General	\$0.90	\$4.10	37	07/15-08/21
1982	General	\$2.00	\$17.40	15	08/01-08/16
.983°	General	\$3.00	\$25.80	17	08/20-08/06
1984	General	\$1.75	\$6.50	7	08/01-09/08
985	General	\$1.60	\$3.80	5	09/01-09/06
1986	General	\$3.20	\$3.20	5	09/01-09/06
987	General	\$2.85	\$3.10	4	09/01–09/05
988	General	\$3.10	\$4.00	4	09/01-09/05
.989	General	\$2.90	\$3.50	2.5	09/01-09/04
.990	General	\$3.35	\$5.70	6	09/01–09/07
991	General	\$2.80	\$9.00	4	09/16–09/20
992	General	\$3.00	\$7.40	2.5	09/04-09/07
1993	General	\$3.23	\$9.70	6	09/04=09/07
1994	General	\$4.00	\$15.00	7	09/15-09/21
995	General		\$7.10	5	09/15-09/22
		\$2.32		8	
996	General	\$2.20	\$6.70	8 7	09/15-09/16
997	General	\$2.21	\$9.80		09/15-09/22
.998	General	\$1.87	\$5.34	11	09/15-09/26
	CDQ	CF	CF	_	_
000 2000/00	TOTAL	<u>CF</u>	<u>CF</u>		
1999-2008/09	TEO	FC	FC	FC	FC
2009/10	IFQ	\$2.19	\$1.00	110	10/15-02/01
	CDQ	\$0.00	\$0.00	110	10/15-02/01
	TOTAL	\$2.19	\$1.00	_	_
2010/11	IFQ	\$4.11	\$4.50	110	10/15-02/01
	CDQ	\$4.14	\$0.60	110	10/15-02/01
	TOTAL	\$4.11	\$5.20	_	_
2011/12	IFQ	\$4.34	\$7.30	110	10/15-02/01
	CDQ	\$4.26	\$0.80	110	10/15-02/01
	TOTAL	\$4.33	\$8.00	_	_
2012/13	IFQ	\$3.77	\$5.40	110	10/15-02/01
	CDQ	\$3.75	\$0.60	110	10/15-02/01
	TOTAL	\$3.77	\$6.00	_	_
2013/14		FC	FC	FC	FC
2014/15	IFQ	\$3.38	\$1.00	110	10/15-02/01
	CDQ	CF	CF	_	-
	TOTAL	CF	CF	_	_
2015/16	IFQ	\$4.03	\$0.40	110	10/15-02/01
2013/10	CDQ	\$0.00	\$0.40	110	10/15-02/01
	TOTAL	\$0.00 \$4.03	\$0.00 \$0.40	110	10/13-02/01
Notes CE - confiden	tial FC = fishery alosed	φ <b>4.</b> U3	φυ.4U		

*Note:* CF = confidential, FC = fishery closed.

<sup>&</sup>lt;sup>a</sup> Average price per pound.

b Millions of dollars.

<sup>&</sup>lt;sup>c</sup> Part of Northern District open until September 20. Saint Lawrence Island harvest included.

Table 2-11.—Saint Matthew Island Section blue king crab commercial fishery harvest by statistical area, 2012/13-2015/16.

			2012/13				
Statistical	Number of		Number of				Average
area	landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	$CPUE^{c}$
725930	45	221,947	51,873	2,994	6,041	4.3	9
726001	29	298,194	70,261	3,928	5,249	4.2	13
735930	64	678,488	159,711	10,987	16,661	4.3	10
736001	35	168,852	39,533	986	4,295	4.3	9
736031	13	147,613	34,057	1,133	2,281	4.3	15
745930	23	44,699	10,864	384	1,096	4.1	10
746000	9	6,629	1,551	32	325	4.3	5
Other <sup>d</sup>	_	49,633	11,536	608	1,117	4.3	10
Total	92	1,616,054	379,386	21,052	37,065	4.3	10

## 2013/14

Statistical	Number of		Number of			A	verage
area	landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	$\mathbf{Weight}^{\mathrm{b}}$	$CPUE^{c}$
FC	FC	FC	FC	FC	FC	FC	FC

### 2014/15

Statistical	Number of		A	verage			
area	landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	$CPUE^{c}$
735930	17	224,779	50,058	4,644	6,569	4.5	8
736001	16	77,683	17,704	867	2,863	4.4	6
Other <sup>d</sup>	_	6,120	1,347	41	701	4.5	2
Total	26	308,582	69,109	5,552	10,133	4.5	7

### 2015/16

Statistical	Number of			A	Average		
area	landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	$CPUE^{c}$
735930	14	53,359	12,267	731	2,347	4.4	5
736001	14	48,838	11,169	651	2,712	4.4	4
Other <sup>d</sup>	_	4,252	971	58	416	4.4	2
Total	14	106,449	24,407	1,439	5,475	4.4	4

*Note:* FC = fishery closed.

<sup>&</sup>lt;sup>a</sup> Deadloss included.

b In pounds.

<sup>&</sup>lt;sup>c</sup> Number of retained crab per pot lift.

d Combination of 4 statistical areas in each season from which less than 3 vessels made landings in each statistical area.

Table 2-12.—Pribilof District golden king crab commercial fishery harvest data, 1981/82–2015.

	Number				Number of				Average	
Season	Vessels	Landings	GHL <sup>b</sup>	Harvest <sup>a,c</sup>	crab <sup>a</sup>	Deadloss <sup>c</sup>	Pots lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>	Lengthe
1981/82	2	CF	_	CF	CF	CF	CF	CF	CF	CF
1982/83	10	19	_	69,970	15,330	570	5,252	4.6	3	151
1983/84	50	115	_	856,475	253,162	20,041	26,035	3.4	10	127
1984	0	0	_	0	0	0	0	0	0	0
1985	1	CF	_	CF	CF	CF	CF	CF	CF	CF
1986	0	0	_	0	0	0	0	0	0	0
1987	1	CF	_	CF	CF	CF	CF	CF	CF	CF
1988-1989	2	CF	_	CF	CF	CF	CF	CF	CF	CF
1990-1992	0	0	_	0	0	0	0	0	0	0
1993	5	15	_	67,458	17,643	0	15,395	3.8	1	NA
1994	3	5	_	88,985	21,477	730	1,845	4.1	12	NA
1995	7	22	_	341,908	82,489	716	9,551	4.1	9	NA
1996	6	32	_	329,009	91,947	3,570	9,952	3.6	9	NA
1997	7	23	_	179,249	43,305	5,554	4,673	4.1	9	NA
1998	3	9	_	35,722	9,205	474	1,530	3.9	6	NA
1999	3	9	200,000	177,108	44,098	319	2,995	4.0	15	NA
2000	7	19	150,000	127,217	29,145	4,599	5,450	4.4	5	NA
2001	6	14	150,000	145,876	33,723	8,227	4,262	4.3	8	143
2002	8	20	150,000	150,434	34,860	8,984	5,279	4.3	6	144
2003	3	CF	150,000	CF	CF	CF	CF	CF	CF	CF
2004	5	CF	150,000	CF	CF	CF	CF	CF	CF	CF
2005	4	CF	150,000	CF	CF	CF	CF	CF	CF	CF
2006-2009	0	0	150,000	0	0	0	0	0	0	0
2010	1	CF	150,000	CF	CF	CF	CF	CF	CF	CF
2011	2	CF	150,000	CF	CF	CF	CF	CF	CF	CF
2012	1	CF	150,000	CF	CF	CF	CF	CF	CF	CF
2013	1	CF	150,000	CF	CF	CF	CF	CF	CF	CF
2014	1	CF	150,000	CF	CF	CF	CF	CF	CF	CF
2015	0	0	130,000	0	0	0	0	0	0	0

*Note:* CF = confidential, NA = not available.

a Deadloss included.

b Guideline harvest level (GHL) in pounds.

c In pounds.

d Number of retained crab per pot lift.

e Carapace length in millimeters.

Table 2-13.—Pribilof District golden king crab commercial fishery economic data, 1991–2015.

	Valu	e	Seas	on length
Season	Exvessela	Total <sup>b</sup>	Days	Dates
1991-1992	\$0.00	\$0.00	365	01/01-12/31
1993	\$2.42	\$0.16	365	01/01-12/31
1994	\$3.99	\$0.36	365	01/01-12/31
1995	\$3.23	\$1.10	365	01/01-12/31
1996	\$2.10	\$0.69	365	01/01-12/31
1997	\$2.23	\$0.39	365	01/01-12/31
1998	\$2.06	\$0.07	365	01/01-12/31
1999	\$2.34	\$0.40	162	01/01-06/10
2000	\$3.22	\$0.39	365	01/01-12/31
2001	\$3.12	\$0.43	105	01/01-04/15
2002	\$3.10	\$0.44	134	01/01-05/14
2003	CF	CF	121	01/01-05/01
2004	CF	CF	72	01/01-03/12
2005	CF	CF	365	01/01-12/31
2006-2009	\$0.00	\$0.00	365	01/01-12/31
2010-2014	CF	CF	365	01/01-12/31
2015	\$0.00	\$0.00	365	01/01-12/31

Note: CF = confidential.

a Average price per pound.
b In millions of dollars.

Table 2-14.—Saint Matthew Island Section golden king crab commercial fishery harvest and economic data, 1982/83–2015.

				Number of				Average		V	alue
Season	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>	Length <sup>d</sup>	Exvessele	Total
1982/83	22	30	193,507	51,714	957	7,825	3.7	7	138	\$2.00	\$385,100
1983/84-1986	0	0	0	0	0	0	0	0	0	\$0.00	\$0
1987	10	28	414,034	99,101	12,750	13,825	4.2	7	142	\$2.60	\$1,043,338
1988	10	22	160,441	36,470	14,000	11,672	4.4	3	150	\$3.10	\$453,967
1989	2	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF
1990-1991	0	0	0	0	0	0	0	0	0	\$0.00	\$0
1992	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF
1993	0	0	0	0	0	0	0	0	0	\$0.00	\$0
1994	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF
1995	5	5	992	212	0	313	4.7	1	NA	\$2.77	\$2,748
1996	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF
1997-2000	0	0	0	0	0	0	0	0	0	\$0.00	\$0
2001	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF
2002	0	0	0	0	0	0	0	0	0	\$0.00	\$0
2003	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF
2004-2015	0	0	0	0	0	0	0	0	0	\$0.00	\$0
Note: CF = confide  a Deadloss include b In pounds. c Number of retain d Carapace length e Average price pe	ed. ned crab per p in millimeter	oot lift.									

Table 2-15.—Bering Sea scarlet king crab commercial fishery data, 1992–2015.

	Number of		Number of			Averag	ge	Value	
Season	Vessels	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>	Exvessel <sup>d</sup>	Total <sup>e</sup>
1992–1994	0	0	0	0	0	0	0	\$0.00	\$0.00
1995	4	26,684	11,048	465	24,551	2.4	1	\$2.45	\$0.06
1996	2	CF	CF	CF	CF	CF	CF	CF	CF
1997-1999	0	0	0	0	0	0	0	\$0.00	\$0.00
$2000^{\mathrm{f}}$	1	CF	CF	CF	CF	CF	CF	CF	CF
$2001^{\rm f}$	1	CF	CF	CF	CF	CF	CF	CF	CF
2002	0	0	0	0	0	0	0	\$0.00	\$0.00
2003 <sup>f</sup>	1	CF	CF	CF	CF	CF	CF	CF	CF
2004 <sup>f</sup>	3	CF	CF	CF	CF	CF	CF	CF	CF
$2005^{\rm f}$	1	CF	CF	CF	CF	CF	CF	CF	CF
2006-2015	0	0	0	0	0	0	0	\$0.00	\$0.00

Note: CF = confidential.

Deadloss included.

In pounds.

Number of retained crab per pot lift.

Average price per pound.

Thousands of dollars.

f Restricted to incidental harvest during Bering Sea golden king crab and grooved Tanner crab fisheries.

Table 2-16.—Bering Sea District Tanner crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest data by subdistrict, 1968–2015/16.

		Nur	nber of			Number of		Pot	S	Ave	
Season	Location <sup>a</sup>	Vessels	Landings	GHL/TAC	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
1968	_	NA	7	-	17,900	6,400	NA	NA	1,400	2.8	12
1969	_	NA	131	-	1,008,900	353,300	NA	NA	29,800	2.9	12
1970	_	NA	66	-	1,014,700	482,300	NA	NA	16,400	2.9	29
1971	_	NA	22	-	166,100	61,300	NA	NA	7,300	2.7	8
1972	_	NA	14	-	107,761	42,061	NA	NA	4,260	2.6	10
1973	_	NA	44	-	231,668	93,595	NA	NA	15,730	2.5	6
1974	_	NA	69	-	5,044,197	2,531,825	NA	NA	22,014	2.0	115
1974/75	Southeastern	NA	72	-	6,504,984	2,526,687	0	NA	32,275	2.6	78
	Pribilofs	NA	8	-	523,394	247,083	0	NA	3,923	2.1	63
	TOTAL	28	80	=	7,028,378	2,773,770	0	NA	38,462	2.5	72
1975/76	Southeastern	NA	230	-	16,643,194	6,682,232	0	NA	106,445	2.5	63
	Pribilofs	NA	74	-	5,714,913	2,273,804	0	NA	34,761	2.5	65
	TOTAL	66	304	=	22,358,107	8,956,036	0	NA	141,206	2.5	63
1976/77	Southeastern	NA	437	-	41,007,736	16,089,057	0	NA	233,667	2.6	69
	Pribilofs	NA	104	-	10,447,485	4,162,451	0	NA	63,804	2.5	65
	TOTAL	83	541	=	51,455,221	20,251,508	0	NA	297,471	2.5	68
1977/78	Southeastern	NA	706	-	53,278,012	21,055,527	0	NA	408,437	2.5	52
	Pribilofs	NA	155	-	13,152,843	5,210,170	0	NA	107,913	2.5	48
	TOTAL	120	861	=	66,648,954	26,350,688	218,099	NA	516,350	2.5	51
1978/79	Southeastern	NA	758	-	39,694,205	15,601,891	75,400	NA	356,594	2.5	44
	Pribilofs	NA	59	-	2,852,969	1,124,627	600	NA	46,103	2.5	24
	TOTAL	144	817	=	42,547,174	16,726,518	76,000	NA	402,697	2.5	42
1979/80	Southeastern	NA	789	-	35,724,003	14,329,889	56,446	-	476,410	2.5	30
	Pribilofs	NA	15	-	890,312	355,722	0	-	12,024	2.5	30
	TOTAL	152	804	28–36 million	36,614,315	14,685,611	56,446	40,273	488,434	2.5	30
1980/81	Southeastern	NA	674	-	26,684,956	10,532,007	97,398	-	496,751	2.5	21
	Pribilofs	NA	87	-	2,945,536	1,313,951	4,196	-	62,875	2.5	21
	TOTAL	165	761	28–36 million	29,630,492	11,845,958	101,594	42,910	559,626	2.5	21
1981/82	Southeastern	NA	539	-	8,812,302	3,825,433	69,829	-	322,634	2.3	12
	Pribilofs	NA	252	-	2,196,477	1,005,547	68,330	-	167,465	2.2	6
	TOTAL	125	791	12–16 million	11,008,779	4,830,980	138,159	36,396	490,099	2.3	10

Table 2-16.—Page 2 of 6.

		Num	ber of			Number of		Pot	S	Aver	age
Season	Location <sup>a</sup>	Vessels	Landings	GHL/TAC	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
1982/83	Northern	NA	10	_	48,454	29,478	167	_	5,950	1.7	5
	Southeastern	NA	287	_	4,633,354	1,984,673	52,879	_	192,538	2.3	10
	Pribilofs	NA	151	_	592,073	272,505	6,983	_	83,528	2.2	3
	TOTAL	108	448	5,600,000	5,273,881	2,286,756	60,029	15,255	282,006	2.3	8
1983/84	Southeastern	NA	91	_	1,099,142	470,181	4,688	_	44,546	2.3	11
	Pribilofs	NA	43	_	109,081	46,759	337	_	16,811	2.3	3
	TOTAL	41	134	7,100,000	1,208,223	516,877	5,025	9,851	61,357	2.3	8
1984/85	Southeastern	38	143	_	3,023,193	1,266,567	14,096	_	85,926	2.4	13
	Pribilofs	15	23	_	13,742	5,934	0	_	8,606	2.3	1
	TOTAL	44	166	3,000,000	3,036,935	1,272,501	14,096	15,325	94,532	2.4	12
1985/86-	-1986/87	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
1987/88	Eastern subdistrict	98	248	_	2,294,997	957,318	10,724	_	114,384	2.5	8
	Western subdistrict	0	0	_	0	0	0	_	0	0	0
	TOTAL	98	248	5,600,000	2,294,997	957,318	10,724	38,765	114,384	2.5	8
1988/89	Eastern subdistrict	109	359	_	6,982,865	2,894,480	34,664	_	183,692	2.4	16
	Western subdistrict	0	0	_	0	0	0	_	0	0	0
	TOTAL	109	359	13,500,000	6,982,865	2,894,480	34,664	43,607	183,692	2.4	16
1989/90	Eastern subdistrict	184	1,013	_	24,448,607	10,664,632	84,103	_	693,235	2.3	15
	Western subdistrict	15	17	_	17,956	7,975	0	_	9,548	2.3	1
	TOTAL	184	1,028	29,500,000	24,466,563	10,672,607	84,103	46,440	702,783	2.3	15
1990/91	Eastern subdistrict	248	1,756	42,800,000	40,081,555	16,608,625	210,769	75,356	883,391	2.4	19
1991/92	Eastern subdistrict	285	2,339	32,800,000	31,794,382	12,924,102	279,741	85,401	1,224,899	2.5	10
1992/93	Eastern subdistrict	293	2,011	_	34,821,008	15,074,069	340,955	_	1,150,334	2.3	13
	Western subdistrict	70	96	_	309,823	191,796	3,000	_	50,051	1.6	4
	TOTAL	294	2,084	38,100,000 <sup>e</sup>	35,130,831	15,265,865	343,955	71,481	1,200,385	2.3	13
1993/94	East of 168°W	285	350	10,700,000 <sup>f</sup>	4,134,529	1,699,750	120,598	_	250,826	2.4	7
	163°W to 173°W	261	515	9,100,000 g,h	12,776,371	5,539,068	154,674	_	325,963	2.3	17
	TOTAL	296	862	19,800,000	16,910,900	7,238,818	275,272	116,039	576,789	2.3	13
1994/95	163°W to 173°W	183	349	7,500,000	7,766,886	3,351,639	132,780	38,670	249,536	2.3	13
1995/96	163°W to 173°W	196	256	5,500,000	4,233,061	1,877,303	44,508	40,827	247,853	2.3	8

Table 2-16.—Page 3 of 6.

	_	Nun	iber of			Number of		Pots	· · · · · · · · · · · · · · · · · · ·	Aver	age
Season	Location <sup>a</sup>	Vessels	Landings	GHL/TAC	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
1996/97	East of 168°W	192	195	2,200,000 f	994,776	393,257	8,464	38,300	75,753	2.5	5
	163°W to 173°W	135	152	6,200,000 <sup>g</sup>	811,301	341,039	6,144	59,910	73,522	2.4	5
	TOTAL	196	347	8,400,000	1,806,077	734,296	14,608	68,602	149,275	2.5	5
1997/98-	-2004/05	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
2005/06	West of 166°W										
	IFQ	43	77	1,458,000	791,315	368,294	14,563	545	29,693	2.2	12
	CDQ	6	10	162,000	161,572	75,686	611	170	2,024	2.1	37
	TOTAL	43	87	1,620,000	952,887	443,979	15,174	545	31,717	2.2	14
2006/07	East of 166°W long										
	IFQ	37	58	1,687,500	1,266,286	529,766	8,416	_	26,351	2.4	20
	CDQ	4	5	187,500	135,457	55,713	840	_	1,631	2.4	34
	TOTAL	37	63	1,875,000	1,401,743	585,479	9,256	_	27,982	2.4	21
	West of 166°W long										
	IFQ	38	64	984,600	633,897	299,478	19,033	_	24,842	2.1	12
	CDQ	8	10	109,400	86,949	41,146	663	_	2,691	2.1	20
	TOTAL	39	74	1,094,000	720,846	340,623	19,696	_	28,140	2.1	12
	Bering Sea District Total	al									
	IFQ	37	58	2,672,100	1,900,183	529,766	8,416	3,354	26,351	2.4	20
	CDQ	9	15	296,900	222,406	96,859	1,503	1,530	4,322	2.3	22
	TOTAL	52	136	2,969,000	2,122,589	926,101	28,952	3,969	53,514	2.3	17
2007/08	East of 166°W long										
	IFQ	20	58	3,100,500	1,439,435	623,508	15,633	_	30,691	2.3	20
	CDQ	3	7	344,500	143,424	61,983	484	_	2,824	2.3	22
	TOTAL	20	65	3,445,000	1,582,858	685,491	16,117	_	33,515	2.3	20
	West of 166°W long										
	IFQ	31	51	1,958,400	467,276	215,175	4,163	_	19,210	2.2	11
	CDQ	6	8	217,600	56,520	26,498	513	_	2,728	2.1	10
	TOTAL	34	59	2,176,000	523,796	241,673	4,676	_	21,938	2.2	11
	Bering Sea District Total	al									
	IFQ	41	109	5,058,900	1,906,711	838,683	19,796	4,328	49,901	2.3	17
	CDQ	7	15	562,100	199,944	88,481	997	845	5,552	2.2	16
-	TOTAL	41	124	5,621,000	2,106,654	927,164	20,793	4,458	55,453	2.3	17

Table 2-16.—Page 4 of 6.

		Nuı	nber of			Number of		Pots		Ave	
Season	Location <sup>a</sup>	Vessels	Landings	GHL/TAC	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
2008/09	East of 166°W long										
	IFQ	21	60	2,486,700	1,553,773	660,962	11,935	1,933	33,827	2.4	20
	CDQ	3	5	276,300	276,246	117,930	1,596	870	2,130	2.3	55
	TOTAL	21	65	2,763,000	1,830,019	778,892	13,531	1,933	35,957	2.4	22
	West of 166°W long										
	IFQ	39	74	1,383,300	109,111	51,145	3,296	1,248	26,632	2.1	2
	CDQ	4	CF	153,700	CF	CF	CF	CF	CF	CF	CF
	TOTAL	42	CF	1,537,000	CF	CF	CF	CF	CF	CF	CF
	Bering Sea District Tot										
	IFQ	46	134	3,870,000	1,662,884	712,107	15,231	3,181	60,459	2.3	12
	CDQ	7	CF	430,000	CF	CF	CF	CF	CF	CF	CF
	TOTAL	49	CF	4,300,000	CF	CF	CF	CF	CF	CF	CF
2009/10	East of 166°W long										
	IFQ	17	46	1,215,000	1,189,574	433,319	7,122	1,673	15,467	2.8	28
	CDQ	5	5	135,000	135,004	50,100	1,254	573	1,303	2.7	38
	TOTAL	17	51	1,350,000	1,324,578	483,419	8,376	1,673	16,770	2.7	29
	West of 166°W long										
	IFQ	29	54	FC	3,374	2,257	3,374	FC	22,659	_	<1
	CDQ	3	4	FC	404	287	404	FC	2,577	_	<1
	TOTAL	30	58	FC	3,778	2,544	3,778	FC	25,236	_	<1
	Bering Sea District Tot										
	IFQ	40	100	1,215,000	1,192,948	435,576	10,496	1,673	38,126	2.7	11
	CDQ	7	9	135,000	135,408	50,387	1,658	526	3,880	2.1	13
	TOTAL	41	109	1,350,000	1,328,356	485,963	12,154	1,673	42,006	2.7	12
2010/11	East of 166°W long										
	IFQ	1	1	FC	1	1	1	FC	CF	_	CF
	CDQ	0	0	FC	0	0	0	FC	0	_	-
	TOTAL	1	1	FC	1	1	1	FC	CF	_	CF
	West of 166°W long										
	IFQ	47	85	FC	2,486	1,651	2,486	FC	36,529	_	<1
	CDQ	5	6	FC	58	38	58	FC	2,585	_	<1
	TOTAL	49	91	FC	2,544	1,689	2,544	FC	39,114	_	<1
	Bering Sea District Tot										
	IFQ	47	85	FC	2,486	1,651	2,486	FC	36,529	_	<1
	CDQ	5	6	FC	58	38	58	FC	2,585	_	<1
	TOTAL	49	92	FC	2,545	1,690	2,545	FC	39,332	_	<1

Table 2-16.—Page 5 of 6.

	_	Nun	nber of			Number of		Pots		Ave	
Season	Location <sup>a</sup>	Vessels	Landings	GHL/TAC	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
2011/12	East of 166°W long										
	IFQ	0	0	FC	0	0	0	FC	0	_	_
	CDQ	0	0	FC	0	0	0	FC	0	_	_
	TOTAL	0	0	FC	0	0	0	FC	0		_
	West of 166°W long										
	IFQ	54	164	FC	4,317	2,880	4,317	FC	63,339	_	<1
	CDQ	8	14	FC	295	215	295	FC	5,187	_	<1
	TOTAL	56	178	FC	4,612	3,095	4,612	FC	68,526	_	<1
	Bering Sea District Tot										
	IFQ	54	164	FC	4,317	2,880	4,317	FC	63,339	_	<1
	CDQ	8	14	FC	295	215	295	FC	5,187	_	<1
	TOTAL	56	178	FC	4,612	3,095	4,612	FC	68,526	_	<1
2012/13	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC
2013/14	East of 166°W long										
	IFQ	30	64	1,316,700	1,310,066	639,701	6,152	3,063	23,559	2.1	27
	CDQ	6	10	146,300	146,291	70,342	102	1,119	2,909	2.1	24
	TOTAL	30	74	1,463,000	1,456,357	710,043	6,254	3,063	26,468	2.1	27
	West of 166°W long										
	IFQ	63	209	1,480,500	1,210,232	668,373	22,306	2,593	122,347	1.8	5 7
	CDQ	11	16	164,500	120,256	67,352	240	1,118	9,177	1.8	7
	TOTAL	64	225	1,645,000	1,330,488	735,725	22,546	2,593	68,526	1.8	6
	Bering Sea District Tot	al									
	IFQ	65	273	2,797,200	2,520,298	1,308,074	28,458	5,656	145,906	1.9	9
	CDQ	12	26	310,800	266,547	137,694	342	2,237	12,086	1.9	11
	TOTAL	66	299	3,108,000	2,786,845	1,445,768	28,800	5,656	157,992	1.9	9
2014/15	East of 166°W long										
	IFQ	41	128	7,632,000	7,602,659	3,936,633	48,242	7,086	78,346	1.9	50
	CDQ	7	15	848,000	847,826	445,257	11,546	1,381	9,529	1.9	47
	TOTAL	42	143	8,480,000	8,450,485	4,381,890	59,788	7,086	87,875	1.9	50
	West of 166°W long			,	, ,		,	,	,		
	IFQ	58	212	5,962,500	4,638,753	2,773,573	92,431	5,313	133,741	1.7	21
	CDQ	8	14	662,500	615,189	367,381	4,490	982	9,079	1.7	40
	TOTAL	58	226	6,625,000	5,253,942	3,140,954	96,921	5,313	142,820	1.7	22
	Bering Sea District Tot			. ,	, ,	•	,	•			
	IFQ	54	340	13,594,500	12,241,412	6,710,206	140,673	12,399	212,087	1.8	32
	CDQ	8	29	1,510,500	1,463,015	812,638	16,036	2,363	18,608	1.8	44
	TOTAL	64	367	15,105,000	13,704,427	7,522,844	156,709	12,399	230,695	1.8	33

Table 2-16.—Page 6 of 6.

		Num	ber of			Number of		Pots	S	Aver	age
Season	Location <sup>a</sup>	Vessels	Landings	GHL/TAC	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
2015/16	East of 166°W long										
	IFQ	49	180	10,144,800	10,138,305	5,396,136	114,950	10,163	126,371	1.9	43
	CDQ	8	22	1,127,200	1,125,257	604,126	5,237	2,010	12,800	1.9	47
	TOTAL	49	202	11,272,000	11,263,562	6,000,262	120,187	10,163	139,171	1.9	43
	West of 166°W long										
	IFQ	59	217	7,556,400	7,539,465	4,373,119	49,676	6,875	131,032	1.7	33
	CDQ	10	23	839,600	839,351	483,037	2,870	1,448	14,606	1.7	33
	TOTAL	62	240	8,396,000	8,378,816	4,856,156	52,546	6,875	145,638	1.7	33
	Bering Sea District Total	al									
	IFQ	70	397	17,701,200	17,677,770	9,769,255	164,626	17,038	257,403	1.8	38
	CDQ	8	45	1,966,800	1,964,608	1,087,163	8,107	3,458	27,406	1.8	40
	TOTAL	70	442	19,668,000	19,642,378	10,856,418	172,733	17,038	284,809	1.8	38

*Note:* FC = fishery closed, CF = confidential, NA = not available.

From 1974/75 through 1984/85, Bering Sea Tanner crab subdistricts were: Southeastern, Pribilof, and Northern (includes the Norton Sound and General Sections). From 1987/88 through 1992/93 harvest subdistricts were divided east and west of 173°W long. From 1993/94 through 1996/97 fishery east of 168°W long is concurrent with the Bristol Bay red king crab fishery and the fishery from 163°W long to 173°W long is a directed Tanner crab fishery. From 2005/06 to current the fishery is divided east and west of 166°W long, and harvest east of 163°W long is only allowed as incidental catch during the Bristol Bay red king crab fishery.

b Deadloss included.

<sup>&</sup>lt;sup>c</sup> In pounds.

d Number of retained crab per pot lift.

<sup>&</sup>lt;sup>e</sup> Initial GHL announcement was 39.2 million pounds, GHL was later adjusted to 38.1 million pounds.

<sup>&</sup>lt;sup>f</sup> GHL for waters east of 163°W long.

g GHL for waters west of 163°W long.

h Harvest concurrent with the Bristol Bay red king crab fishery was estimated to be well below the GHL and minimal harvest was thought to have occurred west of 163°W long, therefore the GHL was adjusted to 16.1 million pounds for the directed Tanner crab fishery from 163°to 173°W long.

Table 2-17.-Bering Sea District Tanner crab commercial fishery economic performance, 1968-2015/16.

	V	alue
Season	Exvessela	Total <sup>b</sup>
1968–1974	NA	NA
1974/75	\$0.20	\$1.4
1975/76	\$0.19	\$4.2
1976/77	\$0.30	\$15.4
1977/78	\$0.38	\$25.3
1978/79	\$0.52	\$22.1
1979/80	\$0.52	\$19.0
1980/81	\$0.58	\$17.2
1981/82	\$1.06	\$11.5
1982/83	\$1.20	\$6.2
1983/84	\$0.95	\$1.1
1984/85	\$1.40	\$4.3
1985/86–1986/87	FC	FC
1987/88	\$2.17	\$4.8
1988/89	\$2.90	\$20.3
1989/90	\$1.85	\$45.3
1990/91	\$1.12	\$44.5
1991/92	\$1.50	\$47.3
1992/93	\$1.69	\$58.8
1993/94	\$1.90	\$31.6
1994/95	\$3.75	\$28.5
1995/96	\$2.80	\$11.7
1996/97	\$2.50	\$4.5
1997/98-2004/05	FC	FC
2005/06	\$1.27	\$1.2
2006/07	\$1.27	\$2.7
2007/08	\$1.64	\$3.4
2008/09	\$1.52	\$2.9
2009/10	\$1.64	\$2.2
2010/11-2012/13	FC	FC
2013/14	\$2.30	\$6.3
2014/15	\$2.15	\$29.1
2015/16	\$2.19	\$42.6

Note: FC = fishery closed, NA = not available.

a Average price per pound.
b Millions of dollars.

Table 2-18.—Bering Sea District Tanner crab commercial fishery season dates, 1968–2015/16.

		Se	ason length	
Season	Location	Open	Closed	Days
1968–1973	No directed fishery	_	_	_
1974		NA	NA	_
1974/75	Southeastern	07/29/74	06/15/75	321
	Pribilofs	07/29/74	06/15/75	321
1975/76	Southeastern	08/01/75	07/15/76	349
	Pribilofs	08/01/75	07/15/76	349
1976/77	Southeastern	08/01/76	07/15/77	348
	Pribilofs	08/01/76	07/15/77	348
1977/78	Southeastern	09/15/77	06/15/78	273
	Pribilofs	09/15/77	06/15/78	273
1978/79	Southeastern	11/01/78	05/24/79	204
	Pribilofs	11/01/78	05/24/79	204
1979/80	Southeastern	11/01/79	05/11/80	192
	Pribilofs	11/01/79	05/11/80	192
1980/81	Southeastern	01/15/81	05/07/81	112
	Pribilofs	01/15/81	05/07/81	112
1981/82	Southeastern	02/15/82	06/15/82	120
	Pribilofs	02/15/82	06/15/82	120
1982/83	Northern	02/15/83	06/15/83	120
	Southeastern	02/15/83	05/22/83	96
	Pribilofs	02/15/83	05/22/83	96
1983/84	Southeastern	02/15/84	06/15/84	121
	Pribilofs	02/15/84	06/15/84	121
1984/85	Southeastern	01/15/85	06/15/85	151
	Pribilofs	01/15/85	06/15/85	151
1985/86-1986/87		FC	FC	_
1987/88	Eastern subdistrict	01/15/88		
	East of 165°W long		04/20/88	96
	West of 165°W long		03/29/88	74
	Western subdistrict	01/15/88	03/29/88	74
1988/89	Eastern subdistrict	01/15/89		
	West of 165°W long		03/26/89	70
	East of 165°W long		05/07/89	112
	Western subdistrict	01/15/89	05/07/89	112
1989/90	Eastern subdistrict	01/15/90		
	East of 166°W long		04/09/90	84
	West of 166°W long		04/24/90	99
	Western subdistrict	01/15/90	04/24/90	99

Table 2-18.—Page 2 of 2.

			Season length	
Season	Location	Open	Closed	Days
1990/91	Eastern subdistrict			
	East of 166°W long	11/20/90	03/25/91	125
	West of 166°W long	01/15/91	03/25/91	69
1991/92	Eastern subdistrict			
	East of 166°W long	11/15/91	03/25/92	131
	West of 166°W long	11/24/91	03/25/92	122
1992/93	Eastern subdistrict	11/15/92		
	East of 163°W long		03/15/93	120
	West of 163°W long		03/31/93	136
	Western subdistrict	11/15/92	03/31/93	136
1993/94	East of 168°W long <sup>a</sup>	11/01/93	11/10/93	9
	163°to 173°W long	11/20/93	01/01/94	42
1994/95	163°to 173°W long	11/01/94	11/21/94	20
1995/96	163°to 173°W long	11/01/95	11/16/95	15
1996/97	East of 168°W long <sup>a</sup>	11/01/96	11/05/96	4
	163°to 173°W long	11/15/96	11/27/96	12
1997/98–2004/05	Ç	FC	FC	_
2005/06	163°to 166°W long <sup>b</sup>	FC	FC	_
	West of 166°W long	10/15/05	03/31/06	167
2006/07	163°to 166°W long <sup>b</sup>	10/15/06	03/31/07	167
	West of 166°W long	10/15/06	03/31/07	167
2007/08	163°to 166°W long <sup>b</sup>	10/15/07	03/31/08	168
	West of 166°W long	10/15/07	03/31/08	168
2008/09	163°to 166°W long <sup>b</sup>	10/15/08	03/31/09	167
	West of 166°W long	10/15/08	03/31/09	167
2009/10	163°to 166°W long <sup>b</sup>	10/15/09	03/31/10	167
	West of 166°W long	FC	FC	_
2010/11	163°to 166°W long <sup>b</sup>	FC	FC	_
	West of 166°W long	FC	FC	_
2011/12	163°to 166°W long <sup>b</sup>	FC	FC	_
	West of 166°W long	FC	FC	_
2012/13	163°to 166°W long <sup>b</sup>	FC	FC	_
	West of 166°W long	FC	FC	_
2013/14	163°to 166°W long <sup>b</sup>	10/15/13	03/31/14	167
	West of 166°W long	10/15/13	03/31/14	167
2014/15	163°to 166°W long <sup>b</sup>	10/15/14	03/31/15	167
	West of 166°W long	10/15/14	03/31/15	167
2015/16	163°to 166°W long <sup>b</sup>	10/15/15	03/31/16	168
	West of 166°W long	10/15/15	03/31/16	168

Note: NA = Not available. FC = Fishery closed.

a Concurrent with Bristol Bay red king crab fishery.

b Directed fishery open between 163° and 166° W long. Incidental harvest allowed in entire area east of 166° W long during Bristol Bay red king crab fishery; however, no incidental harvest allowed when the directed fishery is closed.

Table 2-19.—Bering Sea District Tanner crab commercial fishery harvest by statistical area, 2012/13–2015/16.

		2012/13				
		Number of				
Statistical area	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	CPUE <sup>c</sup>
East of 166°W long	FC	FC	FC	FC	FC	FC
West of 166°W long	FC	FC	FC	FC	FC	FC
<u> </u>		2013/14				
		Number of				
Statistical area	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	CPUE <sup>c</sup>
East of 166°W long	Landings	Clab	1 ots inted	Tur vest	Deadloss	CICL
615601	3	2	146	5	2	<1
615630	12	382	4,502	759	167	<1
615700	4	12	655	24	3	<1
625531	8	1,493	834	3,378	32	2
625600	16	2,218	1,753	4,967	102	1
625630	5	19	598	38	18	<1
635504	16	25,122	1,092	53,048	279	23
635530	46	348,355	9,836	742,415	3,092	35
635600	32	224,991	4,040	432,128	1,657	56
635630	6	926	4,040	1,753		
645501	16				4 485	10 38
645530		67,039	1,751	145,190		
	13	9,843	538	20,882	71	18
Other <sup>d</sup>	3	29,641	633	51,771	343	47
Total	74 <sup>e</sup>	710,043	26,468	1,456,357	6,255	27
West of 166°W long	10	5 47 4	507	0.001	165	1.1
665530	12	5,474	507	9,901	165	11
665600	27	350,025	10,075	625,815	7,721	35
675500	4	687	86	1,113	3	8
675530	17	1,167	780	2,237	77	2
675600	47	101,688	8,891	180,115	2,865	11
675630	8	24,433	829	40,681	198	29
685530	6	28	91	44	29	<1
685600	48	72,124	10,782	130,245	2,194	7
685630	27	30,005	2,606	56,877	394	12
705600	3	38	21	74	0	2
705630	11	430	1,391	821	11	<1
715600	6	1	266	2	2	<1
715630	68	6,180	20,800	9,700	7,373	<1
715700	50	103,478	11,611	195,227	709	9
715730	4	1	235	2	2	<1
725630	53	79	14,779	123	123	<1
725700	55	101	12,830	157	117	<1
725730	27	51	5,524	76	76	<1
735630	5	1	359	1	1	<1
735700	22	47	4,936	79	37	<1

		2013/14	(continued)			
		Number of				
Statistical area	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	$CPUE^{c}$
735730	29	60	8,853	86	86	<1
735800	12	13	3,477	17	17	<1
735830	4	1	195	1	1	<1
745800	8	8	1,450	13	13	<1
745830	9	10	2,223	14	14	<1
755830	7	172	2,832	283	2	<1
Other <sup>d</sup>	36	39,423	5,095	76,783	317	8
Total	225 <sup>e</sup>	735,725	131,524	1,330,488	22,547	6
		201	4/15			
		Number of				
Statistical area	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	CPUE <sup>c</sup>
East of 166°W long	7					
615630	11	1,129	2,113	2,410	39	1
625600	14	109	2,521	252	25	<1
625630	13	392	2,822	899	18	<1
635504	4	829	187	1,744	5	4
635530	55	541,093	13,013	1,109,823	5,744	42
635600	115	2,211,462	39,993	4,268,558	35,149	55
635630	46	465,115	5,916	841,472	9,047	79
645501	12	7,651	286	15,966	97	27

7,651 38 44 645530 254,621 5,730 498,593 1,392 645600 57 837,557 14,045 1,596,353 7,775 60 645630 7 16,809 378 29,747 127 44 655530 6 8,426 172 16,176 79 49 54 655600 6 284 35,677 660 66,424 Otherd 3 39 7 1,020 2,068 26 143<sup>e</sup> 50 Total 4,381,890 87,875 8,450,485 59,788 West of 166°W long 39 665500 118,538 3,011 205,854 1,807 11 23 665530 32 110,673 4,745 191,693 1,918 63 49,902 37 665600 655,249 17,648 1,117,461 32 665630 25 79,438 2,517 130,697 3,102 9 57 665700 84,821 1,478 134,609 667 5 675500 6 527 114 959 10 35 3,985 298 1 675530 3,861 6,626 97 12 675600 283,028 23,059 473,258 13,128 675630 75 877,925 21,725 1,429,713 9,642 40 675700 32 268,282 4,043 430,412 3,278 66 685530 18 138 2,992 206 132 <1 71 2 27,821 45,326 685600 13,401 1,621 685630 74 258,258 16,141 420,115 5,315 16 3 5 283 445 695600 53 10 3 0 0 705600 83 0 <1 705630 4 1 99 2 0 <1

Table 2-19.—Page 3 of 4.

		2014/15 (	(continued)			
		Number of				
Statistical area	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	CPUE <sup>c</sup>
715630	15	41	3,223	73	33	<1
715700	19	303,243	6,132	547,251	4,323	49
725630	17	233	3,947	498	25	<1
725700	19	37	4,705	56	31	<1
725730	6	6	520	8	8	<1
735700	7	33	1,458	48	48	<1
735730	10	74	2,690	112	112	<1
Other <sup>d</sup>	25	68,320	5,175	118,520	1,511	13
Total	226 <sup>e</sup>	3,140,954	142,820	5,253,943	96,921	22
		2015	5/16			
		Number of			_	
Statistical area	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	CPUE <sup>c</sup>
East of 166°W long						
615630	3	98	505	233	0	<1
625600	3	1	115	1	1	<1
625630	5	6	580	15	0	<1
635504	7	25,298	380	49,801	179	67
635530	53	452,564	10,774	902,608	32,436	42
635600	105	1,128,764	30,207	2,156,282	32,461	37
635630	42	395,581	8,160	728,839	3,832	48
645501	22	340,721	8,511	696,090	4,294	40
645530	95	838,176	19,957	1,605,287	11,239	42
645600	109	1,388,326	30,815	2,546,979	14,756	45
645630	19	90,416	1,705	160,248	845	53
655500	17	159,815	3,913	309,037	2,460	41
655530	41	398,305	9,172	726,592	3,794	43
655600	46	669,005	12,894	1,188,096	12,965	52
655630	10	112,974	1,467	193,045	921	77
Other <sup>d</sup>	2	212	16	411	5	13
Total	202 <sup>e</sup>	6,000,262	139,171	11,263,562	120,188	43
West of 166°W long						
665500	13	45,058	1,980	76,003	501	23
665530	40	53,346	10,026	90,792	746	5
665600	69	807,488	21,995	1,351,742	10,098	37
665630	26	113,988	3,404	195,236	2,001	33
675500	5	286	188	441	2	2
675530	23	296	4,281	461	74	<1
675600	56	103,379	14,590	170,990	2,013	7
675630	65	591,837	18,736	960,705	7,746	32
675700	18	249,771	5,096	406,092	3,439	49
675730	4	9,128	285	15,400	152	32
685530	9	55	1,358	85	47	<1
685600	41	225,939	5,671	376,348	1,561	40
685630	80	691,321	19,307	1,131,981	5,785	36

Table 2-19.-Page 4 of 4.

		2015/16	6 (continued)			
		Number of				
Statistical area	Landings	Crab <sup>a</sup>	Pots lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	CPUE <sup>c</sup>
685700	3	5,196	66	8,199	58	79
705630	10	69,700	1,211	111,412	396	58
715630	16	106,247	2,077	195,536	392	51
715700	59	1,538,813	23,167	2,849,138	15,031	66
715730	22	205,997	3,676	374,148	2,232	56
725630	5	10	713	14	14	<1
725700	9	30	2,261	45	45	<1
735730	6	5,488	1,586	8,933	3	3
745800	3	1	334	2	2	<1
745830	3	3	1,141	3	3	<1
Other <sup>d</sup>	23	32,779	2,489	55,111	205	13
Total	240 <sup>e</sup>	4,856,156	145,638	8,378,816	52,546	33

*Note:* FC = fishery closed.

<sup>&</sup>lt;sup>a</sup> Deadloss included.

b In pounds.
c of retained crab per pot lift.

d Combination of 1 (E) & 19 (W) - 2013/14, 2 (E) & 17 (W) - 2014/15, & 1 (E) & 14 (W) - 2015/16) statistical areas where less than 3 vessels made landings.

<sup>&</sup>lt;sup>e</sup> Number of statistical area landings is greater than the total number of landings because a single vessel may fish in several statistical areas.

Table 2-20.-Bering Sea District Tanner crab commercial fishery harvest composition by fishing season, 1968–2015/16.

	Averag	ge	Percent
Season	Weight <sup>a</sup>	Width <sup>b</sup>	new shell
1968	2.8	NA	NA
1969	2.9	NA	NA
1970	2.9	NA	NA
1971	2.7	NA	NA
1972	2.6	NA	NA
1973	2.5	NA	NA
1974	2.0	NA	NA
1974/75	2.5	NA	NA
1975/76	2.5	NA	99.8
1976/77	2.5	NA	NA
1977/78	2.5	153	88.0
1978/79	2.5	153	95.0
1979/80	2.5	151	90.0
1980/81	2.5	149	89.0
1981/82	2.3	149	91.8
1982/83	2.3	149	70.6
1983/84	2.3	147	40.5
1984/85	2.4	150	64.9
1985/86-1986/87	FC	FC	FC
1987/88	2.5	144	89.0
1988/89	2.4	149	79.3
1989/90	2.3	148	96.5
1990/91	2.4	150	95.3
1991/92	2.5	150	93.0
1992/93	2.3	148	90.5
1993/94	2.3	151	93.9
1994/95	2.3	150	92.5
1995/96	2.3	149	58.6
1996/97	2.5	152	46.6
1997/98-2004/05	FC	FC	FC
2005/06	2.2	145	92.1
2006/07	2.3	150	35.8
2007/08	2.3	148	62.8
2008/09	2.3	149	90.1
2009/10	2.7	157	98.0
2010/11-2012/13	FC	FC	FC
2013/14	2.0	142	86.5
2014/15	1.8	138	78.9
2015/16	1.8	138	75.6

Note: NA = not available, FC = fishery closed.

a In pounds.
b Carapace width in millimeters.

Table 2-21.—Bering Sea District snow crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest data, 1977/78–2015/16.

		Numl	ber of	_		Number of		Number	of Pots	Ave	
Season	Fishery	Vessels	Landings	GHL/TAC <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
1977/78	General	15	38	-	1,716,124	1,267,546	NA	NA	13,247	1.4	96
1978/79	General	102	490	-	32,187,039	22,118,498	759,137	NA	190,746	1.5	116
1979/80	General	134	597	-	39,572,668	25,286,777	228,345	35,503	255,102	1.6	99
1981	General	153	867	39.5-91.0 million	52,750,034	34,415,322	2,269,979	39,789	435,742	1.5	79
1982	General	122	803	16–22 million	29,355,374	24,089,562	1,092,655	35,522	469,091	1.2	51
1983	General	109	461	15,800,000	26,128,410	23,853,647	1,324,466	15,396	287,127	1.1	83
1984	General	52	367	49,000,000	26,813,074	24,009,935	98,795	12,493	173,591	1.1	138
1985/86	General	75	718	98,000,000	65,998,875	52,903,246	1,064,184	15,325	372,045	1.3	142
1986	General	88	992	57,000,000	97,984,539	76,499,123	1,378,533	13,750	543,744	1.3	141
1987	General	103	1,038	56,400,000	101,903,388	81,307,659	978,449	19,386	616,113	1.2	132
1988	General	171	1,285	110,700,000	134,241,728	105,933,542	3,424,021	38,765	747,395	1.3	142
1989	General	168	1,300	132,000,000	148,306,262	112,704,215	1,940,482	43,607	665,242	1.3	169
1990	General	189	1,563	139,800,000	161,765,415	128,931,026	1,796,664	46,440	911,303	1.3	141
1991	General	220	2,788	315,000,000	328,647,269	265,123,960	3,464,036	76,056	1,391,463	1.2	191
1992	General	250	2,763	333,000,000	315,302,034	227,376,582	2,325,852	77,858	2,325,852	1.4	177
1993	General	254	1,835	207,200,000	230,754,253	169,535,617	1,573,952	65,081	970,646	1.4	175
1994	General	273	1,293	105,800,000	149,792,718	114,810,186	1,799,763	54,837	716,524	1.3	160
1995	General	253	870	55,700,000	75,309,187	60,658,899	1,289,169	53,707	659,051	1.2	120
1996	General	234	771	50,700,000	65,696,173	52,892,320	1,333,015	50,169	520,671	1.2	102
1997	General	226	1,127	117,000,000	119,543,024	100,013,816	2,351,555	47,036	754,140	1.2	133
1998	General	229	1,767	225,910,000	243,492,307	186,643,308	2,902,601	47,909	891,219	1.3	209
	CDQ	20	86	8,886,634	8,846,977	6,975,242	134,898	4,016	39,575	1.3	176
	TOTAL	230	1,853	234,100,000	252,339,284	193,618,550	3,037,499	47,909	930,794	1.3	208
1999	General	241	1,631	186,200,000	184,735,011	143,469,440	1,833,253	50,173	899,308	1.3	160
	CDQ	23	103	9,674,326	9,628,858	7,714,358	93,244	5,250	46,225	1.3	167
	TOTAL	241	1,734	196,000,000	194,363,869	151,183,798	1,926,497	50,173	945,533	1.3	160
2000	General	231	288	26,362,500	30,774,838	23,265,802	330,896	43,407	170,064	1.3	137
	CDQ	13	27	2,137,500	2,516,506	1,815,879	22,229	2,440	12,570	1.4	144
	TOTAL	231	315	28,500,000	33,291,344	25,081,681	353,125	43,407	182,634	1.3	137

Table 2-21.—Page 2 of 3.

		Numb	per of			Number of	Number of		of Pots	Aver	age
Season	Fishery	Vessels	Landings	GHL/TAC <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
2001	General	207	293	25,252,500	23,382,046	17,185,523	429,884	40,724	176,930	1.4	97
	CDQ	11	29	1,878,070	1,874,338	1,427,082	22,897	2,223	14,270	1.3	100
	TOTAL	207	322	27,300,000	25,256,384	18,612,605	452,781	40,724	191,200	1.4	97
2002	General	190	403	28,510,000	30,233,494	23,281,441	585,288	33,028	308,132	1.3	76
	CDQ	11	33	2,453,648	2,399,716	1,873,780	73,168	2,100	18,845	1.3	99
	TOTAL	191	436	30,820,000	32,633,210	25,155,221	658,456	33,278	326,977	1.3	77
2003	General	190	256	23,690,000	26,198,024	21,504,969	662,409	20,407	139,279	1.2	154
	CDQ	10	29	2,123,046	2,118,899	1,747,935	18,378	1,670	14,583	1.2	120
	TOTAL	190	285	25,610,000	28,316,923	23,252,904	680,787	20,407	153,862	1.2	151
2004	General	189	240	19,269,000	22,170,150	17,331,514	224,377	14,444	110,087	1.3	157
	CDQ	10	25	1,774,735	1,770,774	1,338,077	24,199	1,428	13,622	1.3	98
	TOTAL	189	265	20,831,000	23,940,924	18,669,591	248,576	14,444	123,709	1.3	151
2005	General	168	196	19,362,000	23,036,287	16,684,751	224,193	12,890	69,863	1.4	239
	CDQ	9	23	1,858,807	1,855,841	1,300,994	11,286	1,065	3,345	1.4	389
	TOTAL	168	219	20,932,000	24,892,128	17,985,745	235,479	12,890	73,208	1.4	246
2005/06	IFQ	78	310	33,465,600	33,256,146	22,081,044	322,595	13,948	108,854	1.5	203
	CDQ	15	40	3,718,400	3,717,985	2,471,114	34,846	2,729	12,185	1.5	203
	TOTAL	78	350	37,184,000	36,974,131	24,552,158	357,441	13,948	121,039	1.5	203
2006/07	IFQ	69	274	32,909,400	32,699,874	26,633,212	379,132	11,760	80,112	1.2	332
	CDQ	12	33	3,656,600	3,655,775	3,046,479	34,611	2,730	9,307	1.2	321
	TOTAL	69	307	36,566,000	36,355,649	29,679,691	413,743	11,760	89,419	1.2	342
2007/08	IFQ	78	461	56,730,600	56,724,730	45,204,758	500,156	13,931	129,727	1.3	349
	CDQ	15	52	6,303,400	6,303,306	5,252,755	51,273	3,134	14,385	1.2	356
	TOTAL	78	513	63,034,000	63,028,036	50,457,513	551,429	14,187	144,112	1.3	349
2008/09	IFQ	77	431	52,695,000	52,693,167	41,326,795	402,679	12,398	148,221	1.3	279
	CDQ	15	56	5,855,000	5,854,682	4,618,298	31,943	2,707	15,316	1.3	302
	TOTAL	77	487	58,550,000	58,547,849	45,945,093	434,622	12,549	163,537	1.3	281
2009/10	IFQ	69	325	43,215,300	43,212,583	31,751,359	500,049	11,316	124,935	1.4	254
	CDQ	11	29	4,801,700	4,801,506	3,537,664	36,639	1,993	12,357	1.4	286
	TOTAL	69	354	48,017,000	48,014,089	35,289,023	536,688	11,316	137,292	1.4	257

Table 2-21.—Page 3 of 3.

	_	Numb	per of			Number of		Number	of Pots	Avera	age
Season	Fishery	Vessels	Landings	GHL/TAC <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
2010/11	IFQ	68	348	48,852,900	48,852,452	33,963,757	314,505	11,739	133,899	1.4	254
	CDQ	14	38	5,428,100	5,410,748	3,794,739	37,883	2,478	13,345	1.4	284
	TOTAL	68	386	54,281,000	54,263,200	37,758,496	352,388	11,739	147,244	1.4	256
2011/12	IFQ	71	654	80,004,600	79,941,256	54,469,952	585,054	12,100	243,237	1.5	224
	CDQ	16	70	8,889,400	8,889,396	6,085,153	52,378	3,400	27,365	1.5	222
	TOTAL	72	724	88,894,000	88,830,652	60,555,105	637,432	12,310	270,602	1.5	224
2012/13	IFQ	70	453	59,715,000	59,619,602	42,653,744	428,314	11,062	202,871	1.4	210
	CDQ	13	52	6,635,000	6,634,926	4,802,139	37,208	2,224	22,618	1.4	212
	TOTAL	70	505	66,350,000	66,254,528	47,455,883	465,522	11,062	225,489	1.4	210
2013/14	IFQ	70	408	48,584,700	48,584,808	37,640,813	354,423	11,344	209,152	1.3	180
	CDQ	12	42	5,398,300	5,398,478	4,285,729	50,706	2,299	22,462	1.3	191
	TOTAL	70	450	53,983,000	53,983,286	41,926,542	405,129	11,344	231,614	1.3	181
2014/15	IFQ	70	495	61,155,000	61,146,572	49,573,351	546,042	12,785	259,806	1.2	191
	CDQ	12	48	6,795,000	6,795,015	5,456,467	50,599	2,370	27,114	1.3	201
	TOTAL	71	543	67,950,000	67,941,587	55,029,818	596,641	12,785	286,920	1.2	192
2015/16	IFQ	74	364	36,549,900	36,550,348	26,689,836	352,931	11,942	201,234	1.4	133
	CDQ	11	26	4,061,100	4,061,098	2,924,693	26,236	1,877	15,820	1.4	185
	TOTAL	74	390	40,611,000	40,611,446	29,614,529	379,167	11,942	217,054	1.4	136
<ul> <li>Guidelin</li> <li>Deadlos</li> <li>In pound</li> <li>Number</li> <li>Total ha</li> </ul>	s included. ds. of retained cr rvest includes	el (GHL), tota ab per pot lift 30,919 pound		h (TAC) beginning n unidentified statist waters.							

Table 2-22.—Bering Sea District snow crab commercial fishery season dates and area closures, 1977/78–2015/16.

Season	Opened	Closed	Season length <sup>a</sup>	Comments
1977/78	09/15/77	09/23/78	373	Bering Sea District closure <sup>b</sup>
1978/79	11/01/78	09/03/79	307	Bering Sea District closure <sup>b</sup>
1979/80	11/01/79	08/15/80	307	Bering Sea District state closure
		09/03/80		Bering Sea District federal closure
1981	01/15/81	09/01/81	229	Bering Sea District closure <sup>c</sup>
1982	02/15/82	08/01/82	167	Bering Sea District closure <sup>c</sup>
1983	02/15/83	05/22/83	120	Bering Sea District closure south of 57°30' N lat <sup>c</sup>
		08/01/83		Bering Sea District closure north of 57°30' N lat <sup>c</sup>
1984	02/15/84	08/01/84	320	Bering Sea District closure south of 58°N lat <sup>c</sup>
		08/22/84		Bering Sea District closure north of 58°N lat to allow for an orderly start to king crab season <sup>c</sup>
	09/15/84	12/31/84		Bering Sea District closure north of 58°N lat reopened
				after king season and Bering Sea District closure <sup>c</sup>
1985	01/15/85	05/08/85	333	Pribilof Subdistrict closure south of 58°N lat <sup>c</sup>
		08/01/85		Bering Sea District closure south of 58°39' N lat <sup>c</sup>
		08/22/85		Northern Subdistrict closure to allow for an orderly start to king crab season <sup>c</sup>
	10/09/85	01/15/86		Bering Sea District reopened, except east of 164°W
				long in Southeastern Subdistrict
				Fishery was scheduled to close 12/31/85 but did not,
				it remained open until the start of the 1986 fishery
1986	01/15/86	04/21/86	252	Southeastern Subdistrict closure west of 164°W long <sup>c</sup>
		06/01/86		Pribilof Subdistrict closure <sup>c</sup>
		08/01/86		Northern Subdistrict closure east of 175°W long <sup>c</sup>
		08/24/86		Northern Subdistrict closure west of 175°W long <sup>c</sup>
1987	01/15/87	04/12/87	158	Southeastern Subdistrict west of 164°W long
				and Pribilof Subdistrict closure
		06/01/87		Northern Subdistrict south of 60°30' N lat and
				east of 178°W long closure
	01/15/87	06/22/87		Northern Subdistrict north of 60°30' N lat and
				west of 178°W long closure
1988	01/15/88	03/29/88	120	Bering Sea District closure
-, -, -				(Western Subdistrict to assist in an orderly closure)
	05/15/88	06/30/88		Western Subdistrict reopen and closure
1989	01/15/89	03/26/89	112	Eastern Subdistrict closure
		05/07/89	<b>-</b>	Western Subdistrict closure
1990	01/15/90	04/09/90	148	Eastern Subdistrict east of 165°W long closure
1//0	01/13/70	04/24/90	1 10	Eastern Subdistrict west of 165°W long closure
		06/12/90		Western Subdistrict closure
1991	01/15/91	05/05/91	159	Eastern Subdistrict closure
1//1	01/13/71	06/23/91	137	Western Subdistrict closure

Table 2-22.—Page 2 of 2.

Season	Opened	Closed	Season length <sup>a</sup>	Comments
1992	01/15/92	04/22/92	97	Bering Sea District closure
1993	01/15/93	03/15/93	59	Bering Sea District closure
1994	01/15/94	03/01/94	45	Bering Sea District closure
1995	01/15/95	02/17/95	33	Bering Sea District closure
1996	01/15/96	02/29/96	45	Bering Sea District closure
1997	01/15/97	03/21/97	65	Bering Sea District closure
1998	01/15/98	03/20/98	64	Bering Sea District closure
1999	01/15/99	03/22/99	66	Bering Sea District closure
2000	04/01/00	04/08/00	7	Bering Sea District closure
2001	01/15/01	02/14/01	30	Bering Sea District closure
2002	01/15/02	02/08/02	24	Bering Sea District closure
2003	01/15/03	01/25/03	9	Bering Sea District closure
2004	01/15/04	01/23/04	8	Bering Sea District closure
2005	01/15/05	01/20/05	6	Bering Sea District closure
$2005/06^{d}$	10/15/05	05/15/06	229	Eastern Subdistrict closure
		05/31/06		Western Subdistrict closure
2006/07	10/15/06	05/15/07	229	Eastern Subdistrict closure
		05/31/07		Western Subdistrict closure
2007/08	10/15/07	05/15/08	229	Eastern Subdistrict closure
		05/31/08		Western Subdistrict closure
2008/09	10/15/08	05/15/09	229	Eastern Subdistrict closure
		05/31/09		Western Subdistrict closure
2009/10	10/15/09	05/15/10	229	Eastern Subdistrict closure
		05/31/10		Western Subdistrict closure
2010/11	10/15/10	05/15/11	229	Eastern Subdistrict closure
		05/31/11		Western Subdistrict closure
2011/12	10/15/11	05/31/12	244	Eastern Subdistrict east of 171°W long closure Western and Eastern Subdistricts west of 171°W long
		06/15/12		closure
2012/13	10/15/12	05/15/13	229	Eastern Subdistrict closure
		05/31/13		Western Subdistrict closure
2013/14	10/15/13	05/15/14	229	Eastern Subdistrict closure
		05/31/14		Western Subdistrict closure
2014/15	10/15/14	05/15/15	229	Eastern Subdistrict closure
		05/31/15		Western Subdistrict closure
2015/16	10/15/15	05/15/16	229	Eastern Subdistrict closure
	naged domesti	05/31/16		Western Subdistrict closure

State-managed domestic fishery.
 Concurrent state and federal date.
 Crab Rationalization begins.

Table 2-23.—Bering Sea District snow crab commercial fishery harvest data by subdistrict, 1977/78–2015/16.

		Nun	nber of			Number of			Ave	rage
Season	Subdistrict	Vessels	Landings	GHL/TAC <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Pots lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
1977/78	Southeastern	NA	33	_	1,439,959	1,063,872	NA	11,560	1.4	92
	Pribilof	NA	5	_	276,165	203,674	NA	1,687	1.4	121
	TOTAL	15	38	_	1,716,124	1,267,546	NA	13,247	1.4	96
1978/79	Southeastern	101	476	_	31,102,832	21,279,794	659,137	184,491	1.5	115
	Pribilof	10	14	_	1,084,039	838,704	100,000	6,225	1.5	135
	TOTAL	102	490	_	32,187,039	22,118,498	759,137	190,746	1.5	116
1979/80	Southeastern	133	561	_	36,406,391	23,199,446	187,945	237,375	1.6	98
	Pribilof	19	36	_	3,166,777	2,087,331	40,400	17,727	1.5	118
	TOTAL	134	597	_	39,572,668	25,286,777	228,345	255,102	1.6	99
1981	Southeastern	NA	624	_	37,866,229	24,498,642	1,475,078	309,304	1.6	79
	Pribilof	NA	243	_	14,886,705	9,916,617	794,901	126,438	1.5	78
	TOTAL	153	867	40.0–91.0 million	52,750,034	34,415,322	2,269,979	435,742	1.5	79
1982	Southeastern	NA	468	_	13,079,583	10,207,174	422,979	257,193	1.3	40
	Pribilof	NA	335	_	16,276,421	13,882,388	669,676	211,898	1.2	66
	TOTAL	122	803	16.0–22.0 million	29,355,374	24,089,562	1,092,655	469,091	1.2	51
1983	Southeastern	NA	153	_	4,197,304	3,553,281	165,298	94,470	1.2	38
	Pribilof	NA	239	_	20,514,000	19,076,553	1,078,643	153,458	1.0	124
	Northern	NA	69	_	1,417,106	1,223,813	80,525	39,199	1.1	31
	TOTAL	109	461	15,800,000	26,128,410	23,853,647	1,324,466	287,127	1.1	83
1984	Southeastern	NA	76	_	3,990,621	3,534,370	54,678	33,091	1.1	107
	Pribilof	NA	230	_	19,727,493	17,909,096	708,706	112,078	1.1	160
	Northern	NA	61	_	3,094,960	2,566,469	35,411	28,422	1.2	90
	TOTAL	52	367	49,000,000	26,813,074	24,009,935	798,795	173,591	1.1	138
1985	Southeastern	55	301	_	27,373,232	21,963,882	461,001	158,819	1.4	138
	Pribilof	60	301	_	29,804,093	24,089,526	505,146	142,937	1.2	169
	Northern	24	116	_	8,821,550	6,849,838	98,037	70,289	1.3	97
	TOTAL	75	718	98,000,000	65,998,875	52,903,246	1,064,184	372,045	1.3	142

Table 2-23.—Page 2 of 5.

Season Subdis  1986 Souther Pribilo Norther TOTA  1987 Souther Pribilo Norther TOTA  1988 Eastern Wester	astern 47 f 80 rn 67 L 88 astern 28 f 94 rn 99 L 103	Landings  112  508  372  992  64  458  516  1,038	GHL/TAC <sup>a</sup> 57,000,000  56,400,000	Harvest <sup>b,c</sup> 10,957,578 50,525,150 36,501,811 97,984,539 5,106,473 47,676,734	crab <sup>b</sup> 8,491,694 39,851,767 28,155,662 76,499,123 4,116,778 38,604,802	Deadloss <sup>c</sup> 44,755 472,342 861,436 1,378,533 24,619 261,337	Pots lifted 63,889 281,337 198,518 543,744 24,619	Weight <sup>c</sup> 1.3 1.3 1.3 1.3 1.2	CPUE <sup>d</sup> 133 142 142 141 167
Pribilo Northe TOTA  1987 Southe Pribilo Northe TOTA  1988 Eastern	F 80 rn 67 L 88 astern 28 F 94 rn 99 L 103	508 372 992 64 458 516 1,038	57,000,000 - - -	50,525,150 36,501,811 97,984,539 5,106,473 47,676,734	39,851,767 28,155,662 76,499,123 4,116,778	472,342 861,436 1,378,533 24,619	281,337 198,518 543,744 24,619	1.3 1.3 1.3	142 142 141
Norther TOTA  1987 Souther Pribilo Norther TOTA  1988 Eastern	rn 67 2 88 astern 28 f 94 rn 99 2 103 162	372 992 64 458 516 1,038	57,000,000 - - -	36,501,811 97,984,539 5,106,473 47,676,734	28,155,662 76,499,123 4,116,778	861,436 1,378,533 24,619	198,518 543,744 24,619	1.3 1.3	142 141
TOTA  1987 Souther Pribilo Norther TOTA  1988 Eastern	88 astern 28 f 94 rn 99 L 103 162	992 64 458 516 1,038	57,000,000 - - -	97,984,539 5,106,473 47,676,734	76,499,123 4,116,778	1,378,533 24,619	543,744 24,619	1.3	141
1987 Souther Pribile Norther TOTA 1988 Eastern	28 f 94 rn 99 L 103 162	64 458 516 1,038	- - -	5,106,473 47,676,734	4,116,778	24,619	24,619		
Pribilo Northe TOTA 1988 Eastern	94 rn 99 L 103 162	458 516 1,038	- - - 56 400 000	47,676,734				1.2	167
Northe TOTA 1988 Eastern	rn 99 L 103 162	516 1,038	- - 56 400 000		38,604,802	261 337	261 227		
TOTA 1988 Eastern	L 103 162	1,038	- 56 400 000	40 120 101		201,337	261,337	1.2	148
1988 Eastern	162		56 400 000	49,120,181	38,586,079	330,157	330,157	1.2	117
		771	50,400,000	101,903,388	81,307,659	978,449	616,113	1.2	132
Wester	n 151	//1	_	75,926,942	60,019,586	740,976	423,919	1.3	142
	131	518	_	58,314,786	45,913,956	2,501,693	323,476	1.3	142
TOTA	L 171	1,285	110,700,000	134,241,728	105,933,542	3,424,021	747,395	1.3	142
1989 Eastern	164	872	_	103,163,307	77,717,813	1,137,971	393,251	1.3	198
Wester	n 127	470	_	45,142,955	34,986,402	802,511	271,991	1.3	129
TOTA	L 168	1,300	132,000,000	148,306,262	112,704,215	1,940,482	665,242	1.3	169
1990 Eastern	177	956	_	94,775,962	76,285,217	1,010,755	511,949	1.2	149
Wester	n 152	659	_	66,989,453	52,645,809	785,909	399,354	1.3	132
TOTA	L 189	1,563	139,800,000	161,765,415	128,931,026	1,796,664	911,303	1.3	141
1991 Eastern	218	2,013	_	240,090,666	190,139,612	1,593,021	912,631	1.3	208
Wester	n 185	867	_	88,556,603	74,984,348	1,871,015	478,832	1.2	157
TOTA	220	2,788	315,000,000	328,647,269	265,123,960	3,464,036	1,391,463	1.2	191
1992 Eastern	248	2,696	_	302,364,005	217,376,231	2,269,467	1,228,280	1.4	177
Wester	n 55	152	_	12,938,029	10,000,351	56,385	56,385	1.3	187
TOTA	250	2,763	333,000,000	315,302,034	227,376,582	2,325,852	1,284,665	1.4	177
1993 Eastern	250	1,383	_	151,324,024	110,756,768	1,108,520	675,936	1.4	164
Wester	n 185	632	_	79,430,229	58,778,849	465,432	294,710	1.4	199
TOTA	L 254	1,835	207,200,000	230,754,253	169,535,617	1,573,952	970,646	1.4	175
1994 Eastern	219	820	_	72,008,424	56,012,433	901,674	375,928	1.3	149
Wester	n 171	586	_	77,784,294	58,797,753	898,089	340,596	1.3	173
TOTA	L 273	1,293	105,800,000	149,792,718	114,810,186	1,799,763	716,524	1.3	160

Table 2-23.—Page 3 of 5.

		Nun	nber of			Number of			Ave	rage
Season	Subdistrict	Vessels	Landings	GHL/TAC <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Pots lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
1995	Eastern	217	628	_	39,793,496	32,677,836	659,051	314,711	1.2	104
	Western	153	357		35,515,691	27,981,053	630,118	192,892	1.3	145
	TOTAL	253	870	55,700,000	75,309,187	60,658,899	1,289,169	507,603	1.2	120
1996	Eastern	161	465	_	28,232,574	23,663,995	555,326	252,159	1.2	94
	Western	146	354	_	37,463,599	29,228,325	777,689	268,512	1.3	109
	TOTAL	234	771	50,700,000	65,696,173	52,892,320	1,333,015	520,671	1.2	102
1997	Eastern	225	1,041		105,695,147	88,524,929	2,115,217	649,319	1.2	136
	Western	83	164		13,894,192	11,488,887	236,338	104,821	1.2	110
	TOTAL	226	1,127	117,000,000	119,543,024	100,013,816	2,351,555	754,140	1.2	133
1998	Eastern	229	1,808	_	239,651,113	183,421,483	2,903,695	887,458	1.3	207
	Western	50	115	_	12,688,171	10,197,067	133,804	43,336	1.2	235
	TOTAL	230	1,853	234,100,000	252,339,284	193,618,550	3,037,499	930,794	1.3	208
1999	Eastern	236	1,490	_	145,042,457	110,912,479	1,330,994	702,282	1.3	158
	Western	121	391	_	49,321,412	40,271,319	595,503	243,251	1.2	166
	TOTAL	241	1,734	196,000,000	194,363,869	151,183,798	1,926,497	945,533	1.3	160
2000	Eastern	173	241	_	22,931,135	16,673,204	214,445	120,556	1.4	138
	Western	82	98	_	10,360,209	8,408,477	138,680	62,078	1.2	135
	TOTAL	231	315	28,500,000	33,291,344	25,081,681	353,125	182,634	1.3	137
2001	Eastern	164	232	_	13,016,278	9,201,950	229,454	118,311	1.4	78
	Western	90	135	_	12,240,106	9,410,655	223,327	72,889	1.3	129
	TOTAL	207	322	27,300,000	25,256,384	18,612,605	452,781	191,200	1.4	97
2002	Eastern	146	290		13,858,099	10,642,041	314,240	167,328	1.3	64
	Western	111	220		18,775,111	14,513,180	344,216	159,649	1.3	91
	TOTAL <sup>e</sup>	191	436	30,820,000	32,633,210	25,155,221	658,456	326,977	1.3	77
2003	Eastern	66	104	_	6,644,118	5,407,755	121,572	41,409	1.2	131
	Western	159	228		21,672,805	17,845,149	559,215	112,453	1.2	159
	$TOTAL^{f}$	190	285	25,610,000	28,316,923	23,252,904	680,787	153,862	1.2	151

Table 2-23.—Page 4 of 5.

		Nun	nber of			Number of			Ave	rage
Season	Subdistrict	Vessels	Landings	GHL/TAC <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Pots lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
2004	Eastern	63	93	_	3,496,441	2,688,063	37,117	22,514	1.3	119
	Western	171	227	_	20,445,932	15,981,528	211,459	101,195	1.3	158
	TOTAL	189	265	20,831,000	23,942,373	18,669,591	248,576	123,709	1.3	151
2005	Eastern	69	107	_	9,631,571	6,791,145	65,643	22,026	1.4	308
	Western	128	138	_	15,260,557	11,069,175	169,836	51,182	1.4	219
	TOTAL	168	219	20,932,000	24,892,128	17,860,320	235,479	73,208	1.4	246
2005/06	Eastern	66	269	_	22,870,121	14,929,482	218,325	82,496	1.5	181
	Western	51	169	_	14,104,010	9,622,676	139,116	38,543	1.5	250
	TOTAL	78	350	37,184,000	36,974,131	24,552,158	357,441	121,039	1.5	203
2006/07	Eastern	65	292	_	31,862,426	26,087,650	359,093	78,486	1.2	332
	Western	24	70	_	4,493,223	3,490,010	54,650	10,933	1.3	323
	TOTAL	69	307	36,566,000	36,355,649	29,577,660	413,743	89,419	1.2	331
2007/08	Eastern	78	499	_	59,135,784	47,220,645	533,841	135,607	1.3	348
	Western	11	47	_	3,892,252	3,092,773	17,588	8,505	1.3	365
	TOTAL	78	513	63,034,000	63,028,036	50,313,418	551,429	144,112	1.3	349
2008/09	Eastern	74	329	_	30,177,432	23,468,644	222,674	90,286	1.3	260
	Western	51	278	_	28,370,417	22,476,449	211,948	73,251	1.3	307
	TOTAL	77	487	58,550,000	58,547,849	45,945,093	434,622	163,537	1.3	281
2009/10	Eastern	69	336	_	41,657,695	30,474,768	490,535	120,398	1.4	253
	Western	27	82	_	6,356,393	4,814,255	46,153	16,894	1.3	285
	TOTAL	69	354	48,017,000	48,014,089	35,289,023	536,688	137,292	1.4	257
2010/11	Eastern	67	348	_	42,106,333	29,020,322	267,919	115,671	1.5	251
	Western	32	117	_	12,156,867	8,738,174	84,469	31,573	1.4	277
	TOTAL	68	386	54,281,000	54,263,200	37,758,496	352,388	147,244	1.4	256
2011/12	Eastern	72	651	_	68,554,578	46,578,426	493,209	214,324	1.5	217
	Western	52	254	_	20,276,074	13,976,679	144,223	56,278	1.5	248
	TOTAL	72	724	88,894,000	88,830,652	60,555,105	637,432	270,602	1.5	224
2012/13	Eastern	67	433	_	45,591,190	32,513,841	281,945	162,824	1.4	200
	Western	48	193	_	20,663,338	14,942,042	183,577	62,665	1.4	238
	TOTAL	70	505	66,350,000	66,254,528	47,455,883	465,522	225,489	1.4	210

Table 2-23.—Page 5 of 5.

		Num	iber of		Number of					rage
Season	Subdistrict	Vessels	Landings	GHL/TAC <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Pots lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>
2013/14	Eastern	69	407	_	41,801,732	32,198,145	302,163	178,344	1.3	181
	Western	32	129	_	12,181,554	9,728,397	102,966	53,270	1.3	183
	TOTAL	70	450	53,983,000	53,983,286	41,926,542	405,129	231,614	1.3	181
2014/15	Eastern	71	513	_	58,964,952	47,828,137	443,832	248,565	1.2	192
	Western	36	103	_	8,976,635	7,201,681	152,809	38,355	1.3	188
	TOTAL	71	543	67,950,000	67,941,587	55,029,818	596,641	286,920	1.2	192
2015/16	Eastern	71	330	_	28,383,141	20,052,815	298,724	165,734	1.4	121
	Western	26	109	_	12,228,305	9,561,714	80,443	51,320	1.3	186
	TOTAL	74	390	40,611,000	40,611,446	29,614,529	379,167	217,054	1.4	136

Note: NA = not available. Also, number of landings in each subdistrict is greater than the total number of landings because a single vessel may fish in both subdistricts in any given landing.

landing.

a Guideline harvest level (GHL), total allowable catch (TAC) beginning in 2005/06.

b Deadloss included.

c In pounds.

d Number of retained crab per pot lift.

e Total harvest includes 30,919 pounds taken from an unidentified statistical area.

Includes 181,457 pounds illegally taken in Russian waters.

Table 2-24.-Bering Sea District snow crab commercial fishery harvest composition by season, 1978/79–2015/16.

_	Avei		F	Percent
Season	Weight <sup>a</sup>	Width <sup>b</sup>	new shell	<102 mm CW
1978/79	1.5	113	83.8	6.3
1979/80	1.6	118	90.2	2.1
1981	1.5	117	77.7	19.2
1982	1.2	109	84.5	31.8
1983 <sup>c</sup>	1.1	NA	78.0	27.1
1984 <sup>c</sup>	1.1	105	82.4	11.7
1985°	1.3	108	73.6	15.0
1986 <sup>c</sup>	1.3	110	71.9	18.7
1987 <sup>c</sup>	1.2	109	83.7	20.8
1988 <sup>c</sup>	1.3	110	76.3	16.4
1989 <sup>c</sup>	1.3	111	85.2	13.8
1990 <sup>c</sup>	1.3	109	97.4	18.8
1991 <sup>c</sup>	1.2	110	99.9	2.0
1992	1.4	112	97.6	10.1
1993	1.4	112	92.5	10.7
1994	1.3	110	93.1	14.0
1995	1.2	109	89.6	21.5
1996	1.2	108	75.8	24.0
1997	1.2	107	96.5	20.9
1998	1.3	111	97.7	9.7
1999	1.3	110	97.5	10.4
2000	1.3	111	95.2	8.6
2001	1.4	111	91.5	7.2
2002	1.3	110	69.0	12.1
2003	1.2	107	83.8	20.6
2004	1.3	110	86.0	10.1
2005	1.4	114	88.1	7.9
2005/06	1.5	117	81.4	1.8
2006/07	1.2	109	88.4	9.2
2007/08	1.3	109	85.9	9.0
2008/09	1.3	110	89.5	9.6
2009/10	1.4	113	95.3	4.8
2010/11	1.4	115	96.9	2.6
2011/12	1.5	115	93.9	3.2
2012/13	1.4	113	90.8	6.1
2013/14	1.3	110	93.4	13.7
2014/15	1.2	110	91.0	10.3
2015/16	1.4	113	90.8	8.2

Note: NA = not available.

a In pounds.
b Carapace width in millimeters.
c Partial district and subdistrict closures, see Table 2-22.
d Crab Rationalization begins.

Table 2-25.—Bering Sea District snow crab commercial fishery economic performance, 1979/80–2015/16.

	Valu	e
Season	Exvessela	Total <sup>b</sup>
1979/80	\$0.21	\$8.26
1981	\$0.27	\$13.63
1982	\$0.83	\$23.46
1983	\$0.38	\$9.43
1984	\$0.30	\$7.80
1985	\$0.01	\$0.65
1986	\$0.55	\$53.13
1987	\$0.79	\$79.73
1988	\$0.82	\$107.27
1989	\$0.77	\$112.70
1990	\$0.66	\$105.58
1991	\$0.49	\$159.34
1992	\$0.53	\$165.88
1993	\$0.74	\$169.59
1994	\$1.42	\$210.15
1995	\$2.43	\$179.87
1996	\$1.33	\$85.60
1997	\$0.79	\$92.58
1998	\$0.55	\$137.12
1999	\$0.88	\$169.34
2000	\$1.84	\$60.61
2001	\$1.53	\$37.95
2002	\$1.48	\$47.32
2003	\$1.83	\$50.57
2004	\$2.05	\$48.57
2005	CF	CF
2005/06	\$0.83	\$30.39
2006/07	CF	CF
2007/08	CF	CF
2008/09	\$1.37	\$79.62
2009/10	\$1.13	\$53.65
2010/11	\$2.14	\$115.37
2011/12	\$1.89	\$166.69
2012/13	\$2.02	\$132.92
2013/14	\$2.15	\$115.11
2014/15	\$1.66	\$111.69
2015/16	\$1.97	\$79.17

*Note:* CF = confidential.

<sup>&</sup>lt;sup>a</sup> Average price per pound.

<sup>&</sup>lt;sup>b</sup> Millions of dollars.

Table 2-26.—Bering Sea District snow crab commercial harvest and effort by week, 2012/13–2015/16.

			2012/	13			
	Nu	mber of		Number of			_
Week ending	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	CPUE <sup>c</sup>
17-Nov-15-Dec	1	CF	CF	CF	CF	CF	CF
29-Dec	3	4	699,680	490,425	3,826	1,427	344
5-Jan	28	34	6,185,216	4,448,582	27,356	16,204	275
12-Jan	27	37	5,131,308	3,758,237	22,876	13,023	289
19-Jan	31	33	5,833,930	4,207,851	34,514	16,922	249
26-Jan	38	51	7,105,091	5,106,881	40,235	26,027	196
2-Feb	39	49	5,984,490	4,322,555	45,880	22,353	193
9-Feb	33	37	4,039,774	2,867,468	31,661	16,673	172
16-Feb	32	45	4,796,909	3,423,140	34,049	17,945	191
23-Feb	27	33	4,722,295	3,239,250	26,601	16,462	197
2-Mar	27	38	3,850,266	2,722,272	23,303	15,165	180
9-Mar	30	44	5,318,361	3,787,438	39,515	14,589	260
16-Mar	24	29	3,818,867	2,768,230	28,375	10,892	254
23-Mar	18	19	2,702,435	1,941,657	27,419	9,252	210
30-Mar	10	13	1,146,119	825,895	13,421	4,485	184
6-Apr	6	7	849,497	621,212	10,836	3,308	188
13-Apr	6	7	1,099,137	798,236	13,646	4,935	162
20-Apr	5	6	782,195	570,327	10,014	4,585	124
27-Apr	3	4	135,840	99,980	2,020	1,699	59
4-May	1	CF	CF	CF	CF	CF	CF
11-May	6	8	1,097,164	756,330	14,417	6,194	122
18-May-1-Jun	1	CF	CF	CF	CF	CF	CF
Total	70	505	66,254,528	47,455,883	465,522	225,489	210
			2013/	14			

Number of Number of Harvest<sup>a,b</sup> Landings Week ending Vessels crab<sup>a</sup> Deadloss<sup>b</sup> Pots lifted **CPUE** 19-Oct-30-Nov 2 CF CF CF **CF** CF CF 7 7-Dec 11 1,591,950 1,210,490 9,702 4,313 281 14-Dec 9 14 1,675,106 1,279,959 7,685 4,828 265 7 21-Dec 9,051 11 1,476,534 1,115,157 4,266 261 28-Dec 6 8 1,328,481 996,958 5,151 3,504 285 25 4-Jan 30 4,059,216 20,943 230 3,120,696 13,574 21 22 3,539,373 18,897 12,043 227 11-Jan 2,732,502 18-Jan 28 36 4,476,992 3,466,445 30,474 17,855 194 25-Jan 29 40 4,648,935 3,608,441 31,779 18,256 198 37 43 45,110 185 1-Feb 5,333,272 4,070,448 21,959 8-Feb 35 43 5,351,678 4,166,683 46,714 22,500 185 35 47 15-Feb 4,685,348 3,645,219 33,788 24,976 146 29 36,658 22-Feb 38 4,406,791 3,423,030 21,807 157 22 30 3,152,562 27,627 15,907 157 1-Mar 2,494,633 19 22 32,987 8-Mar 2,918,339 2,368,457 14,819 160 15-Mar 11 12 1,334,982 1,041,221 18,015 7,628 136 22-Mar 12 16 1,703,674 1,356,737 13,728 11,071 123 5 8 29-Mar 643,470 519,795 5,141 3,428 152 5 5-Apr 5 494,444 393,994 4,358 2,776 142 3 12-Apr 3 359,138 283,106 2,971 2,592 109 3 19-Apr 3 1,173 812 145 154,015 117,490 2 26-Apr-3-May CF CF CF CF CF CF 70 Total 450 53,983,286 41,926,542 405,129 231,614 181

Table 2-26.—Page 2 of 3.

Week endingNumber of VesselsLandingsHarvesta, b Harvesta, bNumber of craba1-Nov-29-Nov2CFCFCF6-Dec12162,373,9391,822,77713-Dec891,384,9151,090,46120-Dec10162,047,3601,623,45027-Dec9111,583,4791,226,17831-Dec991,641,6381,273,0433-Jan14172,219,5021,753,70410-Jan23273,694,4432,922,16117-Jan30335,123,6654,130,72524-Jan39466,314,3035,150,88731-Jan20243,419,5992,828,6077-Feb39485,875,2044,834,685	Deadloss <sup>b</sup> CF 9,226	Pots lifted	_
1-Nov-29-Nov         2         CF         CF         CF           6-Dec         12         16         2,373,939         1,822,777           13-Dec         8         9         1,384,915         1,090,461           20-Dec         10         16         2,047,360         1,623,450           27-Dec         9         11         1,583,479         1,226,178           31-Dec         9         9         1,641,638         1,273,043           3-Jan         14         17         2,219,502         1,753,704           10-Jan         23         27         3,694,443         2,922,161           17-Jan         30         33         5,123,665         4,130,725           24-Jan         39         46         6,314,303         5,150,887           31-Jan         20         24         3,419,599         2,828,607           7-Feb         39         48         5,875,204         4,834,685	CF	Dota lifted	
6-Dec 12 16 2,373,939 1,822,777 13-Dec 8 9 1,384,915 1,090,461 20-Dec 10 16 2,047,360 1,623,450 27-Dec 9 11 1,583,479 1,226,178 31-Dec 9 9 1,641,638 1,273,043 3-Jan 14 17 2,219,502 1,753,704 10-Jan 23 27 3,694,443 2,922,161 17-Jan 30 33 5,123,665 4,130,725 24-Jan 39 46 6,314,303 5,150,887 31-Jan 20 24 3,419,599 2,828,607 7-Feb 39 48 5,875,204 4,834,685		Pois inted	CPUE
13-Dec       8       9       1,384,915       1,090,461         20-Dec       10       16       2,047,360       1,623,450         27-Dec       9       11       1,583,479       1,226,178         31-Dec       9       9       1,641,638       1,273,043         3-Jan       14       17       2,219,502       1,753,704         10-Jan       23       27       3,694,443       2,922,161         17-Jan       30       33       5,123,665       4,130,725         24-Jan       39       46       6,314,303       5,150,887         31-Jan       20       24       3,419,599       2,828,607         7-Feb       39       48       5,875,204       4,834,685	0.226	CF	C
20-Dec     10     16     2,047,360     1,623,450       27-Dec     9     11     1,583,479     1,226,178       31-Dec     9     9     1,641,638     1,273,043       3-Jan     14     17     2,219,502     1,753,704       10-Jan     23     27     3,694,443     2,922,161       17-Jan     30     33     5,123,665     4,130,725       24-Jan     39     46     6,314,303     5,150,887       31-Jan     20     24     3,419,599     2,828,607       7-Feb     39     48     5,875,204     4,834,685	9,220	7,231	252
27-Dec     9     11     1,583,479     1,226,178       31-Dec     9     9     1,641,638     1,273,043       3-Jan     14     17     2,219,502     1,753,704       10-Jan     23     27     3,694,443     2,922,161       17-Jan     30     33     5,123,665     4,130,725       24-Jan     39     46     6,314,303     5,150,887       31-Jan     20     24     3,419,599     2,828,607       7-Feb     39     48     5,875,204     4,834,685	5,235	4,167	262
31-Dec     9     9     1,641,638     1,273,043       3-Jan     14     17     2,219,502     1,753,704       10-Jan     23     27     3,694,443     2,922,161       17-Jan     30     33     5,123,665     4,130,725       24-Jan     39     46     6,314,303     5,150,887       31-Jan     20     24     3,419,599     2,828,607       7-Feb     39     48     5,875,204     4,834,685	12,065	5,470	29
3-Jan 14 17 2,219,502 1,753,704 10-Jan 23 27 3,694,443 2,922,161 17-Jan 30 33 5,123,665 4,130,725 24-Jan 39 46 6,314,303 5,150,887 31-Jan 20 24 3,419,599 2,828,607 7-Feb 39 48 5,875,204 4,834,685	7,779	5,052	243
10-Jan     23     27     3,694,443     2,922,161       17-Jan     30     33     5,123,665     4,130,725       24-Jan     39     46     6,314,303     5,150,887       31-Jan     20     24     3,419,599     2,828,607       7-Feb     39     48     5,875,204     4,834,685	8,572	4,759	268
17-Jan     30     33     5,123,665     4,130,725       24-Jan     39     46     6,314,303     5,150,887       31-Jan     20     24     3,419,599     2,828,607       7-Feb     39     48     5,875,204     4,834,685	14,436	9,900	177
24-Jan     39     46     6,314,303     5,150,887       31-Jan     20     24     3,419,599     2,828,607       7-Feb     39     48     5,875,204     4,834,685	21,722	13,894	210
31-Jan 20 24 3,419,599 2,828,607 7-Feb 39 48 5,875,204 4,834,685	27,986	18,813	220
7-Feb 39 48 5,875,204 4,834,685	44,429	25,615	201
	31,332	13,016	217
	46,311	24,602	197
14-Feb 32 45 4,341,903 3,551,233	31,793	20,489	173
21-Feb 34 41 5,539,617 4,508,601	35,035	22,332	202
28-Feb 31 37 5,072,355 4,060,912	50,376	19,006	214
7-Mar 20 26 3,040,581 2,447,607	22,122	13,174	186
14-Mar 22 27 2,514,822 2,103,767	20,891	14,272	147
21-Mar 15 17 2,518,417 2,068,131	22,774	13,030	159
28-Mar 12 13 1,454,508 1,227,208	19,793	11,226	109
4-Apr 11 12 1,130,658 928,698	11,986	7,769	120
11-Apr 12 13 1,359,201 1,126,718	80,882	8,572	131
18-Apr 9 11 968,029 793,872	12,723	5,355	148
25-Apr 6 8 1,020,974 845,251	16,850	4,064	208
2-May 10 12 1,202,671 1,024,247	14,857	4,951	207
9-May 6 8 757,516 612,212	12,239	3,598	170
16-May 4 487,040 403,939	7,224	2,635	153
23-May 4 5 384,224 312,368	4,941	1,779	176
Total 71 543 67,941,587 55,029,818	596,641	286,920	192
2015/16			
Number of Number of			
Week ending Vessels Landings Harvest <sup>a,b</sup> crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	CPUE
17-Oct–24-Oct 2 CF CF CF	CF	CF	Cl
31-Oct 3 3 75,113 51,809	834	2,310	22
7-Nov 7 8 216,701 169,228	2,160	4,081	4
14-Nov 4 4 2,842 1,875	392	3,168	-
21-Nov 4 4 162,393 123,027	1,539	4,375	28
28-Nov 3 3 203,662 150,121		2 102	69
5-Dec 4 4 2,558 1,470	1,453	2,183	
19-Dec–26-Dec 2 CF CF CF	1,453 403 CF	2,183 3,517 CF	<: CI

3 145 2-Jan 3 384,254 263,251 2,087 1,810 9-Jan 20 2,455,886 20,015 12,836 191 26 3,384,063 16-Jan 21 24 3,196,053 2,341,749 25,518 13,178 178 23-Jan 25 34 4,295,859 3,131,126 26,535 16,584 189 30-Jan 29 38 37,385 22,526 4,809,020 3,601,685 160 25 6-Feb 33 4,027,578 2,881,119 37,878 19,474 148 30 34 3,447,102 40,253 20,481 127 13-Feb 2,592,410 23 20-Feb 31 2,566,528 1,869,261 25,710 13,557 138 27-Feb 26 33 3,255,868 2,414,746 24,742 17,955 134 1,419,637 18,872 10,875 5-Mar 16 18 1,978,944 131 23 2,660,902 22,209 10,439 12-Mar 16 1,951,593 187 -continued-

Table 2-26.—Page 3 of 3.

			2015/16 (co	ntinued)			
	Nu	mber of		Number of			
Week ending	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	$CPUE^{c}$
19-Mar	14	17	1,512,794	1,119,387	10,828	7,172	156
26-Mar	10	12	1,072,405	746,606	10,111	5,979	125
2-Apr	5	6	756,963	551,419	21,743	3,931	140
9-Apr	5	5	547,786	364,636	11,696	4,078	89
16-Apr	6	8	726,273	502,370	12,592	6,158	82
23-Apr	2	3	314,694	220,314	4,340	2,447	90
30-Apr	4	5	333,305	231,353	14,528	1,698	136
7-May	3	3	265,402	182,757	2,648	1,108	165
14-May	2	CF	CF	CF	CF	CF	CF
Total	74	390	40,611,446	29,614,529	379,167	217,054	136

Note: CF = confidential.

a Deadloss included.
b In pounds.
c Number of legal crab per pot lift.

Table 2-27.—Bering Sea District snow crab commercial fishery harvest by statistical area, 2012/13-2015/16.

			2012/	13			
Statistical	Number of		Number of			Avei	age
area	landings <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Pots lifted	CPUE <sup>d</sup>	Weight <sup>c</sup>
EASTERN	SUBDISTRICT	STATISTICAL	L AREAS				
675530	8	19,772	13,155	108	397	33	1.50
675600	38	472,389	325,490	3,976	2,323	140	1.45
675630	16	58,218	41,205	601	385	107	1.41
685530	7	2,106	1,421	8	173	8	1.48
685600	118	8,972,004	6,024,519	54,815	27,111	222	1.49
685630	107	5,764,012	4,013,548	45,668	18,830	213	1.44
705600	11	7,026	5,058	46	673	8	1.39
705630	12	49,191	36,297	1,824	404	90	1.36
715600	12	14,221	10,038	91	193	52	1.42
715630	144	9,059,424	6,656,065	51,435	34,685	192	1.36
715700	65	2,512,164	1,800,272	12,552	10,665	169	1.40
725630	152	9,934,507	7,237,267	52,628	33,020	219	1.37
725700	129	6,227,176	4,528,231	40,871	24,686	183	1.38
725730	55	2,306,541	1,690,147	14,819	8,292	204	1.36
725800	4	37,808	26,899	223	306	88	1.41
Other <sup>e</sup>	_	154,631	104,229	2,280	681	153	1.48
Subtotal	433	45,591,190	32,513,841	281,945	162,824	200	1.40
WESTERN	SUBDISTRICT	Γ STATISTICA	L AREAS				
735630	15	42,383	29,716	375	443	67	1.43
735700	54	1,027,107	742,019	9,124	5,117	145	1.38
735730	101	6,519,750	4,659,328	48,113	19,460	239	1.40
735800	81	3,876,551	2,841,929	36,857	12,081	235	1.36
735830	29	642,091	480,426	8,320	1,951	246	1.34
745800	50	1,731,985	1,257,616	15,798	4,932	255	1.38
745830	72	5,523,521	3,995,202	49,776	12,498	320	1.38
755830	9	257,108	187,594	632	456	411	1.37
765830	3	1,644	1,165	2	187	6	1.41
765900	3	3,755	2,503	13	109	23	1.50
765930	3	9,840	6,561	111	160	41	1.50
766000	3	26,579	17,719	273	203	87	1.50
775830	4	530	382	4	163	2	1.39
775930	5	38,724	28,780	674	300	96	1.35
776000	5	3,044	2,332	41	128	18	1.31
776030	3	445	335	8	42	8	1.33
785930	7	578,388	414,597	7,062	2,438	170	1.40
786000	10	275,489	201,551	4,046	1,245	162	1.37
786030	5	2,062	1,577	34	71	22	1.31
Other	_	102,342	70,710	2,314	681	104	1.45
Subtotal	193	20,663,338	14,942,042	183,577	62,665	238	1.38
Total	505	66,254,528	47,455,883	465,522	225,489	210	1.40

Table 2-27.—Page 2 of 5.

			2013/14	4			
Statistical	Number of		Number of			Avei	rage
area	landings <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Pots lifted	CPUE <sup>d</sup>	Weight <sup>c</sup>
EASTERN	SUBDISTRICT	STATISTICA	L AREAS				
665530	3	1,361	1,053	5	33	32	1.29
665600	7	14,353	10,461	258	3,374	3	1.37
675500	3	105	78	0	25	3	1.35
675530	17	162,927	126,527	977	943	134	1.29
675600	55	2,457,787	1,924,033	13,037	13,570	142	1.28
685530	7	43,834	32,332	361	274	118	1.36
685600	71	2,638,005	2,012,905	16,152	13,143	153	1.31
685630	35	909,032	714,456	4,241	3,454	207	1.27
705600	7	15,213	11,434	52	171	67	1.33
705630	26	739,576	528,566	4,832	3,772	140	1.40
715600	13	62,602	46,843	429	341	137	1.34
715630	165	11,698,342	8,822,913	84,316	45,476	194	1.33
715700	106	4,196,384	3,190,236	31,889	18,082	176	1.32
715730	17	135,639	105,156	1,838	908	116	1.29
725600	6	9,015	6,761	36	41	165	1.33
725630	114	7,497,194	5,751,254	37,296	23,371	246	1.30
725700	138	7,745,522	6,145,707	68,644	34,490	178	1.26
725730	80	3,450,562	2,748,662	37,622	16,070	171	1.26
725800	6	23,326	18,029	175	165	109	1.29
Other <sup>e</sup>		953	739	3	641	1	1.29
Subtotal	407	41,801,732	32,198,145	302,163	178,344	181	1.30
WESTERN	SUBDISTRIC'	Γ STATISTICA	L AREAS				
735630	12	187,176	152,716	1,195	894	171	1.23
735700	56	2,255,708	1,848,285	18,103	10,265	180	1.22
735730	70	3,866,307	3,158,300	26,061	17,514	180	1.22
735800	41	1,992,697	1,617,787	18,369	9,170	176	1.23
735830	6	33,539	27,406	432	251	109	1.22
745800	22	713,584	576,105	6,742	3,429	168	1.24
745830	25	1,087,915	865,374	9,369	4,596	188	1.26
755830	12	1,347,218	955,425	17,271	4,818	198	1.41
Other	_	697,410	526,999	5,424	2,333	226	1.32
Subtotal	129	12,181,554	9,728,397	102,966	53,270	183	1.25
Total	450	53,983,286	41,926,542	405,129	231,614	181	1.29

Table 2-27.—Page 3 of 5.

			2014/1:	5			
Statistical	Number of		Number of				erage
area	landings <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Pots lifted	CPUE <sup>d</sup>	Weight <sup>c</sup>
EASTERN	SUBDISTRICT	STATISTICAL	L AREAS				
665500	3	5,865	4,522	101	124	36	1.30
665530	44	2,188,075	1,658,467	16,704	8,512	195	1.32
665600	46	609,716	468,818	6,250	3,901	120	1.30
665630	5	13,959	11,284	176	168	67	1.24
675500	6	2,715	1,942	14	87	22	1.40
675530	93	3,048,970	2,493,180	16,511	11,903	209	1.22
675600	184	11,058,971	9,048,628	82,121	44,850	202	1.22
675630	70	1,388,558	1,144,580	13,696	9,167	125	1.21
675700	5	4,570	3,620	30	899	4	1.26
685530	65	2,876,392	2,385,360	17,854	10,229	233	1.21
685600	179	8,121,182	6,814,695	53,734	32,822	208	1.19
685630	158	9,847,325	8,223,396	98,626	37,442	220	1.20
705600	3	122	98	1	83	1	1.24
705630	6	862	689	12	128	5	1.25
715600	5	58,457	42,245	355	203	208	1.38
715630	85	3,467,879	2,706,415	28,267	18,966	143	1.28
715700	74	3,030,343	2,385,704	19,790	13,988	171	1.27
715730	3	14,388	11,282	83	78	145	1.28
725630	67	3,782,931	2,898,446	24,810	14,576	199	1.31
725700	120	6,042,549	4,821,251	43,573	26,421	182	1.25
725730	72	3,393,308	2,697,350	21,058	13,895	194	1.26
Othere		7,814	6,165	66	123	50	1.27
Subtotal	513	58,964,951	47,828,137	443,832	248,565	192	1.23
WESTERN	SUBDISTRIC	Γ STATISTICA	L AREAS				
735700	44	1,151,201	917,864	11,750	6,132	150	1.25
735730	66	4,320,444	3,450,949	38,059	15,484	223	1.25
735800	33	1,715,681	1,389,916	25,919	6,954	200	1.23
735830	21	823,178	667,501	9,780	4,191	159	1.23
745800	12	131,290	108,027	1,304	566	191	1.22
745830	13	430,658	340,247	4,106	2,260	151	1.27
Other <sup>f</sup>	_	404,183	327,177	61,891	2,768	118	1.24
Subtotal	103	8,976,635	7,201,681	152,809	38,355	188	1.25
Total	543	67,941,586	55,029,818	596,641	286,920	192	1.23

Table 2-27.—Page 4 of 5.

Statistical	Number of		2015/16 Number of	)		A 270	rago
area	landings <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Pots lifted	CPUE <sup>d</sup>	erage Weight <sup>c</sup>
	UBDISTRICT S			Deadloss	1 ots inted	CIUL	Weight
635530	5	10	7	10	417	<1	1.46
635600	10	41	32	25	3,247	<1	1.40
635630	3	2	2	2	1,031	<1	1.00
645501	4	15	11	13	303	<1	1.33
645530	13	226	175	219	3,616	<1	1.29
645600	14	124	98	100	5,962	<1	1.27
655500	4	171	134	171	1,934	<1	1.28
655530	9	82	65	82	2,618	<1	1.27
655600	10	60	49	37	3,273	<1	1.23
665500	8	199,184	128,376	1,367	1,066	120	1.55
665530	56	3,532,991	2,292,768	34,507	13,358	172	1.54
665600	72	2,709,710	1,740,170	29,648	14,459	120	1.56
665630	13	69,540	44,447	685	1,051	42	1.56
675500	9	37,773	27,109	437	205	132	1.39
675530	44	897,750	612,301	13,619	5,357	114	1.47
675600	100	4,885,504	3,350,172	51,206	22,175	151	1.46
675630	70	3,045,228	2,003,542	29,708	15,299	131	1.52
675700	4	265	170	18	1,582	<1	1.56
685530	9	516,421	384,593	12,153	1,479	260	1.34
685600	41	880,076	634,954	8,777	6,484	98	1.39
685630	70	3,653,508	2,604,336	48,225	18,254	143	1.40
715630	26	663,852	501,844	4,588	3,824	131	1.32
715700	44	1,463,523	1,164,875	11,811	8,675	134	1.26
715730	6	41	29	10	890	<1	1.42
725630	39	965,630	733,894	7,875	5,348	137	1.32
725700	68	3,095,650	2,439,974	27,798	13,978	175	1.27
725730	37	1,756,655	1,382,126	13,577	8,373	165	1.27
Other <sup>e</sup>		9,109	6,562	2,056	1,476	4	1.39
Subtotal	330	28,383,141	20,052,815	298,724	165,734	121	1.42
WESTERN S	SUBDISTRICT S	STATISTICAL	AREAS				
735700	20	530,109	412,147	3,378	2,596	159	1.29
735730	68	4,584,840	3,510,725	29,741	16,784	209	1.31
735800	56	2,772,267	2,153,739	20,658	11,154	193	1.29
735830	17	275,684	218,648	3,414	1,483	147	1.26
745800	40	1,196,081	930,138	7,766	4,184	222	1.29

Table 2-27.—Page 5 of 5.

	2015/16 (continued)										
Statistical	Number of	Number of				Ave	rage				
area	landings <sup>a</sup>	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Pots lifted	$CPUE^d$	Weight <sup>c</sup>				
WESTERN SUBDISTRICT STATISTICAL AREAS											
745830	36	1,335,902	1,059,047	10,516	6,962	152	1.26				
755830	5	275,626	219,676	32	1,958	112	1.25				
Other <sup>f</sup>	-	1,257,796	1,057,594	4,938	6,199	171	1.19				
Subtotal	109	12,228,305	9,561,714	80,443	51,320	186	1.28				
Total	390	40,611,446	29,614,529	379,167	217,054	136	1.37				

*Note*: CF = confidential. Also, number of landings in each subdistrict and district are greater than the subtotal and total number of landings because a single vessel may fish in multiple statistical areas in any given landing.

<sup>&</sup>lt;sup>a</sup> Number of statistical area landings is greater than the total number of landings because a single vessel may fish in several statistical areas.

b Deadloss included.

c In pounds.

Number of legal crab per pot lift.

Combination of statistical areas (11 - 2012/13, 3 - 2013/14, 5 - 2014/15, 17 - 2015/16) from which fewer than 3 vessels made landings from each statistical area.

Combination of statistical areas (8 - 2012/13, 11 - 2013/14, 13 - 2014/15, 5 - 2015/16) from which fewer than 3 vessels made landings from each statistical area.

Table 2-28.—Bering Sea District grooved Tanner crab commercial fishery harvest data, 1992–2015.

	Number of		Number of			Avera	ge	Value	;
Season	vessels	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>	Exvessel <sup>d</sup>	Total <sup>e</sup>
1992	1	CF	CF	CF	CF	CF	CF	CF	CF
1993	6	658,796	342,095	71,000	35,650	1.9	9	\$0.92	\$0.61
1994	4	322,444	165,365	30,585	13,739	2.0	11	\$2.65	\$0.85
1995	8	984,648	461,401	67,329	59,028	2.1	7	\$2.09	\$2.06
1996	3	95,795	46,338	11,120	10,802	2.1	4	\$1.12	\$0.11
1997–1999	0	0	0	0	0	0	0	\$0.00	\$0.00
2000	1	CF	CF	CF	CF	CF	CF	CF	CF
2001	1	CF	CF	CF	CF	CF	CF	CF	CF
2002	0	0	0	0	0	0	0	\$0.00	\$0.00
2003	1	CF	CF	CF	CF	CF	CF	CF	CF
2004	4	CF	CF	CF	CF	CF	CF	CF	CF
2005	1	CF	CF	CF	CF	CF	CF	CF	CF
2006-2015	0	0	0	0	0	0	0	\$0.00	\$0.00
Note: CF = conf  Deadloss inclus In pounds.  Number of leg Average price Millions of do	uded. gal crab per pot lift. per pound.								

Table 2-29.—Bering Sea District triangle Tanner crab commercial fishery harvest data, 1992–2015.

	Number of		Number of			Avera	ige	Value	
Season	vessels	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>	Exvesseld	Total <sup>e</sup>
1992-1994	0	0	0	0	0	0	0	\$0.00	\$0.00
1995	4	40,991	35,236	11,943	21,070	1.2	1	\$1.45	\$0.06
1996	1	CF	CF	CF	CF	CF	CF	CF	CF
1997-1999	0	0	0	0	0	0	0	\$0.00	\$0.00
$2000^{\rm f}$	1	CF	CF	CF	CF	CF	CF	CF	CF
2001 <sup>f</sup>	1	CF	CF	CF	CF	CF	CF	CF	CF
2002	0	0	0	0	0	0	0	\$0.00	\$0.00
2003 <sup>f</sup>	1	CF	CF	CF	CF	CF	CF	CF	CF
2004 <sup>f</sup>	4	CF	CF	CF	CF	CF	CF	CF	CF
2005-2015	0	0	0	0	0	0	0	\$0.00	\$0.00
Note: CF = confide  Deadloss include In pounds.  Number of legal Average price pe Millions of dolla Restricted to inci	ed. crab per pot lift. er pound.	ng grooved Tann	er crab fishery.						

Table 2-30.—Bering Sea District hair crab commercial fishery data, 1979–2015.

	Num	ber of			Number of		Number of	Number of Pots		Average	
Season	Vessels	Landings	$GHL^a$	Harvest <sup>b,c</sup>	crab <sup>b</sup>	Deadloss <sup>c</sup>	Registered	Lifted	Weight <sup>c</sup>	CPUE <sup>d</sup>	
1979	11	16	_	5,213	2,457	0	NA	9,908	2.1	<1	
1980	9	17	_	53,914	25,417	0	NA	14,506	2.1	2	
1980/81	67	192	_	2,439,483	1,127,309	265,369	NA	172,695	2.2	7	
1981/82	48	159	_	932,584	466,560	29,749	NA	117,518	2	4	
1982/83	52	161	_	1,211,420	575,453	122,456	NA	84,346	2.1	7	
1983/84	19	48	_	406,538	200,670	28,062	NA	20,414	2	10	
1984 <sup>e</sup>	7	26	_	396,630	197,209	19,436	NA	22,392	2	9	
1985 <sup>e</sup>	3	9	_	66,042	34,410	593	NA	3,905	2	9	
1986	3	7	_	14,835	7,289	500	NA	4,720	2	2	
1987 <sup>f</sup>	2	CF	_	CF	CF	CF	CF	CF	CF	CF	
1988–1990 <sup>e</sup>	0	0	_	0	0	0	0	0	0	0	
1991 <sup>e</sup>	7	42	_	377,708	441,533	0	NA	44,444	0.9	10	
1992 <sup>e,f</sup>	9	20	_	240,767	203,758	11,495	NA	38,808	1.2	5	
1992 <sup>e,g</sup>	10	47	_	1,198,590	1,127,948	65,674	NA	125,943	1.1	9	
1993 <sup>e,f</sup>	4	5	_	3,038	2,347	0	NA	9,345	1.3	<1	
1993/94 <sup>e,g,h,i</sup>	19	129	3.0	2,331,686	1,936,795	124,596	NA	585,913	1.2	3	
1994 <sup>e,g</sup>	10	55	1.1	1,199,246	897,070	49,275	13,350	287,954	1.3	3	
1995 <sup>e,g</sup>	21	81	1.8	2,059,988	1,485,097	73,882	25,750	441,494	1.4	3	
1996°	19	99	0.9	745,804	485,735	32,495	20,680	410,548	1.5	1	
1997 <sup>e</sup>	16	52	0.8	668,096	420,121	17,522	18,180	211,970	1.6	2	
1998 <sup>e</sup>	12	31	0.4	307,739	188,784	17,392	14,330	128,495	1.6	2	
1999 <sup>e</sup>	8	27	0.3	221,656	139,894	4,677	9,840	92,333	1.6	1	
2000 <sup>e</sup>	3	3	0.3	1,546	1,058	0	3,900	3,300	1.5	<1	
2001-2015	FC	FC	FC	FC	FC	FC	FC	FC	FC	FC	

Deadloss included.

In pounds.

Number of legal crab retained per pot lift.

Permit fishery.

Spring fishery.

Fall fishery.

Fishery opened November 1, 1993 and closed April 20, 1994.

Includes 7 vessels that landed hair crab incidental to Tanner crab.

Table 2-31.—Bering Sea District commercial hair crab fishery economic performance and season dates, 1979–2015.

	Valu	e		Season
Season	Exvessel <sup>a</sup>	Total <sup>b</sup>	Days	Dates
1979	\$0.54	\$0.003	257	04/19-12/31
1980	\$0.75	\$0.04	244	01/01-08/30
1980/81	\$0.80	\$1.70	242	11/01-06/30
1981/82	\$0.55	\$0.50	288	11/01-08/15
1982/83	\$0.65	\$0.70	297	10/08-08/01
1983/84	\$1.20	\$0.50	335	08/01-06/30
1984	\$1.60	\$0.60	184	07/01-12/31
1985	\$1.60	\$0.10	365	01/01-12/31
1986	\$1.15	\$0.20	365	01/01-12/31
1987	CF	CF	365	01/01-12/31
1988–1990	\$0.00	\$0.00	365	01/01-12/31
1991	\$3.08	\$1.20	365	01/01-12/31
1992	\$2.25	\$0.50	32	01/01-06/04
1992	\$2.46	\$2.80	156	10/01-11/01
1993	NA	NA	45	04/01-05/15
1993/94	\$2.42	\$5.30	171	11/01-04/20
1994	\$3.55	\$4.00	41	11/01-12/12
1995	\$2.87	\$5.70	25	11/01-11/26
1996	\$2.65	\$1.90	31	11/01-12/02
1997	\$2.97	\$1.90	25	11/01-11/25
1998	\$2.70	\$0.80	16	10/08-10/23
1999	\$3.20	\$0.70	37	10/30-12/07
2000	\$3.84	\$0.005	7	10/30-11/05
2001-2015	FC	FC	FC	FC

*Note:* CF = confidential, NA = not available, FC = fishery closed.

<sup>&</sup>lt;sup>a</sup> Average price per pound.

<sup>&</sup>lt;sup>b</sup> Millions of dollars.

Table 2-32.-Bering Sea District commercial octopus incidental harvest in groundfish fisheries, 1995-2015.

		State water	rs			State and fed	eral waters	
Season	Vessels	Landings	Whole pounds <sup>a</sup>		Landings	Whole pounds <sup>a</sup>	At-sea discards	Exvessel value <sup>b</sup>
1995°	5	12	2,252	49	135	17,554	5,587	\$0.14
1996	6	10	1,195	63	191	26,343	21,144	\$0.33
1997	3	3	59	44	92	12,202	5,205	\$0.20
1998	4	8	673	47	81	8,204	5,624	\$0.03
1999	2	CF	CF	22	56	7,002	6,593	\$0.00
2000	4	6	551	78	272	39,915	23,611	\$0.03
2001	2	CF	CF	62	158	49,641	41,215	\$0.03
2002	2	CF	CF	68	187	56,078	16,628	\$0.05
2003	4	7	4,064	80	237	122,443	27,780	\$0.63
2004	4	6	4,615	92	279	88,534	25,527	\$0.39
2005	5	19	4,033	80	271	156,381	12,583	\$0.65
2006	6	8	1,004	88	304	93,624	5,310	\$0.63
2007	4	6	1,946	110	375	102,128	37,436	\$0.45
2008	5	7	7,177	82	252	66,742	14,071	\$0.47
2009	1	CF	CF	67	144	20,107	7,858	\$0.30
2010	1	CF	CF	81	201	67,187	35,477	\$0.24
2011	2	CF	CF	124	470	193,220	158,040	\$4.20
2012	0	0	0	104	312	51,523	36,780	\$2.50
2013	2	CF	CF	100	310	57,838	40,453	\$0.00
$2014^{d}$	0	0	0	121	403	60,445	29,697	\$18.87
2015	1	CF	CF	131	519	81,685	49,719	\$6.92

*Note*: CF = confidential.

Includes discards.

Includes discards.

Average price per pound, based on landed weight.

The 1995 directed fishery data is confidential, and is not included in this table.

From 2014 on, octopus is reported based on date of landing rather than date fish tickets were entered.

Table 2-33.—Bering Sea District commercial snail harvest and economic performance data, 1992–2015.

	Number of		Number o	of pots			Pounds		Value	e
Season	Vessels	Landings	Registered	Lifted	Harvest <sup>a,b</sup>	Deadloss <sup>b</sup>	per pot <sup>d</sup>	CPUE <sup>c</sup>	Exvessele	Total <sup>f</sup>
1992	CF	CF	CF	CF	CF	CF	CF	CF	CF	CF
1993	4	10	13,800	44,686	312,876	NA	7	25	\$0.40	\$0.13
1994	4	42	14,850	279,349	2,027,328	62,571	7.3	21	\$0.34	\$0.67
1995	4	38	18,800	262,096	2,352,825	22,371	9	28	\$0.30	\$0.70
1996	5	67	31,300	741,326	3,572,992	62,494	4.8	16	\$0.30	\$1.10
1997	3	17	14,500	191,893	932,048	77,131	4.9	16	\$0.36	\$0.31
1998–2015	0	0	0	0	0	0	0	0	\$0.00	\$0.00
Note: CF = con  a Deadloss inc b In pounds. c Number of si d Whole weigh e Average pric f Millions of d	luded. nails per pot lift nt. e per pound.									

Table 2-34.—North Peninsula District Dungeness crab commercial fishery data, 1992–2015.

-	Number of			Number of			Aver	age	Valu	Value	
Season	Vessels	Landings	Harvest <sup>a,b</sup>	crab <sup>a</sup>	Deadloss <sup>b</sup>	Pots lifted	Weight <sup>b</sup>	CPUE <sup>c</sup>	Exvessel <sup>d</sup>	Total <sup>e</sup>	
1992	0	0	0	0	0	0	0	0	\$0.00	\$0.00	
1993	2	CF	CF	CF	CF	CF	CF	CF	CF	CF	
1994	2	CF	CF	CF	CF	CF	CF	CF	CF	CF	
1995	6	18	134,407	63,732	367	34,499	2.1	4	\$1.32	\$0.18	
1996	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	
1997	2	CF	CF	CF	CF	CF	CF	CF	CF	CF	
1998	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	
1999	0	0	0	0	0	0	0	0	\$0.00	\$0.00	
2000	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	
2001	0	0	0	0	0	0	0	0	\$0.00	\$0.00	
2002	2	CF	CF	CF	CF	CF	CF	CF	CF	CF	
2003	0	0	0	0	0	0	0	0	\$0.00	\$0.00	
2004	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	
2005	0	0	0	0	0	0	0	0	\$0.00	\$0.00	
2006	0	0	0	0	0	0	0	0	\$0.00	\$0.00	
2007	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	
2008	0	0	0	0	0	0	0	0	\$0.00	\$0.00	
2009	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	
2010	5	24	795,392	391,849	10,414	60,985	2.0	6	\$1.73	\$1.36	
2011	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	
2012	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	
2013	0	0	0	0	0	0	0	0	\$0.00	\$0.00	
2014	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	
2015	1	CF	CF	CF	CF	CF	CF	CF	CF	CF	

*Note:* CF = confidential.

<sup>&</sup>lt;sup>a</sup> Deadloss included.

b In pounds.

c Number of retained crab per pot lift.
d Average price per pound.

e Millions of dollars.

Table 2-35.—Pot limits for Bering Sea and Aleutian Islands king and Tanner crab commercial fisheries, 2012/13–2015/16.

Fishery	Vessel length	Pot limit
St. Matthew Island Section golden king crab	≤ 125'	60
	> 125'	75
Pribilof District red/blue king crab	All vessels	250
Pribilof District golden king crab	≤ 125'	40
	> 125'	50
Eastern Aleutian Tanner crab	_	$300 / 50^{a}$
Petrel Bank red king crab	All vessels	250

<sup>&</sup>lt;sup>a</sup> Pot limit is for entire fishery and is divided among participating vessels, with a maximum of 50 pots per vessel.

Table 2-36.—Number of Bering Sea and Aleutian Islands buoy tags printed and issued by fishery, 2012/13–2015/16.

	Tag sets issued		Total sets	Tags is	sued	Tags	Total tags
Fishery	≤ 125' <sup>a</sup>	> 125' a	issued	≤ 125′ <sup>a</sup>	> 125' <sup>a</sup>	replaced	issued
Eastern Aleutian District Tanner <sup>b</sup>	1	0	1	20	-	0	20
St. Matthew Section Blue King Crab	13	4	17	2,011	720	0	2,731
Total	14	4	18	2,031	720	0	2,751

		2013/1	-T				
	Tag sets issued		Total sets	Tags is	ssued	Tags	Total tags
Fishery	≤ 125′ <sup>a</sup>	> 125' a	issued	≤ 125′ <sup>a</sup>	> 125' a	replaced	issued
Eastern Aleutian District Tanner <sup>b</sup>	6	0	6	196	-	0	196
Pribilof Golden King Crab	1	0	1	40	-	0	40
Total	7	0	7	236	0	0	236

2014/15									
	Tag sets	issued	Total sets	Tags is	ssued	Tags	Total tags		
Fishery	≤ 125′ <sup>a</sup>	> 125' a	issued	≤ 125′ <sup>a</sup>	> 125' a	replaced	issued		
St. Matthew Section Blue King Crab	3	1	4	525	140	0	665		
Pribilof Golden King Crab	1	0	1	40	-	0	40		
Total	4	1	5	565	140	0	705		

2015/16									
	Tag sets	issued	Total sets		Tags is	sued	Tags	Total tags	
Fishery	≤ 125′ <sup>a</sup>	> 125' a	issued		≤ 125′ <sup>a</sup>	> 125' a	replaced	issued	
Eastern Aleutian District Tanner b,c	1	0		1	50	-	0	50	
Total	1	0		1	50	0	0	50	

Note: All data compiled for table was done to the best of our abilities due to missing information.

a Overall vessel length.
b Season follows calendar year so each season listed is referring to start of season (e.g., 2012/13 = 2012).
c Both the 2015 and 2016 seasons had the same number of tag registrations and are shown once under 2015/16

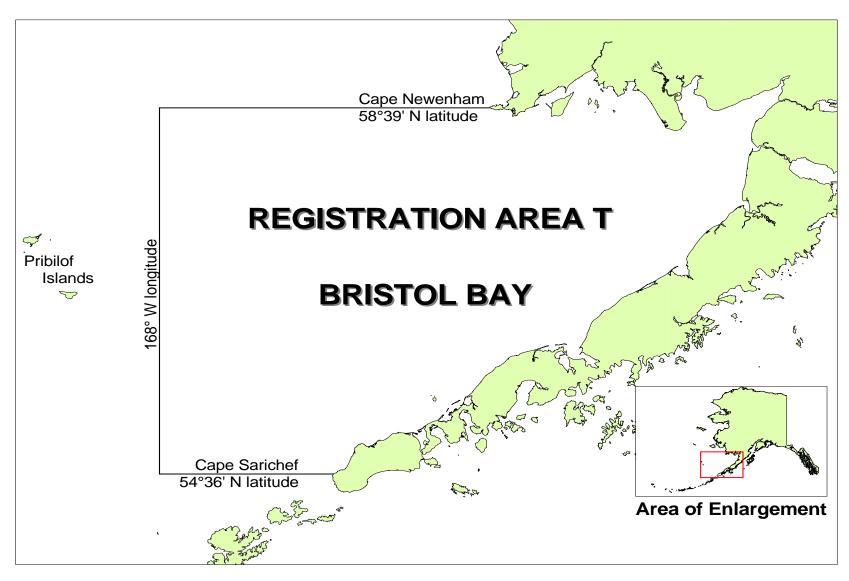


Figure 2-1.—Bristol Bay king crab commercial fishery Registration Area T.

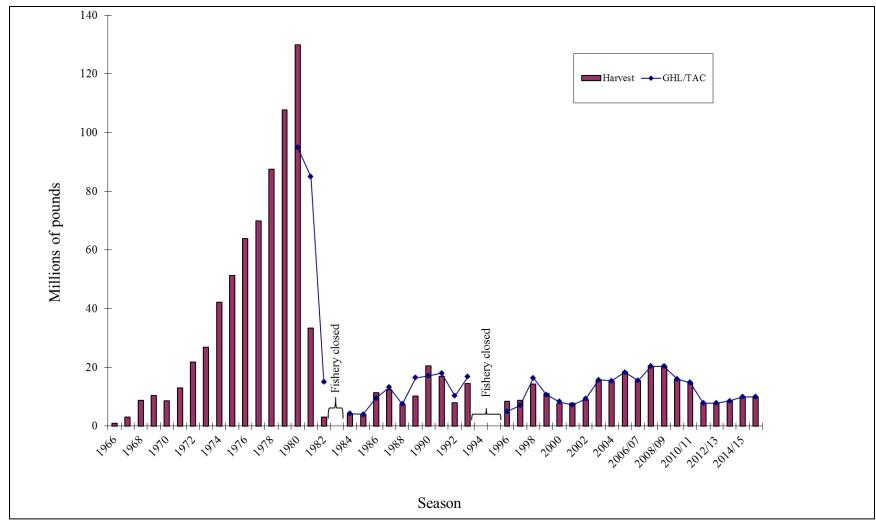


Figure 2-2.—Bristol Bay red king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest and guideline harvest level/total allowable catch (GHL/TAC), 1966–2015/16.

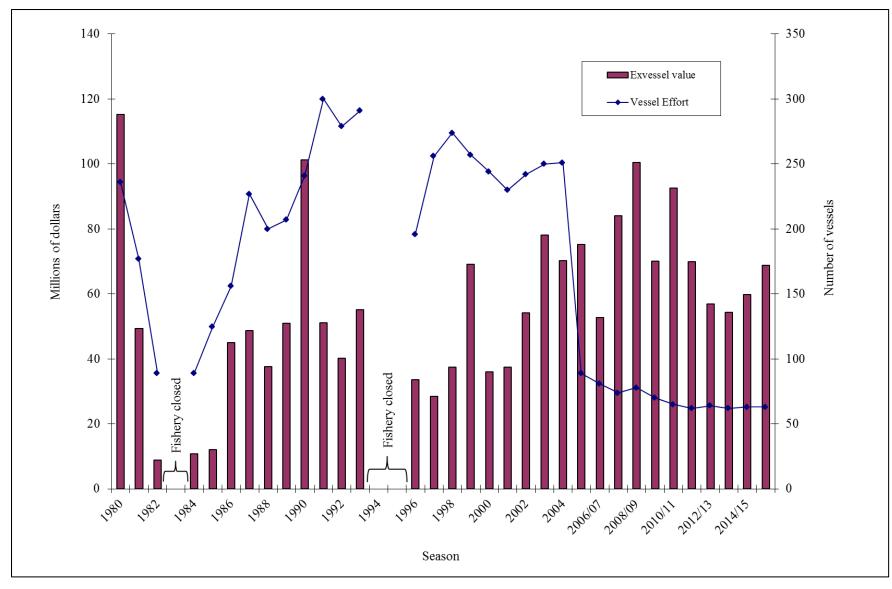


Figure 2-3.—Bristol Bay red king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery exvessel value and vessel effort, 1980–2015/16.

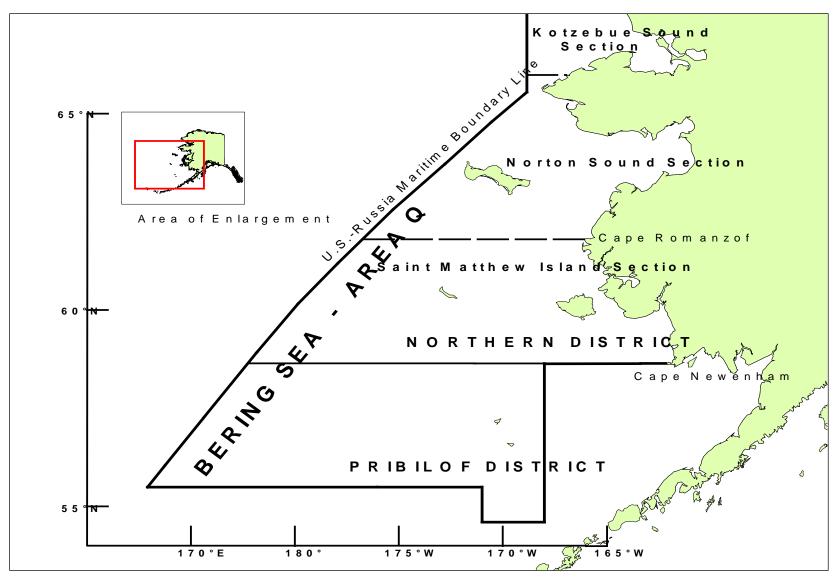


Figure 2-4.—Bering Sea king crab commercial fishery Registration Area Q.

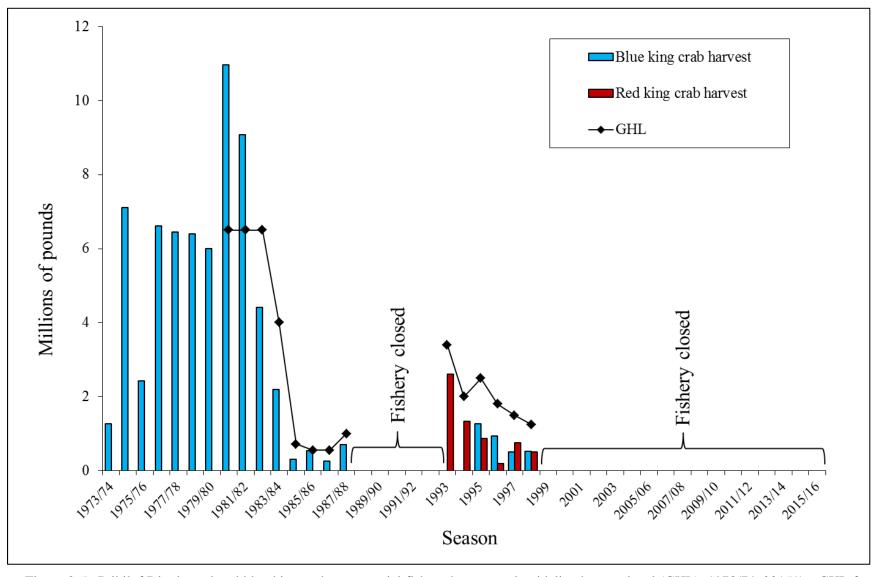


Figure 2-5.—Pribilof District red and blue king crab commercial fishery harvest and guideline harvest level (GHL), 1973/74–2015/16. GHL for red and blue king crab is combined from 1987/88–1995.

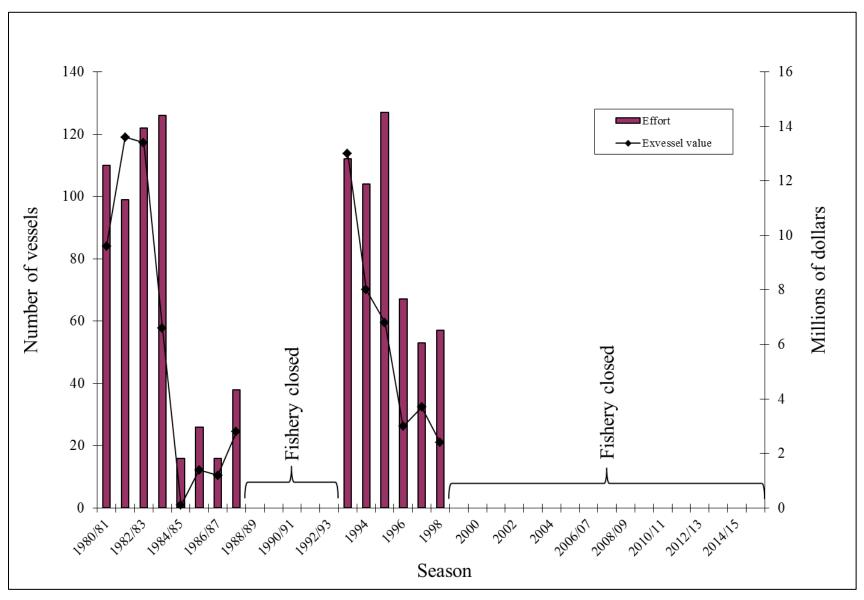


Figure 2-6.—Pribilof District red and blue king crab commercial fishery effort and exvessel value, 1980/81–2015/16.

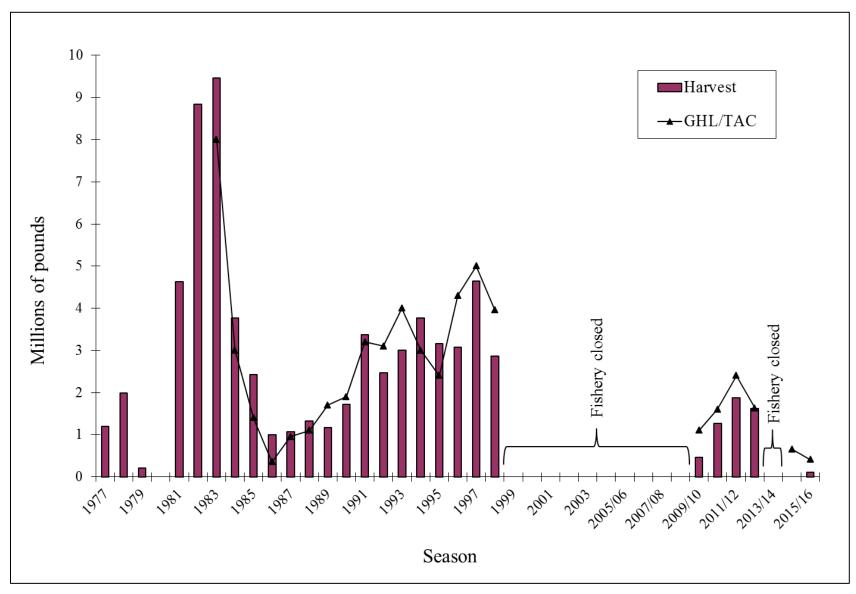


Figure 2-7.—Saint Matthew Island Section blue king crab commercial fishery harvest and guideline harvest level (GHL), 1977–2015/16.

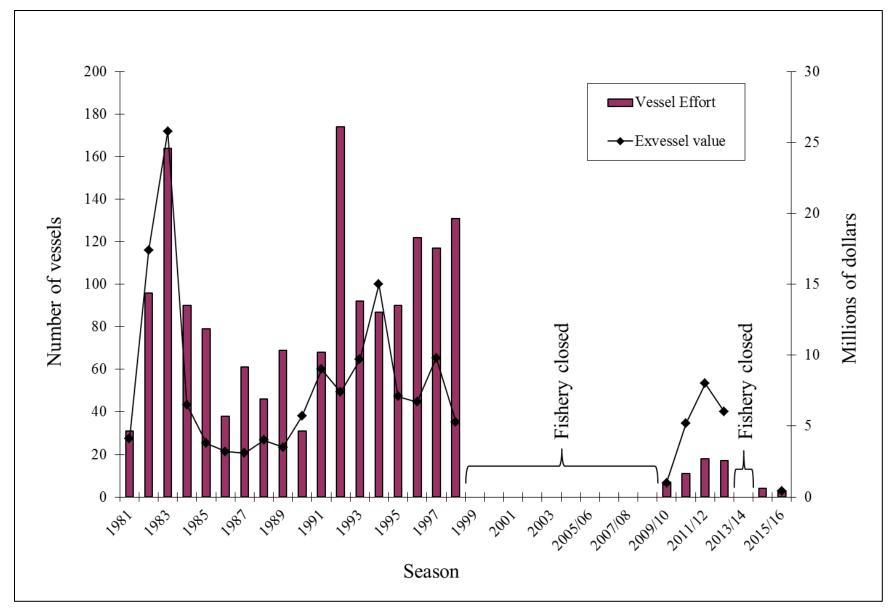


Figure 2-8.—Saint Matthew Island Section blue king crab commercial fishery effort and exvessel value, 1981–2015/16.

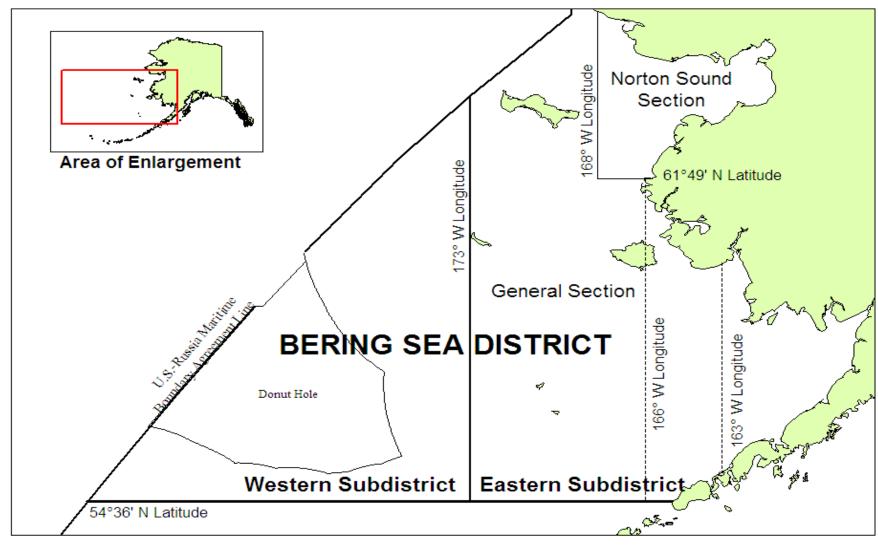


Figure 2-9.—Bering Sea District Tanner crab commercial fishery Registration Area J including subdistricts and sections.

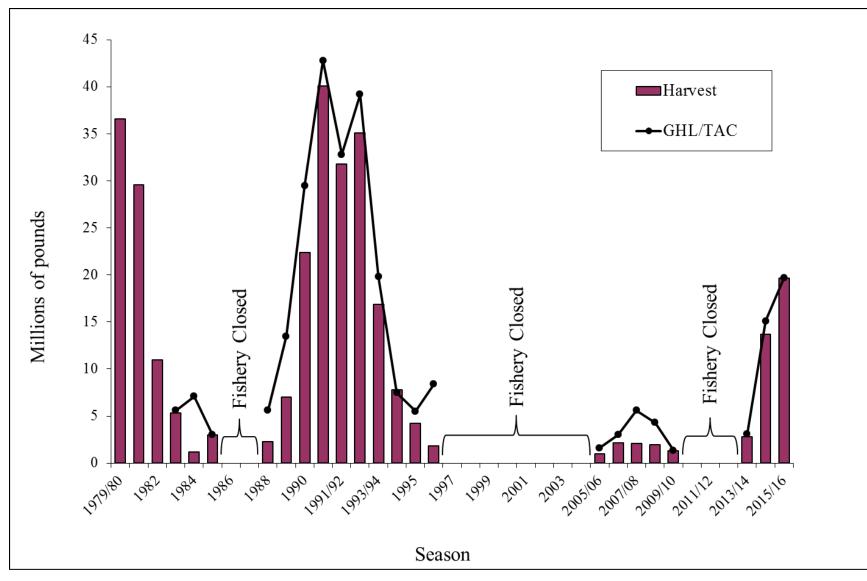


Figure 2-10.—Bering Sea District Tanner crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest and guideline harvest level/total allowable catch (GHL/TAC), 1979/80–2015/16.

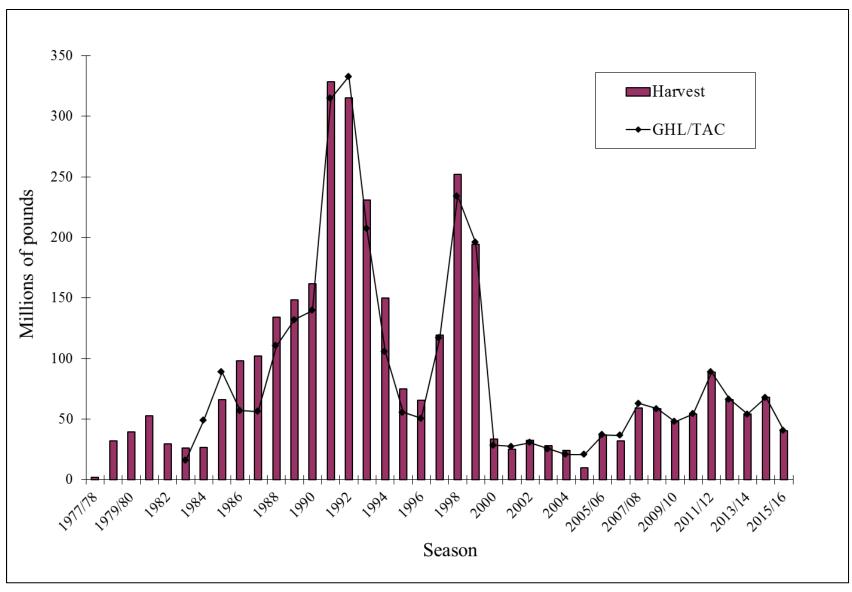


Figure 2-11.—Bering Sea District snow crab commercial fishery harvest and guideline harvest level/total allowable catch (GHL/TAC), 1977/78–2015/16.

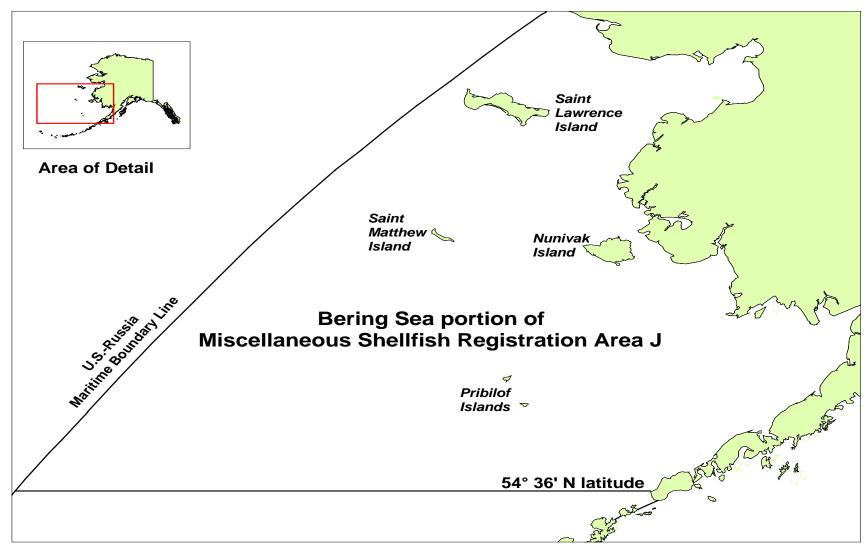


Figure 2-12.—Bering Sea portion of miscellaneous shellfish Registration Area J.

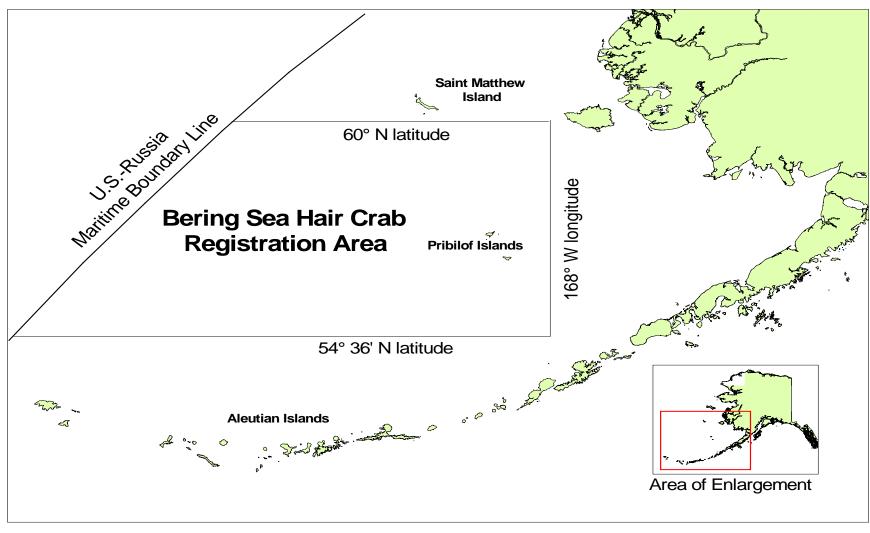


Figure 2-13.—Bering Sea hair crab fishing area of miscellaneous shellfish Registration Area J.

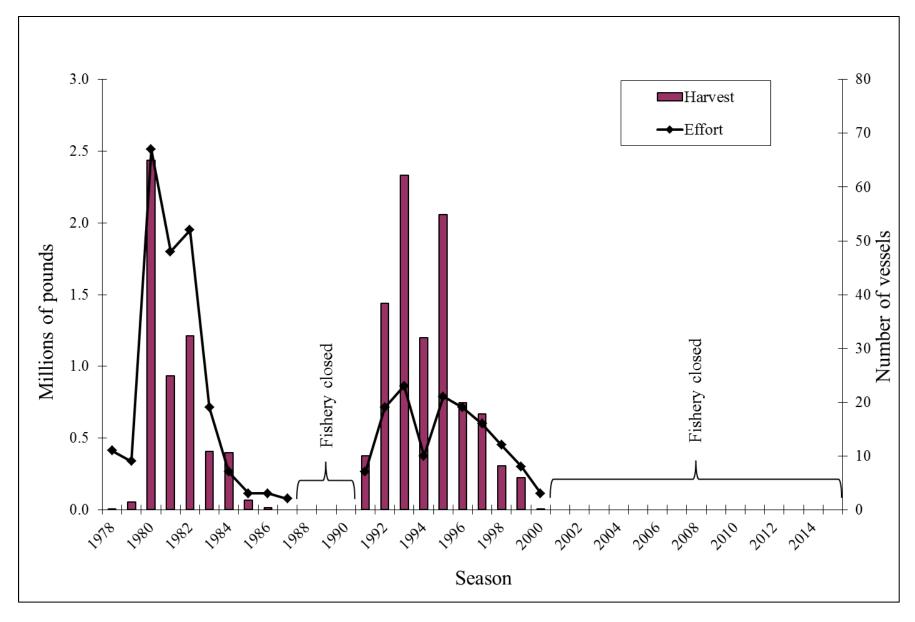


Figure 2-14.—Bering Sea hair crab commercial fishery harvest and effort, 1978–2015.

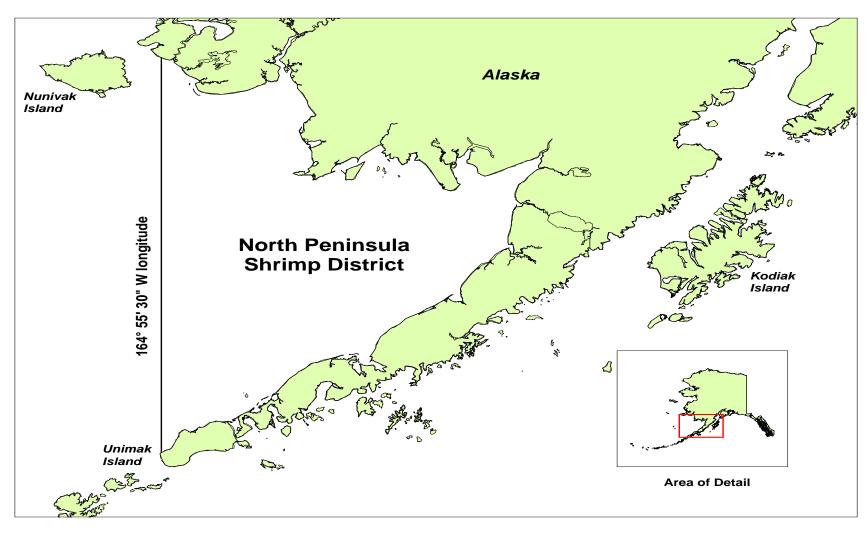


Figure 2-15.—North Peninsula District of shrimp Registration Area J.

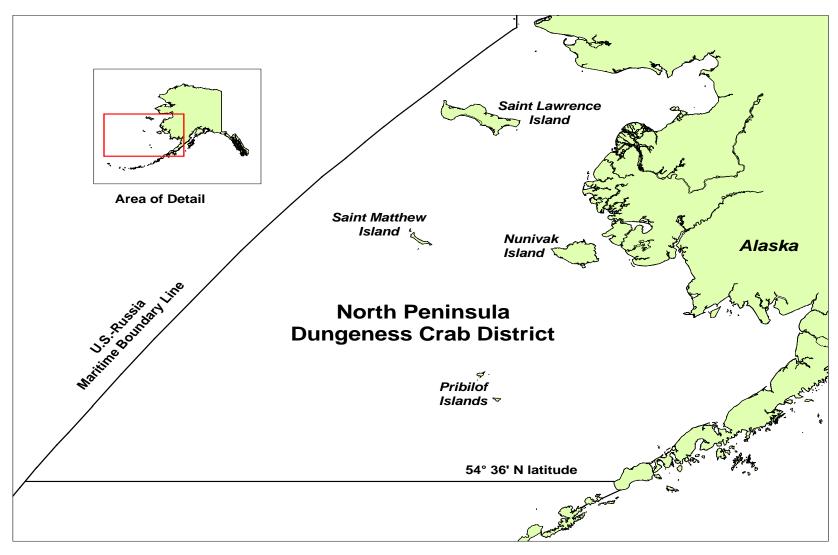


Figure 2-16.-North Peninsula District of Dungeness crab Registration Area J.

# BERING SEA-ALEUTIAN ISLANDS COMMUNITY DEVELOPMENT QUOTA AND ADAK COMMUNITY ALLOCATION SEHLLFISH FISHERIES

#### **DESCRIPTION OF AREA**

Bering Sea Community Development Quota (CDQ) crab fisheries occur within the territorial waters of Alaska (0–3 nautical miles) and the Exclusive Economic Zone (3–200 nautical miles from shore) north of Cape Sarichef (54°36′N lat), south of Cape Prince of Wales (65°49′N lat), and east of the U.S.-Russia Maritime Boundary Line, including waters of Bristol Bay. For CDQ crab fisheries managed by the Alaska Department of Fish and Game (ADF&G) Dutch Harbor office, Cape Romanzof (61°49′N lat) is the northern boundary (Figure 3-1).

Aleutian Islands CDQ and Adak Community Allocation (ACA) crab fisheries encompass territorial waters of Alaska (0–3 nautical miles) and waters of the Exclusive Economic Zone (3–200 nautical miles; Figure 3-2). The CDQ crab fisheries eastern boundary is the longitude of Scotch Cap Light (164°44′W long), the northern boundary from Cape Sarichef (54°36′N lat) to 171°W long, then north to 55°30′N lat, and the western boundary the U.S.-Russia Maritime Boundary Agreement Line. The ACA fishery occurs west of 174°W long.

### **CDQ PROGRAM BACKGROUND**

The North Pacific Fishery Management Council (NPFMC) established the CDQ Program in 1992 for walleye pollock *Theragra chalcogramma* and was later expanded to sablefish *Anoplopoma fimbria* and Pacific halibut *Hippoglossus stenolepis*. In 1995 the NPFMC included certain Bering Sea king and Tanner crab stocks in the CDQ Program. The Alaska Board of Fisheries (BOF) adopted regulations for Bering Sea/Aleutian Islands (BSAI) king and Tanner crab CDQ fisheries in 1997 and the first CDQ crab fisheries took place in 1998. With the implementation of Crab Rationalization in 2005, the BOF adopted regulations to implement changes to the CDQ management program (5 AAC 39.690), including the addition of certain Aleutian Islands crab fisheries to the CDQ crab program. ADF&G manages the CDQ crab fisheries with federal oversight.

Sixty-five western Alaska coastal communities participate in the CDQ Program. These communities are aligned into 6 CDQ organizations, collectively referred to as CDQ groups. The groups are: Aleutian Pribilof Island Community Development Association (APICDA), Bristol Bay Economic Development Corporation (BBEDC), Central Bering Sea Fishermen's Association (CBSFA), Coastal Villages Region Fund (CVRF), Norton Sound Economic Development Corporation (NSEDC), and Yukon Delta Fisheries Development Association (YDFDA).

CDQ groups are nonprofit entities, which may have for-profit subsidiaries. Use of CDQ funds vary widely between groups, but often include fishing-related investments, scholarships, training, employment services, and other projects which are intended to benefit the communities and

regions the CDQ groups represent. Some groups purchase equity in fishing vessels that harvest crab in both CDQ and individual fishing quota (IFQ) fisheries.

Each of the 6 CDQ groups participates in at least 1 CDQ fishery every year, although each group does not necessarily have an allocation for each fishery (Table 3-1). CDQ groups receive allocations for the following BSAI crab fisheries: Norton Sound red king crab, Bristol Bay red king crab, Pribilof red and blue king crab, St. Matthew Island Section blue king crab, Bering Sea snow crab, eastern and western Bering Sea Tanner crab, Aleutian Islands golden king crab (east of 174°W long), and Aleutian Islands red king crab (west of 179°W long; Table 3-1). Groups may choose not to participate or transfer their allocation to another group. To be eligible as a CDQ crab fishery, the crab stock must have an established total allowable catch (TAC) and be managed under the federal BSAI crab fishery management plan.

From 1998–2004 the CDQ allocation as specified in the BSAI crab fishery management plan was based on a fixed percentage of the total CDQ and non-CDQ harvest each year; however, since implementation of crab rationalization (CR), CDQ allocations have been a fixed percentage of the TAC. The annual CDQ allocations for crab were phased in over a 3-year period: 3.5% of the total fishery harvest for 1998, 5.0% for 1999, and 7.5% for 2000–2005. The percentage of the TAC allocated to CDQ groups increased to 10% beginning in the 2005/06 season with the implementation of the CR program. In March 2006, the U.S. Secretary of Commerce authorized fixed percentages to each CDQ group for each fishery. Individual CDQ group allocations undergo decennial review by the State of Alaska beginning in 2012 and every 10 years thereafter (DOC 2007).

This decennial review evaluates each group's performance based on the following Magnuson-Stevens Fishery Conservation and Management Act criteria: demographic changes in member villages including population change, poverty level, and economic development; the CDQ entity's financial performance, including fishery and non-fishery investments; workforce development, educational scholarships and training supported by the entity; and lastly, the group's community development plan is evaluated based on the achievement of their goals (DOC 2007). Results of these reviews were made available in 2013.

This report addresses all CDQ crab fisheries histories and allocations except the Norton Sound CDQ red king crab fishery, which is managed by ADF&G's Arctic-Yukon-Kuskokwim Region.

#### ACA PROGRAM BACKGROUND

In 2005, in conjunction with the CR program, the BOF adopted regulations for an ACA Western Aleutian Islands golden king crab fishery. The program was established to benefit the community of Adak, who created a group called the Adak Community Development Corporation (ACDC). ACDC is a nonprofit entity that represents the community of Adak and has a board of directors elected by the residents of Adak. The ACA crab allocation is not a CDQ fishery, as Adak is not a CDQ community. ACDC must submit a comprehensive plan to the Alaska Department of Commerce, Community, and Economic Development on the intended use of the ACA funds derived from harvesting the ACA golden king crab. The funds are intended for fisheries-related purposes and other projects to benefit the community of Adak.

The ACA is set at 10% of the TAC of the western Aleutian Islands (west of 174°W long) golden king crab fishery (Table 3-1). The fishery opened for the first time in August 2005.

#### **FISHERY HISTORY**

CDQ groups are required to submit preseason fishery harvesting plans to ADF&G prior to each CDQ crab fishery. Fishery plans include information such as participating vessels and their contact information, intended delivery locations, and the group's allocation including quota transfers to other CDQ entities.

Prior to 2000, permits for CDQ fisheries were issued only to vessels fishing for the groups. Before vessel operators were allowed to register for a CDQ fishery, ADF&G generated an estimate of the fishery harvest in order to calculate an estimated allocation for each CDQ group. However, ADF&G changed permitting procedures after several CDQ groups exceeded their allocation in the snow crab fishery in 1998 and 1999. Because vessel permits were issued before the actual harvest limit for the CDQ fishery was known, the permit did not reference the CDQ group's harvest allocation. Permits were henceforth issued to both vessels and CDQ groups. Prior to the CR, CDQ group permits initially stated the estimated allocation for the group. Once the final general fishery harvest was known, an addendum was made to each group permit stating the actual pounds allocated to the group. Under CR the final TAC for CDQ fisheries is established before the season begins so group permits are issued with the known allocation.

CDQ regulations before CRauthorized CDQ harvest prior to the general fishery; however, in 1998 the department did not allow CDQ harvest before the general fishery. A full understanding of the impact of new CDQ fisheries and adequate staff to handle the increased management was needed before allowing CDQ fisheries to occur prior to the general fisheries. National Marine Fisheries Service (NMFS) determined that the federal CDQ regulatory language did not allow for harvest of the allocation outside of the calendar year to which it was assigned. The federal CDQ regulations were revised, but not in time for harvest of the 1999 allocation of snow crab to occur in the fall of 1998.

The BOF addressed an agenda change request at the March 1999 meeting that would prohibit CDQ harvest prior to the general fishery. Due to concerns that CDQ crabs on the market prior to the general fishery would be detrimental to the value of the general fishery, the BOF directed stakeholders to develop a plan for managing CDQ fisheries preseason. A compromise was adopted into regulation. The new regulation would allow a CDQ king or Tanner crab fishery prior to the general fishery only when the GHL was 50 million pounds or more, and a maximum of 30% of the CDQ allocation was allowed to be harvested preseason. However, no CDQ fishing occurred before the general fishery.

With the implementation of the CR program in 2005/06, there was no longer a temporal difference in IFQ and CDQ crab fisheries. Almost all CDQ harvest is taken concurrently with IFQ harvest. Fishermen generally use the same gear to harvest IFQ and CDQ crab; however, fisheries with pot limits are limited to a single fishery complement of pots.

Observer coverage requirements have fluctuated over the history of the CDQ crab fisheries. During the first year of CDQ crab fishing operations, onboard observers were required during all fishing operations. In 1999, observer coverage was reduced in the CDQ snow crab fishery from 1 observer per vessel to 1 per CDQ group, then in 2000 observer coverage was increased from 1 observer per group to 2 per group. In the 2001 CDQ Bristol Bay red king crab fishery, observer coverage requirements were reduced to 1 per group. Because CDQ and IFQ crab are harvested concurrently under CR, observer coverage for CDQ vessels has been incorporated in the overall fleet coverage and is based on the overall number of vessels registered preseason to participate in

the IFQ and CDQ crab fisheries. During the Bristol Bay red king crab fishery, 20% of vessels have observer coverage for 100% of their fishing time. For Bering Sea snow crab fishery, 30% of vessels have observer coverage for 100% of their fishing time. During the Bering Sea Tanner crab fishery, 30–100% of the vessels are required to have observer coverage for 100% of their fishing time. Each vessel fishing for Aleutian Islands golden king crab is required to carry an observer for 50% of their harvest in each of 3 trimesters (August 1–October 31, November 1–January 31, and February 1–April 30). All remaining CDQ fisheries require 100% observer coverage.

In 2006, the Magnuson-Stevens Fishery Conservation and Management Act was amended to allow voluntary quota transfers among eligible CDQ groups to cover harvest exceeding a group allocation after harvesting has occurred. In order to comply with the Magnuson-Stevens Fishery Conservation and Management Act, the BOF adopted a new regulation in March 2008 allowing a CDQ group to transfer quota to another CDQ group after crab has been harvested (5 AAC 39.690(e)(6)(D)). All crab transfers must be completed by June 30 of the current allocation year. Prior to this regulation, all proceeds from the overage were surrendered to the State of Alaska if a CDQ group went over their allocation. In the 2009/10 season, NMFS began allowing transfers of IFQ quota. This same year, 1 CDQ group transferred their overage postseason to IFQ quota to avoid exceeding their allocation.

During the March 2008 BOF meeting, pot limits were repealed in the Bristol Bay red king crab, Bering Sea Tanner crab, and Bering Sea snow crab fisheries. Pot limits remain in effect for the Aleutian Islands red king crab, and Pribilof red and blue king crab CDQ fisheries.

The BOF also adopted regulations during 2008 prohibiting fishermen from participating simultaneously in the Bering Sea snow crab and Western Bering Sea Tanner crab fisheries or the Bristol Bay red king crab and Eastern Bering Sea Tanner crab fisheries. New regulations allow vessels to retain Bering Sea snow crab up to 5% of the weight of the Bering Sea Tanner crab on board the vessel, or Bering Sea Tanner crab up to 5% of the weight of the Bering Sea snow crab or Bristol Bay red king crab on board the vessel. As a result, CDQ fishermen are no longer able to utilize gear configured for snow crab and Tanner crab at the same time.

The historical and current CDQ and ACA fisheries harvest are further described in the *Aleutian Islands Annual Management Report* as well as the *Bering Sea Annual Management Report*.

## **REFERENCES CITED**

DOC (U.S. Department of Commerce). 2007. Magnuson-Stevens Fishery Conservation and Management Act as amended by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (P.L. 109-479). NOAA. May 2007 printing.

# **TABLES AND FIGURES**

Table 3-1.—The 2003–2015/16 Community Development Quota (CDQ) and Adak Community Allocation (ACA) percent allocation by crab fishery to each group.

	Percent allocation by group <sup>a</sup>						
Fishery	APICDA	BBEDC	CBSFA	CVRF	NSEDC	YDFDA	ACDC
Bristol Bay Red King Crab	17	19	10	18	18	18	0
Pribilof Red & Blue King Crab	0	0	100	0	0	0	0
St. Matthew Blue King Crab	50	12	0	12	14	12	0
Norton Sound Red King Crab	0	0	0	0	50	50	0
Eastern Bering Sea Tanner Crab	10	19	19	17	18	17	0
Western Bering Sea Tanner Crab	10	19	19	17	18	17	0
Bering Sea Snow Crab	8	20	20	17	18	17	0
Aleutian Islands Red King Crab (west of 179°W long) <sup>b</sup>	8	18	21	18	21	14	0
Eastern Aleutian Islands Golden King Crab (east of 174°W long) <sup>b</sup>	8	18	21	18	21	14	0
Western Aleutian Islands Golden King Crab (west of 174°W long)	0	0	0	0	0	0	100

<sup>&</sup>lt;sup>a</sup> APICDA (Aleutian Pribilof Island Community Development Association).

BBEDC (Bristol Bay Economic Development Corporation).

CBSFA (Central Bering Sea Fishermen's Association).

CVRF (Coastal Villages Region Fund).

NSEDC (Norton Sound Economic Development Corporation).

YDFDA (Yukon Delta Fisheries Development Association).

ACDC (Adak Community Development Corporation).

Aleutian Islands red king crab west of 179°W long and Eastern Aleutian Islands golden king crab east of 174°W long were not part of the CDQ program until the initiation of Crab Rationalization in the 2005/06 season.

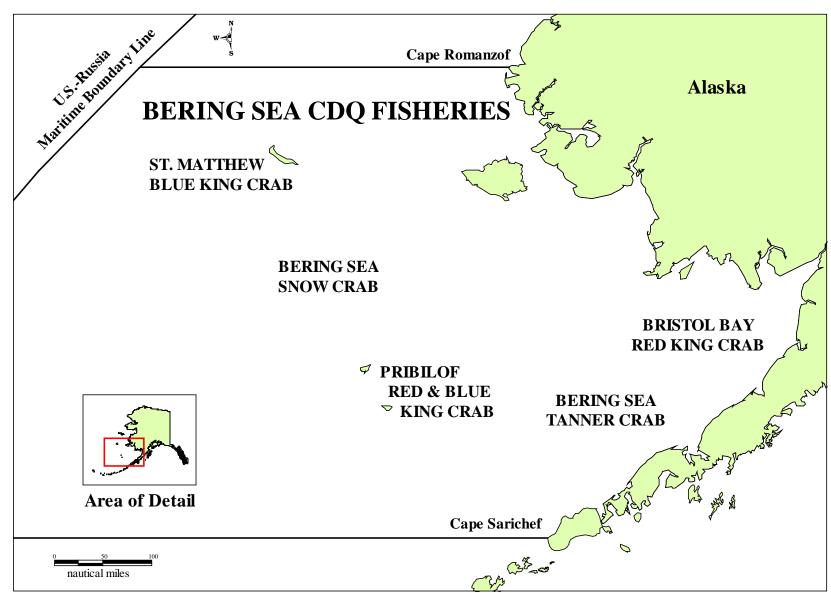


Figure 3-1.—Bering Sea Community Development Quota (CDQ) Program crab fisheries managed by ADF&G, Westward Region.

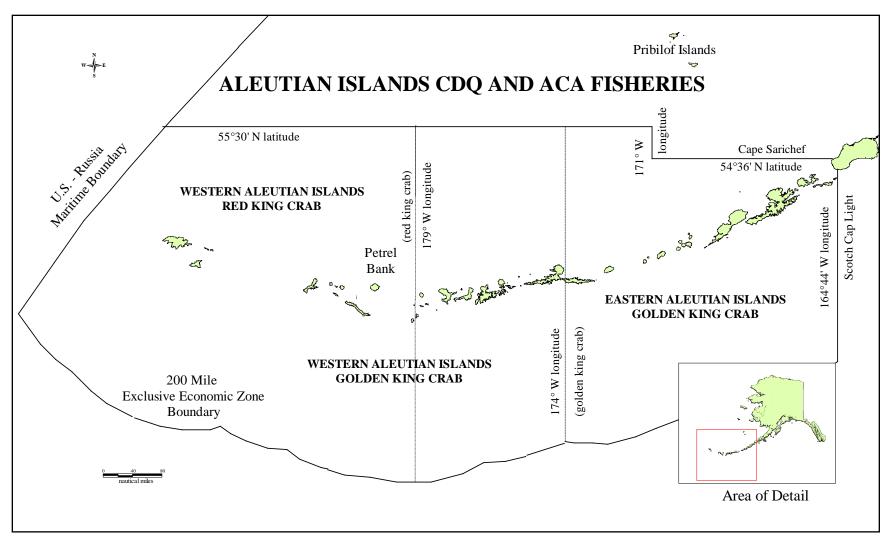


Figure 3-2.—Aleutian Islands Community Development Quota (CDQ) Program and Adak Community Allocation (ACA) crab fisheries managed by ADF&G.