Annual Management Report for Shellfish Fisheries in the Bering Sea-Aleutian Islands Management Area, 2016/17

by

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Divisions of Sport Fish and Commercial Fisheries



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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	(a)	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 ³ /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	<u>≤</u>
yara	yu	et cetera (and so forth)	etc.	logarithm (natural)	in
Time and temperature		exempli gratia		logarithm (base 10)	log
day	d	(for example)	e.g.	logarithm (specify base)	log _{2,} etc.
degrees Celsius	°C	Federal Information	8-	minute (angular)	10g2, etc.
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	int or long	probability	P
second		(U.S.)	\$, ¢	probability of a type I error	1
second	S	months (tables and	Ψ, γ	(rejection of the null	
Physics and chemistry		figures): first three		hypothesis when true)	α
all atomic symbols		letters	Jan,,Dec	,	a
•	A.C.	registered trademark	®	probability of a type II error	
alternating current ampere	AC A	trademark	TM	(acceptance of the null hypothesis when false)	ρ
calorie	cal	United States		,	β
		(adjective)	U.S.	second (angular)	
direct current	DC	United States of	0.3.	standard deviation standard error	SD
hertz	Hz		USA		SE
horsepower	hp	America (noun) U.S.C.	USA United States	variance	*7
hydrogen ion activity (negative log of)	pН		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				
watts	W				

FISHERY MANAGEMENT REPORT NO. 19-22

ANNUAL MANAGEMENT REPORT FOR SHELLFISH FISHERIES OF THE BERING SEA-ALEUTIAN ISLANDS MANAGEMENT AREA, 2016/17

by
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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 invertebrate and shellfish fisheries harvest, participation, and value in the Bering Sea and Aleutian Islands (BSAI) areas, excluding king crab fisheries north of Cape Romanzof. In 2016/17, red king crab, golden king crab, snow crab, Tanner crab, and giant Pacific octopus were taken in BSAI fisheries. 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*, Community Development Quota, Crab Rationalization, Individual Fishing Quota, subsistence, guideline harvest level, Bering Sea, Aleutian Islands, North Peninsula, bycatch, confidential interviews, retained catch, species composition sample, size frequencies

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) manages all commercial and subsistence invertebrate and shellfish fisheries occurring in the state waters of Alaska (0–3 nmi) and waters of the Exclusive Economic Zone (EEZ; 3–200 nmi) of the Bering Sea and Aleutian Islands. 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 the Norton Sound Section. The Aleutian Islands comprise waters west of the longitude 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 south of a line from the latitude 55°30′N lat. Crab in the Bering Sea north of Cape Romanzof (61°49′N lat), 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 districts for Tanner crab, Dungeness crab, and miscellaneous shellfish management. BSAI king and Tanner crab fisheries in the EEZ 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 that occur in territorial waters are managed solely under state jurisdiction. Since 2005, most EEZ BSAI crab fisheries are managed under the federal crab rationalization program which resulted in consolidation of harvesting and processing sectors and substantially changed historical fishing practices.

Species commercially harvested during the 2016/17 season in the BSAI include red king crab *Paralithodes camtschaticus*, golden king crab *Lithodes aequispinus*, snow crab *Chionoecetes opilio*, Tanner crab *C. bairdi*, and giant Pacific octopus *Octopus dofleini*. Additionally, a fishery for weathervane scallop *Patinopectin caurinus* occurs in the BSAI which is summarized in a separate report: *Stock Assessment and Fishery Evaluation Report for the Weathervane Scallop Fishery off Alaska* (NPFMC 2016b). Historically, waters of the BSAI have supported commercial harvests of blue king crab *P. platypus*, scarlet king crab *Lithodes couesi*, triangle Tanner crab *C. angulatus*, grooved Tanner crab *C. tanneri*, Dungeness crab *Metacarcinus magister*, green sea urchins *Strongylocentrotus droebachiensis*, pandalid shrimp, hair crab *Erimacrus isenbeckii*, and

several species of sea snails; however, fisheries for these species are currently either closed due to low abundance or not currently commercially prosecuted. For additional background on current BSAI shellfish fisheries and information on historical fisheries not covered in this report, refer to Annual management report for shellfish fisheries of the Bering Sea–Aleutian Islands Management Area, 2015/16. (Leon et al. 2017).

In 2016/17, 86 catcher vessels, 2 catcher-processors, and 9 shorebased processors were involved in harvesting and processing shellfish in the BSAI. Shellfish landings totaled approximately 36.0 million pounds.

BERING SEA SHELLFISH FISHERIES

BRISTOL BAY KING CRAB REGISTRATION AREA T

DESCRIPTION OF AREA

Bristol Bay king crab Registration Area T includes all waters north of Cape Sarichef (54°36′N lat), south of Cape Newenham (58°39′N lat), and east of 168°W long (Figure 1).

BRISTOL BAY RED KING CRAB

2016/17 Season

The 2016/17 Bristol Bay red king crab (BBR) fishery opened October 15 with a combined Individual Fishing Quota (IFQ) and Community Development Quota (CDQ) Total Allowable Catch (TAC) of 8,469,000 pounds (Table 1). TAC was allocated by National Marine Fisheries Service (NMFS) as 90% IFQ (7,622,100 pounds) and 10% CDQ (846,900 pounds) with all six of the CDQ groups participating in the harvest of the CDQ allocation. Sixty-three vessels participated in the fishery and harvested 8,466,701 pounds, of which 0.5% was deadloss. Despite the regulatory fishing season running through January 15, the entire harvest occurred by mid-November, with the last delivery on November 18 (Tables 2 and 3). On average, vessels were active in the fishery for 13 days. Harvesters were paid an initial average exvessel price of \$9.06 per pound, the highest BBR exvessel price since the inception of the fishery. Total exvessel fishery value was estimated to be \$76,311,556 (Table 2).

Total effort for the 2016/17 fishery was 33,126 pot lifts. Catch per unit effort (CPUE) was 38 legal crab per pot, the highest CPUE since 1980 and above the post-rationalization (2005/06-2015/16) average CPUE of 27 (Table 1, Figure 2). Red king crab appear to have been more highly aggregated during the 2016/17 fishery than in previous years, with fishery effort concentrated on a relatively small portion of the fishing grounds. Harvest was distributed across 13 ADF&G statistical reporting areas with 53% of the harvest occurring in ADF&G statistical area 635600 (Table 4).

BBR cost recovery was conducted by ADF&G in 2016 with 183,948 pounds (27,227 legal male crab) harvested. The 18-day charter occurred from October 1 to October 10 and from October 12 to October 19 (Table 5).

Port Sampling

During the 2016/17 BBR fishery, ADF&G personnel sampled red king crab from vessels without onboard observers at shorebased processors in Akutan, Dutch Harbor, King Cove, and Kodiak. 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 95 of the 148 total landings (IFQ and CDQ) during the 2016/17 BBR fishery. Average weight of sampled crab was 6.8 pounds while average carapace length was 154 mm. (Table 1).

Stock Status

The 2016 NMFS trawl survey of Bristol Bay was conducted in June. Red king crab were caught in 73 of the 136 survey stations within the Bristol Bay management district, with most mature males concentrated in the central and southern sections.

Based on 2016 NMFS trawl survey data, immature male biomass decreased 58%, mature male biomass decreased 21%, legal male biomass decreased 18%, and mature female biomass increased 27%, relative to the 2015 trawl survey estimates. Estimated immature male biomass of 4.6 million pounds was well below the 20-year average of 25.5 million pounds, estimated legal male biomass of 49.4 million pounds was below the 20-year average of 62.6 million pounds, and estimated mature female biomass of 73.6 million pounds was slightly above the 20-year average of 71.2 million pounds (Daly et al. 2016).

Data from the NMFS trawl survey is incorporated into the length-based analysis (LBA) model with model estimates used by the BBR regulatory harvest strategy to determine the fishery TAC. LBA model results indicated an effective spawning biomass of 42 million pounds; therefore, an exploitation rate of 12.5% was applied to mature male red king crab for a 2016 TAC of 8.469 million pounds. The harvest strategy is found in 5 AAC 34.816 *Bristol Bay red king crab harvest strategy*.

Further information on BBR stock status and federal overfishing levels may be found in the 2016 Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions (NPFMC 2016a).

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 3). Area Q is divided into two 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 three 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. The Norton Sound Section and Kotzebue Sound Section are not addressed in this report.

SAINT MATTHEW ISLAND SECTION BLUE KING CRAB

2016/17 Season

The 2016/17 Saint Matthew Island Section blue king crab fishery was closed due to the 2016 NMFS trawl survey model-survey estimate of mature male abundance being below the regulatory threshold for opening a fishery (Table 6 and 7, Figure 4).

Stock Status

The 2016 NMFS trawl survey of Saint Matthew Island was conducted in July. Blue king crab were caught in 16 of the 56 survey stations within the Saint Matthew Island Section of the Northern District, with most mature males concentrated south of the island.

Based on 2016 NMFS trawl survey data, immature male biomass decreased 38%, mature male biomass decreased 40%, legal male biomass decreased 36%, and mature female biomass increased 438%, relative to the 2015 trawl survey estimates. Estimated immature male biomass of 1.1 million pounds was below the 20-year average of 2.5 million pounds, estimated legal male biomass of 5.1 million pounds was below the 20-year average of 6.6 million pounds, and estimated mature female biomass of .28 million pounds was slightly below the 20-year average of .30 million pounds (Daly et al. 2016).

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 2016, 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 2016 pot survey showed continued low abundance in the stock.

Further information on Saint Matthew Island blue king crab stock status and federal overfishing levels may be found in the 2016 Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions (NPFMC 2016a).

PRIBILOF DISTRICT GOLDEN KING CRAB

2016 Season

The 2016 Pribilof District golden king crab fishery had a GHL of 130,000 pounds and was open January 1, 2016 through December 31, 2016. No vessels participated in the fishery (Table 8 and 9).

Fishery Management and Stock Status

The golden king crab fishery is managed using a guideline harvest level (GHL) based on long-term average harvest. In 2012, the North Pacific Fishery Management Council (NPFMC) established a total-catch overfishing level (OFL) of 200,000 pounds. The 2012 OFL used the relationship of bycatch mortality to retained catch in the Pribilof District golden king crab fishery from 2001-2010 (NPFMC 2011).

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

Stock biomass of golden king crab in the Pribilof Canyon area has been estimated using area-swept extrapolations applied to NMFS slope trawl survey data. Biomass estimates of golden king crab from the slope survey are highly uncertain and although, not currently used in fishery management, are still considered relevant to discussions of stock status. Survey data suggest biomass of golden king crab in the Pribilof Canyon area is variable. Results of the 2016 NMFS Bering Sea slope survey show an estimated biomass of 2.89 million pounds, an increase from 1.72 million pounds in 2012 (Hoff 2013, 2016).

Further information on Pribilof District golden king crab stock status and federal overfishing levels may be found in the 2016 Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions (NPFMC 2016a).

BERING SEA SCARLET KING CRAB

2016 Season

No fishery occurred for Bering Sea scarlet king crab in 2016 (Table 10).

Fishery Management and Stock Status

In 2007, NMFS amended the FMP and removed Bering Sea scarlet king crab, which transferred sole jurisdiction for the fishery to the state (NPFMC 2007). 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 non-retained scarlet king crab and bycatch species. This information is useful when developing management measures for deepwater crab stocks; however, there is currently no harvest strategy

Stock biomass of scarlet crab in the Bering Sea has been estimated using area-swept methods applied to NMFS upper continental slope trawl survey data (Hoff 2016). Although biomass estimates of scarlet king crab from the slope survey are available, they are highly uncertain and not currently used in fishery management. Results of the 2016 NMFS Bering Sea slope survey show an estimated biomass of .97 million pounds compared to 1.02 million pounds in 2012 (Hoff 2013, 2016).

BERING SEA TANNER CRAB MANAGEMENT DISTRICT

DESCRIPTION OF AREA

The Bering Sea District of Tanner crab Registration Area J includes all waters north of Cape Sarichef (54°36′N lat). The district is divided into the Eastern and Western Subdistricts at 173°W long. The Eastern Subdistrict is further divided into two sections: the Norton Sound Section north of the latitude of Cape Romanzof (61°49′N lat) and east of 168°W long, and the General Section south and west of the Norton Sound Section (Figure 5).

BERING SEA TANNER CRAB

2016/17 Season

The 2016/17 Bering Sea Tanner crab fisheries were closed. Results from 2016 NMFS trawl survey showed that the mature female biomass estimate was below the regulatory threshold required to open the fishery; mature female biomass must be at or above 40 percent of the 1975-2010 average in the Eastern Subdistrict (east of 173°W long) for fisheries to open east or west of 166°W long (Table 11 and 12, Figure 6). The harvest strategy is found in 5 AAC 35.508 *Bering Sea District C. bairdi Tanner crab harvest strategy*.

Stock Status

The 2016 NMFS trawl survey of the eastern Bering Sea was conducted in June. Tanner crab were caught in 107 of the 120 survey stations east of 166°W long and 161 of the 255 survey stations west of 166°W long. Most mature males east of 166°W were concentrated in the southwest section

of Bristol Bay, whereas mature males west of 166°W were concentrated around the Pribilof Islands (Daly et al. 2016).

Based on 2016 NMFS trawl survey estimates east of 166°W long, immature male biomass decreased 11%, mature male biomass decreased 32%, legal male biomass decreased 38%, and mature female biomass increased 69%, relative to the 2015 trawl survey estimates. Estimated immature male biomass of 15.4 million pounds was below the 20-year average of 20.8 million pounds, estimated legal male biomass of 31.2 million pounds was above the 20-year average of 26.9 million pounds, and estimated mature female biomass of 40.8 million pounds was above the 20-year average of 33.9 million pounds. (Daly et al. 2016)

Based on 2016 NMFS trawl survey estimates west of 166°W long, immature male biomass increased 2%, mature male biomass increased 13%, legal male biomass increased 15%, and mature female biomass decreased 7%, relative to the 2015 trawl survey estimates. Estimated immature male biomass of 18.1 million pounds was below the 20-year average of 28.4 million pounds, estimated legal male biomass of 68.9 million pounds was above the 20-year average of 33.1 million pounds, and estimated mature female biomass of 77.4 million pounds was above the 20-year average of 40.3 million pounds. (Daly et al. 2016)

Further information on Tanner crab stock status and federal overfishing levels may be found in the 2016 Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions (NPFMC 2016a).

BERING SEA SNOW CRAB

2016/17 Season

The 2016/17 Bering Sea snow crab fishery opened October 15 with a combined IFQ and CDQ TAC of 21,570,000 pounds (Table 13). TAC was allocated by NMFS as 90% IFQ (19,413,000 pounds) and 10% CDQ (2,157,000 pounds) with all six of the CDQ groups participating in the harvest of the CDQ allocation. Sixty-three vessels participated in the fishery and harvested 21,570,915 pounds, of which 1% was deadloss. Despite the regulatory fishing season running through May 31, most of the harvest occurred in January and February, with the last delivery on April 25 (Table 14 and 15). On average, vessels were active in the fishery for 38 days. Harvesters were paid an initial average exvessel price of \$2.72 per pound, the highest Bering Sea snow crab exvessel price since the inception of the fishery. Total exvessel fishery value was estimated to be \$58,026,393 (Table 14).

Total effort for the 2016/17 fishery was 118,548 pot lifts. CPUE was 138 legal crab per pot, the second lowest CPUE since rationalization and well below the post-rationalization (2005/06–2015/16) average CPUE of 238 (Table 13; Figure 7). Harvest was distributed across 50 ADF&G statistical reporting areas with the highest concentration of harvest (12%) occurring in ADF&G statistical area 725700 (Table 16).

Port Sampling

During the 2016/17 Bering Sea snow crab fishery, ADF&G personnel sampled snow crab at shore-based processors in Akutan, Dutch Harbor, King Cove, and Saint Paul. Biological data collected on landed snow crab consisted of carapace width, 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 175 of the 266 total landings (IFQ and CDQ) during the 2016/17 Bering Sea snow crab fishery. Average weight of sampled crab was 1.3 pounds while average carapace width was 112 mm (Table 13).

Stock Status

The 2016 NMFS trawl survey of the eastern Bering Sea was conducted in June. Snow crab were caught in 241 of the 375 survey stations of the eastern Bering Sea survey area, with mature males distributed throughout the survey area in waters deeper than 50 meters (Daly et al. 2016).

Based on 2016 NMFS trawl survey estimates, immature male biomass increased 21%, mature male biomass decreased 35%, legal male biomass decreased 28%, and mature female biomass decreased 36%, relative to the 2015 trawl survey estimates. Estimated immature male biomass of 228.7 million pounds was below the 20-year average of 286.7 million pounds, estimated legal male biomass of 113.9 million pounds was below the 20-year average of 307.6 million pounds, and estimated mature female biomass of 114.7 million pounds was below the 20-year average of 174.6 million pounds (Daly et al. 2016).

Further information on snow crab stock status and federal overfishing levels may be found in the 2016 Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions (NPFMC 2016a).

BERING SEA GROOVED TANNER CRAB

2016 Fishery

No vessels targeted grooved Tanner crab in the Bering Sea during 2016 (Table 17).

Fishery Management and Stock Status

In 2007, NMFS amended the FMP and removed Bering Sea grooved Tanner crab, which transferred sole jurisdiction for the fishery to the state (NPFMC 2007). 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 non-retained grooved Tanner crab and bycatch species. This information is useful when developing management measures for deepwater crab stocks; however, there is currently no harvest strategy.

Stock biomass of grooved Tanner crab in the Bering Sea has been estimated using area-swept methods applied to NMFS upper continental slope trawl survey data (Hoff 2016). Although biomass estimates of grooved Tanner crab from the slope survey are available, they are highly uncertain and not currently used in fishery management. Results of the 2016 NMFS Bering Sea slope survey show an estimated biomass of 3.81 million pounds in the eastern Bering Sea compared to 3.0 million pounds in 2012 (Hoff 2013, 2016).

BERING SEA TRIANGLE TANNER CRAB

2016 Fishery

No vessels targeted triangle Tanner crab in the Bering Sea District during 2016 (Table 18).

Fishery Management and Stock Status

Triangle Tanner crab are currently managed as bycatch only to other nonrationalized fisheries. Biomass estimates of triangle Tanner crab from the slope survey are highly uncertain, and although

they are not currently used in fishery management, they are still considered relevant to discussions of stock status. Results from the 2016 NMFS Bering Sea slope survey results show an estimated biomass of 13.5 million pounds in the eastern Bering Sea compared to 10.9 million pounds in 2012 (Hoff 2013, 2016).

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).

NORTH PENINSULA DISTRICT DUNGENESS CRAB

DESCRIPTION OF DISTRICT

The North Peninsula District for Dungeness crab includes all waters of Registration Area J north of the latitude of Cape Sarichef at 54°36′N lat (Figure 8).

DUNGENESS CRAB

2016 Season

The North Peninsula Dungeness crab fishery opened May 1, 2016. One vessel registered for the 2016 season. Harvest information is confidential (Table 19).

Fishery Management and Stock Status

The North Peninsula Dungeness crab fishery is managed using 3-S management (size, sex, and season). Only male Dungeness crab 6.5 inches (165 mm) or greater in carapace width may be retained from 12:00 noon May 1 to 11:59 p.m. October 18. No stock assessment is available and limited biological and fishery data have been collected through dockside sampling.

BERING SEA MISCELLANEOUS SHELLFISH SPECIES

DESCRIPTION OF DISTRICT

The Bering Sea District of Registration Area J for miscellaneous shellfish includes all waters 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 9).

2016 FISHERIES

Octopus

In 2016, harvest from state waters was confidential, with harvest from state and federal waters totaling 164,200 pounds from 103 vessels and 465 landings. All reported harvest was incidental to groundfish fisheries. Average exvessel price based on landed weight of octopus in 2016 was \$0.05 per pound (Table 20).

Fishery Management and Stock Status

Octopus are considered a shellfish species under State of Alaska regulation. Limited directed fishing within state waters may occur under the authority of a commissioner's permit; however, octopus are primarily retained as bycatch during state and federal groundfish fisheries. Currently,

vessels may retain incidentally caught octopus up to 20% of the weight of the target groundfish species or halibut onboard. Most octopus are retained as bycatch in Pacific cod pot gear fisheries.

Incidental harvest of octopus in the Bering Sea is dominated by giant Pacific octopus, *Enteroctopus dofleini*, although at least nine other species of octopus are known to occur in the Bering Sea. Results from the 2016 NMFS Eastern Bering Sea trawl survey estimate octopus (all species) biomass at 16.6 million pounds with 93% of the estimate composed of *E. dofleini*. Octopus (all species) biomass estimates have increased in recent years with the 2016 estimate well above the 5-year average (2010-2015) of 6.1 million pounds. Biomass estimates for octopus in the Bering Sea are highly variable and general knowledge of the stock is limited (Conners et al. 2016).

Further information on octopus stock status and federal overfishing levels may be found in the 2016 Assessment of the Octopus Stock Complex in the Bering Sea and Aleutian Islands (Conners et al. 2016).

REFERENCES CITED

- Conners, M. E., K. Aydin, and C. Conrath. 2016. Assessment of the Octopus Stock Complex in the Bering Sea and Aleutian Islands. [*In*] Stock Assessment and Fishery Evaluation Report of the Bering Sea/Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage.
- Daly, B. J., C. E. Armistead, and R. J. Foy. 2016. The 2016 Eastern Bering Sea continental shelf bottom trawl survey: Results for commercial crab species. U.S. Department of Commerce, NOAA Technical Memo NMFS-AFSC-327.
- Hoff, G. R. 2013. Results of the 2012 eastern Bering Sea upper continental slope survey of groundfish and invertebrate resources. U.S. Department of Commerce, NOAA Technical Memo NMFS-AFSC-258.
- Hoff, G. R. 2016. Results of the 2016 eastern Bering Sea upper continental slope survey of groundfish and invertebrate resources. U.S. Department of Commerce, NOAA Technical Memo NMFS-AFSC-339.
- Leon, J. M., J. Shaishnikoff, E. Nichols, and M. Westphal. 2017. Annual management report for shellfish fisheries of the Bering Sea–Aleutian Islands Management Area, 2015/16. Alaska Department of Fish and Game, Fishery Management Report No. 17-10, Anchorage.
- NPFMC (North Pacific Fishery Management Council). 2007. Fisheries management plan for the king and Tanner crab fisheries of the Bering Sea and Aleutian Islands. North Pacific Fishery Management Council, Anchorage.
- NPFMC (North Pacific Fishery Management Council). 2011. Stock assessment and fishery evaluation report for the king and Tanner crab fisheries of the Bering Sea and Aleutian Islands regions: 2011 crab SAFE. North Pacific Fishery Management Council, Anchorage.
- NPFMC (North Pacific Fishery Management Council). 2014. Stock assessment and fishery evaluation report for the king and Tanner crab fisheries of the Bering Sea and Aleutian Islands regions: 2014 crab SAFE. North Pacific Fishery Management Council, Anchorage.
- NPFMC (North Pacific Fishery Management Council). 2016a. Stock assessment and fishery evaluation report for the king and Tanner crab fisheries of the Bering Sea and Aleutian Islands regions: 2016 crab SAFE. North Pacific Fishery Management Council, Anchorage.
- NPFMC (North Pacific Fishery Management Council). 2016b. Stock assessment and fishery evaluation report for the weathervane scallop fishery off Alaska: 2016 scallop SAFE. North Pacific Fishery Management Council, Anchorage.

TABLES AND FIGURES

Table 1.—Bristol Bay red king crab commercial fishery harvest data, 1966–2016/17.

					Nu	mber of			Average	
Season	GHL/TAC ^{a,b}	Harvest ^{a,c}	Deadlossa	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{a,h}	Length ^{h,i}
1966	-	997,321	NA	9	15	140,554	2,720	52	NA	NA
1967	-	3,102,443	NA	20	61	397,307	10,621	37	NA	NA
1968	-	8,686,546	NA	59	261	1,278,592	47,496	27	NA	NA
1969	-	10,403,283	NA	65	377	1,749,022	98,426	18	NA	NA
1970	-	8,559,178	NA	51	309	1,682,591	96,658	17	NA	NA
1971	-	12,955,776	NA	52	394	2,404,681	118,522	20	NA	NA
1972	-	21,744,924	NA	64	611	3,994,356	205,045	19	NA	NA
1973	-	26,913,636	NA	67	441	4,825,963	194,095	25	5.6	NA
1974	-	42,266,274	NA	104	605	7,710,317	212,915	36	5.5	NA
1975	-	51,326,259	1,639,483	102	592	8,745,294	205,096	43	5.7	NA
1976	-	63,919,728	875,327	141	984	10,603,367	321,010	33	6.0	148
1977	-	69,967,868	730,279	130	1,020	11,733,101	451,273	26	5.9	148
1978	-	87,618,320	1,273,037	162	926	14,745,709	406,165	36	5.9	147
1979	-	107,828,057	3,555,891	236	889	16,808,605	315,226	53	6.4	152
1980	70-120 million	129,948,463	1,858,668	236	1,251	20,845,350	267,292	37	6.2	151
1981	10-100 million	33,372,832	706,489	177	1,013	5,273,530	536,646	10	6.3	151
1982	10-20 million ^e	2,990,082	95,834	89	253	538,925	140,492	4	5.5	145
1983				No Com	nercial Fishe	ry				
1984	2.5-6 million	4,083,612	35,101	89	133	793,046	107,406	7	5.2	142
1985	3-5 million	4,090,305	6,436	125	130	780,791	84,443	9	5.2	142
1986	6-13 million	11,306,084	284,126	157	229	2,083,496	175,753	12	5.4	142
1987	8.5-17.7 million	12,289,067	120,388	230	311	2,122,341	220,971	10	5.8	145
1988	7,500,000	7,361,026	23,537	200	201	1,231,731	146,179	8	6.0	147

Table 1.—Page 2 of 3.

					Nur	nber of			Average	
Season	GHL/TACa,b	Harvest ^{a,c}	Deadlossa	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{a,h}	Length ^{i,h}
1989	16,500,000	10,156,849	81,334	207	280	1,667,405	205,528	8	6.1	148
1990	17,100,000	20,443,043	141,067	241	333	3,135,382	262,761	12	6.5	152
1991	18,000,000	17,177,894	119,670	300	325	2,630,446	227,555	12	6.5	152
1992	10,300,000	8,070,129	9,000	280	289	1,201,129	206,815	6	6.7	153
1993	16,800,000	14,587,704	134,314	292	360	2,254,989	254,389	9	6.5	152
1994-1995				No Co	mmercial Fis	hery				
1996	5,000,000	8,523,114	26,084	197	200	1,266,048	77,081	16	6.7	153
1997	7,000,000	8,911,387	32,012	257	269	1,340,591	91,085	15	6.6	152
1998 ^g	16,400,000	15,003,359	87,978	275	301	2,241,489	145,689	15	6.7	152
1999	10,660,000	11,835,930	44,807	258	284	1,927,105	151,212	13	6.1	148
2000^{f}	8,350,000	8,240,644	37,230	244	270	1,272,382	104,056	12	6.5	151
$2001^{\rm f}$	7,150,000	8,523,495	59,973	230	257	1,305,396	66,947	19	6.5	151
$2002^{\rm f}$	9,270,489	9,666,847	35,122	242	272	1,498,574	72,514	21	6.5	151
$2003^{\rm f}$	15,713,000	15,728,256	230,467	250	296	2,524,506	134,515	19	6.2	149
$2004^{\rm f,g}$	15,424,000	15,447,030	163,750	251	294	2,272,184	97,621	23	6.8	154
$2005/06^{j}$	18,329,000	18,309,335	86,288	89	296	2,732,563	114,944	24	6.7	152
2006/07	15,527,000	15,616,816	118,227	81	213	2,455,618	72,106	34	6.4	151
2007/08	20,383,000	20,366,065	140,384	74	281	3,139,336	113,214	28	6.5	151
2008/09	20,364,000	20,329,402	173,163	78	289	3,066,286	139,937	22	6.6	153
2009/10	16,009,000	15,932,654	122,207	70	233	2,537,221	118,521	21	6.3	150
2010/11	14,839,000	14,833,829	106,874	65	254	2,398,490	131,627	18	6.2	150
2011/12	7,834,000	7,833,594	32,068	62	161	1,279,054	45,166	28	6.1	149
2012/13	7,853,000	7,849,835	30,050	64	141	1,157,364	38,159	30	6.8	154

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Table 1.—Page 3 of 3.

					Number of				Average		
Season	GHL/TACa,b	Harvest ^{a,c}	Deadlossa	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{a,h}	Length ^{i,h}	
2013/14	8,600,000	8,600,476	62,749	63	156	1,242,705	45,927	27	6.9	155	
2014/15	9,986,000	9,987,008	101,241	63	159	1,498,538	58,702	26	6.7	152	
2015/16	9,974,000	9,969,964	182,833	64	152	1,497,783	48,008	31	6.7	153	
2016/17	8,469,000	8,466,701	41,120	63	148	1,253,967	33,126	38	6.8	154	

Note: NA = not available

- ^d Number of legal crab per pot lift.
- ^e Inseason revision to 4.7 million pounds.
- f Includes American Fisheries Act (AFA) harvest data.
- g Total GHL announced prior to general fishery opening, CDQ GHL adjusted based on general fishery harvest.
- h Retained catch.
- ⁱ Carapace length in millimeters.
- j Crab rationalization begins.

^a In pounds.

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

^c Deadloss included.

 $Table\ 2.-Bristol\ Bay\ red\ king\ crab\ commercial\ fishery\ value\ and\ season\ dates,\ 1980-2016/17.$

		Value	Se	eason length	
Season	Exvessela	Total	Opened	Closed	Days
1980	\$0.90	\$115,280,816	09/10/80	10/20/80	41
1981	\$2.03	\$66,312,676	09/10/81	12/15/81	97
1982	\$3.20	\$9,261,594	09/10/82	10/10/82	31
1983		No Comm	ercial Fishery		
1984	\$2.72	\$11,011,950	10/01/84	10/16/84	16
1985	\$2.90	\$11,843,220	09/25/85	10/02/85	8
1986	\$4.05	\$44,638,930	09/25/86	10/07/86	13
1987	\$3.95	\$48,070,777	09/25/87	10/06/87	12
1988	\$4.85	\$35,610,150	09/25/88	10/02/88	8
1989	\$4.68	\$47,202,150	09/25/89	10/06/89	12
1990	\$5.03	\$102,198,044	11/01/90	11/13/90	13
1991	\$3.00	\$51,174,672	11/01/91	11/08/91	8
1992	\$5.13	\$41,323,471	11/01/92	11/08/92	8
1993	\$4.48	\$64,750,431	11/01/93	11/10/93	10
1994-1995		No Comm	ercial Fishery		
1996	\$4.01	\$34,104,724	11/01/96	11/05/96	5
1997	\$3.27	\$29,033,365	11/01/97	11/05/97	5
1998	\$2.60	\$38,852,795	11/01/98	$11/6/98^{b}$	6
1999	\$6.23	\$73,473,949	10/15/99	$10/20/99^{b}$	6
2000	\$4.82	\$39,542,935	10/16/00	$10/20/00^{b}$	5
2001	\$4.95	\$41,934,728	10/15/01	$10/18/01^{b}$	4
2002	\$6.13	\$59,016,000	10/15/02	$10/18/02^{b}$	4
2003	\$5.05	\$78,253,116	10/15/03	$10/20/03^{b}$	6
2004	\$4.64	\$70,936,658	10/15/04	$10/18/04^{b}$	4
$2005/06^{c}$	\$3.85	\$70,086,741	10/15/05	01/15/06	93
2006/07	\$3.37	\$52,277,156	10/15/06	01/15/07	93
2007/08	\$4.16	\$84,211,504	10/15/07	01/15/08	93
2008/09	\$4.97	\$100,222,813	10/15/08	01/15/09	93
2009/10	\$4.44	\$70,172,988	10/15/09	01/15/10	93
2010/11	\$6.31	\$92,924,994	10/15/10	01/15/11	93
2011/12	\$8.91	\$69,479,174	10/15/11	01/15/12	93
2012/13	\$7.28	\$56,914,521	10/15/12	01/15/13	93
2013/14	\$6.41	\$54,763,067	10/15/13	01/15/14	93
2014/15	\$6.05	\$59,849,844	10/15/14	01/15/15	93

Table 2.—Page 2 of 2.

	V	alue	Season length				
Season	Exvessela	Total	Opened	Closed	Days		
2015/16	\$7.02	\$68,754,179	10/15/15	01/15/16	93		
2016/17	\$9.06	\$76,311,556	10/15/16	01/15/17	93		

^a Average price per pound.

^b CDQ fishery opened after general fishery.

^c Crab Rationalization begins.

Table 3.—Bristol Bay red king crab commercial fishery harvest and effort by week, 2016/17.

				Nu	Av	Average		
Week ending	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,d}
15-Oct	3,248,164	14,012	35	43	484,375	12,101	40	6.7
22-Oct	3,063,076	22,414	36	55	454,326	12,272	37	6.7
29-Oct	1,413,910	4,047	23	29	206,330	5,909	35	6.9
5-Nov	530,459	571	8	14	78,676	2,013	39	6.7
12-Nov & 19-Nov ^e	211,092	76	6	7	30,260	831	36	7.0
Total	8,466,701	41,120	63	148	1,253,967	33,126	38	6.8

Note: CF = Confidential

^a In pounds.

b Deadloss included.

^c Number of retained crab per pot lift.

d Retained catch.

^e Combined harvest and effort for last two weeks of fishery due to confidentiality from limited vessel participation.

 $Table\ 4.-Bristol\ Bay\ red\ king\ crab\ commercial\ fishery\ harvest\ and\ effort\ by\ statistical\ area,\ 2016/17.$

				Nur	mber of		Av	Average		
Statistical area	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,d}		
625600	479,004	2,666	18	35	74,053	1,965	38	6.5		
625630	364,494	955	14	24	54,952	1,041	53	6.6		
635530	6,387	9	8	11	930	229	4	6.9		
635600	4,459,670	20,243	59	129	661,542	16,888	39	6.7		
635630	1,524,976	7,890	39	85	226,772	5,834	39	6.7		
645530	7,631	5	5	7	1,092	159	7	7.0		
645600	1,572,946	9,136	34	68	227,075	6,216	37	6.9		
645630	44,171	175	15	21	6,443	591	11	6.9		
645700	1,398	31	3	3	210	45	5	6.7		
Other ^e	6,024	10	5	5	898	158	6	6.7		
Total	8,466,701	41,120	63	148	1,253,967	33,126	38	6.8		

^a In pounds.

b Deadloss included.

^c Number of legal crab per pot lift.

d Retained catch.

^e Combination of statistical areas (4) in which landings were made by fewer than three vessels.

Table 5.—Bristol Bay red king crab cost-recovery harvest data and charter length, 1990–2016.

				Nun	nber of		Av	verage	Charter Length	
Season	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,g}	Dates	Days
1990 ^d	80,701	24,540	1	3	9,567	870	16	5.9	08/07-09/07	30
1991 ^d	205,851	12,817	1	2	30,351	518	62	6.4	09/02-10/07	35
1992 ^d	74,089	3,000	1	1	11,213	670	17	6.3	10/08-10/23	15
1993 ^d	53,200	800	1	1	8,384	464	18	6.3	08/20-09/20	31
1994 ^d	93,336	4,500	1	1	14,806	732	21	6.0	09/25-10/25	30
1995 ^d	80,158	2,339	1	2	14,123	564	26	5.5	08/01-08/31	31
1996 ^d	107,955	1,918	1	3	15,390	355	44	6.9	08/01-08/31	31
1997^{d}	154,739	18,040	1	4	21,698	658	37	6.3	07/25-08/21	28
1998^{d}	188,176	32,564	1	2	22,230	738	36	7.0	08/01-08/28	28
1999 ^e	185,944	410	2	4	29,368	1,239	24	6.3	09/25-10/11,10/25-11/10	34
2000^{d}	86,218	347	1	2	14,196	702	20	6.1	09/20-10/04	15
2001e	120,435	138	2	3	17,605	597	29	6.8	09/22-10/10, 10/23-11/08	36
2002e	96,221	181	2	2	14,528	277	52	6.6	09/23-10/09, 10/17-10/27	27
$2003^{\rm d,f}$	33,817	143	1	1	5,327	584	9	6.4	09/01-10/04	34
2004 ^e	201,579	638	2	3	29,733	1,286	23	6.8	10/21-10/25, 10/23-10/31, 10/27-11/01	20
2005 ^e	208,828	1,500	1	4	30,585	1,376	22	6.8	11/12-12/02	19
2006e	303,867	3,313	1	4	47,215	1,067	44	6.4	09/23-10/23	31
2007e	145,619	469	1	4	22,951	734	31	6.3	10/02-10/23	22
2008						No Cost R	Recovery Eff	ort		
2009 ^e	100,400	463	1	3	15,726	646	24	6.4	09/25-10/12	18
2010 ^e	72,787	69	1	3	11,462	556	21	6.4	09/27-10/20	25
2011 ^e	118,690	199	1	3	18,963	618	31	6.3	09/30-10/21	21
2012e	134,712	286	3	7	18,388	726	25	7.3	10/09-10/22	14

Table 5.–Page 2 of 2.

			Number of			Av	verage	Charter Length		
Season	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,g}	Dates	Days
2013e	198,158	1,332	1	3	29,568	662	45	6.7	10/01-10/08, 10/12-10/17	14
2014 ^e	190,269	940	1	3	27,044	665	41	7.0	10/02-10/21	20
2015 ^e	201,471	1,143	1	3	29,191	755	39	6.9	10/01-10/11, 10/13-10/22	21
2016e	183,948	1,107	1	3	27,227	482	56	6.8	10/1-10/10, 10/12-10/19	18

- a In pounds.
- b Deadloss included.
- c Number of legal crab per pot lift.
- d Bering Sea and Aleutian Islands shellfish research program cost recovery.
- e Bering Sea and Aleutian Islands shellfish research and observer program cost recovery.
- f Includes 1,222 pounds harvested in the Pribilof District.
- g Retained catch.

Table 6.—Saint Matthew Island Section blue king commercial fishery harvest data, 1977–2016/17.

					Nu	mber of			Average	
Season	GHL/TACa,b	Harvest ^{a,c}	Deadlossa	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{a,g}	Length ^{e,g}
1977	-	1,202,066	129,148	10	24	281,665	17,370	16	4.3	130
1978	-	1,984,251	116,037	22	70	436,126	43,754	9	4.5	132
1979	-	210,819	56,147	18	25	52,966	9,877	5	4.0	129
1980	-	CF	CF	2	2	CF	CF	CF	CF	CF
1981	-	4,627,761	53,355	31	119	1,045,619	58,550	18	4.4	NA
1982	-	8,844,789	142,973	96	269	1,935,886	165,618	12	4.6	135
1983	8,000,000	9,454,323	828,994	164	235	1,931,990	133,944	14	4.8	137
1984	2-4 million	3,764,592	31,983	90	169	841,017	73,320	11	4.5	135
1985	0.9-1.9 million	2,175,087	2,613	74	95	436,021	46,988	9	5.0	139
1986	0.2-0.5 million	1,003,162	32,560	38	43	219,548	22,073	10	4.6	134
1987	0.6-1.3 million	1,039,779	600	60	61	227,447	28,230	8	4.6	134
1988	0.7-1.5 million	1,236,462	7,760	45	45	280,401	21,678	13	4.4	133
1989	1,700,000	1,166,258	3,754	69	69	247,641	30,803	8	4.7	135
1990	1,900,000	1,725,349	17,416	31	38	391,405	26,264	15	4.4	134
1991	3,200,000	3,372,066	216,459	68	69	726,519	37,104	20	4.6	134
1992	3,100,000	2,475,916	1,836	174	179	545,222	56,630	10	4.5	134
1993	4,400,000	3,003,089	3,168	92	136	630,353	58,647	11	4.8	135
1994	3,000,000	3,764,262	46,699	87	133	827,015	60,860	14	4.6	133
1995	2,400,000	3,166,093	91,041	90	111	666,905	48,560	14	4.7	135
1996	4,300,000	3,078,959	36,892	122	188	660,665	91,085	7	4.7	135
1997	5,000,000	4,649,660	209,490	117	166	939,822	81,117	12	4.9	140
1998	4,099,512	2,968,573	15,554	132	266	635,370	91,826	7	4.7	134
1999-2008/09 ^f				No	o Commercial	l Fishery				

Table 6.–Page 2 of 2.

					Num	ber of			Average	
Season	GHL/TACa,b	Harvest ^{a,c}	Deadlossa	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{a,g}	Length ^{e,g}
2009/10	1,167,000	460,859	10,484	7	30	103,376	10,697	10	4.5	130
2010/11	1,600,000	1,263,982	10,206	11	70	298,668	29,346	10	4.2	123
2011/12	2,359,000	1,881,322	26,588	18	90	437,862	48,554	9	4.3	126
2012/13	1,630,000	1,616,054	21,052	17	92	379,386	37,065	10	4.3	130
2013/14				No Co	mmercial Fis	hery				
2014/15	655,000	308,582	5,552	4	26	69,109	10,133	7	4.5	132
2015/16	411,000	106,449	1,439	3	14	24,407	5,475	4	4.4	132
2016/17				No Co	mmercial Fis	hery				

Note: NA = not available, CF = confidential

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^a In pounds.

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

^c Deadloss included.

d Number of legal crab per pot lift.
 e Carapace length in millimeters.
 f Crab Rationalization begins.

g Retained catch.

Table 7.—Saint Matthew Island Section blue king crab commercial fishery value and season dates, 1977–2016/17.

		Value	Sea	ason length	
Season	Exvessela	Total	Opened	Closed	Days
1977	\$1.00	\$1,072,918	06/07/77	08/16/77	71
1978	\$0.95	\$1,774,803	07/15/78	09/03/78	51
1979	\$0.70	\$108,270	07/15/79	08/24/79	41
1980	CF	CF	07/15/80	09/03/80	51
1981	\$0.90	\$4,116,965	07/15/81	08/21/81	38
1982	\$2.00	\$17,403,632	08/01/82	08/16/82	16
1983 ^b	\$3.00	\$25,875,987	08/23/83	09/06/83	15
1984	\$1.50	\$5,598,914	09/01/84	09/08/84	8
1985	\$1.60	\$3,475,958	09/01/85	09/06/85	6
1986	\$2.96	\$2,870,927	09/01/86	09/06/86	6
1987	\$2.73	\$2,833,149	09/01/87	09/05/87	5
1988	\$3.10	\$3,811,700	09/01/88	09/05/88	5
1989	\$2.90	\$3,371,233	09/01/89	09/04/89	4
1990	\$3.42	\$5,844,906	09/01/90	09/07/90	7
1991	\$2.80	\$8,835,700	09/16/91	09/20/91	5
1992	\$2.92	\$7,228,333	09/04/92	09/07/92	4
1993	\$3.05	\$9,159,080	09/15/93	09/21/93	7
1994	\$4.13	\$15,338,950	09/15/94	09/22/94	8
1995	\$2.32	\$7,123,102	09/15/95	09/22/95	8
1996	\$2.21	\$6,712,037	09/15/96	09/16/96	2
1997	\$2.23	\$9,900,019	09/15/97	09/22/97	8
1998	\$1.87	\$5,523,187	09/15/98	09/26/98	12
1999 - 2008/09 ^b		No Comn	nercial Fishery		
2009/10	\$2.19	\$985,204	10/15/09	02/01/10	110
2010/11	\$4.12	\$5,160,670	10/15/10	02/01/11	110
2011/12	\$4.33	\$8,034,387	10/15/11	02/01/12	110
2012/13	\$3.77	\$6,008,470	10/15/12	02/01/13	110
2013/14		No Comn	nercial Fishery		
2014/15	\$3.38	\$1,025,161	10/15/14	02/01/15	110
2015/16	\$4.03	\$423,508	10/15/15	02/01/16	110
2016/17		No Comn	nercial Fishery		

Note: CF = confidential

^a Average price per pound.

^b Crab rationalization begins.

Table 8.—Pribilof District golden king crab commercial fishery harvest data, 1981/82–2016.

					Num	ber of			Average	
Season	$\mathrm{GHL}^{\mathrm{a,b}}$	Harvest ^{a,c}	Deadlossa	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{a,f}	Length ^{e,f}
1981/82	-	CF	CF	2	3	CF	CF	CF	CF	CF
1982/83	-	69,970	570	10	19	15,330	5,252	3	4.6	151
1983/84	-	856,475	20,041	50	115	253,162	26,035	10	3.4	127
1984	-				No Commerc	cial Fishing E	ffort			
1985	-	CF	CF	1	1	CF	CF	CF	CF	CF
1986	-				No Commerc	cial Fishing E	ffort			
1987	-	CF	CF	2	2	CF	CF	CF	CF	CF
1988	-	CF	CF	1	2	CF	CF	CF	CF	CF
1989	-	CF	CF	2	4	CF	CF	CF	CF	CF
1990 - 1992	-				No Commerc	cial Fishing E	ffort			
1993	-	67,458		5	15	17,643	15,395	1	3.8	NA
1994	-	88,985	730	3	5	21,477	1,845	12	4.1	NA
1995	-	341,908	2950	7	23	82,489	9,551	9	4.1	NA
1996	-	329,009	12,409	6	32	91,947	9,952	9	3.6	NA
1997	-	179,249	5,554	7	23	43,305	4,673	9	4.1	NA
1998	-	35,722	474	3	9	9,205	1,530	6	3.9	NA
1999	200,000	177,108	319	3	9	44,098	2,995	15	4.0	NA
2000	150,000	127,217	4,599	7	19	29,145	5,450	5	4.4	NA
2001	150,000	145,876	8,227	6	14	33,723	4,262	8	4.3	143
2002	150,000	150,434	8,984	8	20	34,860	5,279	7	4.3	144
2003	150,000	CF	CF	3	6	CF	CF	CF	CF	CF
2004	150,000	CF	CF	5	8	CF	CF	CF	CF	CF
2005	150,000	CF	CF	4	8	CF	CF	CF	CF	CF

Table 8.–Page 2 of 2.

					Number	of			Average	
Season	$GHL^{a,b}$	Harvest ^{a,c}	Deadlossa	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{a,f}	Length ^{e,f}
2006-2009	150,000		No Commercial Fishing Effort							
2010	150,000	CF	CF	1	3	CF	CF	CF	CF	CF
2011	150,000	CF	CF	2	4	CF	CF	CF	CF	CF
2012	150,000	CF	CF	1	3	CF	CF	CF	CF	CF
2013	150,000	CF	CF	1	2	CF	CF	CF	CF	CF
2014	150,000	CF	CF	1	1	CF	CF	CF	CF	CF
2015–2016	130,000			1	No Commercial	Fishing Ef	fort			

Note: CF = confidential, NA = not available.

^a In pounds.

b Guideline harvest level (GHL).

^c Deadloss included.

^d Number of legal crab per pot lift.

^e Carapace length in millimeters.

f Retained catch.

Table 9.-Pribilof District golden king crab commercial fishery value and season dates, 1991-2016.

	Val	ue	Sea	son length	
Season	Exvessela	Total	Opened	Closed	Days
1993	\$2.58	\$173,975	01/01/93	12/31/93	365
1994	\$3.97	\$350,375	01/01/94	12/31/94	365
1995	\$2.82	\$955,522	01/01/95	12/31/95	365
1996	\$2.13	\$674,660	01/01/96	12/31/96	365
1997	\$2.25	\$391,339	01/01/97	12/31/97	365
1998	\$1.96	\$68,930	01/01/98	12/31/98	365
1999	\$2.39	\$421,674	01/01/99	06/10/99	161
2000	\$3.22	\$395,325	01/01/00	12/31/00	365
2001	\$3.15	\$433,922	01/01/01	04/15/01	105
2002	\$3.09	\$436,584	01/01/02	05/14/02	134
2003	CF	CF	01/01/03	05/01/03	121
2004	CF	CF	01/01/04	03/12/04	72
2005	CF	CF	01/01/05	12/31/05	365
2006	No Commercial	Fishing Effort	01/01/06	12/31/06	365
2007	No Commercial	Fishing Effort	01/01/07	12/31/07	365
2008	No Commercial	Fishing Effort	01/01/08	12/31/08	365
2009	No Commercial	Fishing Effort	01/01/09	12/31/09	365
2010	CF	CF	01/01/10	12/31/10	365
2011	CF	CF	01/01/11	12/31/11	365
2012	CF	CF	01/01/12	12/31/12	365
2013	CF	CF	01/01/13	12/31/13	365
2014	CF	CF	01/01/14	12/31/14	365
2015	No Commercial	Fishing Effort	01/01/15	12/31/15	365
2016	No Commercial	Fishing Effort	01/01/16	12/31/16	365

Note: CF = confidential.

^a Average price per pound.

Table 10.—Bering Sea scarlet king crab commercial fishery harvest data, 1995–2016.

				Numbe	er of		Ave	erage	Val	ue
Season	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUEc	Weight ^{a,f}	Exvesseld	Total
1995	26,684	465	4	25	11,048	24,551	<1	2.4	\$2.45	\$64,237
1996	CF	CF	2	7	CF	CF	CF	CF	CF	CF
1997–2001				No 0	Commercia	l Fishing Effort				
2002	CF	CF	1	4	CF	CF	CF	CF	CF	CF
2003 ^e	CF	CF	3	11	CF	CF	CF	CF	CF	CF
2004 ^e	CF	CF	2	4	CF	CF	CF	CF	CF	CF
2005 ^e	CF	CF	1	1	CF	CF	CF	CF	CF	CF
2006–2016				No (Commercia	l Fishing Effort				

Note: CF = confidential.

Note: CF = confidential.

a In pounds.

b Deadloss included.

c Number of legal crab per pot lift.

d Average price per pound.

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

f Retained catch.

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Table 11.—Bering Sea District Tanner crab commercial fishery harvest data, 1968–2016/17.

						Nu	mber of			Average	
Season	Locationa	GHL/TACb,c	Harvest ^{b,d}	Deadloss ^b	Vessels	Landings	Crab ^d	Pots lifted	CPUE ^e	Weight ^{b,l}	Width ^{j,l}
1968	-	-	17,900	NA	NA	7	6,400	1,400	5	2.8	NA
1969	-	-	1,008,900	NA	NA	131	353,300	29,800	12	2.9	NA
1970	-	-	1,014,700	NA	NA	66	482,300	16,400	29	2.9	NA
1971	-	-	166,100	NA	NA	22	61,300	7,300	8	2.7	NA
1972	-	-	107,761	NA	NA	14	42,061	4,260	10	2.6	NA
1973	-	-	231,668	NA	NA	44	93,595	15,730	6	2.5	NA
1974	-	-	5,044,197	NA	NA	69	2,531,825	22,014	115	2.0	NA
1974/75	Southeastern	-	6,504,984	NA	NA	72	2,526,687	32,275	78	2.6	-
	Pribilofs	-	523,394	NA	NA	8	247,083	3,923	63	2.1	-
	TOTAL	-	7,028,378	NA	28	80	2,773,770	36,198	77	2.5	NA
1975/76	Southeastern	-	16,643,194	NA	NA	230	6,682,232	106,445	63	2.5	-
	Pribilofs	-	5,714,913	NA	NA	74	2,273,804	34,761	65	2.5	-
	TOTAL	-	22,358,107	NA	66	304	8,956,036	141,206	63	2.5	NA
1976/77	Southeastern	-	41,007,736	NA	NA	437	16,089,057	233,667	69	2.6	-
	Pribilofs	-	10,447,485	NA	NA	104	4,162,451	63,804	65	2.5	-
	TOTAL	-	51,455,221	NA	83	541	20,251,508	297,471	68	2.5	NA
1977/78	Southeastern	-	53,278,012	NA	NA	706	21,055,527	408,437	52	2.5	-
	Pribilofs	-	13,152,843	NA	NA	155	5,210,170	107,913	48	2.5	-
	TOTAL	-	66,430,855	NA	120	861	26,265,697	516,350	51	2.5	153
1978/79	Southeastern	-	39,694,205	75,400	NA	758	15,601,891	356,594	44	2.5	-
	Pribilofs	-	2,852,969	600	NA	59	1,124,627	46,103	24	2.5	-
	TOTAL	-	42,547,174	76,000	144	817	16,726,518	402,697	42	2.5	153

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Table 11.—Page 2 of 5.

						Nu	ımber of			Average	
Season	Locationa	GHL/TACb,c	Harvest ^{b,d}	Deadloss ^b	Vessels	Landings	Crab ^d	Pots lifted	CPUE ^e	Weight ^{b,l}	Width ^{j,l}
1979/80	Southeastern	-	35,724,003	56,446	NA	789	14,329,889	476,410	30	2.5	-
	Pribilofs	-	890,312	0	NA	15	355,722	12,024	30	2.5	-
	TOTAL	28-36 million	36,614,315	56,446	152	804	14,685,611	488,434	30	2.5	151
1981	Southeastern	-	26,684,956	97,398	NA	674	10,532,007	496,751	21	2.5	-
	Pribilofs	-	2,945,536	4,196	NA	87	1,313,951	62,875	21	2.2	-
	TOTAL	28-36 million	29,630,492	101,594	165	761	11,845,958	559,626	21	2.5	149
1982	Southeastern	-	8,812,302	69,829	NA	539	3,825,433	322,634	12	2.3	-
	Pribilofs	-	2,196,477	68,330	NA	252	1,005,547	167,465	6	2.2	-
	TOTAL	12-16 million	11,008,779	138,159	125	791	4,830,980	490,099	10	2.3	149
1983	Northern	-	48,454	167	NA	10	29,578	5,950	5	1.6	-
	Southeastern	-	4,633,354	52,879	NA	287	1,984,673	192,538	10	2.3	-
	Pribilofs	-	592,073	6,983	NA	151	272,505	83,528	3	2.2	-
	TOTAL	5,600,000	5,273,881	60,029	108	448	2,286,756	282,016	8	2.3	149
1984	Southeastern	-	1,099,142	4,688	NA	91	470,181	44,546	11	2.3	-
	Pribilofs	-	109,081	337	NA	43	46,759	16,811	3	2.3	-
	TOTAL	7,100,000	1,208,223	5,025	41	134	516,940	61,357	8	2.3	147
1985	Southeastern	-	3,023,193	14,096	38	143	1,266,567	85,926	13	2.4	-
	Pribilofs	-	13,742	0	15	23	5,934	8,606	1	2.3	-
	TOTAL	3,000,000	3,036,935	14,096	44	166	1,272,501	94,532	12	2.4	150
1986– 1987					No Cor	nmercial Fishe	ry				

Table 11.—Page 3 of 5.

						Nu	ımber of		Average			
Season	Locationa	GHL/TACb,c	Harvest ^{b,d}	Deadloss ^b	Vessels	Landings	Crab ^d	Pots lifted	CPUE ^e	Weight ^{b,l}	Width ^{j,l}	
1988	Eastern	-	2,294,997	10,724	102	249	957,318	114,384	8	2.4	-	
	Western				Ŋ	No Commercial	l Fishing Effort					
	TOTAL	5,600,000	2,294,997	10,724	102	249	957,318	114,384	8	2.4	144	
1989	Eastern	-	6,982,865	34,664	108	358	2,894,480	183,692	16	2.4	-	
	Western				N	No Commercial	l Fishing Effort					
	TOTAL	13,500,000	6,982,865	34,664	108	358	2,894,480	183,692	16	2.4	149	
1990	Eastern	-	24,529,592	86,603	184	1,016	10,701,363	695,667	15	2.3	-	
	Western	-	17,956	0	15	18	7,975	9,548	1	2.3	-	
	TOTAL	29,500,000	24,547,548	86,603	184	1,034	10,709,338	705,215	15	2.3	148	
1990/91	Eastern	42,800,000	40,081,555	210,769	248	1,756	16,608,625	883,391	19	2.4	150	
1991/92	Eastern	-	31,742,117	279,741	284	2,316	12,901,364	1,209,180	11	2.5	-	
	Western	-	52,265		19	33	22,738	15,779	1	2.3	-	
	TOTAL	32,800,000	31,794,382	279,741	284	2,349	12,924,102	1,224,959	11	2.5	150	
1992/93	Eastern	-	34,821,009	346,505	293	2,010	15,074,069	1,151,849	13	2.3	-	
	Western	-	309,823	3,000	70	96	191,796	50,051	4	1.6	-	
	TOTAL	38,100,000 ^f	35,130,832	349,505	294	2,106	15,265,865	1,201,900	13	2.3	148	
1993/94	East of 168° W	10,700,000 ^g	4,134,529	119,715	285	350	1,699,750	250,826	7	2.4	-	
	163° W to 173° W	$9,100,000^{h,i}$	12,776,371	155,557	261	515	5,539,068	325,963	17	2.3	-	
	TOTAL	19,800,000	16,910,900	275,272	296	865	7,238,818	576,789	13	2.3	151	
1994	163° W to 173° W	7,500,000	7,766,886	132,780	183	349	3,351,639	249,536	13	2.3	150	
1995	163° W to 173° W	5,500,000	4,233,061	44,523	196	256	1,877,303	247,853	8	2.3	149	

Table 11.—Page 4 of 5.

						Nur	nber of			Average	
Season	Locationa	GHL/TACb,c	Harvest ^{b,d}	Deadloss ^b	Vessels	Landings	Crab ^d	Pots lifted	CPUE ^e	Weight ^{b,l}	Width ^{j,l}
1996	East of 168° W	$2,200,000^{g}$	811,301	6,149	135	152	341,039	73,522	5	2.4	-
	163° W to 173° W	6,200,000 ^h	994,776	8,464	192	195	393,257	75,753	5	2.5	-
	$TOTAL^k$	8,400,000	1,806,077	14,613	196	347	734,296	149,275	5	2.5	152
1997– 2004					No Comme	rcial Fishery					
$2005/06^{m}$	East of 166° W					No Commerci	ial Fishery				
	West of 166° W	1,620,000	952,887	15,174	43	103	443,977	32,389	14	2.1	145
-	$TOTAL^k$	1,620,000	952,887	15,174	43	103	443,977	32,389	14	2.1	145
2006/07	East of 166° W	1,875,000	1,401,743	9,256	37	63	585,480	29,129	20	2.4	151
	West of 166° W	1,094,000	720,846	19,696	39	78	340,623	28,140	12	2.1	146
	$TOTAL^k$	2,969,000	2,122,589	28,952	52	141	926,103	57,269	16	2.3	150
2007/08	East of 166° W	3,445,000	1,582,858	16,117	20	65	685,491	33,515	20	2.3	148
	West of 166° W	2,176,000	523,796	4,676	34	61	241,673	21,938	11	2.2	146
	$TOTAL^k$	5,621,000	2,106,654	20,793	41	126	927,164	55,453	17	2.3	148
2008/09	East of 166° W	2,763,000	1,830,031	13,543	22	66	778,898	36,698	21	2.3	150
	West of 166° W	1,537,000	109,552	3,737	42	101	51,471	30,175	2	2.1	147
-	$TOTAL^k$	4,300,000	1,939,583	17,280	50	167	830,369	66,873	12	2.3	149
2009/10	East of 166° W	1,350,000	1,324,578	8,376	17	51	483,419	16,770	29	2.7	157
	West of 166° W					No Commerci	ial Fishery				
	$TOTAL^k$	1,350,000	1,328,356	12,154	41	113	485,963	42,006	12	2.7	157
2010/11- 2012/13					No Comme	rcial Fishery					

Table 11.—Page 5 of 5.

						N	umber of			Average	
Season	Location ^a	GHL/TACb,c	Harvest ^{b,d}	Deadloss ^b	Vessels	Landings	Crab ^d	Pots lifted	CPUE ^e	Weight ^{b,l}	Width ^{j,l}
2013/14	East of 166° W	1,463,000	1,456,357	6,254	30	74	710,043	26,468	27	2.1	145
	West of 166° W	1,645,000	1,330,488	22,546	64	261	735,725	131,524	6	1.8	138
	$TOTAL^k$	3,108,000	2,786,845	28,800	66	335	1,445,768	157,992	9	1.9	142
2014/15	East of 166° W	8,480,000	8,450,485	59,788	42	143	4,381,890	87,875	50	1.9	141
	West of 166° W	6,625,000	5,253,942	96,921	58	237	3,140,954	142,820	22	1.7	134
	$TOTAL^k$	15,105,000	13,704,427	156,709	64	380	7,522,844	230,695	33	1.8	138
2015/16	East of 166° W	11,272,000	11,263,562	120,187	49	202	6,000,262	139,171	43	1.9	141
	West of 166° W	8,396,000	8,378,816	52,546	62	247	4,856,156	145,638	33	1.7	135
	$TOTAL^k$	19,668,000	19,642,378	172,733	70	449	10,856,418	284,809	38	1.8	138
2016/17					No Com	mercial Fishe	rv		·	·	· · · · · · · · · · · · · · · · · · ·

Note: NA = not available.

- b In pounds.
- ^c Guideline harvest level (GHL), total allowable catch (TAC) began in 2005/06.
- d Deadloss included.
- ^e Number of legal crab per pot lift.
- f Initial GHL announcement was 39.2 million pounds, GHL was later adjusted to 38.1 million pounds.
- g GHL for waters east of 163° W long.
- ^h GHL for waters west of 163° W long.
- ⁱ 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.
- ^j Carapace width in millimeters.
- ^k Bering Sea District totals include limited tanner crab harvest incidental to the Bering Sea Snow and Bristol Bay Red King crab fisheries. Includes incidental harvest, participation, and effort.
- Retained catch.
- ^m Crab rationalization begins.

^a 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.

Table 12.—Bering Sea District Tanner crab commercial fishery value and season dates, 1974–2016/17.

		/alue	Se	ason length		
Season	Exvessela	Total	Opened	Closed	Days	Location/Comments
1974/75	\$0.20	\$1,405,676	07/29/74	06/15/75	322	Southeastern Subdistrict
				06/15/75	322	Pribilof Subdistrict
1975/76	\$0.19	\$4,248,040	08/01/75	07/15/76	350	Southeastern Subdistrict
				07/15/76	350	Pribilof Subdistrict
1976/77	\$0.30	\$15,436,566	08/01/76	07/15/77	349	Southeastern Subdistrict
				07/15/77	349	Pribilof Subdistrict
1977/78	\$0.38	\$25,243,725	09/15/77	06/15/78	274	Southeastern Subdistrict
				06/15/78	274	Pribilof Subdistrict
1978/79	\$0.52	\$22,085,010	11/01/78	05/24/79	205	Southeastern Subdistrict
				05/24/79	205	Pribilof Subdistrict
1979/80	\$0.52	\$19,010,092	11/01/79	05/11/80	193	Southeastern Subdistrict
				05/11/80	193	Pribilof Subdistrict
1981	\$0.58	\$17,126,761	01/15/81	05/07/81	113	Southeastern Subdistrict
				05/07/81	113	Pribilof Subdistrict
1982	\$1.06	\$11,522,857	02/15/82	06/15/82	121	Southeastern Subdistrict
				06/15/82	121	Pribilof Subdistrict
1983	\$1.20	\$6,256,622	02/15/83	06/15/83	121	Northern Subdistrict
				05/22/83	97	Southeastern Subdistrict
				05/22/83	97	Pribilof Subdistrict
1984	\$0.95	\$1,143,038	02/15/84	06/15/84	122	Southeastern Subdistrict
				06/15/84	122	Pribilof Subdistrict
1985	\$1.40	\$4,231,975	01/15/85	06/15/85	152	Southeastern Subdistrict
				06/15/85	152	Pribilof Subdistrict
1986–1987			No Co	ommercial Fis	shery	
1988	\$2.20	\$5,029,284	01/15/88			Eastern Subdistrict
				04/20/88	97	East of 165° W long
				03/29/88	75	West of 165° W long
			01/15/88	03/29/88	75	Western Subdistrict
1989	\$2.99	\$20,772,065	01/15/89			Eastern Subdistrict
				03/26/89	71	East of 165° W long
				05/07/89	113	West of 165° W long
			01/15/89	05/07/89	113	Western Subdistrict

Table 12.—Page 2 of 3.

		/alue	S	eason length		
Season	Exvessela	Total	Opened	Closed	Days	Location/Comments
1990	\$1.97	\$48,253,834	01/15/90			Eastern Subdistrict
				04/09/90	85	East of 165° W long
				04/24/90	100	West of 165° W long
			01/15/90	04/24/90	100	Western Subdistrict
1990/91	\$1.06	\$42,323,199				Eastern Subdistrict
			11/20/90	03/25/91	126	East of 166° W long
			11/20/90	03/25/91	126	West of 166° W long
1991/92	\$1.84	\$58,127,840				Eastern Subdistrict
			11/15/91	03/31/92	138	East of 166° W long
			11/15/91	03/31/92	138	West of 166° W long
1992/93	\$1.96	\$68,296,684	11/15/92			Eastern Subdistrict
				03/31/93	137	East of 166° W long
				03/31/93	137	West of 166° W long
			11/15/92	03/31/93	137	Western Subdistrict
1993/94	\$2.33	\$38,832,369	11/01/93	11/10/93	10	East of 168° W long ^b
			11/20/93	01/01/94	43	163° to 173° W long
1994	\$4.13	\$31,543,340	11/01/94	11/21/94	21	163° to 173° W long
1995	\$4.14	\$17,348,234	11/01/95	11/16/95	16	163° to 173° W long
1996	\$2.50	\$4,471,234	11/01/96	11/05/96	5	East of 168° W long ^b
			11/15/96	11/27/96	13	163° to 173° W long
1997–2004			No Co	ommercial Fi	shery	
2005/06°		No Comn	nercial Fisher	y		163° to 166° W $long^d$
	\$1.19	\$1,118,129	10/15/05	03/31/06	168	West of 166° W long
2006/07	\$1.31	\$2,742,429	10/15/06	03/31/07	168	163° to 166° W long ^d
				03/31/07	168	West of 166° W long
2007/08	\$1.52	\$3,171,664	10/15/07	03/31/08	169	163° to 166° W long ^d
				03/31/08	169	West of 166° W long
2008/09	\$1.49	\$2,862,365	10/15/08	03/31/09	168	163° to 166° W long ^d
				03/31/09	168	West of 166° W long
2009/10	\$1.64	\$2,155,355	10/15/09	03/31/10	168	163° to 166° W long ^d
		No Comm	nercial Fisher	y		West of 166° W long
2010/11–			No Co	ommercial Fi	shery	_
2012/13	¢2.20	\$6.300.202			•	163° to 166° W land
2013/14	\$2.29	\$6,309,202	10/15/13	03/31/14	168	163° to 166° W long ^d
				03/31/14	168	West of 166° W long

Table 12.—Page 3 of 3.

	V	alue	Se	eason length						
Season	Exvessela	Total	Opened	Closed	Days	Location/Comments				
2014/15	\$2.15	\$29,073,491	10/15/14	03/31/15	168	163° to 166° W $long^d$				
				03/31/15	168	West of 166° W long				
2015/16	\$2.18	\$42,432,982	10/15/15	03/31/16	169	163° to 166° W long ^d				
				03/31/16	169	West of 166° W long				
2016/17		No Commercial Fishery								

^a Average price per pound.

^b Concurrent with Bristol Bay red king crab fishery.

^c Crab Rationalization begins.

d 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 13.—Bering Sea District snow crab commercial fishery harvest data, 1977/78–2016/17.

					Nu	mber of			Average	
Season	GHL/TAC ^{a,b}	Harvest ^{b,c}	Deadloss ^c	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{b,j}	Width ^{h,j}
1977/78	-	1,716,124	NA	15	38	1,267,546	13,247	96	1.4	NA
1978/79	-	32,187,039	759,137	102	490	22,118,498	190,746	116	1.5	113
1979/80	-	39,572,668	228,345	134	597	25,286,777	255,102	99	1.6	118
1981	39.5-91 million	52,750,034	2,269,979	153	867	34,415,322	435,742	79	1.5	117
1982	16-22 million	29,355,374	1,092,655	122	803	24,089,562	469,091	51	1.2	109
1983	15,800,000	26,128,410	1,324,466	109	461	23,853,647	287,127	83	1.1	NA
1984	49,000,000	26,813,074	798,795	52	367	24,009,935	173,591	138	1.1	105
1985	98,000,000	66,010,484	1,064,184	75	718	52,908,591	372,045	142	1.2	108
1986	57,000,000	97,684,139	1,378,533	87	990	76,319,307	542,346	141	1.3	110
1987	56,400,000	101,903,388	978,449	103	1,038	81,307,659	616,113	132	1.3	109
1988	110,700,000	134,060,185	3,242,478	171	1,285	105,933,542	747,395	142	1.3	110
1989	132,000,000	148,306,262	1,940,482	169	1,300	112,704,215	665,242	169	1.3	111
1990	139,800,000	161,656,405	1,798,664	189	1,563	128,859,645	912,718	141	1.3	109
1991	315,000,000	328,648,169	3,464,936	219	2,788	265,124,637	1,394,897	190	1.2	110
1992	333,000,000	315,302,034	2,329,852	248	2,763	227,376,582	1,281,796	177	1.4	112
1993	207,200,000	230,754,145	1,577,102	254	1,835	169,531,168	972,118	174	1.4	112
1994	105,800,000	149,792,718	1,799,763	272	1,293	114,810,186	716,524	160	1.3	110
1995	55,700,000	75,309,187	1,291,135	253	870	60,591,399	507,603	119	1.2	109
1996	50,700,000	65,696,173	1,335,372	234	771	52,892,320	520,671	102	1.2	108
1997	117,000,000	119,589,339	2,351,555	226	1,127	100,013,816	754,140	133	1.2	107
1998	234,100,000	252,339,284	3,037,499	230	1,853	193,618,550	930,794	208	1.3	111
1999	196,000,000	194,363,869	1,926,497	241	1,734	151,183,798	945,533	160	1.3	110
2000	28,500,000	33,291,344	353,125	231	315	25,081,681	182,634	137	1.3	111

Table 13.—Page 2 of 2.

					Nu	mber of			Average		
Season	GHL/TAC ^{a,b}	Harvest ^{b,c}	Deadloss ^c	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{b,j}	Width ^{h,j}	
2001	27,300,000	25,256,384	452,781	207	322	18,612,605	191,200	97	1.4	111	
2002 ^e	30,820,000	32,633,210	658,456	191	436	25,155,221	326,977	77	1.3	110	
$2003^{\rm f}$	25,610,000	28,316,923	680,787	190	285	23,252,904	153,862	151	1.2	107	
2004	20,831,000	23,942,373	248,576	189	265	18,669,591	123,709	151	1.3	110	
2005	20,932,000	24,892,128	235,479	168	219	17,985,745	73,208	246	1.4	114	
$2005/06^{i}$	37,184,000	36,973,890	357,200	78	350	24,551,986	121,029	203	1.5	117	
2006/07	36,566,000	36,355,649	413,743	69	307	29,620,685	89,419	331	1.2	109	
2007/08	63,034,000	63,028,036	551,429	78	513	50,327,591	144,110	349	1.3	109	
2008/09	58,550,000	58,547,849	434,622	77	487	45,945,092	163,537	281	1.3	110	
2009/10	48,017,000	48,014,089	536,688	69	354	35,289,022	137,292	257	1.4	113	
2010/11	54,281,000	54,263,200	352,388	68	386	37,758,496	147,478	256	1.4	115	
2011/12	88,894,000	88,830,652	637,432	72	724	60,555,105	270,602	224	1.5	115	
2012/13	66,350,000	66,254,528	465,522	70	505	47,455,883	225,627	210	1.4	113	
2013/14	53,983,000	53,983,286	405,129	70	450	41,926,542	231,614	181	1.3	110	
2014/15	67,950,000	67,941,587	596,641	71	543	55,029,818	286,920	192	1.2	110	
2015/16	40,611,000	40,611,446	379,167	74	390	29,614,529	217,054	136	1.4	113	
2016/17	21,570,000	21,570,915	250,474	63	266	16,412,386	118,548	138	1.3	112	

Note: NA = not available.

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

^b In pounds.

^c Deadloss included.

Mumber of legal crab per pot lift.
 Total harvest includes 30,919 pounds taken from an unidentified statistical area.
 Includes 181,457 pounds illegally taken in Russian waters.

h Carapace width in millimeters.

Crab Rationalization begins.

j Retained catch.

Table 14.—Bering Sea District snow crab commercial fishery value and season dates, 1980–2016/17.

	Va	alue	Sea	son length		
Season	Exvessela	Total	Opened	Closed	Days	Location/Comments
1979/80	\$0.21	\$8,262,308	11/01/79	08/15/80	289	Bering Sea District state closure
				09/03/80	308	Bering Sea District federal closure
1981	\$0.27	\$13,629,615	01/15/81	09/01/81	230	Bering Sea District closure
1982	\$0.83	\$23,458,057	02/15/82	08/01/82	168	Bering Sea District closure
1983	\$0.38	\$9,425,499	02/15/83	05/22/83	97	Bering Sea District closure south of 57°30' N lat
				08/01/83	168	Bering Sea District closure north of 57°30' N lat
1984	\$0.30	\$7,804,284	02/15/84	08/01/84	169	Bering Sea District closure south of 58° N lat
				08/22/84	190	Bering Sea District closure north of 58° N lat to allow for
						an orderly start to king crab season
1985	\$0.30	\$19,483,890	01/15/85	05/08/85	114	Pribilof Subdistrict closure south of 58° N lat
				08/01/85	199	Bering Sea District closure south of 58°39' N lat
				08/22/85	220	Northern Subdistrict closure to allow for an orderly
						start to king crab season
1986	\$0.55	\$52,721,553	01/15/86	04/21/86	97	Southeastern Subdistrict closure west of 164° W long
				06/01/86	138	Pribilof Subdistrict closure
				08/01/86	199	Northern Subdistrict closure east of 175° W long
				08/24/86	222	Northern Subdistrict closure west of 175° W long
1987	\$0.77	\$77,815,458	01/15/87	04/12/87	88	Southeastern Subdistrict west of 164° W long
						and Pribilof Subdistrict closure
				06/01/87	138	Northern Subdistrict south of 60°30' N lat and
						east of 178° W long closure
				06/22/87	159	Northern Subdistrict north of 60°30' N lat and
						west of 178° W long closure

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		⁷ alue	Sea	son length		
Season	Exvessela	Total	Opened	Closed	Days	Location/Comments
1988	\$0.83	\$108,645,549	01/15/88	03/29/88	75	Bering Sea District closure
						(Western Subdistrict to assist in an orderly closure)
			05/15/88	06/30/88	47	Western Subdistrict reopen and closure
1989	\$0.77	\$112,144,331	01/15/89	03/26/89	71	Eastern Subdistrict closure
				05/07/89	113	Western Subdistrict closure
1990	\$0.77	\$122,459,171	01/15/90	04/09/90	85	Eastern Subdistrict east of 165° W long closure
				04/24/90	100	Eastern Subdistrict west of 165° W long closure
				06/12/90	149	Western Subdistrict closure
1991	\$0.49	\$158,683,336	01/15/91	05/05/91	111	Eastern Subdistrict closure
				06/23/91	160	Western Subdistrict closure
1992	\$0.59	\$184,951,171	01/15/92	04/22/92	99	Bering Sea District closure
1993	\$0.93	\$212,377,174	01/15/93	03/15/93	60	Bering Sea District closure
1994	\$1.58	\$233,301,131	01/15/94	03/01/94	46	Bering Sea District closure
1995	\$2.44	\$180,489,720	01/15/95	02/17/95	34	Bering Sea District closure
1996	\$1.31	\$84,200,277	01/15/96	02/29/96	46	Bering Sea District closure
1997	\$0.71	\$83,787,925	01/15/97	03/21/97	66	Bering Sea District closure
1998	\$0.55	\$137,642,743	01/15/98	03/20/98	65	Bering Sea District closure
1999	\$0.88	\$169,366,879	01/15/99	03/22/99	67	Bering Sea District closure
2000	\$1.81	\$59,659,349	04/01/00	04/08/00	8	Bering Sea District closure
2001	\$1.49	\$36,833,621	01/15/01	02/14/01	31	Bering Sea District closure
2002	\$1.84	\$58,674,555	01/15/02	02/08/02	25	Bering Sea District closure
2003	\$1.75	\$48,496,278	01/15/03	01/25/03	11	Bering Sea District closure
2004	\$2.04	\$48,359,092	01/15/04	01/23/04	9	Bering Sea District closure

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		/alue	Sea	ason length		
Season	Exvessela	Total	Opened	Closed	Days	Location/Comments
2005	\$1.79	\$44,144,504	01/15/05	01/20/05	6	Bering Sea District closure
2005/06b	\$1.51	\$55,291,202	10/15/05	05/15/06	213	Eastern Subdistrict closure
				05/31/06	229	Western Subdistrict closure
2006/07	\$1.37	\$49,111,061	10/15/06	05/15/07	213	Eastern Subdistrict closure
				05/31/07	229	Western Subdistrict closure
2007/08	\$1.63	\$102,072,731	10/15/07	05/15/08	214	Eastern Subdistrict closure
				05/31/08	230	Western Subdistrict closure
2008/09	\$1.37	\$79,464,730	10/15/08	05/15/09	213	Eastern Subdistrict closure
				05/31/09	229	Western Subdistrict closure
2009/10	\$1.13	\$53,645,621	10/15/09	05/15/10	213	Eastern Subdistrict closure
				05/31/10	229	Western Subdistrict closure
2010/11	\$2.14	\$115,523,133	10/15/10	05/15/11	213	Eastern Subdistrict closure
				05/31/11	229	Western Subdistrict closure
2011/12	\$1.89	\$166,973,717	10/15/11	05/31/12	230	Eastern Subdistrict east of 171° W long closure Western and Eastern Subdistricts west of 171° W long
				06/15/12	245	closure
2012/13	\$2.02	\$133,088,320	10/15/12	05/15/13	213	Eastern Subdistrict closure
				05/31/13	229	Western Subdistrict closure
2013/14	\$2.15	\$115,438,494	10/15/13	05/15/14	213	Eastern Subdistrict closure
				05/31/14	229	Western Subdistrict closure
2014/15	\$1.67	\$112,275,497	10/15/14	05/15/15	213	Eastern Subdistrict closure
				05/31/15	229	Western Subdistrict closure
2015/16	\$2.01	\$80,936,867	10/15/15	05/15/16	214	Eastern Subdistrict closure
				05/31/16	230	Western Subdistrict closure

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	Va	alue	Sea	ason length		
Season	Exvessela	Total	Opened	Closed	Days	Location/Comments
2016/17	\$2.72	\$58,026,393	10/15/16	05/15/17	213	Eastern Subdistrict closure
				05/31/17	229	Western Subdistrict closure

^a Average price per pound.^b Crab rationalization begins.

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Table 15.—Bering Sea District commercial snow crab commercial fishery harvest and effort by week, 2016/17.

				Nu		Ave	Average		
Week ending	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,d}	
Oct-15	CF	CF	1	1	CF	CF	CF	CF	
Jan-7	2,323,243	10,538	14	20	1,757,860	8,221	214	1.3	
Jan-14	2,638,694	61,557	19	25	2,070,381	11,138	186	1.3	
Jan-21	2,814,049	22,452	23	31	2,228,711	13,678	163	1.3	
Jan-28	2,000,623	22,435	16	20	1,520,701	10,014	152	1.3	
Feb-4	3,246,556	27,069	34	50	2,368,285	21,105	112	1.4	
Feb-11	2,005,196	13,819	21	30	1,537,843	12,691	121	1.3	
Feb-18	2,695,031	33,294	22	38	2,063,993	15,785	131	1.3	
Feb-25	1,888,951	31,766	16	24	1,418,972	12,729	111	1.3	
Mar-4	562,612	6,670	7	8	400,494	4,331	92	1.4	
Mar-11	441,476	8,178	6	8	357,912	2,362	152	1.2	
Mar-18	810,569	10,187	5	7	589,541	4,660	127	1.4	
Mar-25	CF	CF	1	1	CF	CF	CF	CF	
Apr-1	CF	CF	1	1	CF	CF	CF	CF	
Apr-8	CF	CF	1	1	CF	CF	CF	CF	
Apr-22	CF	CF	1	1	CF	CF	CF	CF	
Total	21,570,915	250,474	63	266	16,412,386	118,548	138	1.3	

Note: CF = Confidential

^a In pounds.

b Deadloss included.

^c Number of legal crab per pot lift.

d Retained catch.

Table 16.—Bering Sea District commercial snow crab commercial fishery harvest and effort by statistical area, 2016/17.

				Numb	er of		Aver	age
Statistical area	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,e}
665500	8,507	98	3	3	5,435	43	126	1.6
665530	1,539,626	11,628	17	41	951,101	6,972	136	1.6
665600	884,810	9,326	16	36	559,937	5,465	102	1.6
665630	6,420	62	3	8	4,044	45	90	1.6
675530	343,708	4,218	14	32	230,677	2,586	89	1.5
675600	2,237,394	24,149	21	58	1,550,517	13,931	111	1.4
675630	302,104	3,419	11	20	211,600	2,142	99	1.4
685600	610,559	6,013	14	35	429,847	3,697	116	1.4
685630	1,198,928	12,397	12	36	862,460	7,609	113	1.4
715630	412,548	6,182	12	25	331,960	2,836	117	1.2
715700	742,019	12,769	15	40	611,499	4,877	125	1.2
715730	8,071	121	4	9	6,632	65	102	1.2
725630	769,195	14,163	12	23	629,688	4,137	152	1.2
725700	2,667,436	27,514	29	99	2,174,297	16,470	132	1.2
725730	1,364,991	9,875	27	70	1,102,211	7,802	141	1.2
735700	258,775	2,224	16	36	203,017	2,256	90	1.3
735730	1,830,870	33,390	26	61	1,476,603	9,235	160	1.2
735800	1,851,906	37,928	19	59	1,499,105	8,679	173	1.2
735830	16,654	166	13	22	12,887	664	19	1.3
745800	1,693,602	11,540	16	46	1,350,877	6,206	218	1.3
745830	1,240,961	14,929	11	31	993,389	5,617	177	1.2
745900	10,742	50	4	5	8,659	115	75	1.2

Table 16.—Page 2 of 2.

				Numl		Average		
Statistical area	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,e}
775930	189,251	1,173	3	9	138,815	684	203	1.4
785930	599,661	5,520	3	6	455,950	1,229	371	1.3
Other ^d	782,178	1,621	17	43	611,179	5,186	118	1.3
Total	21,570,915	250,474	63	266	16,412,386	118,548	138	1.3

^a In pounds.

b Deadloss included.

^c Number of legal crab per pot lift.

d Combination of statistical areas (26) in which landings were made by fewer than three vessels.

e Retained catch.

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Table 17.—Bering Sea District grooved Tanner crab commercial fishery harvest data, 1992–2016.

				Nun	nber of		Av	Average		Value	
Season	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE°	Weight ^{a,e}	Exvesseld	Total	
1992	CF	CF	1	1	CF	CF	CF	CF	CF	CF	
1993	658,796	71,000	6	18	342,095	35,650	9	1.9	\$0.92	\$540,772	
1994	322,444	30,585	4	12	165,365	13,739	11	2.0	\$2.65	\$773,426	
1995	984,648	67,329	8	51	461,401	59,028	7	2.1	\$2.09	\$1,917,197	
1996	95,795	11,120	3	11	46,338	10,802	4	2.1	\$1.12	\$94,836	
1997–1999				N	No Comme	rcial Fishing E	ffort				
2000	CF	CF	1	1	CF	CF	CF	CF	CF	CF	
2001	CF	CF	1	3	CF	CF	CF	CF	CF	CF	
2002				N	No Comme	rcial Fishing E	ffort				
2003	CF	CF	1	7	CF	CF	CF	CF	CF	CF	
2004	CF	CF	2	10	CF	CF	CF	CF	CF	CF	
2005	CF	CF	1	1	CF	CF	CF	CF	CF	CF	
2006–2016				N	No Comme	rcial Fishing E	ffort				

Note: CF = confidential.

^a In pounds.

b Deadloss included.

Number of legal crab per pot lift.
 d Average price per pound.

e Retained catch.

Table 18.—Bering Sea District triangle Tanner crab commercial fishery harvest data, 1995–2016.

				Number of				erage	Value			
Season	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUEc	Weight ^{a,f}	Exvesseld	Total		
1995	49,007	14,147	4	26	41,914	22,180	2	1.2	\$1.44	\$50,198		
1996	CF	CF	1	6	CF	CF	CF	CF	CF	CF		
1997–1999		No Commercial Fishing Effort										
2000e	CF	CF	1	1	CF	CF	CF	CF	CF	CF		
2001e	CF	CF	1	3	CF	CF	CF	CF	CF	CF		
2002				No	Commerc	ial Fishing Effo	ort					
2003e	CF	CF	1	7	CF	CF	CF	CF	CF	CF		
2004e	CF	CF	3	13	CF	CF	CF	CF	CF	CF		
2005–2016		No Commercial Fishing Effort										

Note: CF = confidential.

^a In pounds.

b Deadloss included.

c Number of legal crab per pot lift.
d Average price per pound.
e Restricted to incidental harvest during grooved Tanner crab fishery.

f Retained catch.

Table 19.-North Peninsula District commercial Dungeness crab fishery data, 1992–2016.

				Num	ber of		Av	erage	Va	ılue			
Season	Harvest ^{a,b}	Deadloss ^a	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,e}	Exvesseld	Total			
1992	CF	CF	1	3	CF	CF	CF	CF	CF	CF			
1993	CF	CF	2	8	CF	CF	CF	CF	CF	CF			
1994	CF	CF	2	13	CF	CF	CF	CF	CF	CF			
1995	134,407	367	6	18	63,732	34,499	4	2.1	\$1.32	\$176,933			
1996	CF	CF	1	6	CF	CF	CF	CF	CF	CF			
1997	CF	CF	1	2	CF	CF	CF	CF	CF	CF			
1998	CF	CF	1	1	CF	CF	CF	CF	CF	CF			
1999			No Commercial Fishing Effort										
2000	CF	CF	1	5	CF	CF	CF	CF	CF	CF			
2001			No Commercial Fishing Effort										
2002	CF	CF	2	2	CF	CF	CF	CF	CF	CF			
2003				1	No Comme	cial Fishing Effo	rt						
2004	CF	CF	1	3	CF	CF	CF	CF	CF	CF			
2005	CF	CF	1	6	CF	CF	CF	CF	CF	CF			
2006				1	No Comme	cial Fishing Effo	rt						
2007	CF	CF	1	6	CF	CF	CF	CF	CF	CF			
2008				1	No Comme	cial Fishing Effo	rt						
2009	CF	CF	1	6	CF	CF	CF	CF	CF	CF			
2010	795,392	10,414	5	24	391,849	60,985	6	2.0	\$1.73	\$1,358,012			
2011	CF	CF	1	6	CF	CF	CF	CF	CF	CF			
2012	CF	CF	1	2	CF	CF	CF	CF	CF	CF			
2013				1	No Comme	cial Fishing Effo	rt						
2014	CF	CF	1	4	CF	CF	CF	CF	CF	CF			

Table 19.—Page 2 of 2.

				Number of			Av	verage	Value	
Season	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,e}	Exvessel ^d	Total
2015	CF	CF	1	3	CF	CF	CF	CF	CF	CF
2016	CF	CF	1	6	CF	CF	CF	CF	CF	CF

Note: CF = confidential.

- ^a In pounds.
- b Deadloss included.
- ^c Number of legal crab per pot lift.
- d Average price per pound.
- e Retained catch.

Table 20.—Bering Sea commercial octopus incidental harvest, 1995–2016.

		State waters			State and fede	eral waters		
•			Whole			Whole	At-sea	Exvessel
Season	Vessels	Landings	poundsa	Vessels	Landings	poundsa	discards	value ^b
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	2	CF	22	56	7,002	6,593	NA
2000	4	6	551	78	272	39,915	23,611	\$0.03
2001	2	3	CF	62	158	49,641	41,215	\$0.03
2002	2	2	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	1	CF	67	144	20,107	7,858	\$0.30
2010	0	0	0	81	201	67,187	35,477	\$0.24
2011	2	3	CF	124	470	193,222	158,042	\$0.21
2012	0	0	0	104	312	48,938	36,780	\$0.34
2013	2	2	CF	100	310	59,351	40,453	NA
2014	0	0	0	121	403	60,445	29,697	\$0.05
2015	3	5	90	131	519	81,685	49,719	\$0.14
2016	1	2	CF	103	465	164,200	85,174	\$0.05

Note: CF = confidential, NA = not available.

^a Includes discards.

^b Average price per pound, based on landed weight.

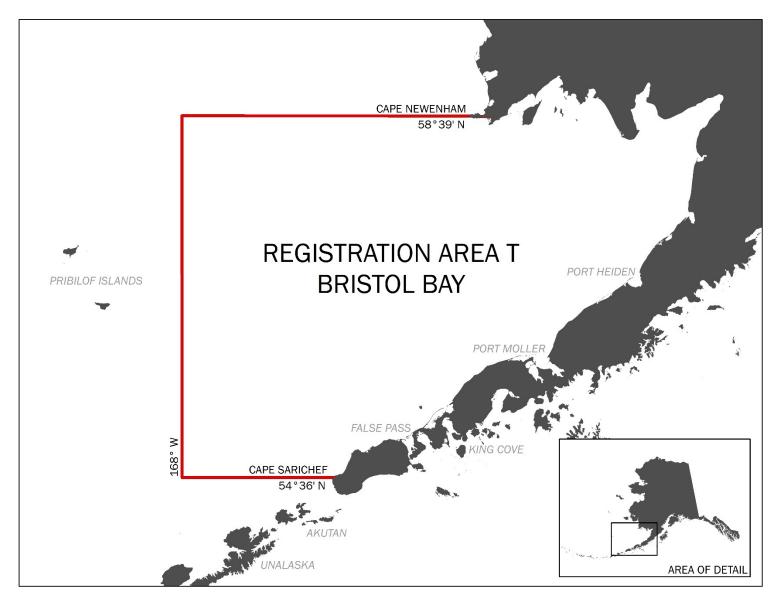


Figure 1.-Bristol Bay king crab commercial fishery Registration Area T.

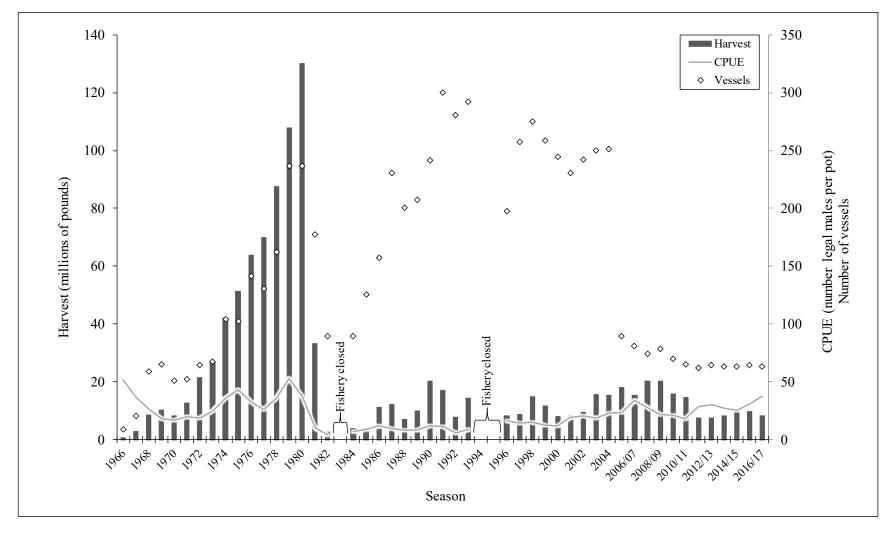


Figure 2.—Bristol Bay red king crab commercial fishery harvest, catch per unit effort (CPUE; number legal males per pot), and number of vessels, 1966–2016/17.

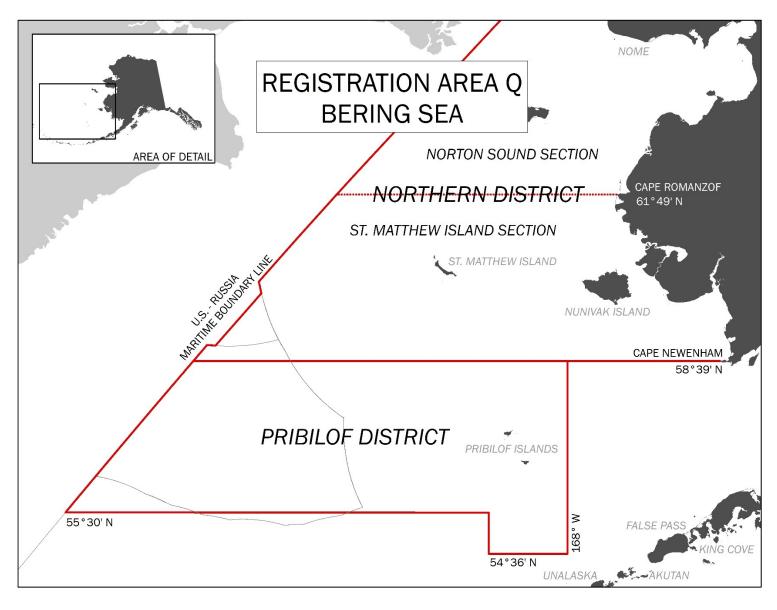


Figure 3.-Bering Sea king crab commercial fishery Registration Area Q.

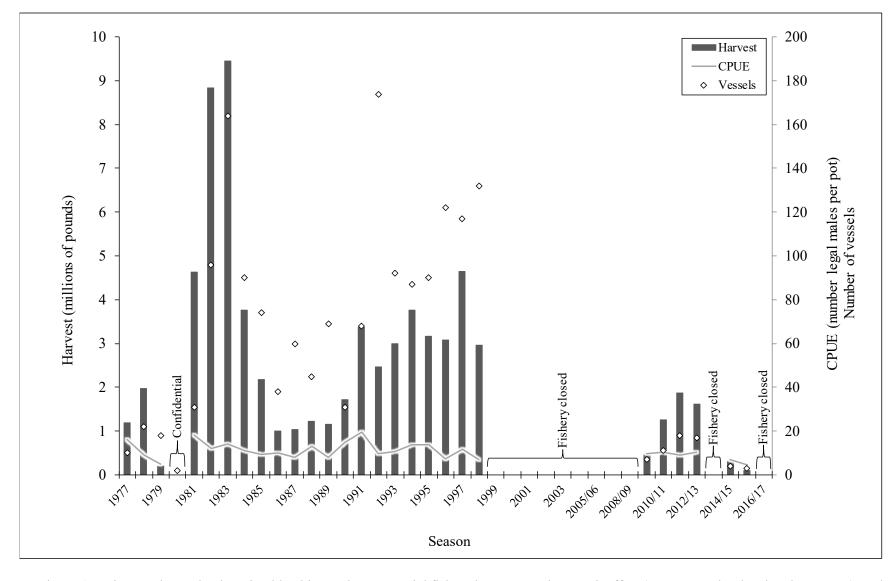


Figure 4.—Saint Matthew Island section blue king crab commercial fishery harvest, catch per unit effort (CPUE; number legal males per pot), and number of vessels, 1977–2016.

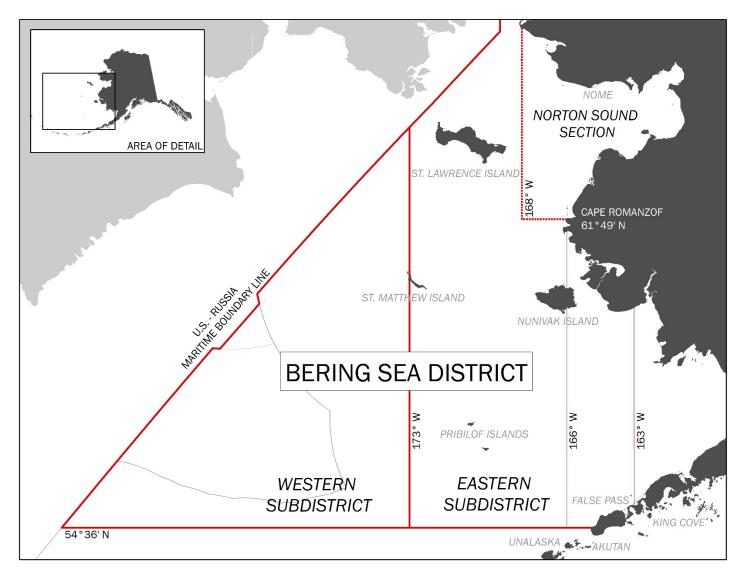


Figure 5.—Bering Sea District Tanner crab commercial fishery Registration Area J including subdistricts and sections.

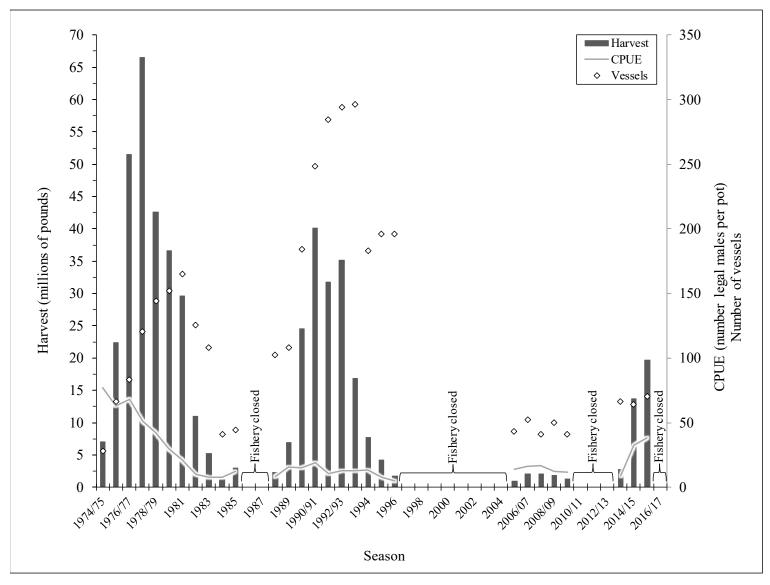


Figure 6.—Bering Sea Tanner crab commercial fishery harvest, catch per unit effort (CPUE; number legal males per pot), and number of vessels, 1974/75–2016/17.

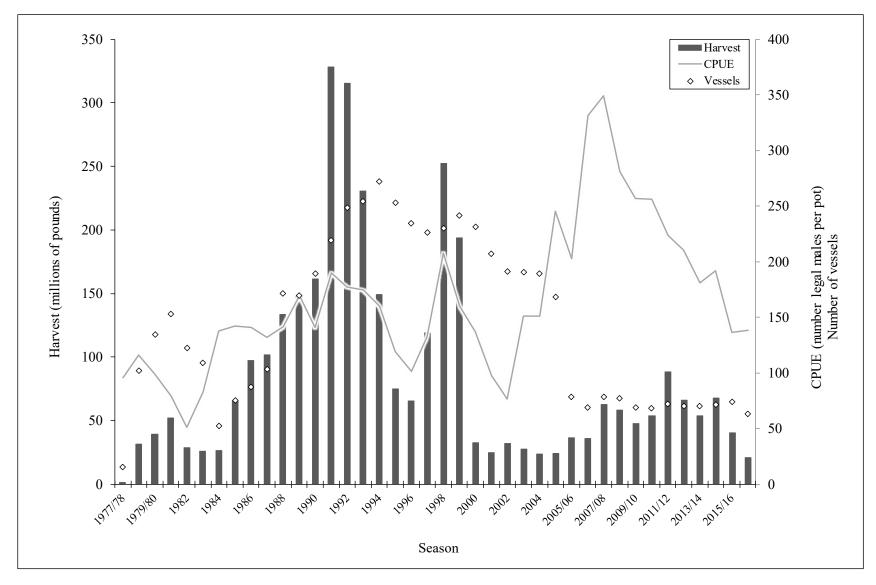


Figure 7.—Bering Sea Snow crab commercial fishery harvest, catch per unit effort (CPUE; number legal males per pot), and number of vessels, 1977/78–2016/17.

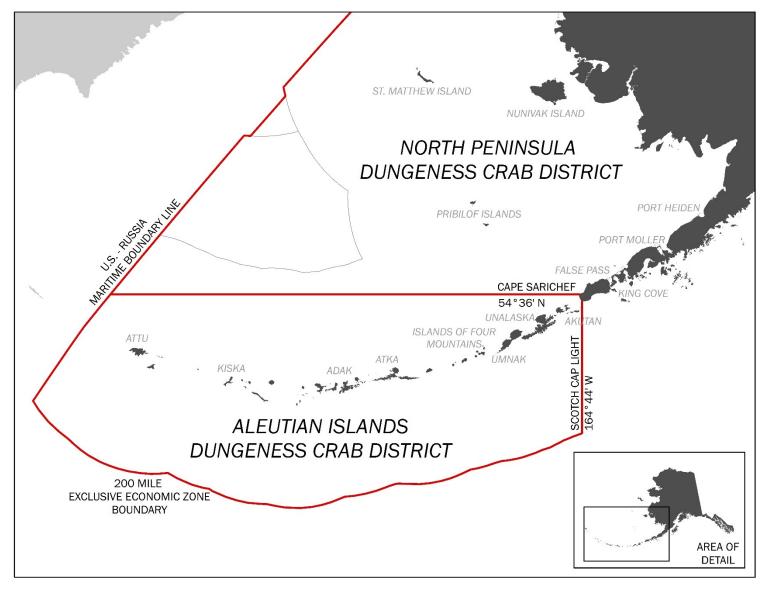


Figure 8.-North Peninsula and Aleutian Islands Dungeness crab Districts of Registration Area J.

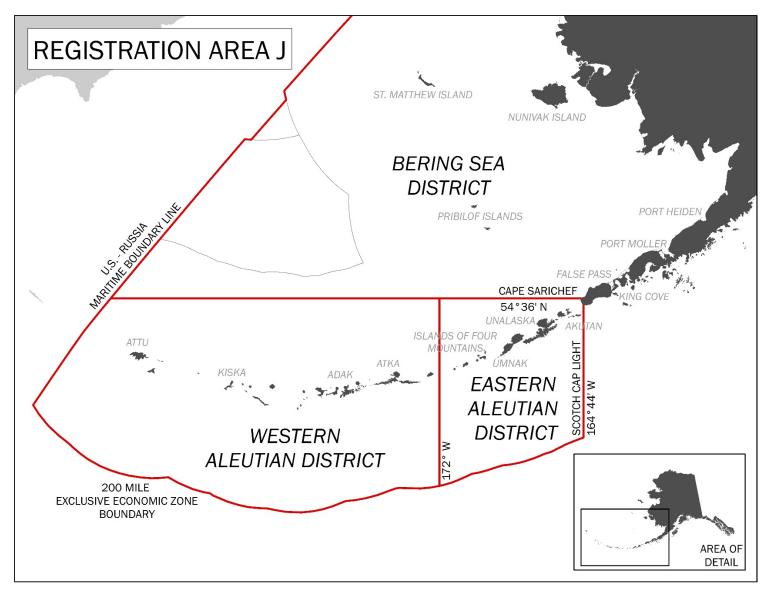


Figure 9.—Bering Sea and Aleutian Islands Tanner crab and miscellaneous shellfish Districts of Registration Area J.

ALEUTIAN ISLANDS SHELLFISH FISHERIES

ALEUTIAN ISLANDS KING CRAB MANAGEMENT AREA

DESCRIPTION OF AREA

The Aleutian Islands king crab Registration Area O 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 United States-Russia Maritime Boundary Line of 1990 (Figure 10).

ALEUTIAN ISLANDS GOLDEN KING CRAB

The Aleutian Islands golden king crab (AIGKC) stock is managed as two separate fisheries, east and west of 174°W long, with a separate TAC set for each fishery.

2016/17 Fishery East of 174°W Longitude

The 2016/17 Aleutian Islands Golden king crab fishery east of 174°W long (EAG) opened August 1 with a combined IFQ and CDQ TAC of 3,310,000 pounds (Table 21). TAC was allocated by NMFS as 90% IFQ (2,979,000 pounds) and 10% CDQ (331,000 pounds) with four of the six CDQ groups participating in the harvest of the CDQ allocation. Four vessels participated in the fishery and harvested 3,307,162 pounds, of which 2% was deadloss. Despite the regulatory fishing season running through April 30, 99% of the harvest occurred by the third week November, with the last delivery on April 7. On average, vessels were active in the fishery for 93 days. Harvest by statistical week is largely confidential and therefore not shown in tables. Harvesters were paid an initial average price of \$4.52 per pound, the highest EAG exvessel value since the inception of the fishery. Total exvessel fishery value was estimated to be \$14,660,890 (Table 22).

Total effort for the 2016/17 fishery was 23,401 pot lifts. On average, vessels were active in the fishery for 93 days. CPUE was 32 legal crab per pot, slightly above the post-rationalization (2005/06-2015/16) average CPUE of 31 (Table 21, Figure 11). Harvest was distributed across 23 ADF&G statistical reporting areas with the highest concentration of harvest (17%) occurring in ADF&G statistical area 715202 around Amukta Pass (Table 23).

EAG cost recovery was conducted by ADF&G in 2016 with 172,367 pounds (40,651 legal male crab) harvested. The 11-day charter occurred from August 28 to September 7 (Table 24).

Port Sampling

During the 2016/17 EAG fishery, ADF&G personnel sampled golden king crab at shore-based processors in Akutan and Dutch Harbor. Biological data collected on landed golden 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 11 of the 38 total landings (IFQ and CDQ) during the

2016/17 EAG fishery. Average weight of sampled crab was 4.4 pounds while average carapace length was 152 mm. (Table 21).

2016/17 Fishery West of 174°W Longitude

The 2016/17 Aleutian Islands Golden king crab fishery west of 174°W long (WAG) opened August 1 with a combined IFQ and CDQ TAC of 2,235,000 pounds (Table 21). TAC was allocated by NMFS as 90% IFQ (2,011,500 pounds) and 10% ACA (223,500 pounds). Three vessels participated in the fishery and harvested 2,236,651 pounds, of which 4% was deadloss. Harvest occurred throughout the season before the regulatory closure on April 30; harvest by statistical week is confidential and therefore not shown in tables. On average, vessels were active in the fishery for 208 days. Harvesters were paid an initial average price of \$4.50 per pound, the highest WAG exvessel value since inception of the fishery. Total exvessel fishery value was estimated to be \$9,664,768 (Table 22).

Total effort for the 2016/17 fishery was 38,118 pot lifts. CPUE was 14 legal crab per pot, well below the post-rationalization (2005/06-2015/16) average CPUE of 20 (Table 21, Figure 12). Harvest was distributed across 64 ADF&G statistical reporting areas; harvest by statistical area is confidential and therefore not shown in tables.

Port Sampling

During the 2016/17 WAG fishery, ADF&G personnel sampled golden king crab at shorebased processors in Akutan and Dutch Harbor. Biological data collected on landed golden 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. Daily fishing log records were also collected from landings to the shorebased processor in Adak where an AD&G port sampler was not available to collect biological data. Data was collected by ADF&G port samplers from 13 of the 37 total landings (IFQ and CDQ) during the 2016/17 WAG fishery. Average weight of sampled crab was 4.1 pounds while average carapace length was 148 mm. (Table 21).

Fishery Management and Stock Status

The AIGKC fishery is managed under a constant-catch harvest strategy with TAC fixed in regulation both east and west of 174°W long (5 AAC 34.612). Only a small portion of the area in which golden king crab are commercially harvested has been surveyed. In 2014, methods testing for an industry cooperative in-fishery survey began. ADF&G personnel are deployed on eastern Aleutian Islands golden king crab fishing vessels and survey pots are sampled 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 goal that the data will be informative to the developing stock assessment model.

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 (M.S.M. Siddeek, Biometrician, ADF&G, Juneau; personal communication).

Further information on AIGKC stock status and federal overfishing levels may be found in the 2016 Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions (NPFMC 2016a).

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 (164°44′W long), west to 172°W long, and south of the latitude of Cape Sarichef (54°36′N lat; Figure 13).

TANNER CRAB

2016 Commercial Fishery

The 2016 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 necessary for a commercial fishery were not met in the Unalaska/Kalekta Bay or Akutan Bay Sections. A single vessel participated in the fishery. Harvest information is confidential. The fishery closed on February 21 in anticipation of the GHL being achieved (Table 25 and 26).

Port Sampling

During the 2016 EAD fishery, ADF&G personnel sampled Tanner crab from one vessel at a shorebased processor in Dutch Harbor. Biological data collected on landed Tanner crab consisted of carapace width, shell condition, and average weight. Confidential interviews, supplemented by daily fishing log records, were conducted with the vessel captain to acquire detailed information regarding statistical reporting areas fished, effort, and fishery performance. Data was collected by ADF&G port samplers from 4 of the 4 total landings during the 2016 EAD fishery.

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 only from 8:00 a.m. until 5:59 p.m. Vessel length is restricted to 58 feet overall or less in the Unalaska Section. In the remainder of the EAD, vessel length is restricted to 58 feet overall or less when the GHL for Tanner crab is 1,000,000 pounds or less. The EAD Tanner crab fishery was not included in the crab rationalization program and remains an open access fishery. The harvest strategy is found in 5 AAC 35.509 *Eastern Aleutian District Tanner crab harvest strategy*.

In 2016, Akutan Bay, Unalaska/Kalekta Bay, and Makushin/Skan Bay were surveyed with trawl gear using the ADF&G *R/V Resolution* (Spalinger 2016). Total estimated abundance was 2.8 million crab, a 24% decrease from 3.6 million crab in 2015. The legal male abundance estimate of 0.041 million crab represents a decrease of 48% from 0.079 million crab in 2015 and is the lowest recorded legal estimate since 1995 and well below the trawl survey time series average of .291 million crab (1990-2015). In 2016, the most notable decrease in abundance from the 2015 survey was seen in the Unalaska/Kalekta Bay Section across all sex and size classes; the estimate of total crab abundance decreased 89%.

SUBSISTENCE

2016 King and Tanner Fishery

In 2016, ADF&G issued 257 subsistence permits, of which 115, or 45%, were returned. The returned permits account for a reported harvest of 2,243 Tanner crab and 100 red king crab

(Table 27). Harvest of Tanner crab ranged from 0 to 417 crab per permit holder and harvest of red king crab ranged from 0 to 25 crab per permit holder. Subsistence effort was primarily focused in Unalaska Bay. King and Tanner crab harvested in the EAD were taken with pot gear, though some users reported taking crab using scuba gear.

ALEUTIAN DISTRICT DUNGENESS CRAB

DESCRIPTION OF DISTRICT

The Aleutian District for Dungeness crab 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 (54°35.89′N lat), and east of the United States-Russia Maritime Boundary Line of 1990 (Figure 8).

2016 FISHERY

No vessels registered to fish for Dungeness crab in the Aleutian Islands during 2016 (Table 28).

Fishery Management and Stock Status

The Aleutian Islands Dungeness crab fishery is managed using 3-S management (size, sex, and season). Only male Dungeness crab 6.5 inches (165 mm) or greater in carapace width 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. Stock status of Dungeness crab in the Aleutian Islands is unknown, but the resource is believed to be limited by availability of suitable habitat.

ALEUTIAN DISTRICT MISCELLANEOUS SHELLFISH

DESCRIPTION OF DISTRICT

The Aleutian Islands District 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 9).

2016 FISHERIES

Octopus

In 2016, harvest from state waters was 36,128 pounds from 21 vessels and 89 landings. Harvest from state and federal waters was 158,482 pounds from 93 vessels and 386 landings. All reported harvest was incidental to groundfish fisheries. Average exvessel value based on landed weight of octopus in 2016 was \$0.18 per pound (Table 29).

Fishery Management and Stock Status

Octopus are considered a shellfish species under State of Alaska regulation. Limited directed fishing within state waters may occur under the authority of a commissioner's permit, however, octopus are primarily retained as bycatch during state and federal groundfish fisheries. Currently, vessels may retain incidentally caught octopus up to 20% of the weight of the target groundfish species or halibut onboard. Most octopus are retained as bycatch in Pacific pot gear cod fisheries.

Incidental harvest of octopus in the Aleutian Islands is dominated by giant Pacific octopus *Enteroctopus dofleini*, although at least six other species of octopus are known to occur in the Aleutian Islands. Results from the 2016 NMFS Aleutian Islands trawl survey estimate octopus (all

species) biomass at 8.5 million pounds. Biomass estimates for octopus in the Aleutian Islands are highly variable and general knowledge of the stock is limited (Conners et al. 2016).

Further information on octopus stock status and federal overfishing levels may be found in the 2016 Assessment of the Octopus Stock Complex in the Bering Sea and Aleutian Islands (Conners et al. 2016).

REFERENCES CITED

- Conners, M. E., K. Aydin, and C. Conrath. 2016. Assessment of the Octopus Stock Complex in the Bering Sea and Aleutian Islands. [In] Stock Assessment and Fishery Evaluation Report of the Bering Sea/Aleutian Islands Regions. North Pacific Fishery Management Council, Anchorage.
- NPFMC (North Pacific Fishery Management Council). 2016a. Stock assessment and fishery evaluation report for the king and Tanner crab fisheries of the Bering Sea and Aleutian Islands regions: 2016 crab SAFE. North Pacific Fishery Management Council, Anchorage.
- Spalinger, K. 2016. Bottom trawl survey of crab and groundfish: Kodiak, Chignik, South Peninsula, and Eastern Aleutian management districts, 2015. Alaska Department of Fish and Game, Fishery Management Report No. 15-27, Anchorage.

TABLES AND FIGURES

Table 21.—Aleutian Islands golden king crab commercial fishery harvest data, 1981/82–2016/17.

						Nur	nber of			Average	
Season	Location	GHL/TACa,b	Harvest ^{a,c}	Deadlossa	Vessels ^d	Landings	Crab ^c	Pots lifted	CPUE ^e	Weight ^{a,h}	Length ^{f,h}
1981/82	East of 172° W	-	115,715	8,752	6	16	22,666	2,906	8	5.1	158
	West of 172° W	-	1,194,046	22,064	14	76	217,700	24,627	9	5.5	160
	TOTAL	_	1,309,761	30,816	NA	92	240,366	27,533	9	5.4	NA
1982/83	East of 172° W	-	1,184,971	47,479	49	136	227,471	29,369	8	5.2	158
	West of 172° W	-	8,006,274	220,743	99	501	1,509,001	150,103	10	5.3	158
	TOTAL		9,191,245	268,222	NA	637	1,736,472	179,472	10	5.3	NA
1983/84	East of 172° W	-	1,810,973	45,268	47	132	328,353	29,595	11	5.5	NA
	West of 172° W	-	8,128,029	171,021	157	1,002	1,534,909	226,798	7	5.3	NA
	TOTAL		9,939,002	216,289	NA	1,134	1,863,262	256,393	7	5.3	NA
1984/85	East of 171° W	-	1,521,142	70,362	13	67	327,440	24,044	14	4.6	161
	West of 171° W	-	4,141,052	130,377	38	107	863,367	77,049	11	4.8	157
	TOTAL		5,662,194	200,739	NA	174	1,190,807	101,093	12	4.8	NA
1985/86	East of 171° W	-	1,733,878	25,223	11	59	364,097	31,322	12	4.8	156
	West of 171° W	-	11,024,759	197,753	53	386	2,452,216	205,279	12	4.5	151
	TOTAL	-	12,758,637	222,976	NA	445	2,816,313	236,601	12	4.5	NA
1986/87	East of 171° W	-	1,869,180	9,510	17	71	400,389	37,585	11	4.7	NA
	West of 171° W	-	12,869,564	276,741	62	528	2,940,238	395,435	7	4.4	150
	TOTAL	-	14,738,744	286,251	NA	599	3,340,627	433,020	8	4.4	NA
1987/88	East of 171° W	-	1,388,983	25,060	23	77	301,227	42,867	7	4.6	150
	West of 171° W	-	7,868,022	167,110	57	380	1,873,349	263,863	7	4.2	147
	TOTAL	-	9,257,005	192,170	NA	457	2,174,576	306,730	7	4.3	NA

Table 21.—Page 2 of 6.

					Number of					Average	
Season	Location	GHL/TACa,b	Harvest ^{a,c}	Deadlossa	Vesselsd	Landings	Crab ^c	Pots lifted	CPUE	Weight ^{a,h}	Length ^{f,h}
1988/89	East of 171° W	-	1,546,113	23,960	21	57	323,783	41,371	8	4.8	154
	West of 171° W	-	9,080,929	125,500	73	455	2,164,650	280,556	8	4.2	149
	TOTAL	-	10,627,042	149,460	76	512	2,488,433	321,927	8	4.3	NA
1989/90	East of 171° W	-	1,852,249	17,421	13	70	424,067	43,346	10	4.4	151
	West of 171° W	-	10,169,803	99,866	65	505	2,478,846	314,457	8	4.1	149
	TOTAL	-	12,022,052	117,287	68	575	2,902,913	357,803	8	4.1	NA
1990/91	East of 171° W	-	1,699,675	42,800	16	67	391,135	53,592	7	4.3	148
	West of 171° W	-	5,250,687	176,583	13	167	1,312,116	161,222	8	4.0	145
	TOTAL	-	6,950,362	219,383	23	234	1,703,251	214,814	8	4.1	NA
1991/92	East of 171° W	-	1,516,779	45,100	11	56	352,803	43,231	8	4.3	148
	West of 171° W	-	6,185,362	96,848	16	206	1,494,595	191,626	8	4.1	145
	TOTAL	-	7,702,141	141,948	19	258	1,847,398	234,857	8	4.2	NA
1992/93	East of 171° W	-	1,404,452	37,200	10	46	337,559	38,348	9	4.2	148
	West of 171° W	-	4,886,745	104,215	18	128	1,190,769	164,873	7	4.1	147
	TOTAL	-	6,291,197	141,415	22	174	1,528,328	203,221	8	4.1	NA
1993/94	East of 171° W	-	915,460	7,324	4	14	217,788	22,490	10	4.2	149
	West of 171° W	-	4,635,683	165,358	21	148	1,179,742	212,164	6	3.9	148
	TOTAL	-	5,551,143	172,682	21	162	1,397,530	234,654	6	4.0	NA
1994/95	East of 171° W	-	1,750,481	35,938	14	46	384,405	67,587	6	4.6	148
	West of 171° W	-	6,378,030	242,190	34	247	1,539,866	319,006	5	4.1	150
	TOTAL		8,128,511	278,128	35	293	1,924,271	386,593	5	4.2	NA

Table 21.—Page 3 of 6.

					Number of					Average	
Season	Location	GHL/TACa,b	Harvest ^{a,c}	Deadlossa	Vesselsd	Landings	Crab ^c	Pots lifted	CPUE ^e	Weight ^{a,h}	Length ^{f,h}
1995/96	East of 171° W	1,500,000	1,993,980	65,156	17	42	431,867	65,030	7	4.6	150
	West of 171° W	5-6 million	4,966,426	248,226	25	141	1,150,466	227,991	5	4.3	147
	TOTAL	_	6,960,406	313,382	28	183	1,582,333	293,021	5	4.4	NA
1996/97	East of 174° W	3,200,000	3,290,862	185,203	14	71	731,909	113,460	6	4.5	NA
	West of 174° W	2,700,000	2,524,910	75,506	13	99	602,968	99,267	6	4.2	NA
	TOTAL	5,900,000	5,815,772	260,709	18	166	1,334,877	212,727	6	4.4	147
1997/98	East of 174° W	3,200,000	3,501,055	131,481	13	74	780,610	106,403	7	4.5	147
	West of 174° W	2,700,000	2,444,628	79,564	9	96	569,550	86,811	7	4.3	148
	TOTAL	5,900,000	5,945,683	211,045	15	167	1,350,160	193,214	7	4.4	147
1998/99	East of 174° W	3,000,000	3,247,863	82,113	14	55	740,011	83,378	9	4.4	148
	West of 174° W	2,700,000	1,694,030	21,218	3	44	410,018	35,975	11	4.1	146
	TOTAL	5,700,000	4,941,893	103,331	16	99	1,150,029	119,353	10	4.3	147
1999/00	East of 174° W	3,000,000	3,069,886	67,574	15	60	709,332	79,129	9	4.3	147
	West of 174° W	2,700,000	2,768,902	104,852	15	113	676,558	107,040	6	4.1	147
	TOTAL	5,700,000	5,838,788	172,426	16	168	1,385,890	186,169	7	4.2	147
2000/01	East of 174° W	3,000,000	3,134,079	55,999	15	50	704,702	71,551	10	4.4	147
	West of 174° W	2,700,000	2,884,682	53,158	12	100	705,613	101,239	7	4.1	145
	TOTAL	5,700,000	6,018,761	109,157	17	149	1,410,315	172,790	8	4.3	146
2001/02	East of 174° W	3,000,000	3,178,652	50,030	19	45	730,030	62,639	12	4.4	147
	West of 174° W	2,700,000	2,740,054	43,519	9	90	686,738	105,512	7	4.0	145
	TOTAL	5,700,000	5,918,706	93,549	21	134	1,416,768	168,151	8	4.2	146

Table 21.—Page 4 of 6.

					Number of					Average	
Season	Location	GHL/TACa,b	Harvest ^{a,c}	Deadlossa	Vessels ^d	Landings	Crab ^c	Pots lifted	CPUE ^e	Weight ^{a,h}	Length ^{f,h}
2002/03	East of 174° W	3,000,000	2,821,851	55,425	19	43	643,886	52,042	12	4.4	148
	West of 174° W	2,700,000	2,640,604	32,101	6	73	664,823	78,979	8	4.0	146
	TOTAL	5,700,000	5,462,455	87,526	22	116	1,308,709	131,021	10	4.2	147
2003/04	East of 174° W	3,000,000	2,977,055	76,006	18	37	643,074	58,883	11	4.6	149
	West of 174° W	2,700,000	2,688,773	49,321	6	60	676,633	66,236	10	4.0	146
	TOTAL	5,700,000	5,665,828	125,327	21	96	1,319,707	125,119	11	4.3	147
2004/05	East of 174° W	3,000,000	2,886,817	43,576	19	32	637,536	34,848	18	4.5	148
	West of 174° W	2,700,000	2,688,234	43,560	6	51	685,465	56,846	12	3.9	146
	TOTAL	5,700,000	5,575,051	87,136	22	83	1,323,001	91,694	14	4.2	147
2005/06g	East of 174° W	3,000,000	2,866,602	26,962	7	39	623,966	24,569	25	4.6	151
	West of 174° W	2,700,000	2,653,716	30,873	3	47	639,370	30,116	21	4.2	148
	TOTAL	5,700,000	5,520,318	57,835	8	82	1,263,336	54,685	23	4.4	149
2006/07	East of 174° W	3,000,000	2,992,010	34,594	6	38	650,588	26,195	25	4.6	152
	West of 174° W	2,700,000	2,270,332	22,344	4	37	527,737	26,110	20	4.3	150
	TOTAL	5,700,000	5,262,342	56,938	7	74	1,178,325	52,305	23	4.5	150
2007/08	East of 174° W	3,000,000	2,989,997	21,558	4	42	633,253	22,653	28	4.7	153
	West of 174° W	2,700,000	2,518,103	24,870	3	39	600,595	29,950	20	4.2	149
	TOTAL	5,700,000	5,508,100	46,428	5	76	1,233,848	52,603	23	4.5	151
2008/09	East of 174° W	3,150,000	3,144,423	25,525	3	37	666,947	24,466	27	4.7	151
	West of 174° W	2,835,000	2,535,661	25,292	3	42	587,661	26,200	22	4.3	148
	TOTAL	5,985,000	5,680,084	50,817	5	79	1,254,608	50,666	25	4.5	149

Table 21.—Page 5 of 6.

						Nur	nber of			Average	
Season	Location	GHL/TACa,b	Harvest ^{a,c}	Deadlossa	Vesselsd	Landings	Crab ^c	Pots lifted	CPUE ^e	Weight ^{a,h}	Length ^{f,h}
2009/10	East of 174° W	3,150,000	3,150,474	33,284	3	39	679,886	26,298	26	4.6	152
	West of 174° W	2,835,000	2,761,813	40,311	3	41	628,332	26,489	24	4.4	150
	TOTAL	5,985,000	5,912,287	73,595	5	80	1,308,218	52,787	25	4.5	150
2010/11	East of 174° W	3,150,000	3,148,188	71,519	3	35	670,981	25,851	26	4.7	153
	West of 174° W	2,835,000	2,820,661	39,727	3	38	626,246	29,944	21	4.5	149
	TOTAL	5,985,000	5,968,849	111,246	5	73	1,297,227	55,795	23	4.6	151
2011/12	East of 174° W	3,150,000	3,150,374	24,184	3	41	668,828	17,915	37	4.7	151
	West of 174° W	2,835,000	2,814,042	39,147	3	40	616,118	26,326	23	4.6	148
	TOTAL	5,985,000	5,964,416	63,331	5	81	1,284,946	44,241	29	4.6	149
2012/13	East of 174° W	3,310,000	3,315,115	79,434	3	45	687,666	20,827	33	4.8	153
	West of 174° W	2,980,000	2,952,644	55,627	4	36	672,916	32,716	21	4.4	150
	TOTAL	6,290,000	6,267,759	135,061	6	81	1,360,582	53,543	25	4.6	151
2013/14	East of 174° W	3,310,000	3,302,061	29,932	3	42	699,078	20,687	34	4.7	151
	West of 174° W	2,980,000	2,970,514	92,980	3	34	686,883	41,835	16	4.3	152
	TOTAL	6,290,000	6,272,575	122,912	5	76	1,385,961	62,522	22	4.5	151
2014/15	East of 174° W	3,310,000	3,307,016	29,676	3	33	693,474	16,406	42	4.8	152
	West of 174° W	2,980,000	CF	CF	2	44	CF	CF	CF	CF	148
	TOTAL	6,290,000	CF	CF	5	77	CF	CF	CF	CF	150
2015/16	East of 174° W	3,310,000	3,302,480	53,160	3	34	717,864	18,481	39	4.6	152
	West of 174° W	2,980,000	CF	CF	2	50	CF	CF	CF	CF	147
	TOTAL	6,290,000	CF	CF	5	84	CF	CF	CF	CF	150

Table 21.—Page 6 of 6.

						Number of			Average		
Season	Location	GHL/TACa,b	Harvest ^{a,c}	Deadloss ^a	Vesselsd	Landings	Crab ^c	Pots lifted	CPUE ^e	Weight ^{a,h}	Length ^{f,h}
2016/17	East of 174° W	3,310,000	3,307,162	65,366	4	38	753,332	23,401	32	4.4	152
	West of 174° W	2,235,000	2,236,651	88,769	3	37	543,796	38,118	14	4.1	148
	TOTAL	5,545,000	5,543,813	154,135	5	75	1,297,128	61,519	21	4.3	150

Note: CF = confidential, NA = not available.

^a In pounds.

^b Guideline harvest level (GHL), total allowable catch (TAC) from 2005/06 forward.

^c Deadloss included.

^d Many vessels fished both east and west of 174° W long, thus total number of vessels reflects the entire Aleutian Islands.

^e Number of legal crab per pot lift.

f Carapace length in millimeters.

g Crab Rationalization begins.

h Retained catch.

Table 22.–Aleutian Islands golden king crab commercial fishery value and season dates, 1981/82–2016/17.

		V	alue	Se	eason length	
Season	Location	Exvessela	Total	Opened	Closed	Days
1981/82	East of 172° W	\$2.05	\$219,274	11/01/81	01/15/82	76
	West of 172° W	\$2.06	\$2,414,283	11/01/81	06/15/82	227
1982/83	East of 172° W	\$3.00	\$3,412,476	11/01/82	02/15/83	107
	West of 172° W	\$3.01	\$23,434,448	11/01/82	04/15/83	166
1983/84	East of 172° W	\$3.05	\$5,385,400	11/01/83	02/15/84	107
	West of 172° W	\$2.92	\$23,234,463	11/10/83	04/15/84	158
1984/85	East of 171° W	\$1.35	\$1,958,553	07/01/84	02/15/85	230
	West of 171° W	\$2.00	\$8,021,350	11/10/84	07/08/85	241
1985/86	East of 171° W	\$2.00	\$3,417,310	07/01/85	10/31/85	123
	West of 171° W	\$2.50	\$27,067,515	11/01/85	08/15/86	288
1986/87	East of 171° W	\$2.85	\$5,300,060	07/01/86	12/31/86	184
	West of 171° W	\$3.00	\$37,778,469	11/01/86	08/15/87	288
1987/88	East of 171° W	\$2.85	\$3,887,181	07/01/87	09/02/87	64
	West of 171° W	\$3.00	\$23,102,736	11/01/87	08/15/88	289
1988/89	East of 171° W	\$3.07	\$4,672,313	09/01/88	12/04/88	95
	West of 171° W	\$3.37	\$30,181,208	11/01/88	08/15/89	288
1989/90	East of 171° W	\$3.63	\$6,668,081	09/01/89	02/15/90	168
	West of 171° W	\$3.39	\$34,140,693	11/01/89	08/15/90	288
1990/91	East of 171° W	\$3.34	\$5,530,986	09/01/90	11/09/90	70
	West of 171° W	\$3.08	\$15,644,967	11/01/90	08/15/91	288
1991/92	East of 171° W	\$2.00	\$2,943,358	09/01/91	11/15/91	76
	West of 171° W	\$3.18	\$19,338,288	11/01/91	08/15/92	289
1992/93	East of 171° W	\$2.86	\$3,906,365	09/01/92	11/17/92	78
	West of 171° W	\$3.62	\$17,299,699	11/01/92	08/15/93	288
1993/94	East of 171° W	\$4.57	\$4,154,668	09/01/93	03/01/94	182
	West of 171° W	\$2.50	\$11,175,813	11/01/93	08/15/94	288
1994/95	East of 171° W	\$3.94	\$6,757,257	09/01/94	10/28/94	58
	West of 171° W	\$3.35	\$20,536,409	11/01/94	08/15/95	288
1995/96	East of 171° W	\$2.58	\$4,983,453	09/01/95	10/09/95	39
	West of 171° W	\$2.27	\$10,715,103	11/01/95	08/15/96	289
1996/97	East of 174° W	\$2.20	\$6,835,280	09/01/96	12/25/96	116
	West of 174° W	\$2.23	\$5,463,529	09/01/96	08/31/97	365

Table 22.—Page 2 of 3.

		V	alue	Se	eason length	
Season	Location	Exvessela	Total	Opened	Closed	Days
1997/98	East of 174° W	\$2.25	\$7,581,682	09/01/97	11/24/97	85
	West of 174° W	\$2.15	\$5,087,987	09/01/97	08/31/98	365
1998/99	East of 174° W	\$1.88	\$5,952,446	09/01/98	11/07/98	68
	West of 174° W	\$2.02	\$3,377,002	09/01/98	08/31/99	365
1999/00	East of 174° W	\$3.28	\$9,853,086	09/01/99	10/25/99	55
	West of 174° W	\$3.11	\$8,284,343	09/01/99	08/14/00	349
2000/01	East of 174° W	\$3.51	\$10,806,859	08/15/00	09/24/00	41
	West of 174° W	\$3.07	\$8,682,694	08/15/00	05/28/01	287
2001/02	East of 174° W	\$3.30	\$10,324,453	08/15/01	09/10/01	27
	West of 174° W	\$3.15	\$8,487,366	08/15/01	03/30/02	228
2002/03	East of 174° W	\$3.33	\$9,199,835	08/15/02	09/07/02	24
	West of 174° W	\$3.50	\$9,117,906	08/15/02	03/08/03	206
2003/04	East of 174° W	\$3.47	\$10,065,228	08/15/03	09/08/03	25
	West of 174° W	\$3.83	\$10,109,101	08/15/03	02/06/04	176
2004/05	East of 174° W	\$3.18	\$9,039,137	08/15/04	08/29/04	15
	West of 174° W	\$3.29	\$8,706,763	08/15/04	01/03/05	142
2005/06 ^b	East of 174° W	\$2.51	\$7,117,132	08/15/05	05/15/06	274
	West of 174° W	\$2.12	\$5,549,420	08/15/05	05/15/06	274
2006/07	East of 174° W	\$1.71	\$5,070,070	08/15/06	05/15/07	274
	West of 174° W	\$1.32	\$2,978,071	08/15/06	05/15/07	274
2007/08	East of 174° W	\$2.14	\$6,365,457	08/15/07	05/15/08	275
	West of 174° W	\$1.79	\$4,454,290	08/15/07	05/15/08	275
2008/09	East of 174° W	\$3.42	\$10,678,756	08/15/08	05/15/09	274
	West of 174° W	\$1.91	\$4,791,631	08/15/08	05/15/09	274
2009/10	East of 174° W	\$1.98	\$6,174,304	08/15/09	05/15/10	274
	West of 174° W	\$1.96	\$5,322,370	08/15/09	05/15/10	274
2010/11	East of 174° W	\$3.03	\$9,315,401	08/15/10	05/15/11	274
	West of 174° W	\$3.53	\$9,803,355	08/15/10	05/15/11	274
2011/12	East of 174° W	\$3.80	\$11,880,146	08/15/11	05/15/12	275
	West of 174° W	\$3.72	\$10,313,779	08/15/11	05/15/12	275
2012/13	East of 174° W	\$3.47	\$11,218,989	08/15/12	05/15/13	274
	West of 174° W	\$3.30	\$9,554,574	08/15/12	05/15/13	274

Table 22.—Page 3 of 3.

		V	alue	Season length			
Season	Location	Exvessela	Total	Opened	Closed	Days	
2013/14	East of 174° W	\$3.48	\$11,376,784	08/15/13	05/15/14	274	
	West of 174° W	\$3.50	\$10,081,665	08/15/13	05/15/14	274	
2014/15	East of 174° W	\$3.34	\$10,936,484	08/15/14	05/15/15	274	
	West of 174° W	CF	CF	08/15/14	05/15/15	274	
2015/16	East of 174° W	\$3.64	\$11,815,476	08/01/15	04/30/16	274	
	West of 174° W	CF	CF	08/01/15	04/30/16	274	
2016/17	East of 174° W	\$4.52	\$14,660,890	08/01/16	04/30/17	273	
	West of 174° W	\$4.50	\$9,664,768	08/01/16	04/30/17	273	

Note: CF = confidential.

^a Average price per pound.

^b Crab rationalization begins.

Table 23.-Aleutian Islands golden king crab commercial fishery harvest by statistical area east of 174° W long, 2016/17.

				Num		Av	erage	
Statistical area	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,e}
695200	165,683	2,893	3	17	35,654	1,360	26	4.6
695239	123,163	2,168	3	22	26,473	1,015	26	4.7
705232	506,611	8,844	3	26	116,645	4,256	27	4.3
715202	566,080	17,004	3	24	129,254	4,390	29	4.4
725201	322,357	4,630	4	19	70,806	1,871	38	4.6
Other ^d	1,623,268	29,827	3	36	374,500	10,509	36	4.3
Total	3,307,162	65,366	4	38	753,332	23,401	32	4.4

^a In pounds.

b Deadloss included.

^c Number of legal crab per pot lift.

d Combination of statistical areas (18) in which landings were made by fewer than three vessels.

e Retained catch.

Table 24.—Eastern Aleutian Islands golden king crab cost-recovery harvest data and charter length, 2013–2016.

			Number of			Av	erage	Charter Length		
Season	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,d}	Dates	Days
2013	106,978	1,344	1	1	21,142	701	30	5.1	09/09-09/17	9
2014	119,005	894	1	1	25,590	596	43	4.7	09/07-09/17	11
2015	202,169	3,756	1	1	45,740	895	51	4.4	09/08-09/17	10
2016	172,367	3,448	1	1	40,651	1,069	38	4.2	08/28-09/07	11

a In pounds

b Deadloss included.

c Number of legal crab per pot lift.

d Retained catch.

Table 25.–Eastern Aleutian District Tanner crab commercial fishery harvest data, 1973/74–2016.

					Number of				Av	erage
Season	Location	GHL ^{a,b}	Harvest ^{a,c}	Deadlossa	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{a,g}
1973/74	-	-	498,836	NA	6	14	210,539	NA	60	2.4
1974/75	-	-	CF	CF	2	2	CF	CF	CF	CF
1975/76	-	-	534,295	NA	8	13	219,166	4646	47	2.4
1976/77	-	-	1,239,569	NA	12	35	544,755	9640	57	2.3
1977/78	-	-	2,494,631	NA	15	198	1,104,631	29855	37	2.3
1978/79	-	-	1,280,115	NA	20	174	542,081	18618	29	2.4
1979/80	-	-	886,487	NA	18	107	352,819	18040	20	2.5
1981	-	-	654,514	NA	29	119	264,238	21771	12	2.5
1982	-	-	739,694	NA	31	138	332,260	30109	11	2.2
1983	-	-	547,830	NA	23	107	250,774	22168	11	2.2
1984	-	-	239,585	NA	16	91	104,761	11069	9	2.3
1985	-	-	181,407	60	7	56	78,930	6295	13	2.3
1986	-	-	167,339	400	8	37	73,187	10244	7	2.3
1987	-	-	162,097	115	8	65	72,098	5915	12	2.2
1988	-	-	309,918	2,000	20	130	129,478	11011	12	2.4
1989	-	-	326,196	2,300	12	108	144,593	14615	10	2.3
1990	-	-	155,648	0	10	75	68,859	6858	10	2.3
1991	-	-	50,038	0	5	27	21,511	1849	12	2.3
1992	-	-	98,703	0	4	29	42,096	2963	14	2.3
1993	-	-	118,609	0	7	34	51,441	3530	15	2.3
1994	-	-	166,080	40	8	119	71,760	6303	11	2.3
1995–2002				No Cor	nmercial Fi	shery				
2003e	-	-	15,138	9	3	10	6,695	191	35	2.3

Table 25.—Page 2 of 3.

						Num	ber of		Average		
Season	Location	GHL ^{a,b}	Harvest ^{a,c}	Deadlossa	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{a,g}	
2004	Unalaska Bay	47,219	CF	CF	10	48	CF	CF	CF	CF	
	Makushin/Skan Bay	87,891	CF	CF	6	13	CF	CF	CF	CF	
	TOTAL	135,110	CF	CF	$14^{\rm f}$	61	CF	CF	CF	CF	
2005	Unalaska Bay	35,304	34,022	0	25	79	14,249	696	20	2.4	
2006	Makushin/Skan Bay	87,241	CF	CF	10	32	CF	CF	CF	CF	
2007	Akutan Bay	35,000	CF	CF	3	7	CF	CF	CF	CF	
	Unalaska Bay	49,000	CF	CF	12	41	CF	CF	CF	CF	
	TOTAL	84,000	CF	CF	$13^{\rm f}$	47	CF	CF	CF	CF	
2008	Unalaska Bay	60,000	CF	CF	11	48	CF	CF	CF	CF	
2009	Akutan Bay	35,000	CF	CF	1	2	CF	CF	CF	CF	
	Makushin/Skan Bay	35,000	CF	CF	1	3	CF	CF	CF	CF	
	Unalaska Bay	58,000	CF	CF	10	83	CF	CF	CF	CF	
	TOTAL	128,000	CF	CF	11 ^f	88	CF	CF	CF	CF	
2010	Akutan Bay	45,000	CF	CF	3	3	CF	CF	CF	CF	
	Unalaska Bay	74,000	CF	CF	7	63	CF	CF	CF	CF	
	TOTAL	119,000	CF	CF	$8^{\rm f}$	66	CF	CF	CF	CF	
2011	Akutan Bay	35,000	CF	CF	2	3	CF	CF	CF	CF	
	Makushin/Skan Bay	35,000	CF	CF	3	4	CF	CF	CF	CF	
	TOTAL	70,000	CF	CF	$3^{\rm f}$	7	CF	CF	CF	CF	
2012	Makushin/Skan Bay	35,000	CF	CF	1	6	CF	CF	CF	CF	
2013	Unalaska Bay	35,000	CF	CF	6	28	CF	CF	CF	CF	
2014				No Comi	nercial Fish	ery					
2015	Makushin/Skan Bay	35,000	CF	CF	1	5	CF	CF	CF	CF	

Table 25.—Page 3 of 3.

					Number of				Ave	rage
Season	Location	GHL ^{a,b}	Harvest ^{a,c}	Deadlossa	Vessels	Landings	Crab ^c	Pots lifted	CPUE ^d	Weight ^{a,g}
2016	Makushin/Skan Bay	35,000	CF	CF	1	4	CF	CF	CF	CF

Note: NA = not available, CF = confidential

- ^a In pounds.
- b Guideline harvest level (GHL).
- ^c Deadloss included beginning 1980.
- d Number of legal crab per pot lift.
- ^e January/February survey (fish ticket harvest code 15, exploratory shellfish harvest).
- f Vessel(s) participated in multiple sections.
- g Retained catch.

Table 26.–Eastern Aleutian District Tanner crab commercial fishery value and season dates, 1973/74–2016.

		Val	ue	Season length			
Season	Location	Exvessela	Total	Opened	Closed	Days	
1973/74	-	NA	NA	10/01/73	07/31/74	304	
1974/75	-	CF	CF	01/18/74	10/15/75	636	
1975/76	-	\$0.20	\$106,859	01/20/75	10/15/76	635	
1976/77	-	\$0.30	\$371,871	11/07/76	06/15/77	221	
1977/78	-	\$0.38	\$947,960	11/01/77	06/15/78	227	
1978/79	-	\$0.52	\$665,660	11/01/78	06/15/79	227	
1979/80	-	\$0.52	\$460,973	11/01/79	06/15/80	228	
1981	-	\$0.58	\$379,618	01/15/81	06/15/81	152	
1982	-	\$1.25	\$924,618	02/15/82	06/15/82	121	
1983	-	\$1.20	\$657,396	02/15/83	06/15/83	121	
1984	-	\$0.98	\$234,793	02/15/84	06/15/84	122	
1985	-	\$0.96	\$174,093	01/15/85	06/15/85	152	
1986	-	\$1.66	\$277,119	01/15/86	06/15/86	152	
1987	-	\$2.03	\$328,823	01/15/87	06/15/87	152	
1988	-	\$2.18	\$671,261	01/15/88	04/10/88	87	
1989	-	\$2.72	\$880,997	01/15/89	05/07/89	113	
1990	-	\$1.97	\$306,627	01/15/90	04/09/90	85	
1991	-	\$1.25	\$62,548	01/15/91	03/31/91	76	
1992	-	\$2.07	\$204,315	01/15/92	03/31/92	77	
1993	-	\$1.70	\$201,635	01/15/93	03/31/93	76	
1994	-	\$2.11	\$350,344	01/15/94	03/31/94	76	
1995–2003		No Co	mmercial Fisher	у			
2004	Unalaska Bay	CF	CF	01/15/04	01/19/04	5	
	Makushin/Skan Bay	CF	CF	01/15/04	02/03/04	20	
2005	Unalaska Bay	\$2.58	\$87,777	01/15/05	01/18/05	4	
2006	Makushin/Skan Bay	CF	CF	01/15/06	01/21/06	7	
2007	Akutan Bay	CF	CF	01/15/07	03/31/07	76	
	Unalaska Bay	CF	CF	01/15/07	01/19/07	5	
2008	Unalaska Bay	CF	CF	01/15/08	01/29/08	15	
2009	Akutan Bay	CF	CF	01/15/09	03/31/09	76	
	Makushin/Skan Bay	CF	CF	01/15/09	03/31/09	76	
	Unalaska Bay	CF	CF	01/15/09	02/11/09	28	
2010	Akutan Bay	CF	CF	01/15/10	03/31/10	76	
	Unalaska Bay	CF	CF	01/15/10	02/10/10	27	

Table 26.—Page 2 of 2.

		Valu	e	Season length			
Season	Location	Exvessela	Total	Opened	Closed	Days	
2011	Akutan Bay	CF	CF	01/15/11	03/31/11	76	
	Makushin/Skan Bay	CF	CF	01/15/11	03/18/11	63	
2012	Makushin/Skan Bay	CF	CF	01/15/12	02/10/12	27	
2013	Unalaska Bay	CF	CF	01/15/13	01/26/13	12	
2014		No Cor	mmercial Fisher	y			
2015	Makushin/Skan Bay	CF	CF	01/15/15	02/13/15	30	
2016	Makushin/Skan Bay	CF	CF	01/15/16	02/21/16	38	

Note: NA = not available, CF = confidential.

^a Average price per pound.

Table 27.–Subsistence king and Tanner crab harvest from the Eastern Aleutian Islands, west of Scotch Cap Light and east of 168°W long, 1999–2016.

		Permits		Harvest ^a			
Year	Number issued ^b	Number returned	Percent returned	King crab reported	Tanner crab reported		
1999	179	80	45%	787	1,432		
2000	193	137	71%	523	916		
2001	200	153	77%	1,149	1,703		
2002	231	179	77%	1,080	2,451		
2003	229	160	70%	387	4,600		
2004	225	144	64%	225	4,714		
2005	241	182	76%	866	5,447		
2006	256	185	72%	1,796	1,439		
2007	203	122	60%	1,359	1,542		
2008	290	177	61%	1,212	853		
2009	273	154	56%	639	2,045		
2010	283	117	41%	142	2,315		
2011	256	119	46%	185	1,476		
2012	342	134	39%	229	2,436		
2013	266	117	44%	606	2,081		
2014	249	113	45%	236	1,953		
2015	222	111	50%	73	1,570		
2016	257	115	45%	100	2,243		
1999–2016 Average	244	139	58%	644	2,290		

^a Reported harvest, in number of crab, from waters surrounding Unalaska Island.

^b Includes permits issued for both shellfish and salmon.

Table 28.—Aleutian District Dungeness crab commercial fishery data, 1974–2016.

				Nun	nber of		Av	verage	Value	
Season	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,f}	Exvessel ^d	Total
1974	60,517	NA	3	13	24,459	3,399	7	2.5	NA	NA
1975	CF	CF	1	3	CF	CF	CF	CF	CF	CF
1976–1977				N	o Commerc	ial Fishing Effo	rt			
1978	CF	CF	2	9	CF	CF	CF	CF	CF	CF
1979	CF	CF	1	4	CF	CF	CF	CF	CF	CF
1980-1981/82				N	o Commerc	ial Fishing Effo	ort			
1982/83	CF	CF	2	9	CF	CF	CF	CF	CF	CF
1983/84	CF	CF	2	14	CF	CF	CF	CF	CF	CF
1984/85	91,739	NA	4	50	40,128	13,555	3	2.3	\$1.33	\$122,013
1985/86	17,830	0	4	19	8,590	1,706	5	2.1	NA	NA
1986/87	CF	CF	2	9	CF	CF	CF	CF	CF	CF
1987/88	26,627	0	6	43	13,247	2,987	4	2	\$0.95	\$25,296
1988/89	22,915	4	6	45	10,956	2,599	4	2.1	\$0.81	\$18,558
1989/90	11,124	0	4	31	5,165	2,078	2	2.2	\$0.91	\$10,123
1990/91	17,482	117	3	11	8,379	1,345	6	2.1	\$1.20	\$20,838
1991/92	7,412	0	4	14	3,654	732	5	2	\$1.25	\$9,265
1992/93	5,649	0	4	13	2,854	555	5	2	\$0.83	\$4,689
1993/94	7,531	10	5	12	3,448	797	4	2.2	\$0.78	\$5,866
1994/95				N	o Commerc	ial Fishing Effo	rt			
1995/96	CF	CF	2	2	CF	CF	CF	CF	CF	CF
1996/97			No Commercial Fishing Effort							
1997-98	CF	CF	2	4	CF	CF	CF	CF	CF	CF
1998/99-2000/01				N	o Commerc	ial Fishing Effo	rt			

Table 28.–Page 2 of 2.

				Number of			A	verage	Value	
Season	Harvest ^{a,b}	Deadlossa	Vessels	Landings	Crab ^b	Pots lifted	CPUE ^c	Weight ^{a,f}	Exvesseld	Total
2001/02	CF	CF	1	1	CF	CF	CF	CF	CF	CF
2002/03	CF	CF	1	1	CF	CF	CF	CF	CF	CF
2003/04-2004/05				No	Commer	cial Fishing Ef	fort			
2005/06	CF	CF	1	1	CF	CF	CF	CF	CF	CF
2006/07-2014				No	Commer	cial Fishing Ef	fort			
2015	CF	CF	1e	1	CF	CF	CF	CF	CF	CF
2016				No Commercial Fishing Effort						

Note: CF = confidential. NA = not available

- ^a In pounds.
- b Deadloss included.
- ^c Number of legal crab per pot lift.
- d Average price per pound.
- e Harvested from a dock.
- f Retained catch.

Table 29.-Aleutian Islands commercial octopus incidental harvest in groundfish fisheries, 1996-2016.

		State water	`S	State and federal waters						
Season	Vessels	Landings	Whole pounds ^a	Vessels	Landings	Whole pounds ^a	At-sea discards	Exvessel value ^b		
1996°	26	87	36,292	68	281	97,085	29,925	\$0.39		
1997	19	44	22,431	61	235	98,497	22,880	\$0.33		
1998°	16	44	18,375	46	195	54,979	22,554	\$0.05		
1999	32	76	87,420	60	268	152,075	36,292	\$0.32		
2000	24	37	5,911	69	286	71,957	49,832	\$0.17		
2001	19	47	7,120	69	254	99,521	67,936	\$0.02		
2002	12	21	3,063	56	199	96,586	68,752	\$0.02		
2003	27	89	102,104	69	329	288,020	27,011	\$0.55		
2004°	38	135	151,205	76	459	998,731	97,750	\$0.62		
2005°	22	82	57,552	53	336	439,500	37,163	\$0.50		
2006	33	114	133,182	64	346	454,847	92,777	\$0.46		
2007	31	96	46,346	70	295	102,291	13,895	\$0.39		
2008°	26	45	35,480	56	151	142,938	24,713	\$0.40		
2009	13	21	8,782	41	91	28,038	5,192	\$0.23		
2010	21	48	42,376	54	184	168,964	96,533	\$0.20		
2011	13	17	8,187	53	204	209,636	181,825	\$0.23		
2012	18	58	14,917	57	182	76,141	38,129	\$0.12		
2013	20	129	50,309	50	202	116,103	16,671	\$0.01		
2014	16	136	65,637	56	293	212,019	48,664	\$0.26		
2015	17	84	41,258	69	288	168,133	36,229	\$0.26		
2016	21	89	36,128	93	386	158,482	36,900	\$0.18		

^a Includes discards.

Average price per pound, based on landed weight.
 Includes directed octopus harvest from Commissioner's permit fishery.

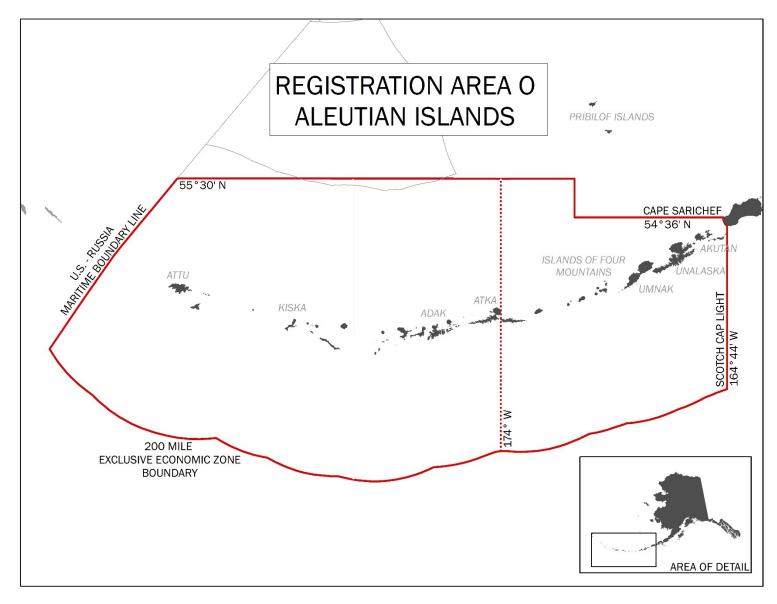


Figure 10.-Aleutian Islands king crab commercial fishery Registration Area O.

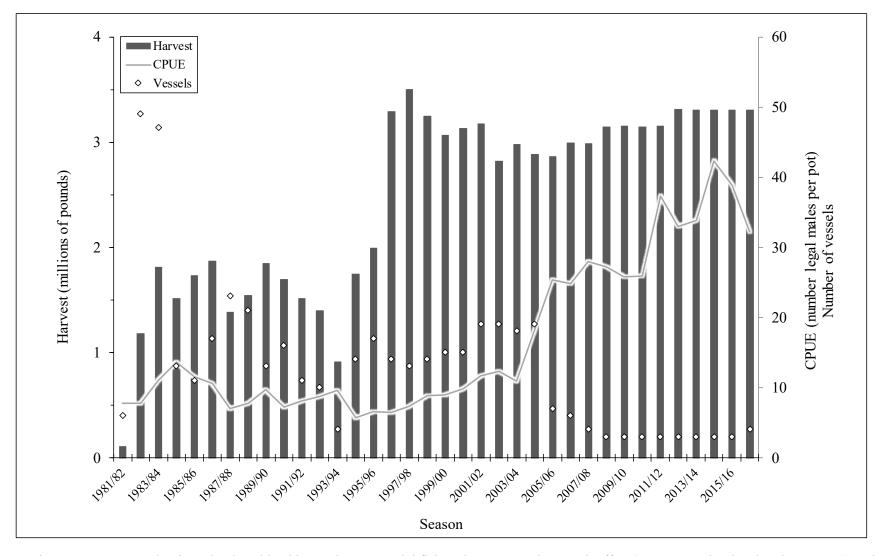


Figure 11.—Eastern Aleutian Islands golden king crab commercial fishery harvest, catch per unit effort (CPUE; number legal males per pot), and number of vessels, 1981/82–2016/17.

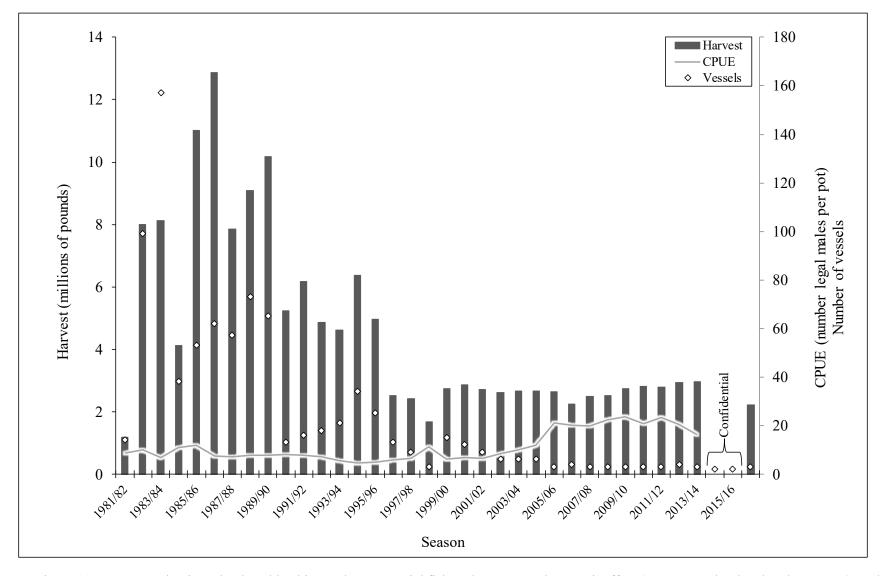


Figure 12.—Western Aleutian Islands golden king crab commercial fishery harvest, catch per unit effort (CPUE; number legal males per pot), and number of vessels, 1981/82–2016/17.

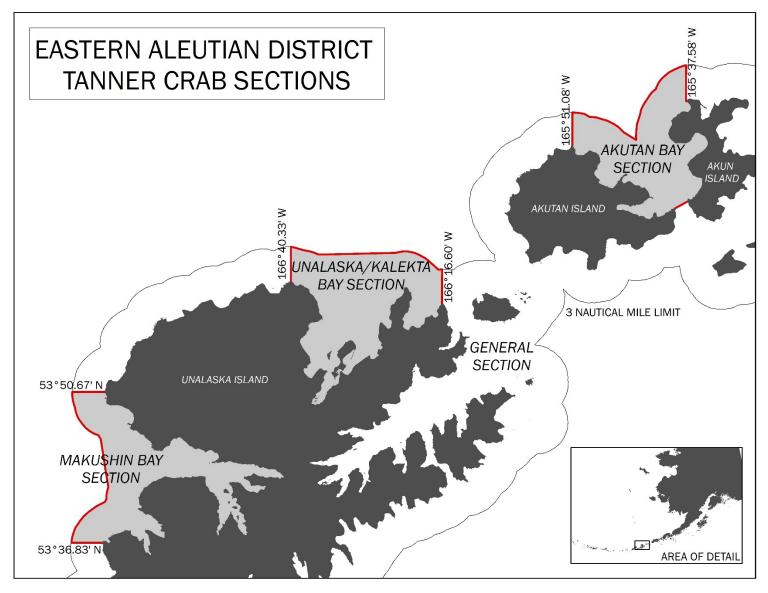


Figure 13.-Eastern Aleutian District Tanner crab sections of Registration Area J.

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

DESCRIPTION OF AREA

Bering Sea Community Development Quota (CDQ) crab fisheries occur within the state waters of Alaska (0–3 nmi) and the Exclusive Economic Zone (EEZ; 3–200 nmi) 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 1, 3, and 5).

Aleutian Islands CDQ and Adak Community Allocation (ACA) crab fisheries encompass state waters of Alaska (0–3 nmi) and waters of the Exclusive Economic Zone (EEZ; 3–200 nmi). 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 (Figure 10).

PROGRAM BACKGROUND

The Alaska Board of Fisheries (BOF) adopted regulations for 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 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 aligned into six CDQ organizations, collectively referred to as CDQ groups. The groups are as follows: 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 six CDQ groups participates in at least one CDQ fishery every year, although each group does not necessarily have an allocation for each fishery (Table 30). Groups may choose not to participate or transfer their allocation to another group. 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.

In conjunction with the changes to the CDQ program during crab rationalization, the BOF adopted regulations for an Adak Community Allocation (ACA) Western Aleutian Islands golden king crab fishery. The program was established to benefit the community of Adak, who formed 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. This fishery opened for the first time in August 2005.

CURRENT FISHERY

CDQ groups are required to submit preseason fishery 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. Almost all CDQ harvest is taken concurrently with IFQ harvest. Fishermen generally use the same gear to harvest IFQ and CDQ crab.

TABLES

Table 30.—Community Development Quota (CDQ) and Adak Community Allocation (ACA) program percent allocation by fishery to each group, 2003–2016/17.

	Percent allocation by group ^a								
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) ^b	8	18	21	18	21	14	0		
Eastern Aleutian Islands Golden King Crab (east of 174° W long) ^b	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		

^a 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).

^b 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.