**Fishery Management Report No. 14-54**

# Annual Management Report for the Commercial and Subsistence Shellfish Fisheries of the Aleutian Islands, Bering Sea and the Westward Region's Shellfish Observer Program, 2011/12

**by**

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

## Symbols and Abbreviations

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

**Weights and measures (metric)**

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

**Weights and measures (English)**

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

**Time and temperature**

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

**Physics and chemistry**

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

**General**

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

**Mathematics, statistics**

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

*FISHERY MANAGEMENT REPORT NO. 14-54*

# ANNUAL MANAGEMENT REPORT FOR THE COMMERCIAL AND SUBSISTENCE SHELLFISH FISHERIES OF THE ALEUTIAN ISLANDS, BERING SEA, AND THE WESTWARD REGION'S SHELLFISH OBSERVER PROGRAM, 2011/12

by

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

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# ABSTRACT

The Alaska Department of Fish and Game (ADF&G) manages commercial and subsistence shellfish fisheries in the Territorial Sea and Exclusive Economic Zone (EEZ) of the Aleutian Islands west of Scotch Cap Light (164°44' W long) and Bering Sea north of Cape Sarichef (58°39' N lat).

This report presents details on commercial and subsistence shellfish fisheries harvest, participation, and value in the Bering Sea and Aleutian Islands (BSAI) areas, excluding king crab fisheries north of Cape Romanzof. In 2011/12, three species of king crab, snow crab, Tanner crab, Dungeness crab, and giant Pacific octopus were taken in BSAI fisheries. Historical and current fishery management practices, a summary of the most recent commercial fishery, and general stock status information are presented.

Details of the crab observer program's history and structure, and 2011/12 BSAI crab fisheries observer coverage levels and observer sampling efforts, are presented in this report.

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

# INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) manages all commercial and subsistence shellfish fisheries occurring in the Territorial Sea and Exclusive Economic Zone (EEZ) of the Aleutian Islands west of Scotch Cap Light (164°44'W long) and Bering Sea waters of the Territorial Sea and EEZ north of Cape Sarichef (58°39'N lat). King crab in the Bering Sea north of Cape Romanzof, including Norton Sound, are managed by ADF&G's Nome office and are not included in this report. Waters of the Bering Sea and Aleutian Islands (BSAI) support the largest and most valuable commercial crab fisheries in Alaska.

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

Species commercially harvested during the 2011/12 season in the BSAI include red king crab *Paralithodes camtschaticus*, golden king crab *Lithodes aequispinus*, blue king crab *P. platypus,* snow crab *Chionoecetes opilio*, Tanner crab *C. bairdi*, Dungeness crab *Metacarcinus magister*, and giant Pacific octopus *Octopus dofleini*. Historically, waters of the BSAI have supported commercial harvests of grooved Tanner crab *C. tanneri*, triangle Tanner crab *C. angulatus,* green sea urchins *Strongylocentrotus droebachiensis*, pandalid shrimp, hair crab *Erimacrus isenbeckii,*

and sea snails of several species; however, fisheries for these species are currently either closed due to low abundance or not commercially pursued. A fishery for weathervane scallop *Patinopectin caurinus* occurs in the BSAI and is summarized in a separate report.

In 2011/12, 78 catcher vessels, 3 catcher-processors, 2 floating processors, and 12 shorebased processors were involved in harvesting and processing shellfish resources in the BSAI. BSAI shellfish landings totaled approximately 105 million pounds and generated an approximate exvessel value of $253 million.

The Bering Sea snow crab fishery was the largest shellfish fishery in Alaska during 2011/12, with a harvest of 88.8 million pounds, followed by the Bristol Bay red king crab fishery with a harvest of 8.0 million pounds, the Aleutian Islands golden king crab fishery with a harvest of 6.0 million pounds, and the Saint Matthew Island Section blue king crab fishery with a harvest of 1.9 million pounds. There was limited or no participation during 2011/12 in most BSAI fisheries for miscellaneous shellfish species. The Pribilof District golden king crab fishery harvest was confidential due to limited participation. Fisheries for red and blue king crabs in the Pribilof District and for red king crab in the eastern and western Aleutian Islands, as well as Bering Sea Tanner crab fisheries, were closed due to low abundance.

State and federal management agencies and the public utilize data collected by onboard crab fisheries observers. Observer coverage is required on all vessels that process crabs at sea, while catcher-vessel observer coverage levels vary by fishery. Depending on the fishery and vessel type, observer coverage is either secured and paid for by industry (pay-as-you-go) or by using funds acquired through cost-recovery crab fishing or federal grants. During the 2011/12 BSAI crab fisheries, 84 observers participated in 109 deployments for a total of 126 observer months, sampled contents of 7,899 crab pots, conducted 401 confidential vessel interviews, and sampled 570 landings.

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# ALEUTIAN ISLANDS KING CRAB MANAGEMENT AREA

## DESCRIPTION OF AREA

The Aleutian Islands king crab management area's eastern boundary is the longitude of Scotch Cap Light (164°44' W long), the northern boundary is a line from Cape Sarichef (54°36' N lat) to 171° W long, north to 55°30' N lat, and the western boundary the Maritime Boundary Agreement Line as described in the Maritime Boundary Agreement between the United States and the Union of Soviet Socialist Republics signed in Washington, June 1, 1990 (Figure 1-1). Area O encompasses waters of the Territorial Sea (0–3 nautical miles) and waters of the Exclusive Economic Zone (3–200 nautical miles).

## ALEUTIAN ISLANDS RED KING CRAB

### Historical Background

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

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

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

Pot surveys in the western Aleutian Islands were conducted from 1975 to 1977 to provide red king crab catch per unit of effort (CPUE), fecundity, and relative abundance information (ADF&G 1978). Pot surveys were conducted on an annual basis in the Dutch Harbor Area until 1990 when trawl surveys were implemented to survey areas in a more timely fashion and to reduce gear selectivity inherent to pot fishing activities (Urban 1992).

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

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

Portions of the Adak area were opened during the 1998/99, 2000/01, and 2001/02 seasons in order to assess the status of red king crab stocks without recent abundance information (Table 1-3). A limited commercial fishery was opened on November 1, 1998 for stock assessment purposes. Using historic catch information, a GHL of 5,000 pounds was established east of 179° W long and a GHL of 10,000 pounds was set west of 179° E long. During the limited fishery, crab not retained for commercial use were tagged and released. In addition, vessel operators were required to document all red king crab fishing activities in a logbook. The Petrel Bank area (the region between 179° E long and 179° W long) was not opened based on prior population data from that area (Byersdorfer 1998).

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

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

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

close the fishery prior to achieving the GHL if legal male CPUE dropped below 10 crab per pot.

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

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

The Petrel Bank red king crab fishery was closed in 2004/05 and 2005/06 due to low levels of sublegal and female crab in the 2002/03 and 2003/04 fisheries, along with low legal male CPUE toward the end of the 2003/04 fishery.

In 2005 the Crab Rationalization (CR) program was implemented for the major Bering Sea and Aleutian Islands (BSAI) crab fisheries. Western Aleutian Islands red king crab (west of 179° W long) is included in this program and will have both Individual Fishing Quota (IFQ) and Community Development Quota (CDQ) fisheries when the stock is again open to commercial harvest. IFQ and CDQ shares will allow harvesters to prosecute this fishery at any time during the open season. Prior to rationalization, the overall fishery pot limit in the Western Aleutian Islands red king crab fishery was 1,250 pots divided evenly among participants. Currently the individual vessel pot limit is 250 pots.

Observers have been required on all crab catcher-processors since 1988 and on catcher vessels targeting red king crabs in the Aleutian Islands since 1995. Observer coverage on golden king crab vessels provides red king crab incidental harvest data, although red king crab bycatch in golden king crab gear is minimal due to the limited overlap in distribution of the two species. Observer coverage is set at 100 percent for vessels targeting red king crab in the Aleutian Islands.

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

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

Subsistence information has been collected by ADF&G for the past 13 years. An average of 217 permits have been issued annually with an approximate 68 percent return rate. The returned permits accounted for an average annual harvest of 796 king crab (Table 1-3), with reported harvest ranging from 0 to 150 king crab per permit holder. Harvest

estimates generated from returned subsistence permits indicate an average of 1,165 king crab were harvested annually between 1999 and 2011, substantially less than estimates generated by a 1994 survey of 15 percent of households in Unalaska, where 6,892 king crab were estimated to have been taken (ADF&G 1999b).

## 2011/12 Commercial Fishery East of 171° W Longitude

The commercial red king crab fishery in the Aleutian Islands east of 171° W long was closed during the 2011/12 season due to low stock abundance.

## 2011/12 Commercial Fishery 171° W Longitude to 179° W Longitude

The commercial red king crab fishery in the Aleutian Islands between 171° W long and 179° W long was closed during the 2011/12 season due to low stock abundance.

## 2011/12 Fishery West of 179° W Longitude

The IFQ and CDQ commercial red king crab fisheries in the Aleutian Islands west of 179° W long was closed during the 2011/12 season due to low stock abundance.

## 2011 Subsistence Fishery

In 2011, ADF&G issued 189 subsistence permits, of which 124, or 66 percent, were returned. Returned permits reported a total harvest of 188 king crab with harvest ranging from 0 to 30 king crab per permit (Table 1-3). Estimates generated from the subsistence permits indicate that approximately 287 king crab were taken. The majority of subsistence-caught king crab in the Unalaska Island area are taken with pot gear, though some king crab are taken using SCUBA gear.

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

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

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

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

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

The red king crab fishery from 171° W long to 179° W long was not included in the CR program. Consistent with regulation for the area east of 171° W long, a fisherman may

not be registered to fish in the commercial red king crab and golden king crab fisheries concurrently between 171° W long and 179° W long as outlined in 5 AAC 39.670(c)(6) *Bering Sea/Aleutian Islands Individual Fishing Quota (IFQ) Crab Fisheries Management Plan*.

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

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

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

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

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

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

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

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

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

ADF&G conducted a survey of the red king crab stock on the Petrel Bank in November 2009. A direct CPUE comparison cannot be made between the 2001, 2006, and 2009 surveys and the 2002/03 and 2003/04 commercial fisheries due to differences in fishing practices. The 2009 survey was designed to sample the areas previously surveyed in 2001 and 2006, and those areas commercially fished in 2002/03 and 2003/04. The 2009 survey had 117 stations fished in common with the 2006 survey. For the stations fished in common with the 2006 survey, the 2009 survey indicated that legal-sized male crab had decreased by 15 percent, female crab had decreased by 57 percent, and sublegal males had decreased by 85 percent. Legal-male CPUE declined from 1.7 in 2006 to 1.5 in 2009 for those stations fished during both years. The mean carapace length of males increased from 151 mm in 2006 to 166 mm CL in 2009. The lack of pre-recruit males and females and the increase in mean carapace length in males from the 2006 survey to the 2009 survey indicate an aging population with little recruitment. Additionally, in the 2009 survey 59 percent of the catch of all red king crab captured occurred in just three stations, suggesting limited distribution of red king crab in the area (Gish 2010).

A catcher-processor conducted a commissioner's permit test fishery during October 15 to December 15, 2009 in waters west of Petrel Bank while concurrently fishing for golden king crab. The intent of this test fishery was to ascertain the presence or absence of red king crab in five survey blocks selected by a fisherman with experience harvesting red king crab in the area. Pots fished could be set in depths of 100 fathoms or less and had to be legal red king crab gear for the Aleutian Islands, except the escape webbing was closed to help retain sublegal and female crab. A total of 18 red king crab pots were set and pulled in four of the five survey blocks resulting in the capture of 1 legal-sized red

king crab. The commissioner's permit allowed for the test fishery to continue during January 1 to February 15, 2010, but no test fishing activity occurred during this time period. Results of the test fishery suggest that the red king crab population west of Petrel Bank remains severely depressed (Unpublished memorandum, 2009 Western Aleutian Islands Red King Crab Commissioner's Permit Test Fishery, ADF&G, Jeanette Alas; Dutch Harbor, Alaska).

## ALEUTIAN ISLANDS GOLDEN KING CRAB

### Historical Background

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

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

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

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

managed based on a historical average catch of 1.6 million pounds annually (ADF&G 1999a).

The average weight of golden king crab harvested in both the Dutch Harbor and Adak Areas declined from 1981 to 1995, ranging from a high of 7.6 pounds during the 1983/84 season to 4.2 pounds during the 1992/93 season in the Dutch Harbor Area and 5.5 pounds in the 1981/82 season to 3.9 pounds in the 1993/94 season in the Adak Area (Table 1-4; Figure 1-4). In 1984, the BOF adopted an ADF&G proposal to lower the legal size for golden king crab in the Aleutian Islands from 6.5 inches to 6.0 inches carapace width (CW), and establish the Dutch Harbor Area as a permit fishery. The regulation decreasing the legal size did not, however, reverse the trend of slowly declining catch rates in the area west of 171° W long. Dutch Harbor area CPUE slowly declined, from a peak of 14 legal crab per pot during the 1984/85 season to 6 crab during the 1994/95 season; and Adak Area CPUE declined from 12 legal crab per pot in the 1985/86 season to 5 crab in the 1995/96 season.

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

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

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

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

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

In July 1999, the BOF changed the opening of Registration Area O golden king crab fishery from September 1 to August 15 in order to accommodate fishermen that participate in both the Aleutian Islands golden king and Bristol Bay red king crab (BBR) fisheries. The BBR fishery opening changed from November 1 to October 15, which reduced the amount of fishing time available to the golden king crab fleet prior to the Bristol Bay opening. The change in opening date for Area O golden king crab was designed to provide adequate fishing time to harvest the golden king crab GHL east of 174° W long, prior to the opening of the BBR fishery.

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

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

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

In 2005, in conjunction with the CR program, the BOF adopted regulations for a CDQ fishery in conjunction with the Eastern Aleutian Islands golden king crab fishery and an

Adak Community Allocation (ACA) fishery in conjunction with the Western Aleutian Islands golden king crab fishery.

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

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

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

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

During the 2010/11 fishery east of 174° W long, 3 vessels participated and harvested 3.15 million pounds with an average of 26 legal crab per pot lift. Average weight was 4.7 pounds. Three vessels participated in the fishery west of 174° W long and harvested 2.5 million pounds in the IFQ fishery, harvest from the ACA fishery is confidential. The fleet averaged 21 legal crab per pot lift, which was lower than the previous two seasons; however, average weight increased yet again and was 4.5 pounds (Table 1-4).

### 2011/12 Fishery

Five vessels participated in the 2011/12 Aleutian Islands golden king crab fishery and landed 100 percent of the combined IFQ TACs for the fisheries east and west of 174° W

long. Both fisheries had a combined average of 29 legal crab per pot lift, an increase from previous seasons. Average weight was 4.6 pounds, which was only slightly higher than other CR seasons (Table 1-4).

## 2011/12 Fishery East of 174° W long

During the 2011/12 fishery east of 174° W long, 3 vessels participated and landed 3.15 million pounds. The fleet averaged 37 legal crab per pot lift, an increase from previous peak of 28 in 2007/08. Average weight of crab landed was 4.7 pounds (Table 1-4). The fleet registered 3,850 pots, which was 750 pots less than the previous season. Landing data is confidential for all weeks because fewer than three vessels made landings in any one week, except for the week of September 9, when 435,695 pounds were harvested. Fishing operations were completed the second week of November. Most fishing effort concentrated around Amukta Pass in ADF&G statistical areas 705232 and 715202 (Table 1-6).

### *IFQ fishery East of 174° W long*

Three vessels participated in the Aleutian Islands golden king crab IFQ fishery east of 174° W long. The IFQ fleet exceeded the 2.835-million pound TAC by 270 pounds (Table 1-4). Six shorebased processors and 1 floating processor located in Dutch Harbor processed golden king crab from the eastern Aleutian Islands. Exvessel price paid for live, whole crab averaged $3.83 per pound, leading to a fishery value of $10.77 million, a 29 percent increase from the 2010/11 fishery (Table 1-5).

### *CDQ Fishery East of 174° W long*

The 2011/12 Eastern Aleutian Islands (east of 174° W long) CDQ golden king crab allocation was 315,000 pounds and the CDQ TAC was exceeded by 104 pounds (Table 1-4). All CDQ groups were allocated a portion of the harvest, but only five groups participated. One group transferred their quota to another CDQ group. Each participating group used 1 vessel to harvest their allocation and 1 vessel harvested for 3 groups. Exvessel price was $3.82 per pound, for a total CDQ fishery value of $1.2 million (Table 1-5).

### *2011/12 Fishery West of 174° W long*

The 2011/12 Western Aleutians Islands golden king crab (WAG) TAC was 2.835 million pounds and 3 vessels participated. The ACA fishery is confidential, therefore the total fishery harvest is also confidential (Table 1-4).

### *IFQ Fishery West of 174° W long*

Three vessels participated in the IFQ fishery west of 174° W long. The fleet registered 4,292 pots, a decrease of 383 pots from the 2010/11 season (Table 1-4). Landing data by statistical week is confidential because fewer than three vessels made landings each week. Fishing effort was concentrated around Amchitka Island and Petrel Bank (Table 1-6). The fleet harvested 2.54 million pounds or 99 percent of the TAC. Golden king crab were purchased and processed by one catcher-processor and six shorebased processors located in Dutch Harbor and on Adak Island. Exvessel price averaged $3.84 per pound yielding a total fishery value of $9.62 million, a 16 percent increase from the previous season (Table 1-5).

### *ACA Fishery West of 174° W long*

The 2011/12 Western Aleutian Islands ACA golden king crab allocation, issued to the ACA group Adak Community Development Corporation (ACDC), was 283,500 pounds, the same as the previous two years (Table 1-4). One vessel participated in the fishery. Harvest information is confidential due to a limited number of participating processors and vessels.

## Fishery Management and Stock Status

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

ADF&G surveyed a small portion of golden king crab habitat in the Aleutian Islands during the summer of 1997 (Blau et al. 1998). Prior to that, ADF&G performed the only survey of this area in 1991 (Blau and Pengilly 1994). Mark-recapture data from the 1997 survey suggested that the commercial fishery was annually removing a minimum of 20 percent of the legal male crab present in the area surveyed. In the late 1990s the FMP specified that the golden king crab stock in the Aleutian Islands was considered overfished when fishing mortality (F) exceeds 0.2 (NPFMC 1998). During the 1997/98 season, the GHL of 3.2 million pounds in the area east of 174° W long was exceeded by approximately 300,000 pounds. Therefore, to maintain a long-term average harvest at 3.2 million pounds, the 1998/99 GHL in this area was reduced to 3.0 million pounds (D. Pengilly, Regional Shellfish/Groundfish Research Coordinator, ADF&G, Kodiak, personal communication).

Only a small portion of the area in which golden king crab are commercially harvested is surveyed. The stations surveyed in 1997 were surveyed again in 2000, 2003, and 2006. Tag recovery rates changed only slightly even though approximately one-third fewer legal-sized male crab were tagged in 2000 than in 1997. Harvest rates as indicated by tag returns in the 2000/01 season were similar to those in 1997/98. Shell condition composition data indicated the stock was healthy, while size composition of the retained catch has changed very little (Watson and Gish 2002). Results from the 2003 survey indicate that overall approximately 22 percent fewer crab were tagged compared to the 2000 survey although numbers of tagged legal males were similar (Watson 2005). Approximately 14 percent fewer crab were tagged during the 2006 survey than the 2003 survey, although numbers of tagged legal males increased. Results from the 2006 survey and tag recovery data are available in Fishery Management Report No. 07-07 (Watson 2007). No surveys have been conducted since 2006.

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

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

## ALEUTIAN ISLANDS SCARLET KING CRAB

### Historical Background

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

### 2011 Fishery

No vessels registered to harvest scarlet king crab in the Aleutian Islands in 2011.

### Fishery Management and Stock Status

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

# EASTERN ALEUTIAN TANNER CRAB DISTRICT

## DESCRIPTION OF DISTRICT

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

## TANNER CRAB

### Historical Background

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

Since 2004, the EAD Tanner crab fishery has opened each year in at least one of the three sections (Unalaska Bay, Makushin/Skan Bay, and Akutan Bay). Harvest information for 2004 and 2006 to 2012 is confidential due to limited processor or vessel participation. Vessel participation since 2004 ranged from 1 vessel in 2012 to 25 vessels in 2005 (Table 1-10).

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

During the past 12 years, an average of 217 subsistence permits have been issued annually. On average, approximately 68 percent of permits are returned. The returned permits account for an average annual reported harvest of 2,391 Tanner crab and annual harvest ranged from 0 to 914 crab per permit holder. Harvest estimates generated from the subsistence harvest permits indicate an average of 3,497 Tanner crab were harvested annually between 1999 and 2011 (Table 1-3).

## 2012 Commercial Fishery

The 2012 commercial Tanner crab fishery in the EAD opened on January 15 with a GHL of 35,000 pounds in the Makushin/Skan Bay Section. The minimum mature male abundance thresholds were not met in the Unalaska/Kalekta Bay or Akutan Bay Sections, therefore the Unalaska/Kalekta Bay and Akutan Bay Sections were not opened to commercial fishing. Five vessels preseason registered for the 2012 fishery resulting in a limit of 50 pots per vessel. One vessel registered for the fishery and participated. Due to limited vessel participation, harvest information is confidential. The fishery closed on February 10 in the Makushin/Skan Bay Section when the GHL was anticipated to be reached.

## 2011 Subsistence Fishery

In 2011, ADF&G issued 189 subsistence permits, of which 124, or 66 percent, were returned. The returned permits account for a reported harvest of 1,453 Tanner crab (Table 1-3). Estimates generated from the subsistence permits indicate that approximately 2,215 Tanner crab were taken, with harvest ranging from 0 to 340 Tanner crab per permit holder. Most subsistence Tanner crab harvested in the EAD in 2011 were taken with pot gear, though some were taken using SCUBA gear.

## Fishery Management and Stock Status

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

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

In March 2008, the BOF adopted 5 AAC 35.509 *Eastern Aleutian District Tanner Crab Harvest Strategy*, which placed the existing interim harvest strategy in regulation and subdivided the EAD into sections allowing for greater management precision. The proposal adopted by the board was identical to the management measures that ADF&G had implemented on an interim basis.

Prior to 1990, sporadic pot surveys were used to generate a Tanner crab abundance index in the eastern Aleutian Islands (Urban 1992). Pot surveys were not utilized to generate a GHL; instead they were used to monitor trends in abundance and recruitment. Pot surveys and fishery data were used to establish harvest levels of 0 to 250,000 pounds (ADF&G 1983b). Since 1990, trawl surveys and occasional pot surveys have been used

to estimate abundance and are used in conjunction with fishery data for management purposes.

In 2011, Akutan Bay, Unalaska/Kalekta Bay, Makushin/Skan Bay, and Pumicestone Bay were surveyed with trawl gear using the ADF&G research vessel Resolution (Spalinger 2012). Total estimated abundance for the area surveyed was 2.6 million crab, a 7 percent decrease from 2.8 million crab in 2010. Most of the decrease in abundance from the 2010 survey can be explained by lower abundance estimates of legal males and sublegal males in Akutan Bay and Unalaska/Kalekta Bay.

The 2011 legal-male population estimate for areas surveyed, 0.12 million crab, represents a decrease of 29 percent from 0.17 million crab in 2010. This is consistent with a declining trend that began in the 2007 survey. The number of recruit-sized legal males decreased nearly 60 percent while the post-recruit estimate decreased by 3 percent. The abundance estimate for post-recruits larger than 165 mm CW was 1,112 crab, the second lowest estimate on record.

The 2011 legal-male Tanner crab abundance is below average relative to the trawl survey time series from 1990 to 2010. In 2011, the most notable decreases in abundance from the 2010 survey were total recruits, which decreased by 60 percent, and the number of females in the Unalaska/Kalekta Bay Section, which decreased by 52 percent, and the number of sublegal males, legal males, and recruit-sized males in the Akutan Section, which decreased by 51 percent, 80 percent, and 88 percent, respectively. Based on trawl survey estimates, the EAD Tanner crab stock appears capable of supporting only a small harvest in Makushin/Skan Bay in 2012.

## GROOVED TANNER CRAB

### Historical Background

Similar to other deepwater crab fisheries in the Aleutian Islands, the first harvest of grooved Tanner crab in the EAD occurred in the early 1980s as incidental harvest in the Dutch Harbor golden king crab fishery. Directed fishing for this species began in 1993, when a single vessel participated in a fishery that lasted from July until December. The grooved Tanner crab fishery in the EAD typically occurred between March and December. Peak harvest in the EAD occurred in 1995 when 8 vessels landed 0.879 million pounds (Table 1-10). One vessel harvested grooved Tanner crab in the EAD in 2001 and 2004; data from both years is confidential due to limited participation. From 2002 to 2003 and 2005 to 2011, there was no grooved Tanner crab effort in the EAD.

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

In 1997, ADF&G established GHLs for grooved Tanner crab in the Eastern Aleutian, Bering Sea, and Alaska Peninsula Districts where most historical harvests had occurred.

Harvest levels were derived using catch information from previous seasons and data collected by onboard observers. A GHL of 200,000 pounds was established for each of the aforementioned areas, while smaller harvest levels of 100,000 pounds were established for the Kodiak and Western Aleutian Districts to allow for exploratory fishing. In addition, the department required that all pots be equipped with at least two escape rings of 4.5 inches minimum diameter (ADF&G 1999a).

### 2011 Fishery

No vessels registered to harvest grooved Tanner crab in the EAD during 2011.

### Fishery Management and Stock Status

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

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

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

## TRIANGLE TANNER CRAB

### Historical Background

Triangle Tanner crab have been incidentally harvested in the eastern Aleutian grooved Tanner crab fishery, where the species has occurred in small numbers. Prior to 1995 and the beginning of the directed fishery, no harvest of triangle Tanner crab was reported on fish tickets; however, shellfish observers stationed on board vessels participating in the grooved Tanner crab fishery observed small numbers of triangle crab harvested in 1994 (ADF&G 1999a). Two vessels targeted triangle Tanner crab in the EAD during the 1995 and 1996 seasons; harvest information from those fisheries is confidential (Table 1-11). From 1997 to 2000, and 2002 to 2011, no vessels registered to harvest triangle Tanner crab in the EAD. One vessel participated in 2001; harvest information is confidential.

### 2011 Fishery

No vessels harvested triangle Tanner crab in the EAD during 2011.

### Fishery Management and Stock Status

In the Eastern Aleutian District triangle Tanner crab are harvested under a permit authorized in 5 AAC 35.511 *Permits for Tanneri and Angulatus Tanner Crab in Registration Area J*. Surveys of population abundance are not conducted for triangle Tanner crab, thus the status of this stock is unknown. Because of the paucity of population data for this species and the history of the fishery, additional fishing for triangle Tanner crab in the Eastern Aleutian District is limited to incidental harvest during the grooved Tanner crab fishery. Vessels registered to fish for grooved Tanner crab are permitted to retain triangle Tanner crab up to 50 percent of the weight of the target species onboard the vessel. This harvest strategy allows some retention of a deepwater species that is believed to have a high mortality rate when taken incidentally in pot gear.

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

# WESTERN ALEUTIAN TANNER CRAB DISTRICT

## DESCRIPTION OF DISTRICT

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

## TANNER CRAB

### Historical Background

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

### 2011/12 Fishery

The WAD Tanner crab fishery may be opened by emergency order on November 1; however, the fishery was not opened during the 2011/12 season because there is no management plan in place, nor has sufficient data been collected to set a GHL.

### Fishery Management and Stock Status

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

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

## GROOVED TANNER CRAB

### Historical Background

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

To prevent overharvest of this population where little abundance information is available, ADF&G restricted harvest to males of five inches or greater CW in 1993. In addition, beginning in 1994, and according to provisions provided in 5 AAC 35.511 *Permits for Tanneri and Angulatus Tanner Crab in Area J*, all vessels registered for the fishery were required to carry an onboard observer for all fishing activities. Using information collected by onboard observers and historic catch information, ADF&G established GHLs for grooved Tanner crab in the WAD in 1997. The GHL was set at 100,000 pounds to allow for exploratory fishing and incidental harvest (ADF&G 1999a). Since 1997, ADF&G has re-evaluated harvest levels for deepwater Tanner crab. Because commercial fishing for grooved Tanner crab in the WAD has only occurred during four seasons and no survey data is available, confidence was not as high in the GHL for this district as in other districts where grooved Tanner crab harvest has occurred. In order to prevent overharvest of this stock, no GHL was set in 2000 when new deepwater Tanner crab GHLs were announced, and the fishery will remain closed until further notice.

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

### 2011 Fishery

The WAD was not open to commercial fishing for grooved Tanner crab in 2011.

### Fishery Management and Stock Status

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

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

# ALEUTIAN DISTRICT DUNGENESS CRAB

## DESCRIPTION OF DISTRICT

The Aleutian District for Dungeness crab *Metacarcinus magister* management includes all waters of Registration Area J west of the longitude of Scotch Cap Light (164°44' W long), south of the latitude of Cape Sarichef (54°36' N lat), and east of the United States-Russia Maritime Boundary Line of 1990 (Figure 1-9). Area J encompasses waters of the Territorial Sea (0–3 nautical miles) and waters of the Exclusive Economic Zone (3–200 nautical miles).

## HISTORICAL BACKGROUND

Islands in the Aleutian Chain are separated by deep passes with swift currents and are closely bordered on the north by the Aleutian Basin and to the south by the Aleutian Trench. Dungeness crab inhabit bays, estuaries, and other shallow water habitats, areas that are sparsely and widely dispersed in the Aleutian Islands. Therefore, populations of Dungeness crab are small and fishing effort has been low within the district.

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

In addition to commercial harvest, Dungeness crab have also been taken in subsistence and sport fisheries occurring in the vicinity of Unalaska Island. Subsistence harvest reports returned to ADF&G between 1988 and 1994 indicate that Dungeness crab harvests were larger than those documented for both red king and Tanner crabs. On average, 15 harvest reports were returned per year and Dungeness crab harvest averaged 686 crab per year with a range of 5 to 1,906 crab per year (ADF&G 1999b). No estimate of current Dungeness harvest is available, but it is believed to be small relative to subsistence harvest of king and Tanner crabs.

## 2011/12 FISHERY

No vessels registered to harvest Dungeness crab during the 2011/12 season.

## FISHERY MANAGEMENT AND STOCK STATUS

The Aleutian Islands Dungeness crab fishery is managed using size, sex, and season restrictions. Only male Dungeness crab 6.5 inches (165 mm) or greater in CW may be retained in the Aleutian District from 12:00 noon May 1 to 12:00 noon January 1. No stock assessment work has been performed and limited biological and fishery data have been collected through dockside sampling. The stock status of this species in the Aleutian

Islands is unknown, but the resource is believed to be limited by the availability of suitable Dungeness crab habitat.

# ALEUTIAN DISTRICT SHRIMP

## DESCRIPTION OF DISTRICT

The Aleutian District of Registration Area J, as described for shrimp, includes all Bering Sea and Pacific Ocean waters west of the longitude of Cape Sarichef at 164°55' W long and east of the United States-Russia Maritime Boundary Line of 1990 (Figure 1-10). Area J encompasses waters of the Territorial Sea (0–3 nautical miles) and waters of the Exclusive Economic Zone (3–200 nautical miles). The Aleutian District includes four sections: Unalaska Bay, Makushin Bay, Usof Bay, and Beaver Inlet.

## HISTORICAL BACKGROUND

Commercial fishing for shrimp in the Aleutian District began in the 1960s with Russian and Japanese participation. Most harvests occurred northwest of the Pribilof Islands, with some harvests as large as 30,000 metric tons per year (NMFS 1999). In 1972, a domestic trawl fishery began targeting northern pink shrimp *Pandalus borealis* in the vicinity of Unalaska Island. Catch and effort increased and harvest peaked in 1977/78 at 6.8 million pounds (Table 1-15). Sharp declines in catches after 1978 led to a reduction in season length. Between 1983 and 1991 no fishing occurred; however, in 1992 four catcher-processors targeted shrimp northwest of the Pribilof Islands. Low concentrations of shrimp were located and all 4 vessels departed the fishery after making a total of 6 landings for 72,133 pounds. Since 1992, interest in Aleutian District shrimp fishery has remained at a very low level. Several vessels registered to fish, but made no landings until 1999 when 2 vessels registered for the fishery; catch information is confidential. Initial catches were composed primarily of northern pink shrimp. As the fishery progressed, sidestriped shrimp *Pandalopsis dispar* became the dominant species in the catch. The fishery was closed on July 9, 1999, because ADF&G did not possess adequate information regarding the abundance and distribution of these species and it was not possible to prosecute the trawl fishery in accordance with 5 AAC 39.210 *Management Plan for High Impact Emerging Fisheries*. This fishery has not opened to trawl gear since that time.

## 2011 FISHERY

The Aleutian District was not open to commercial fishing for shrimp with trawl gear in 2011. There is no closed season for shrimp fishing with pots in the Aleutian Islands and there was no participation during the 2011 season.

## FISHERY MANAGEMENT AND STOCK STATUS

Limited population information exists for the shrimp stocks of the Aleutian Islands. The last extensive commercial activity occurred in the 1970s and trawl surveys conducted by ADF&G and NMFS do not target shrimp. However, in 2000, NMFS performed a pilot deep-sea trawl survey on the continental slope. During this survey sidestriped shrimp was the most abundant shrimp species encountered, found primarily on the continental slope east of Zhemchug Canyon at an average depth of 214 fathoms. NMFS conducted an

eastern Bering Sea continental slope survey again in 2002. Sidestriped and northern pink shrimp were the most abundant shrimp species encountered although extensive data was not collected (Hoff and Britt 2003). Shrimp are also encountered during the NMFS summer Bering Sea trawl survey. The most abundant species caught on the survey are northern pink shrimp which are found along the outer shelf between the 100 and 200 meter depth contours and humpy shrimp *Pandalus goniurus*, which are usually found in waters less than 100 meters.

# ALEUTIAN DISTRICT MISCELLANEOUS SHELLFISH

## DESCRIPTION OF DISTRICT

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

## HISTORICAL BACKGROUND

Miscellaneous shellfish species are typically harvested in relatively small amounts compared to the Aleutian Islands commercial king and Tanner crab fisheries. Miscellaneous shellfish species include hair crab *Erimacrus isenbeckii*, sea urchins *Strongylocentrotus spp*, red sea cucumbers *Parastichopus californicus*, snails, *Paralomis multispina* crab, octopi, and weathervane scallops *Patinopecten caurinus*. Weathervane scallops are summarized in a separate statewide Annual Management Report. Prior to 1999, ADF&G regulated new and emerging shellfish fisheries under authority of a commissioner's permit as described in 5 AAC 38.062 *Permits for Octopi, Squid, Hair Crab, Sea Urchins, Sea Cucumbers, Sea Snails, and Other Marine Invertebrates*. Terms of commissioner's permits were general and not fully developed. As a result, miscellaneous shellfish fisheries were often conducted without prior knowledge of stock abundance or distribution and harvest limits were not established. Since 1999, requests for commissioner's permits have decreased in frequency; however, when permits have been issued, permit terms have been crafted to promote data gathering.

Octopus and sea urchins are the only miscellaneous shellfish that were harvested in the Aleutian Islands from 1996 to 2011.

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

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

## 2011 FISHERIES

### Octopus

In 2011, directed fishing for octopus was permitted in the Aleutian Islands under the authority of a commissioner's permit, however, no vessels registered to target octopus in the Aleutian Islands. In 2011, 8,187 pounds of octopus were retained as incidental harvest to other commercial fisheries in State of Alaska waters of the Aleutian Islands (Table 1-16).

### Red Sea Cucumber and Sea Urchin

The 2011 season opened under a commissioner's permit with a GHL of 5,000 pounds each of eviscerated product for sea cucumbers and whole animal weight for sea urchins in the Aleutian Islands. The small GHLs were established to permit conservative commercial exploration of areas that lacked historic harvest data and to allow ADF&G to collect information for future management purposes. However, no vessels or divers registered for either fishery in the Aleutian Islands in 2011.

### Other Miscellaneous Shellfish Species

No vessels were registered for any other miscellaneous shellfish species in the Aleutian Islands in 2011.

## FISHERY MANAGEMENT AND STOCK STATUS

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

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# TABLES AND FIGURES

Table 1-1.–Aleutian Islands red king crab commercial fishery data, 1960/61 – 2011/12.

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

-continued-

Table 1-1.–Page 2 of 4.

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

-continued-

Table 1-1.–Page 3 of 4.

| Season | Location | Number of Vessels | Number of Landings | Number of Crab[a] | Number of Pots lifted | GHL/TAC[b] | Harvest[a,c] | Deadloss[c] | Average Weight[c] | Average CPUE[d] | Average Length[e] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1978/79 | East of 172° W | 60 | 300 | 1,233,758 | 51,783 | 5.0 - 13.0 million[f] | 6,824,793 | NA | 5.5 | 24 | NA |
| | West of 172° W | 13 | 27 | 149,491 | 13,948 | 0.5 - 3.0 million | 807,195 | 1,170 | 5.4 | 11 | NA |
| | **TOTAL** | **NA** | **327** | **1,383,249** | **65,731** | | **7,631,988** | **-** | **5.5** | **21** | **-** |
| 1979/80 | East of 172° W | 104 | 542 | 2,551,116 | 120,554 | 17.0 - 25.0 million[f] | 15,010,840 | NA | 5.9 | 21 | NA |
| | West of 172° W | 18 | 23 | 82,250 | 9,757 | 0.5 - 3.0 million | 467,229 | 24,850 | 5.7 | 8 | 152 |
| | **TOTAL** | **NA** | **565** | **2,633,366** | **130,311** | | **15,478,069** | **-** | **5.9** | **20** | **-** |
| 1980/81 | East of 172° W[g] | 114 | 830 | 2,772,287 | 231,607 | 7.0 - 17.0 million[f] | 17,660,620 | NA | 6.4 | 12 | NA |
| | East of 172° W[i] | 54 | 120 | 182,349 | 30,000 | | 1,392,923 | NA | 7.6 | 6 | NA |
| | West of 172° W | 17 | 52 | 254,390 | 20,914 | 0.5 - 3.0 million | 1,419,513 | 54,360 | 5.6 | 12 | 149 |
| | **TOTAL** | **NA** | **1,002** | **3,209,026** | **282,521** | | **20,473,056** | **-** | **6.4** | **11** | **-** |
| 1981/82 | East of 172° W | 92 | 683 | 741,966 | 220,087 | 7.0 - 17.0 million[f] | 5,155,345 | NA | 6.9 | 3 | NA |
| | West of 172° W | 46 | 106 | 291,311 | 40,697 | 0.5 - 3.0 million | 1,648,926 | 8,759 | 5.7 | 7 | 148.3 |
| | **TOTAL** | **NA** | **789** | **1,033,277** | **260,784** | | **6,804,271** | **-** | **6.6** | **4** | **-** |
| 1982/83 | East of 172° W | 81 | 278 | 64,380 | 72,924 | 2.0 - 3.0 million | 431,179 | NA | 6.7 | 1 | - |
| | West of 172° W | 72 | 191 | 284,787 | 66,893 | 0.5 - 3.0 million | 1,701,818 | 7,855 | 6.0 | 4 | 150.8 |
| | **TOTAL** | **NA** | **469** | **349,167** | **139,817** | | **2,132,997** | **-** | **6.1** | **3** | **-** |
| 1983/84 | West of 172° W | 106 | 248 | 298,958 | 60,840 | 0.5 - 3.0 million | 1,981,579 | 3,833 | 6.6 | 5 | 157.3 |
| 1984/85 | West of 171° W | 64 | 106 | 196,276 | 48,642 | 1.5 - 3.0 million | 1,296,385 | 0 | 6.6 | 4 | 155.1 |
| 1985/86 | West of 171° W | 35 | 82 | 156,097 | 29,095 | 0.5 - 2.0 million | 868,828 | 0 | 5.6 | 5 | 152.2 |
| 1986/87 | West of 171° W | 33 | 69 | 126,204 | 29,189 | 0.5 - 1.5 million | 712,543 | 800 | 5.7 | 4 | NA |
| 1987/88 | West of 171° W | 71 | 103 | 211,692 | 43,433 | 0.5 - 1.5 million | 1,213,892 | 6,900 | 5.7 | 5 | 148.5 |
| 1988/89 | West of 171° W | 73 | 156 | 266,053 | 64,334 | 1.0 million | 1,567,314 | 557 | 5.9 | 4 | 153.1 |
| 1989/90 | West of 171° W | 56 | 123 | 193,177 | 54,213 | 1.7 million | 1,105,971 | 759 | 5.7 | 4 | 151.5 |
| 1990/91 | West of 171° W | 7 | 34 | 146,903 | 10,674 | NA | 828,105 | 0 | 5.6 | 14 | 148.1 |
| 1991/92 | West of 171° W | 10 | 35 | 165,356 | 16,636 | NA | 951,278 | 0 | 5.8 | 10 | 149.8 |
| 1992/93 | West of 171° W | 12 | 30 | 218,049 | 16,129 | NA | 1,286,424 | 5,000 | 6.0 | 14 | 151.5 |
| 1993/94 | West of 171° W | 12 | 21 | 119,330 | 13,575 | NA | 698,077 | 7,402 | 5.9 | 9 | 154.6 |
| 1994/95 | West of 171° W | 20 | 31 | 30,337 | 18,146 | 1.0 - 1.5 million | 196,967 | 1,430 | 6.5 | 2 | 157.5 |
| 1995/96 | West of 171° W | 4 | 12 | 6,880 | 1,986 | 1.0 - 1.5 million | 38,941 | 235 | 5.7 | 3 | 153.6 |
| 1996/97 - 1997/98 | | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC |

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Table 1-1.–Page 4 of 4.

| Season | Location | Number of Vessels | Number of Landings | Number of Crab[a] | Number of Pots lifted | GHL/TAC[b] | Harvest[a,c] | Deadloss[c] | Average Weight[c] | Average CPUE[d] | Average Length[e] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1998/99 | West of 174° W | 1 | CF | CF | CF | 15,000 | CF | CF | CF | CF | CF |
| 1999/00 | | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC |
| 2000/01[k] | Petrel Bank[l] | 1 | 3 | 11,299 | 496 | FC | 76,562 | 0 | 6.8 | 23 | 161.0 |
| 2001/02[m] | Petrel Bank[l] | 4 | 5 | 22,080 | 564 | FC | 153,961 | 82 | 7.0 | 39 | 159.5 |
| 2002/03 | Petrel Bank[l] | 33 | 35 | 68,300 | 3,786 | 500,000 | 505,642 | 1,311 | 7.4 | 18 | 162.4 |
| 2003/04 | Petrel Bank[l] | 30 | 31 | 59,828 | 5,774 | 500,000 | 479,113 | 2,617 | 8.0 | 10 | 167.9 |
| 2004/05 - 2011/12 | | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC |

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

[a] Deadloss included.

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

[c] In pounds.

[d] Number of retained crab per pot lift.

[e] Carapace length in millimeters.

[f] GHL includes all king crab species. Golden king crab incidental to red king crab.

[g] 6.5 inch minimum legal size for portion of the season.

[h] 8.0 inch minimum legal size for portion of the season.

[i] 7.5 inch minimum legal size for portion of the season.

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

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

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

Table 1-2.–Aleutian Islands red king crab fishery economic performance and season dates, 1960/61 – 2011/12.

| | | Value | | Season length | |
|---|---|---|---|---|---|
| Season | Location | Exvessel[a] | Total | Days | Dates |
| 1960/61 - 1967/68 | | NA | NA | 365 | 01/01 - 12/31 |
| 1968/69 | East of 172° W | NA | NA | 73 | 01/01 - 03/15 |
| | West of 172° W | NA | NA | NA | NA - 03/15 |
| 1969/70 | East of 172° W | NA | NA | 153 | 09/15 - 02/15 |
| | West of 172° W | NA | NA | 122 | 09/15 - 01/15 |
| 1970/71 | East of 172° W | NA | NA | 117 | 09/15 - 01/10 |
| | West of 172° W | NA | NA | 79 | 11/01 - 03/31 |
| 1971/72 | East of 172° W | NA | NA | 38 | 09/15 - 10/23 |
| | West of 172° W | NA | NA | 45 | 11/01 - 12/16 |
| 1972/73 | East of 172° W | NA | NA | 23 | 10/01 - 10/24 |
| | West of 172° W | NA | NA | 108 | 11/01 - 02/17 |
| 1973/74 | East of 172° W | $0.65 | $8,269,729 | 24 | 11/01 - 11/24 |
| | West of 172° W | NA | NA | 35 | 11/01 - 12/06 |
| | **TOTAL** | - | **-** | - | - |
| 1974/75 | East of 172° W | $0.37 | $5,176,740 | 75 | 11/01 - 01/14 |
| | West of 172° W | $0.35 | $971,237 | 118 | 11/01 - 02/26 |
| | **TOTAL** | **NA** | **$6,147,977** | **-** | **-** |
| 1975/76 | East of 172° W | $0.42 | $6,680,797 | 71 | 11/01 - 01/10 |
| | West of 172° W | $0.38 | $156,402 | 47 | 11/01 - 12/18 |
| | **TOTAL** | **NA** | **$6,837,199** | **-** | **-** |
| 1976/77 | East of 172° W[b] | $0.64 | $5,995,497 | 37 | 11/01 - 12/07 |
| | East of 172° W[c] | $0.79 | $656,061 | 31 | 12/13 - 01/13 |
| | West of 172° W | FC | FC | FC | FC |
| | **TOTAL** | **NA** | **$6,651,558** | **-** | **-** |
| 1977/78 | East of 172° W[b] | $0.99 | $3,622,271 | 84 | 09/15 - 12/08 |
| | East of 172° W[d] | $1.35 | $34,502 | 28 | 12/08 - 01/05 |
| | West of 172° W | $1.36 | $1,231,517 | 28 | 02/20 - 03/20 |
| | **TOTAL** | **NA** | **$4,888,290** | **-** | **-** |
| 1978/79 | East of 172° W | $1.35 | $9,213,471 | 71 | 09/10 - 11/20 |
| | West of 172° W | $1.23 | $992,850 | 36 | 02/21 - 03/29 |
| | **TOTAL** | **NA** | **$10,206,321** | **-** | **-** |
| 1979/80 | East of 172° W | $0.90 | $13,509,756 | 122 | 09/10 - 01/10 |
| | West of 172° W | $0.68 | $317,716 | 76 | 01/15 - 04/01 |
| | **TOTAL** | **NA** | **$13,827,472** | **-** | **-** |

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Table1-2.–Page 2 of 3.

| Season | Location | Value | | Season length | |
|---|---|---|---|---|---|
| | | Exvessel[a] | Total | Days | Dates |
| 1980/81 | East of 172° W[b] | $1.02 | $18,013,832 | 73 | 11/01 - 01/12 |
| | East of 172° W[d] | $1.03 | $1,434,711 | 31 | 01/15 - 02/15 |
| | West of 172° W | $0.92 | $1,305,952 | 72 | 01/15 - 03/28 |
| | **TOTAL** | **NA** | **$20,754,495** | - | - |
| 1981/82 | East of 172° W | $2.30 | $11,617,293 | 107 | 11/01 - 02/15 |
| | West of 172° W | $2.01 | $3,314,341 | 107 | 11/01 - 02/15 |
| | **TOTAL** | **NA** | **$14,931,634** | - | - |
| 1982/83 | East of 172° W | $3.43 | $1,478,944 | 66 | 11/01 - 01/15 |
| | West of 172° W | $3.44 | $5,854,254 | 76 | 11/01 - 01/15 |
| | **TOTAL** | **NA** | **$7,333,198** | - | - |
| 1983/84 | East of 172° W | FC | FC | FC | FC |
| | West of 172° W | $3.53 | $6,796,816 | 340 | 11/10 - 12/16 |
| 1984/85 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $2.10 | $2,872,111 | 97 | 11/10 - 02/15 |
| 1985/86 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $2.15 | $1,948,530 | 107 | 11/01 - 02/15 |
| 1986/87 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $3.87 | $2,756,380 | 107 | 11/01 - 02/15 |
| 1987/88 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $4.00 | $4,855,732 | 107 | 11/01 - 02/15 |
| 1988/89 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $5.00 | $7,836,570 | 34 | 11/01 - 12/04 |
| 1989/90 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $4.20 | $4,697,977 | 107 | 11/01 - 02/15 |
| 1990/91 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $4.00 | $3,312,420 | 107 | 11/01 - 02/15 |
| 1991/92 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $3.00 | $2,853,834 | 107 | 11/01 - 02/15 |
| 1992/93 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $5.05 | $6,496,441 | 76 | 11/01 - 01/15 |
| 1993/94 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $3.87 | $2,701,558 | 107 | 11/01 - 02/15 |
| 1994/95 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $5.50 | $1,083,319 | 27 | 11/01 - 11/28 |
| 1995/96 | East of 171° W | FC | FC | FC | FC |
| | West of 171° W | $2.81 | $109,424 | 107 | 11/01 - 02/15 |

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Table 1-2.–Page 3 of 3.

| | | Value | | Season length | |
|---|---|---|---|---|---|
| Season | Location | Exvessel[a] | Total | Days | Dates |
| 1996/97 - 1997/98 | | FC | FC | FC | FC |
| 1998/99 | West of 174° W | CF | CF | 272 | 11/01 - 7/31 |
| 1999/00 | | FC | FC | FC | FC |
| 2000/01[e] | | FC | FC | FC | FC |
| 2001/02[f] | | FC | FC | FC | FC |
| 2002/03 | Petrel Bank[g] | $6.51 | $3,291,729 | 2 | 10/25 - 10/27 |
| 2003/04 | Petrel Bank[g] | $5.14 | $2,449,189 | 4 | 10/25 - 10/29 |
| 2004/05 - 2011/12 | | FC | FC | FC | FC |

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

[a] Average price per pound.

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

[c] 8.0 inch minimum legal size for this portion of the season.

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

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

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

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

Table 1-3.–Subsistence king and Tanner crabs harvest from the Eastern Aleutian Islands, west of Scotch Cap Light and east of 168° W long, 1999 – 2011.

| Year | Permits | | | Harvest[a] | | | |
|---|---|---|---|---|---|---|---|
| | Number issued | Number returned | Percent returned | King crab reported | King crab estimated | Tanner crab reported | Tanner crab estimated |
| 1999 | 179 | 80 | 45 | 787 | 1,761 | 1,432 | 3,204 |
| 2000 | 193 | 137 | 71 | 523 | 737 | 916 | 1,290 |
| 2001 | 200 | 153 | 77 | 1,149 | 1,502 | 1,703 | 2,226 |
| 2002 | 231 | 179 | 77 | 1,080 | 1,394 | 2,451 | 3,163 |
| 2003 | 229 | 160 | 70 | 387 | 554 | 4,600 | 6,584 |
| 2004 | 225 | 144 | 64 | 225 | 352 | 4,714 | 7,366 |
| 2005 | 241 | 182 | 76 | 866 | 1,147 | 5,447 | 7,213 |
| 2006 | 256 | 185 | 72 | 1,796 | 2,485 | 1,439 | 1,991 |
| 2007 | 203 | 122 | 60 | 1,359 | 2,265 | 1,542 | 2,570 |
| 2008 | 242 | 176 | 73 | 1,188 | 1,634 | 889 | 1,222 |
| 2009 | 219 | 168 | 77 | 641 | 836 | 2,014 | 2,625 |
| 2010 | 215 | 119 | 55 | 160 | 289 | 2,479 | 4,479 |
| 2011 | 189 | 124 | 66 | 188 | 287 | 1,453 | 2,215 |
| **1999 - 2011 Average** | **217** | **148** | **68** | **796** | **1,165** | **2,391** | **3,497** |

[a] Estimated harvest, in number of crab, from waters surrounding Unalaska Island.

Table 1-4.–Aleutian Islands golden king crab general, Individual Fishing Quota (IFQ), Community Development Quota (CDQ), and Adak Community Allocation (ACA) fishery harvest data, 1981/82 – 2011/12.

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

-continued-

Table 1-4.–Page 2 of 5.

| Season | Location | Number of Vessels[a] | Number of Landings | Number of Crab[b] | GHL/TAC[c] | Harvest[b,d] | Deadloss[d] | Number of pots Registered | Number of pots Lifted | Average Weight[d] | Average CPUE[e] | Average Length[f] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1992/93 | East of 171° W | 10 | 46 | 337,559 | - | 1,404,452 | 37,200 | 4,222 | 38,348 | 4.2 | 9 | 148 |
| | West of 171° W | 18 | 128 | 1,190,769 | - | 4,886,745 | 104,215 | 8,236 | 164,873 | 4.1 | 7 | 147 |
| | **TOTAL** | **22** | **174** | **1,528,328** | **-** | **6,291,197** | **141,415** | **12,458** | **203,221** | **4.1** | **8** | **NA** |
| 1993/94 | East of 171° W | 4 | 14 | 217,788 | - | 915,460 | 7,324 | 2,334 | 22,490 | 4.2 | 10 | 149 |
| | West of 171° W | 21 | 148 | 1,179,742 | - | 4,635,683 | 165,358 | 11,970 | 212,164 | 3.9 | 6 | 148 |
| | **TOTAL** | **21** | **162** | **1,397,530** | **-** | **5,551,143** | **172,682** | **14,304** | **234,654** | **4.0** | **6** | **NA** |
| 1994/95 | East of 171° W | 14 | 45 | 384,353 | - | 1,750,267 | 35,938 | 7,378 | 67,537 | 4.6 | 6 | 148 |
| | West of 171° W | 34 | 247 | 1,539,866 | - | 6,378,030 | 242,190 | 15,604 | 319,006 | 4.1 | 5 | 150 |
| | **TOTAL** | **35** | **292** | **1,924,219** | **-** | **8,128,297** | **278,128** | **22,982** | **386,543** | **4.2** | **5** | **NA** |
| 1995/96 | East of 171° W | 17 | 42 | 431,867 | 1,500,000 | 1,993,980 | 65,156 | 10,325 | 65,030 | 4.6 | 7 | 150 |
| | West of 171° W | 25 | 141 | 1,150,466 | 5-6 million | 4,966,426 | 248,226 | 14,213 | 227,991 | 4.3 | 5 | 147 |
| | **TOTAL** | **28** | **183** | **1,582,333** | **-** | **6,960,406** | **313,382** | **24,538** | **293,021** | **4.4** | **5** | **NA** |
| 1996/97 | East of 174° W | 14 | 71 | 731,909 | 3,200,000 | 3,290,862 | 185,203 | 9,040 | 113,460 | 4.5 | 6 | NA |
| | West of 174° W | 13 | 99 | 602,968 | 2,700,000 | 2,524,910 | 75,506 | 8,805 | 99,267 | 4.2 | 6 | NA |
| | **TOTAL** | **18** | **170** | **1,334,877** | 5,900,000 | **5,815,772** | **260,709** | **17,845** | **212,727** | **4.4** | **6** | **147** |
| 1997/98 | East of 174° W | 13 | 74 | 780,610 | 3,200,000 | 3,501,055 | 131,481 | 9,720 | 106,403 | 4.5 | 7 | 147 |
| | West of 174° W | 9 | 96 | 569,550 | 2,700,000 | 2,444,628 | 79,564 | 5,240 | 86,811 | 4.3 | 7 | 148 |
| | **TOTAL** | **15** | **167** | **1,350,160** | **5,900,000** | **5,945,683** | **211,045** | **14,960** | **193,214** | **4.4** | **7** | **147** |
| 1998/99 | East of 174° W | 14 | 55 | 740,011 | 3,000,000 | 3,247,863 | 82,113 | 8,295 | 83,378 | 4.4 | 9 | 148 |
| | West of 174° W | 3 | 44 | 426,257 | 2,700,000 | 1,694,030 | 21,218 | 1,930 | 35,975 | 4.0 | 12 | 146 |
| | **TOTAL** | **16** | **99** | **1,149,542** | **5,700,000** | **4,939,248** | **103,331** | **10,225** | **119,298** | **4.3** | **10** | **147** |
| 1999/00 | East of 174° W | 15 | 60 | 709,332 | 3,000,000 | 3,069,886 | 67,574 | 9,514 | 79,129 | 4.3 | 9 | 147 |
| | West of 174° W | 15 | 113 | 676,558 | 2,700,000 | 2,768,902 | 104,852 | 10,564 | 107,040 | 4.1 | 6 | 147 |
| | **TOTAL** | **17** | **173** | **1,385,890** | **5,700,000** | **5,838,788** | **172,426** | **20,078** | **186,169** | **4.2** | **7** | **147** |
| 2000/01 | East of 174° W | 15 | 50 | 704,702 | 3,000,000 | 3,134,079 | 55,999 | 10,598 | 71,551 | 4.4 | 10 | 147 |
| | West of 174° W | 12 | 100 | 705,613 | 2,700,000 | 2,884,682 | 53,158 | 8,910 | 101,239 | 4.1 | 7 | 145 |
| | **TOTAL** | **17** | **150** | **1,410,315** | **5,700,000** | **6,018,761** | **109,157** | **19,508** | **172,790** | **4.3** | **8** | **146** |
| 2001/02 | East of 174° W | 19 | 45 | 730,030 | 3,000,000 | 3,178,652 | 50,030 | 12,927 | 62,639 | 4.4 | 12 | 147 |
| | West of 174° W | 9 | 90 | 686,738 | 2,700,000 | 2,740,054 | 43,519 | 8,491 | 105,512 | 4.0 | 7 | 145 |
| | **TOTAL** | **21** | **134** | **1,416,768** | **5,700,000** | **5,918,706** | **93,549** | **21,418** | **168,151** | **4.2** | **8** | **146** |
| 2002/03 | East of 174° W | 19 | 43 | 643,886 | 3,000,000 | 2,821,851 | 55,425 | 11,834 | 52,042 | 4.4 | 12 | 148 |
| | West of 174° W | 6 | 73 | 664,823 | 2,700,000 | 2,640,604 | 32,101 | 6,225 | 78,979 | 4.0 | 8 | 146 |
| | **TOTAL** | **22** | **116** | **1,308,709** | **5,700,000** | **5,462,455** | **87,526** | **18,059** | **131,021** | **4.2** | **10** | **147** |

-continued-

Table 1-4.–Page 3 of 5.

| Season | Location | Number of Vessels[a] | Number of Landings | Number of Crab[b] | GHL/TAC[c] | Harvest[b,d] | Deadloss[d] | Number of pots Registered | Number of pots Lifted | Average Weight[d] | Average CPUE[e] | Average Length[f] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2003/04 | East of 174° W | 18 | 37 | 643,074 | 3,000,000 | 2,977,055 | 76,006 | 12,518 | 58,883 | 4.6 | 11 | 149 |
| | West of 174° W | 6 | 60 | 676,633 | 2,700,000 | 2,688,773 | 49,321 | 7,140 | 66,236 | 4.0 | 10 | 146 |
| | **TOTAL** | **21** | **96** | **1,319,707** | **5,700,000** | **5,665,828** | **125,327** | **19,658** | **125,119** | **4.3** | **11** | **147** |
| 2004/05 | East of 174° W | 19 | 32 | 637,536 | 3,000,000 | 2,886,817 | 43,576 | 13,165 | 34,848 | 4.5 | 18 | 148 |
| | West of 174° W | 6 | 51 | 685,465 | 2,700,000 | 2,688,234 | 43,560 | 7,240 | 56,846 | 3.9 | 12 | 146 |
| | **TOTAL** | **22** | **83** | **1,323,001** | **5,700,000** | **5,575,051** | **87,136** | **20,405** | **91,694** | **4.2** | **14** | **147** |
| 2005/06 | ***East of 174° W*** | | | | | | | | | | | |
| | IFQ | 7 | 33 | 560,906 | 2,700,000 | 2,567,781 | 23,791 | - | 21,898 | 4.6 | 26 | - |
| | CDQ | 3 | CF | CF | 300,000 | CF | CF | - | CF | CF | CF | - |
| | **TOTAL** | **7** | **CF** | **CF** | **3,000,000** | **CF** | **CF** | **-** | **CF** | **CF** | **CF** | **151** |
| | ***West of 174° W*** | | | | | | | | | | | |
| | IFQ | 3 | 43 | 571,014 | 2,430,000 | 2,384,567 | 26,500 | - | 27,503 | 4.2 | 21 | - |
| | ACA | 1 | CF | CF | 270,000 | CF | CF | - | CF | CF | CF | - |
| | **TOTAL** | **3** | **CF** | **CF** | **2,700,000** | **CF** | **CF** | **-** | **CF** | **CF** | **CF** | **148** |
| | ***Aleutian Islands Area Total*** | | | | | | | | | | | |
| | IFQ | 8 | 72 | 1,131,920 | 5,130,000 | 4,952,348 | 50,291 | 9,833 | 49,401 | 4.4 | 23 | - |
| | CDQ/ACA | 4 | CF | CF | 570,000 | CF | CF | CF | CF | CF | CF | - |
| | **TOTAL** | **8** | **CF** | **CF** | **5,700,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **149** |
| 2006/07 | ***East of 174° W*** | | | | | | | | | | | |
| | IFQ | 6 | 32 | 585,676 | 2,700,000 | 2,692,010 | 31,311 | - | 23,839 | 4.6 | 25 | - |
| | CDQ | 3 | CF | CF | 300,000 | CF | CF | - | CF | CF | CF | - |
| | **TOTAL** | **6** | **CF** | **CF** | **3,000,000** | **CF** | **CF** | **-** | **CF** | **CF** | **CF** | **152** |
| | ***West of 174° W*** | | | | | | | | | | | |
| | IFQ | 3 | 32 | 462,529 | 2,430,000 | 2,002,190 | 19,768 | - | 22,694 | 4.3 | 20 | - |
| | ACA | 2 | CF | CF | 270,000 | CF | CF | - | CF | CF | CF | - |
| | **TOTAL** | **4** | **CF** | **CF** | **2,700,000** | **CF** | **CF** | **-** | **CF** | **CF** | **CF** | **150** |
| | ***Aleutian Islands Area Total*** | | | | | | | | | | | |
| | IFQ | 7 | 63 | 1,048,205 | 5,130,000 | 4,694,200 | 51,079 | 9,300 | 46,533 | 4.5 | 22 | - |
| | CDQ/ACA | 4 | CF | CF | 570,000 | CF | CF | CF | CF | CF | CF | - |
| | **TOTAL** | **7** | **CF** | **CF** | **5,700,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **150** |

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Table 1-4.–Page 4 of 5.

| Season | Location | Number of Vessels[a] | Number of Landings | Number of Crab[b] | GHL/TAC[c] | Harvest[b,d] | Deadloss[d] | Number of pots Registered | Number of pots Lifted | Average Weight[d] | Average CPUE[e] | Average Length[f] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2007/08 | ***East of 174° W*** | | | | | | | | | | | |
| | IFQ | 4 | 36 | 566,838 | 2,700,000 | 2,689,997 | 21,042 | - | 20,496 | 4.8 | 28 | - |
| | CDQ | 3 | 6 | 66,415 | 300,000 | 300,000 | 516 | - | 2,157 | 4.5 | 31 | - |
| | **TOTAL** | **4** | **42** | **633,253** | **3,000,000** | **2,989,997** | **21,558** | **-** | **22,653** | **4.7** | **28** | **153** |
| | ***West of 174° W*** | | | | | | | | | | | |
| | IFQ | 3 | 35 | 524,894 | 2,430,000 | 2,248,103 | 23,183 | - | 25,616 | 4.2 | 21 | - |
| | ACA | 1 | CF | CF | 270,000 | CF | CF | - | CF | CF | CF | - |
| | **TOTAL** | **3** | **CF** | **CF** | **2,700,000** | **CF** | **CF** | **-** | **CF** | **CF** | **CF** | **149** |
| | ***Aleutian Islands Area Total*** | | | | | | | | | | | |
| | IFQ | 5 | 66 | 1,091,732 | 5,130,000 | 4,938,100 | 44,225 | 7,600 | 46,112 | **4.5** | **23** | - |
| | CDQ/ACA | 4 | CF | CF | 570,000 | CF | CF | CF | CF | CF | CF | - |
| | **TOTAL** | **5** | **CF** | **CF** | **5,700,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **151** |
| 2008/09 | ***East of 174° W*** | | | | | | | | | | | |
| | IFQ | 3 | 29 | 600,380 | 2,835,000 | 2,829,423 | 24,117 | - | 21,855 | 4.7 | 27 | - |
| | CDQ | 3 | 8 | 66,566 | 315,000 | 315,000 | 1,408 | - | 2,611 | 4.7 | 25 | - |
| | **TOTAL** | **3** | **37** | **666,946** | **3,150,000** | **3,144,423** | **25,525** | **-** | **24,466** | **4.7** | **27** | **151** |
| | ***West of 174° W*** | | | | | | | | | | | |
| | IFQ | 3 | 38 | 519,530 | 2,551,500 | 2,252,114 | 22,802 | - | 22,351 | 4.3 | 23 | - |
| | ACA | 1 | CF | CF | 283,500 | CF | CF | - | CF | CF | CF | - |
| | **TOTAL** | **3** | **CF** | **CF** | **2,835,000** | **CF** | **CF** | **-** | **CF** | **CF** | **CF** | **148** |
| | ***Aleutian Islands Area Total*** | | | | | | | | | | | |
| | IFQ | 5 | 67 | 1,119,910 | 5,386,500 | 5,081,537 | 46,919 | 7,500 | 44,206 | 4.5 | 25 | - |
| | CDQ/ACA | 4 | CF | CF | 598,500 | CF | CF | CF | CF | CF | CF | - |
| | **TOTAL** | **5** | **CF** | **CF** | **5,985,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **149** |
| 2009/10 | ***East of 174° W*** | | | | | | | | | | | |
| | IFQ | 3 | 32 | 611,574 | 2,835,000 | 2,835,474 | 31,622 | 4,600 | 23,442 | 4.6 | 26 | - |
| | CDQ | 3 | 7 | 68,312 | 315,000 | 315,000 | 1,662 | 4,600 | 2,856 | 4.6 | 24 | - |
| | **TOTAL** | **3** | **39** | **679,886** | **3,150,000** | **3,150,474** | **33,284** | **4,600** | **26,298** | **4.6** | **26** | **152** |
| | ***West of 174° W*** | | | | | | | | | | | |
| | IFQ | 3 | 38 | 561,445 | 2,551,500 | 2,478,313 | 33,069 | 5,050 | 22,746 | 4.4 | 25 | - |
| | ACA | 1 | CF | CF | 283,500 | CF | CF | CF | CF | CF | CF | - |
| | **TOTAL** | **3** | **CF** | **CF** | **2,835,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **150** |
| | ***Aleutian Islands Area Total*** | | | | | | | | | | | |
| | IFQ | 5 | 70 | 1,173,019 | 5,386,500 | 5,313,787 | 64,691 | 8,450 | 46,188 | 4.5 | 25 | - |
| | CDQ/ACA | 4 | CF | CF | 598,500 | CF | CF | CF | CF | CF | CF | - |
| | **TOTAL** | **5** | **CF** | **CF** | **5,985,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **150** |

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Table 1-4.–Page 5 of 5.

| Season | Location | Number of Vessels[a] | Number of Landings | Number of Crab[b] | GHL/TAC[c] | Harvest[b,d] | Deadloss[d] | Number of pots Registered | Number of pots Lifted | Average Weight[d] | Average CPUE[e] | Average Length[f] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010/11 | ***East of 174° W*** | | | | | | | | | | | |
| | IFQ | 3 | 30 | 604,471 | 2,835,000 | 2,833,188 | 69,329 | 4,600 | 23,737 | 4.7 | 25 | - |
| | CDQ | 3 | 5 | 66,047 | 315,000 | 315,000 | 2,190 | 4,540 | 2,114 | 4.8 | 31 | - |
| | **TOTAL** | **3** | **35** | **670,983** | **3,150,000** | **3,148,188** | **71,519** | **4,600** | **25,851** | **4.7** | **26** | **153** |
| | ***West of 174° W*** | | | | | | | | | | | |
| | IFQ | 3 | 35 | 562,060 | 2,551,500 | 2,537,161 | 32,628 | 4,675 | 26,587 | 4.5 | 21 | - |
| | ACA | 1 | CF | CF | 283,500 | CF | CF | CF | CF | CF | CF | - |
| | **TOTAL** | **3** | **CF** | **CF** | **2,835,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **149** |
| | ***Aleutian Islands Area Total*** | | | | | | | | | | | |
| | IFQ | 5 | 65 | 1,166,531 | 5,386,500 | 5,370,349 | 101,957 | 9,175 | 50,324 | 4.6 | 23 | - |
| | CDQ/ACA | 4 | CF | CF | 598,500 | CF | CF | CF | CF | CF | CF | - |
| | **TOTAL** | **5** | **CF** | **CF** | **5,985,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **151** |
| 2011/12 | ***East of 174° W*** | | | | | | | | | | | |
| | IFQ | 3 | 34 | 603,766 | 2,835,000 | 2,835,270 | 22,641 | 3,850 | 16,075 | 4.7 | 38 | - |
| | CDQ | 3 | 7 | 65,062 | 315,000 | 315,104 | 1,543 | 3,850 | 1,840 | 4.8 | 35 | - |
| | **TOTAL** | **3** | **41** | **668,828** | **3,150,000** | **3,150,374** | **24,184** | **3,850** | **17,915** | **4.7** | **37** | **151** |
| | ***West of 174° W*** | | | | | | | | | | | |
| | IFQ | 3 | 36 | 550,688 | 2,551,500 | 2,536,744 | 33,075 | 4,292 | 22,586 | 4.6 | 24 | - |
| | ACA | 1 | CF | CF | 283,500 | CF | CF | CF | CF | CF | CF | - |
| | **TOTAL** | **3** | **CF** | **CF** | **2,835,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **148** |
| | ***Aleutian Islands Area Total*** | | | | | | | | | | | |
| | IFQ | 5 | 70 | 1,154,454 | 5,386,500 | 5,372,014 | 55,716 | 7,742 | 38,661 | 4.6 | 29 | - |
| | CDQ/ACA | 4 | CF | CF | 598,500 | CF | CF | CF | CF | CF | CF | - |
| | **TOTAL** | **5** | **CF** | **CF** | **5,985,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **149** |

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

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

[b] Deadloss included.

[c] Guideline harvest level (GHL), total allowable catch (TAC) from 2005/06 forward.

[d] In pounds.

[e] Number of retained crab per pot lift.

[f] Carapace length in millimeters.

Table 1-5.–Aleutian Islands golden king crab general, Individual Fishing Quota (IFQ), Community Development Quota (CDQ), and Adak Community Allocation (ACA) fishery economic performance, 1981/82 – 2011/12.

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

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Table 1-5.–Page 2 of 3.

| Season | Location | Fishery | Value | | Season length | |
|---|---|---|---|---|---|---|
| | | | Exvessel[a] | Total[b] | Days | Dates |
| 1997/98 | East of 174° W | | $2.25 | $7.58 | 84 | 09/01-11/24 |
| | West of 174° W | | $2.10 | $4.96 | 365 | 09/01-08/31 |
| | **Total** | | **$2.19** | **$12.54** | | |
| 1998/99 | East of 174° W | | $1.87 | $5.92 | 68 | 09/01-11/07 |
| | West of 174° W | | $2.04 | $3.41 | 365 | 09/01-08/31 |
| | **Total** | | **$1.92** | **$9.33** | | |
| 1999/00 | East of 174° W | | $3.26 | $9.78 | 55 | 09/01-10/25 |
| | West of 174° W | | $3.09 | $8.23 | 348 | 09/01-08/14 |
| | **Total** | | **$3.15** | **$18.01** | | |
| 2000/01 | East of 174° W | | $3.50 | $10.77 | 40 | 08/15-09/24 |
| | West of 174° W | | $3.09 | $8.75 | 286 | 08/15-05/28 |
| | **Total** | | **$3.33** | **$19.52** | | |
| 2001/02 | East of 174° W | | $3.30 | $10.26 | 26 | 08/15-09/10 |
| | West of 174° W | | $2.93 | $7.87 | 227 | 08/15-03/30 |
| | **Total** | | **$3.16** | **$18.13** | | |
| 2002/03 | East of 174° W | | $3.30 | $9.13 | 23 | 08/15-09/07 |
| | West of 174° W | | $3.50 | $9.13 | 205 | 08/15-03/08 |
| | **Total** | | **$3.38** | **$18.26** | | |
| 2003/04 | East of 174° W | | $3.46 | $10.05 | 24 | 08/15-09/08 |
| | West of 174° W | | $3.83 | $10.11 | 175 | 08/15-02/06 |
| | **Total** | | **$3.61** | **$20.16** | | |
| 2004/05 | East of 174° W | | $3.18 | $9.05 | 14 | 08/15-08/29 |
| | West of 174° W | | $3.09 | $8.16 | 141 | 08/15-01/03 |
| | **Total** | | **$3.14** | **$17.21** | | |
| 2005/06 | East of 174° W | IFQ | $2.53 | $6.50 | 273 | 08/15-05/15 |
| | | CDQ | CF | CF | 273 | 08/15-05/15 |
| | | **Total** | **CF** | **CF** | | |
| | West of 174° W | IFQ | $2.05 | $4.89 | 273 | 08/15-05/15 |
| | | ACA | CF | CF | 273 | 08/15-05/15 |
| | | **Total** | **CF** | **CF** | | |
| 2006/07 | East of 174° W | IFQ | $1.77 | $4.71 | 273 | 08/15-05/15 |
| | | CDQ | CF | CF | 273 | 08/15-05/15 |
| | | **Total** | **CF** | **CF** | | |
| | West of 174° W | IFQ | $1.33 | $2.64 | 273 | 08/15-05/15 |
| | | ACA | CF | CF | 273 | 08/15-05/15 |
| | | **Total** | **CF** | **CF** | | |
| 2007/08 | East of 174° W | IFQ | $2.11 | $5.63 | 273 | 08/15-05/15 |
| | | CDQ | $2.18 | $0.65 | 273 | 08/15-05/15 |
| | | **Total** | **$2.12** | **$6.28** | | |
| | West of 174° W | IFQ | $1.63 | $3.63 | 273 | 08/15-05/15 |
| | | ACA | CF | CF | 273 | 08/15-05/15 |
| | | **Total** | **CF** | **CF** | | |
| 2008/09 | East of 174° W | IFQ | $3.32 | $9.31 | 273 | 08/15-05/15 |
| | | CDQ | $3.58 | $1.12 | 273 | 08/15-05/15 |
| | | **Total** | **$3.34** | **$10.43** | | |
| | West of 174° W | IFQ | $1.87 | $4.17 | 273 | 08/15-05/15 |
| | | ACA | CF | CF | 273 | 08/15-05/15 |
| | | **Total** | **CF** | **CF** | | |

-continued-

Table 1-5.–Page 3 of 3.

| Season | Location | Fishery | Value | | Season length | |
|---|---|---|---|---|---|---|
| | | | Exvessel[a] | Total[b] | Days | Dates |
| 2009/10 | East of 174° W | IFQ | $1.96 | $5.50 | 273 | 08/15-05/15 |
| | | CDQ | $2.06 | $0.65 | 273 | 08/15-05/15 |
| | | **Total** | **$1.97** | **$6.13** | | |
| | West of 174° W | IFQ | $1.93 | $4.72 | 273 | 08/15-05/15 |
| | | ACA | CF | CF | 273 | 08/15-05/15 |
| | | **Total** | **CF** | **CF** | | |
| 2010/11 | East of 174° W | IFQ | $3.01 | $8.31 | 273 | 08/15-05/15 |
| | | CDQ | $3.19 | $1.00 | 273 | 08/15-05/15 |
| | | **Total** | **$3.02** | **$9.31** | | |
| | West of 174° W | IFQ | $3.32 | $8.31 | 273 | 08/15-05/15 |
| | | ACA | CF | CF | 273 | 08/15-05/15 |
| | | **Total** | **CF** | **CF** | | |
| 2011/12 | East of 174° W | IFQ | $3.83 | $10.77 | 273 | 08/15-05/15 |
| | | CDQ | $3.82 | $1.20 | 273 | 08/15-05/15 |
| | | **Total** | **$3.83** | **$11.97** | | |
| | West of 174° W | IFQ | $3.84 | $9.62 | 273 | 08/15-05/15 |
| | | ACA | CF | CF | 273 | 08/15-05/15 |
| | | **Total** | **CF** | **CF** | | |

*Note:* CF = confidential.

[a]Average price per pound.

[b]Millions of dollars.

Table 1-6.–Aleutian Islands golden king crab Individual Fishing Quota (IFQ), Community Development Quota (CDQ), and Adak Community Allocation (ACA) harvest by statistical area, 2011/12.

| Statistical | Number of | | | | | Average | |
|---|---|---|---|---|---|---|---|
| area | Landings | Crab[a] | Pots lifted | Harvest[a,b] | Deadloss[b] | Weight[b] | CPUE[c] |
| 705232 | 36 | 192,790 | 4,127 | 899,663 | 7,427 | 4.7 | 47 |
| 715202 | 34 | 132,108 | 4,149 | 619,250 | 5,168 | 4.7 | 32 |
| 795200 | 20 | 16,916 | 961 | 75,879 | 1,385 | 4.5 | 18 |
| 805103 | 22 | 27,834 | 1,307 | 123,377 | 2,282 | 4.4 | 21 |
| 805132 | 27 | 59,657 | 2,711 | 266,975 | 4,245 | 4.6 | 26 |
| 805201 | 28 | 22,977 | 1,288 | 107,022 | 986 | 4.7 | 18 |
| 815100 | 19 | 18,618 | 950 | 82,488 | 1,752 | 4.4 | 20 |
| 815131 | 20 | 17,513 | 744 | 81,336 | 712 | 4.5 | 20 |
| Other[d] | 81 | 796,533 | 28,004 | 3,708,426 | 39,374 | 4.7 | 28 |
| **Total** | **65** | **1,284,946** | **44,241** | **5,964,416** | **63,331** | **4.6** | **29** |

[a]Deadloss included.

[b]In pounds.

[c]Number of retained crab per pot lift.

[d]Combination of 63 statistical areas in which landings were made by fewer than three vessels.

Table 1-7.–Aleutian Islands scarlet king crab fishery data, 1992 – 2011.

| | | Number of | | | | | | Average | | Value | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Location | Vessels | Landings | Crab[a] | Pots lifted | Harvest[a,b] | Deadloss[b] | Weight[b] | CPUE[c] | Exvessel[d] | Total[e] |
| 1992 | Dutch Harbor | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Adak | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1993 | Dutch Harbor/Adak | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1994 | Dutch Harbor | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| | Adak | 5 | 9 | 6,613 | 7,370 | 21,269 | 10,829 | 3.2 | 1 | $1.24 | $26.4 |
| | **Total** | 6 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1995 | Dutch Harbor | 3 | 7 | 6,270 | 5,706 | 13,871 | 1,755 | 2.2 | 1 | $3.01 | $41.8 |
| | Adak | 6 | 18 | 19,544 | 15,046 | 49,126 | 2,066 | 2.5 | 1 | $2.95 | $144.9 |
| | **Total** | **8** | **25** | **25,814** | **20,752** | **62,997** | **3,821** | **2.4** | **1** | **$2.96** | **$186.5** |
| 1996 | Dutch Harbor | 3 | 10 | 9,967 | 8,071 | 20,538 | 3,911 | 2.1 | 1 | $1.78 | $37.1 |
| | Adak | 4 | 13 | 10,199 | 18,547 | 24,161 | 1,861 | 2.4 | <1 | $1.80 | $43.5 |
| | **Total** | **7** | **23** | **20,166** | **26,618** | **44,699** | **5,772** | **2.2** | **<1** | **$1.79** | **$80.6** |
| 1997 | Aleutian Islands | 3 | 12 | 2,698 | 21,217 | 6,720 | 408 | 2.5 | <1 | $1.40 | $9.4 |
| 1998 | Aleutian Islands | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1999 | Aleutian Islands | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2000 | Aleutian Islands | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2001 | Aleutian Islands | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2002 | Aleutian Islands | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2003 | Aleutian Islands | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2004 | Aleutian Islands | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2005 - 2006 | Aleutian Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 2007 | Aleutian Islands | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2008 - 2011 | Aleutian Islands | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |

*Note:* CF = confidential.

[a] Deadloss included.

[b] In pounds.

[c] Number of retained crab per pot lift.

[d] Average price per pound.

[e] Thousands of dollars.

Table 1-8.–Eastern Aleutian District Tanner crab fishery data, 1973/74 – 2012.

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

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Table 1-8.–Page 2 of 2.

| Season | Location | Number of | | | | GHL[b] | Harvest[a,b] | Deadloss[b] | Average | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Vessels | Landings | Crab[a] | Pots lifted | | | | Weight[b] | CPUE[c] |
| 2008 | Unalaska Bay | 11 | CF | CF | CF | 60,000 | CF | CF | 2.4 | CF |
| 2009 | Akutan Bay | 1 | CF | CF | CF | 35,000 | CF | CF | 2.3 | CF |
| | Makushin/Skan | 1 | CF | CF | CF | 35,000 | CF | CF | 2.4 | CF |
| | Unalaska Bay | 10 | CF | CF | CF | 58,000 | CF | CF | 2.2 | CF |
| | **Total** | **11**[e] | CF | CF | CF | **128,000** | CF | CF | **2.3** | CF |
| 2010 | Akutan Bay | 3 | CF | CF | CF | 45,000 | CF | CF | 2.1 | CF |
| | Unalaska Bay | 7 | CF | CF | CF | 74,000 | CF | CF | 2.3 | CF |
| | **Total** | **8**[e] | CF | CF | CF | **119,000** | CF | CF | **2.2** | CF |
| 2011 | Akutan Bay | 2 | CF | CF | CF | 35,000 | CF | CF | 2.2 | CF |
| | Makushin/Skan | 3 | CF | CF | CF | 35,000 | CF | CF | 2.3 | CF |
| | **Total** | **3**[e] | CF | CF | CF | **70,000** | CF | CF | **2.2** | CF |
| 2012 | Makushin/Skan | 1 | CF | CF | CF | 35,000 | CF | CF | 2.2 | CF |

Note: NA = not available, CF = confidential.

[a] Deadloss included beginning 1980.

[b] In pounds.

[c] Number of retained crab per pot lift.

[d] January/February survey (fish ticket harvest code 15, exploratory shellfish harvest).

[e] Vessel(s) participated in multiple sections.

Table 1-9.–Eastern Aleutian District Tanner crab fishery economic performance and season dates, 1973/74 – 2012.

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

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

[a] Average price per pound.

[b] Millions of dollars.

Table 1-10.–Eastern Aleutian District grooved Tanner crab fishery data, 1993 – 2011.

| Year | Number of | | | | Harvest[a,b] | Deadloss[b] | Average | | Value | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Vessels | Landings | Crab[a] | Pots lifted | | | Weight[b] | CPUE[c] | Exvessel[d] | Total[e] |
| 1993 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1994 | 4 | 28 | 429,777 | 37,246 | 754,983 | 19,151 | 1.8 | 12 | $1.61 | $1.18 |
| 1995 | 9 | 57 | 511,125 | 77,443 | 879,386 | 30,348 | 1.7 | 7 | $1.70 | $1.44 |
| 1996 | 4 | 25 | 54,903 | 21,994 | 104,680 | 7,496 | 1.9 | 3 | $1.00 | $0.10 |
| 1997 - 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 2001 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2002 - 2003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 2004 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2005 - 2011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |

*Note:* CF = confidential.

[a]Deadloss included.

[b]In pounds.

[c]Number of retained crab per pot lift.

[d]Average price per pound.

[e]Millions of dollars.

Table 1-11.–Eastern Aleutian District triangle Tanner crab fishery data, 1993 – 2011.

| Year | Number of | | | | Harvest[a,b] | Deadloss[b] | Average | | Value | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Vessels | Landings | Crab[a] | Pots lifted | | | Weight[b] | CPUE[c] | Exvessel[d] | Total[e] |
| 1993 - 1994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 1995 | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1996 | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1997 - 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 2001 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2002 - 2011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |

*Note:* CF = confidential.

[a] Deadloss included.

[b] In pounds.

[c] Number of retained crab per pot lift.

[d] Average price per pound.

[e] Millions of dollars.

Table 1-12.–Western Aleutian District Tanner crab fishery data, 1973/74 – 2011/12.

| | Number of | | | | | | Average | | Value | |
|---|---|---|---|---|---|---|---|---|---|---|
| Season | Vessels | Landings | Crab[a] | Pots lifted | Harvest[a,b] | Deadloss[b] | Weight[b] | CPUE[c] | Exvessel[d] | Total |
| 1973/74 | 7 | 12 | 31,079 | 2,390 | 71,887 | NA | 2.3 | 13 | NA | NA |
| 1974/75 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1975/76 | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1976/77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | 0 |
| 1977/78 | 6 | 7 | 103,190 | 2,700 | 237,512 | NA | 2.3 | 38 | $0.38 | $90,255 |
| 1978/79 | 6 | 9 | 84,129 | 4,730 | 197,244 | 0 | 2.3 | 18 | $0.53 | $104,539 |
| 1979/80 | 10 | 12 | 147,843 | 5,952 | 337,297 | NA | 2.3 | 25 | $0.52 | $175,394 |
| 1980/81 | 9 | 23 | 95,102 | 7,327 | 220,716 | 0 | 2.3 | 13 | $0.54 | $119,187 |
| 1981/82 | 17 | 43 | 364,164 | 21,910 | 838,697 | 6,470 | 2.3 | 17 | $1.30 | $1,081,895 |
| 1982/83 | 61 | 125 | 225,491 | 40,450 | 488,399 | 7,662 | 2.2 | 6 | $1.27 | $610,536 |
| 1983/84 | 31 | 86 | 171,576 | 20,739 | 384,146 | 200 | 2.2 | 8 | $0.95 | $364,749 |
| 1984/85 | 31 | 41 | 75,009 | 13,416 | 163,460 | 1,000 | 2.2 | 6 | $1.30 | $211,198 |
| 1985/86 | 15 | 30 | 98,089 | 7,999 | 206,814 | 0 | 2.1 | 12 | $1.40 | $289,540 |
| 1986/87 | 8 | 24 | 19,874 | 10,878 | 42,761 | 200 | 2.1 | 2 | $1.50 | $63,842 |
| 1987/88 | 15 | 37 | 63,545 | 7,453 | 141,390 | 200 | 2.2 | 9 | $2.10 | $296,499 |
| 1988/89 | 36 | 77 | 69,280 | 18,906 | 148,997 | 233 | 2.1 | 4 | $1.00 | $148,764 |
| 1989/90 | 12 | 30 | 22,937 | 6,204 | 48,746 | 3,810 | 2.1 | 4 | $1.00 | $44,936 |
| 1990/91 | 5 | 21 | 6,901 | 1,309 | 14,779 | 125 | 2.1 | 5 | $1.25 | $18,318 |
| 1991/92 | 8 | 8 | 3,483 | 986 | 7,825 | NA | 2.2 | 4 | $1.00 | $7,825 |
| 1992/93 | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1993/94 - 1994/95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 1995/96 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1996/97 - 2011/12 | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC |

Notes: NA = not available, CF = confidential, FC = fishery closed.
[a] Deadloss included.
[b] In pounds.
[c] Number of retained crab per pot lift.
[d] Average price per pound.

Table 1-13.–Western Aleutian District grooved Tanner crab fishery data, 1992 – 2011.

| | Number of | | | | | | Average | | Value | |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | Vessels | Landings | Crab[a] | Pots lifted | Harvest[a,b] | Deadloss[b] | Weight[b] | CPUE[c] | Exvessel[d] | Total[e] |
| 1992 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1993 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 1994 | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1995 | 6 | 18 | 76,972 | 17,374 | 145,660 | 17,160 | 1.9 | 4 | $2.22 | $0.29 |
| 1996 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1997 - 1999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 2000 - 2011 | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC |

Note: CF = confidential, FC = fishery closed.

[a] Deadloss included.

[b] In pounds.

[c] Number of retained crab per pot lift.

[d] Average price per pound.

[e] Millions of dollars.

Table 1-14.–Aleutian District Dungeness crab fishery data, 1974 – 2011/12.

| Year[a] | Number of | | | | Harvest[b,c] | Deadloss[c] | Average | | Exvessel[e] | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | Vessels | Landings | Crab[b] | Pots lifted | | | Weight[c] | CPUE[d] | | |
| 1974 | 3 | 13 | 24,459 | 3,399 | 60,517 | NA | 2.4 | 8 | NA | NA |
| 1975 | NA | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1976/77 - 1977/78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 1978/79 - 1979/80 | NA | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1980/81 - 1981/82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 1982/83 - 1983/84 | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1984/85 | 4 | 50 | 40,128 | 13,555 | 91,739 | NA | 2.3 | 3 | $1.35 | NA |
| 1985/86 | 4 | 19 | 8,590 | 1,706 | 17,830 | 0 | 2.1 | 5 | NA | NA |
| 1986/87 | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1987/88 | 6 | 43 | 13,247 | 2,987 | 26,627 | 0 | 2.0 | 4 | $0.95 | $25,296 |
| 1988/89 | 6 | 45 | 10,956 | 2,599 | 22,915 | 4 | 2.1 | 4 | $0.81 | $18,558 |
| 1989/90 | 4 | 31 | 5,165 | 2,078 | 11,124 | 0 | 2.2 | 2 | $0.91 | $10,123 |
| 1990/91 | 3 | 11 | 8,379 | 1,345 | 17,482 | 117 | 2.1 | 6 | $1.20 | $20,838 |
| 1991/92 | 4 | 14 | 3,654 | 732 | 7,412 | 0 | 2.0 | 5 | $1.25 | $9,265 |
| 1992/93 | 4 | 13 | 2,854 | 555 | 5,649 | 0 | 2.0 | 5 | $0.83 | $4,689 |
| 1993/94 | 5 | 12 | 3,448 | 797 | 7,531 | 10 | 2.2 | 4 | $0.78 | $5,866 |
| 1994/95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 1995/96 | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1996/97 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 1997-98 | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1998/99 - 2000/01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 2001/02 - 2002/03 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2003/04 - 2004/05 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 2005/06 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2006/07 - 2011/12 | 1 [f] | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |

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

[a] Season dates 1/1-12/31 in 1974 and 1975. Season dates 5/1-1/1 beginning in 1976/77.

[b] Deadloss included.

[c] In pounds.

[d] Number of retained crab per pot lift.

[e] Average price per pound

Table 1-15.–Aleutian Islands District trawl shrimp fishery data, 1972 – 2011.

| | | Number of | | | | Value | |
|---|---|---|---|---|---|---|---|
| Year | Season dates | Vessels | Landings | Tows | Harvest[a] | Exvessel[b] | Total |
| 1972 | 01/01 - 12/01 | 2 | CF | CF | CF | CF | CF |
| 1973 | 01/01 - 12/01 | 1 | CF | CF | CF | CF | CF |
| 1974 | 01/01 - 12/01 | 7 | 88 | 721 | 5,749,407 | NA | NA |
| 1975 | 01/01 - 12/01 | 3 | 14 | 54 | 467,196 | NA | NA |
| 1976 | 01/01 - 12/01 | 8 | 66 | 689 | 3,670,609 | $0.07 | $256,943 |
| 1977/78 | 02/01 - 03/01 | 7 | 93 | 1,372 | 6,800,393 | $0.12 | $816,047 |
| 1978/79 | 04/01 - 03/01 | 7 | 74 | 1,007 | 4,946,350 | $0.15 | $741,953 |
| 1979/80 | 04/01 - 02/01 | 7 | 68 | 799 | 3,292,049 | $0.20 | $658,410 |
| 1980 | 03/01 - 12/01 | 5 | 60 | 711 | 2,454,829 | $0.23 | $564,611 |
| 1981 | 03/01 - 12/02 | 6 | 45 | 551 | 2,185,326 | $0.22 | $480,772 |
| 1982 | 05/01 - 06/01 | 6 | CF | CF | CF | CF | CF |
| 1983 - 1991 | - | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 1992 | 01/01 - 12/01 | 4 | 6 | 94 | 72,133 | NA | NA |
| 1993 - 1998 | - | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 1999 | 01/01 - 07/09 | 2 | CF | CF | CF | CF | CF |
| 2000 - 2011 | FC | FC | FC | FC | FC | FC | FC |

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

[a] In pounds.

[b] Average price per pound.

Table 1-16.–Aleutian Islands octopus directed fishery and incidental harvest data, 1996 – 2011.

| | Directed harvest[a] | | | Incidental harvest[b] | | |
|---|---|---|---|---|---|---|
| Year | Vessels | Landings | Harvest[c] | Vessels | Landings | Harvest[c] |
| 1996 | 2 | 21 | CF | 26 | 87 | 36,292 |
| 1997 | 0 | 0 | 0 | 19 | 44 | 22,431 |
| 1998 | 1 | 2 | CF | 16 | 44 | 18,375 |
| 1999 | 0 | 0 | 0 | 32 | 76 | 87,420 |
| 2000 | 0 | 0 | 0 | 24 | 37 | 5,911 |
| 2001 | 0 | 0 | 0 | 19 | 47 | 7,120 |
| 2002 | 0 | 0 | 0 | 12 | 21 | 3,063 |
| 2003 | 0 | 0 | 0 | 27 | 89 | 102,104 |
| 2004 | 14 | 43 | 230,492 | 38 | 135 | 151,205 |
| 2005 | 1 | 2 | CF | 22 | 82 | 57,552 |
| 2006 | 0 | 0 | 0 | 33 | 114 | 133,182 |
| 2007 | 0 | 0 | 0 | 31 | 96 | 46,782 |
| 2008 | 1[d] | 1 | CF | 26 | 45 | 35,480 |
| 2009 | 0 | 0 | 0 | 13 | 21 | 8,782 |
| 2010 | 0 | 0 | 0 | 21 | 48 | 42,376 |
| 2011 | 0 | 0 | 0 | 13 | 17 | 8,187 |

*Note:* CF = confidential.

[a] Directed octopus harvest from Commissioner's permit fishery.

[b] Octopus incidentally taken from state waters.

[c] In pounds. Discards at sea included.

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

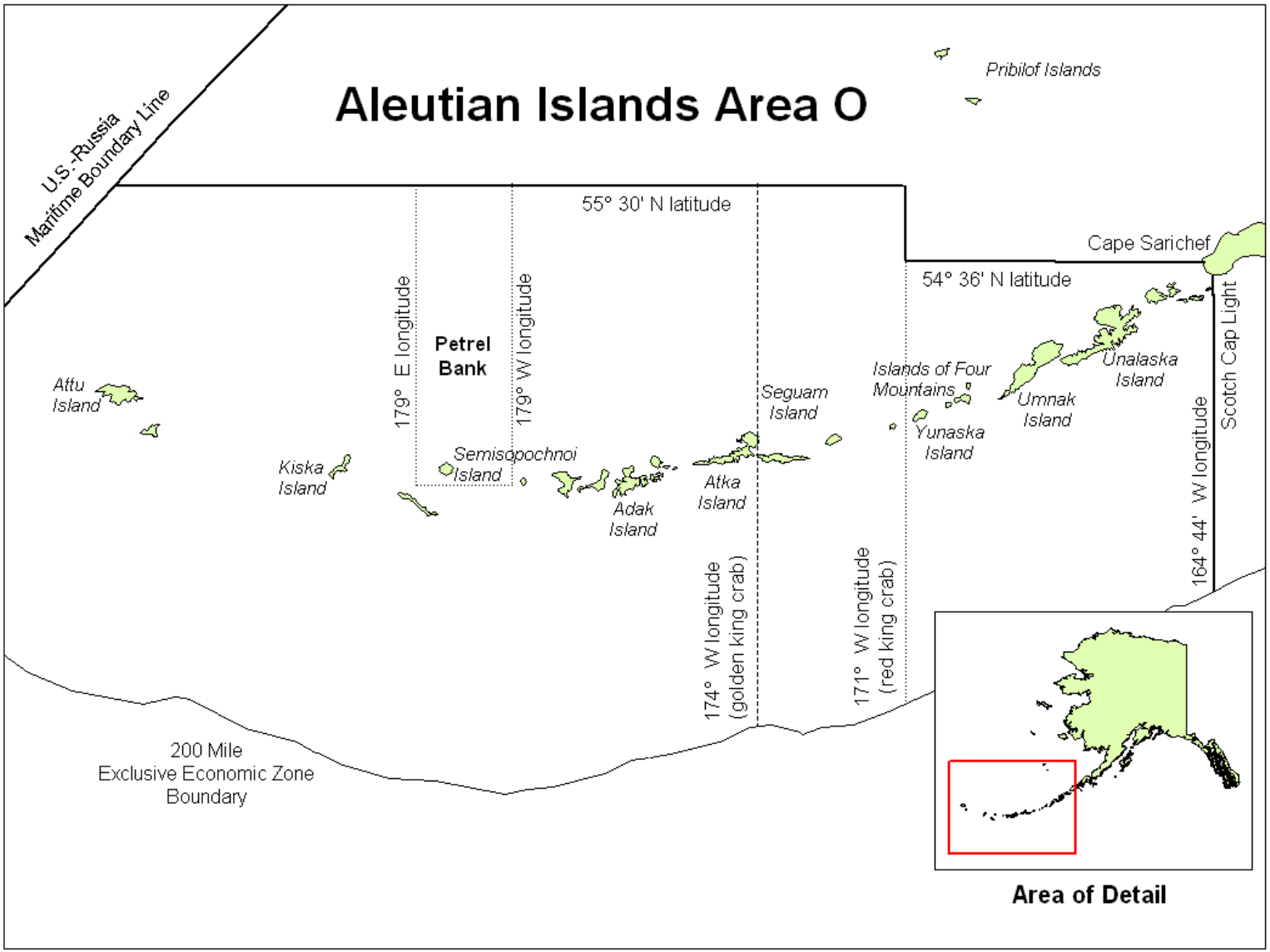


Figure 1-1.–Aleutian Islands Area O red and golden king crab management area.

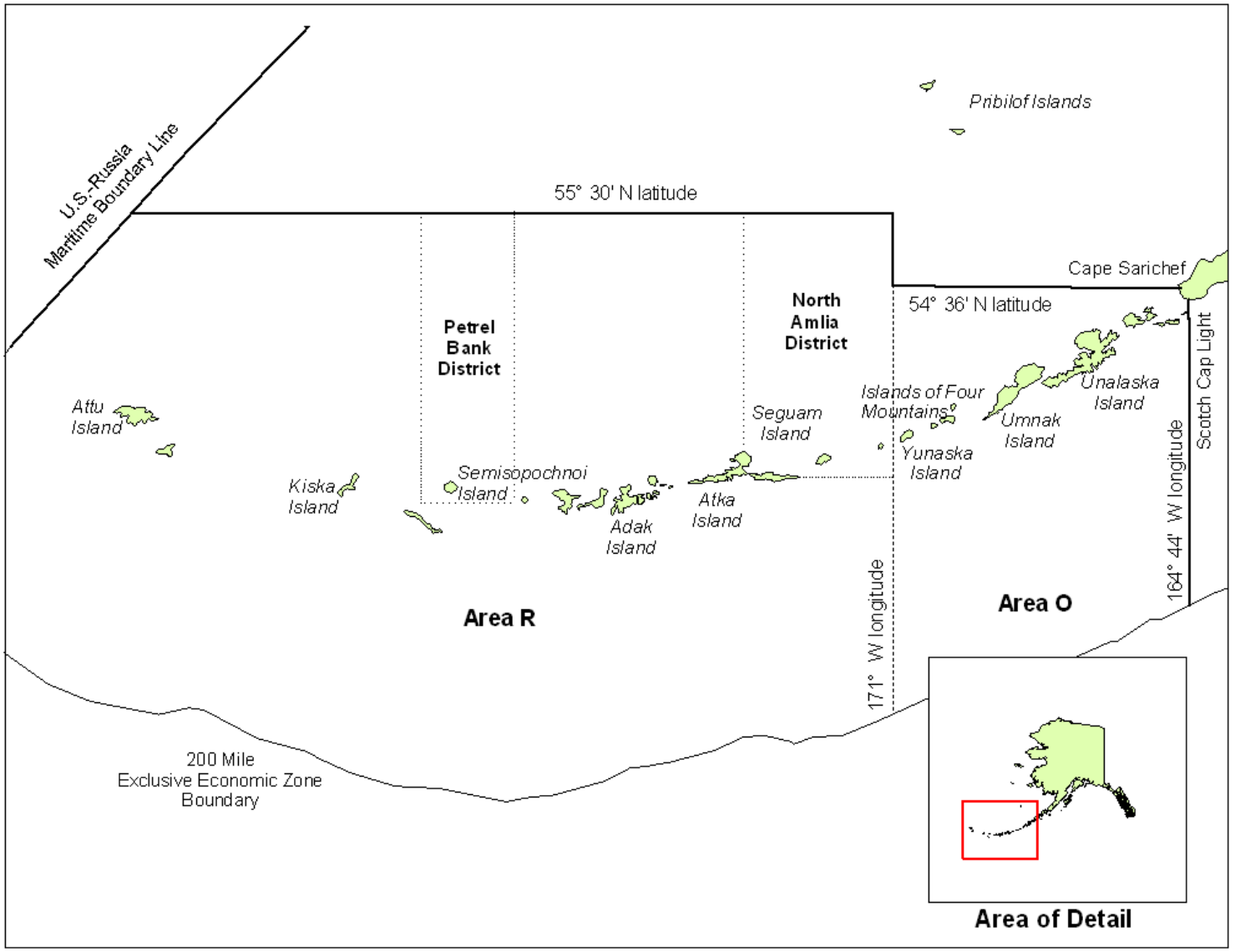


Figure 1-2.–Adak (Area R) and Dutch Harbor (Area O) king crab Registration Areas and Districts 1984/85–1996/97.

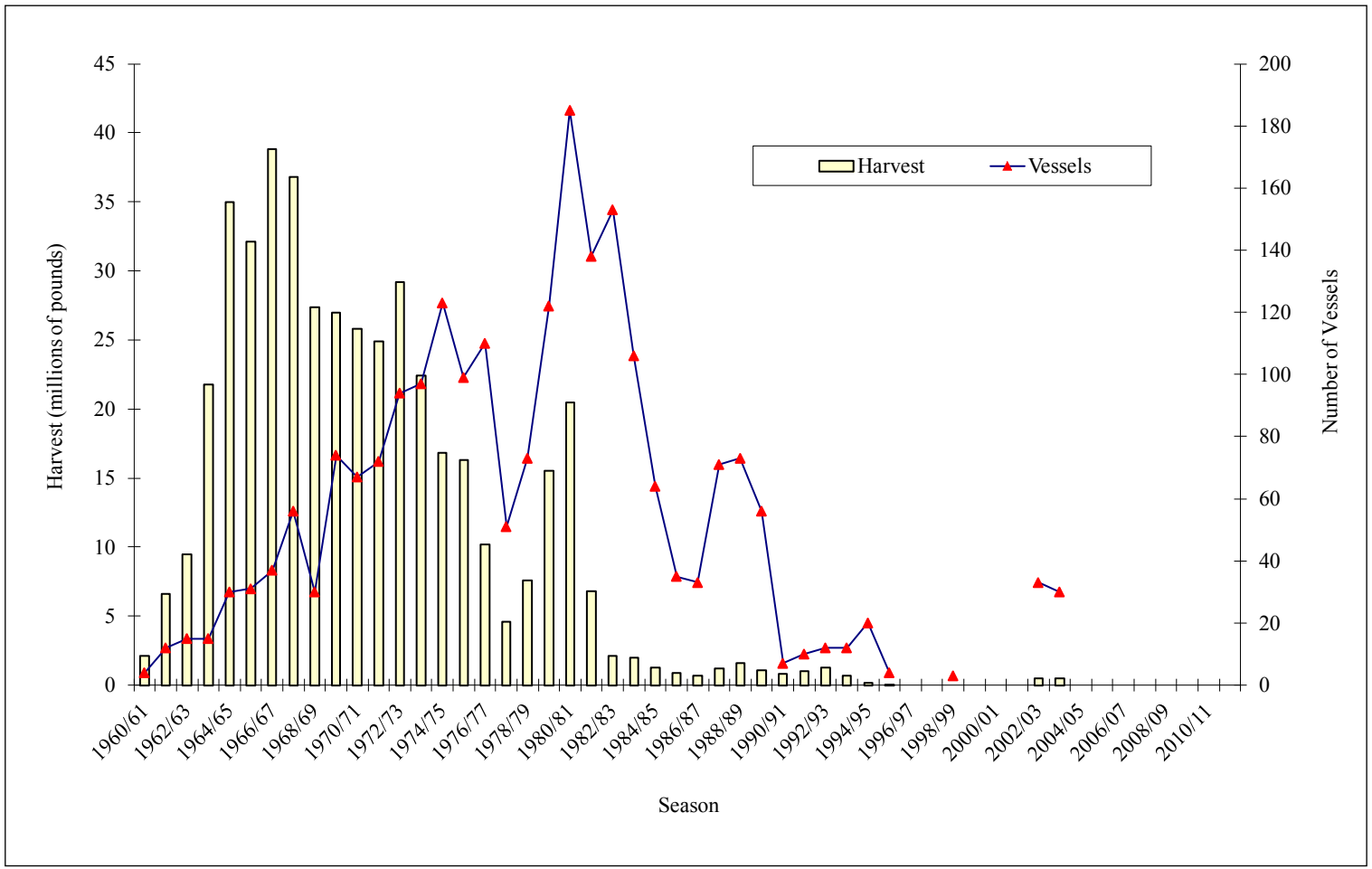


Figure 1-3.–Aleutian Islands red king crab fishery harvest and vessel effort, 1960/61–2011/12.

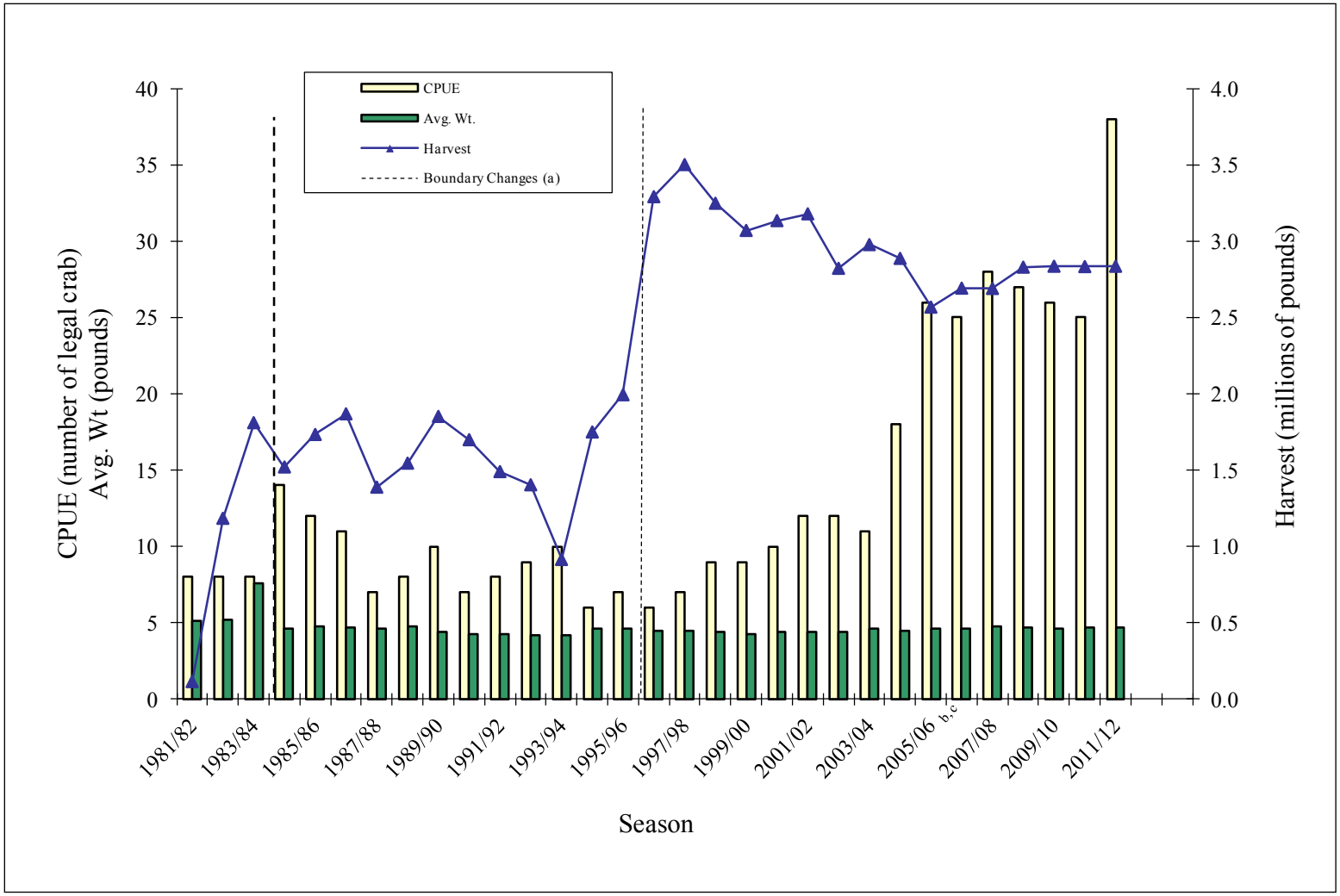


Figure 1-4.–Eastern Aleutian Islands golden king crab fishery harvest, fishery performance and average weight data for the 1981/82–2011/12 seasons.

[a] Western boundary of the fishery changed from 172° W to 171° W long prior to 1984/85 and from 171° W to 174° W long prior to the 1996/97 season.

[b] First rationalized crab season.

[c] Beginning in 2005/06, information reflects IFQ only; CDQ information omitted due to confidentiality.

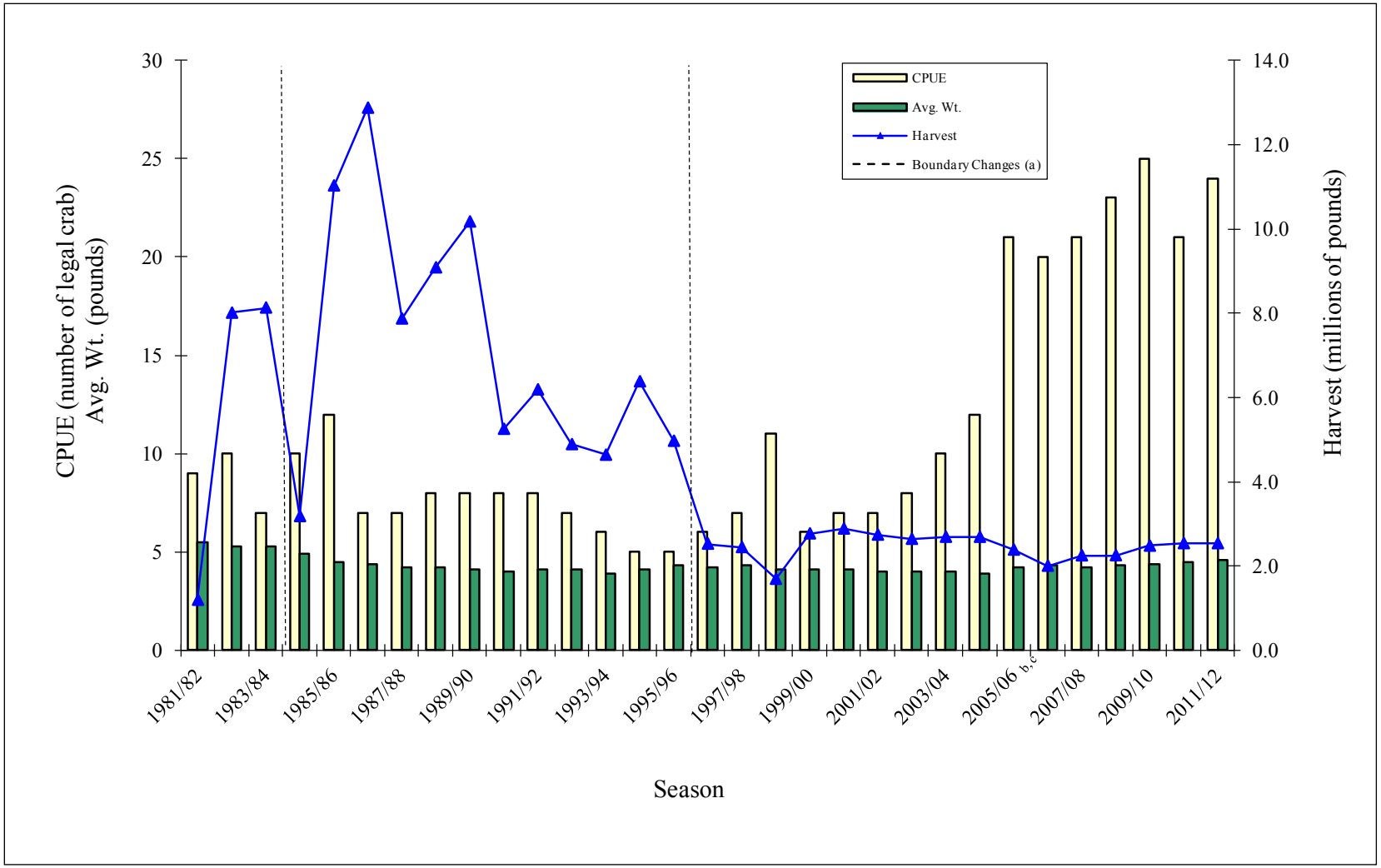


Figure 1-5.–Western Aleutian Islands golden king crab fishery harvest, fishery performance and average weight data for the 1981/82–2011/12 seasons.

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

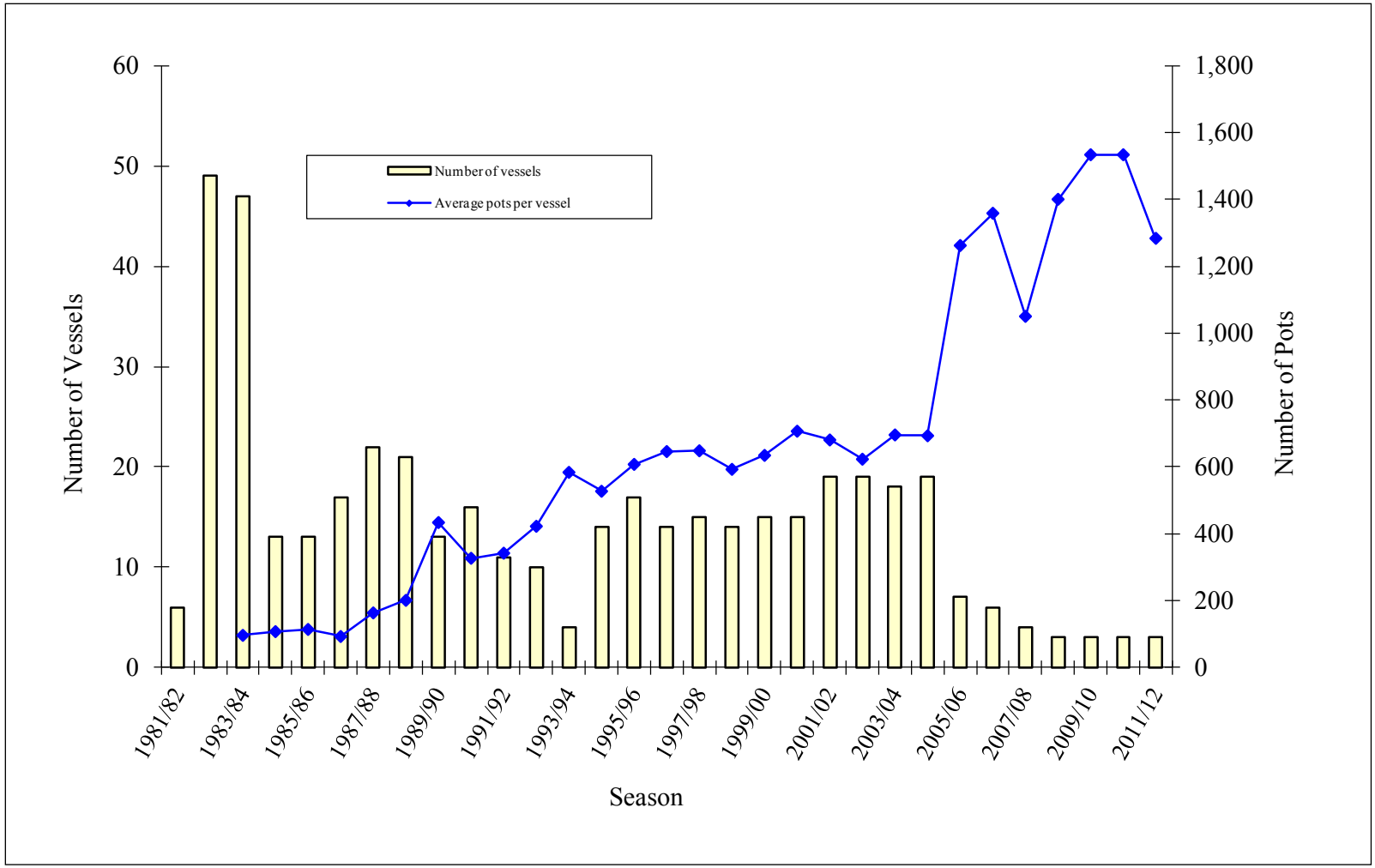


Figure 1-6.–Eastern Aleutian Islands golden king crab fishery vessel registrations and average number of pots per vessel 1981/82–2011/12, includes Community Development Quota fishery.

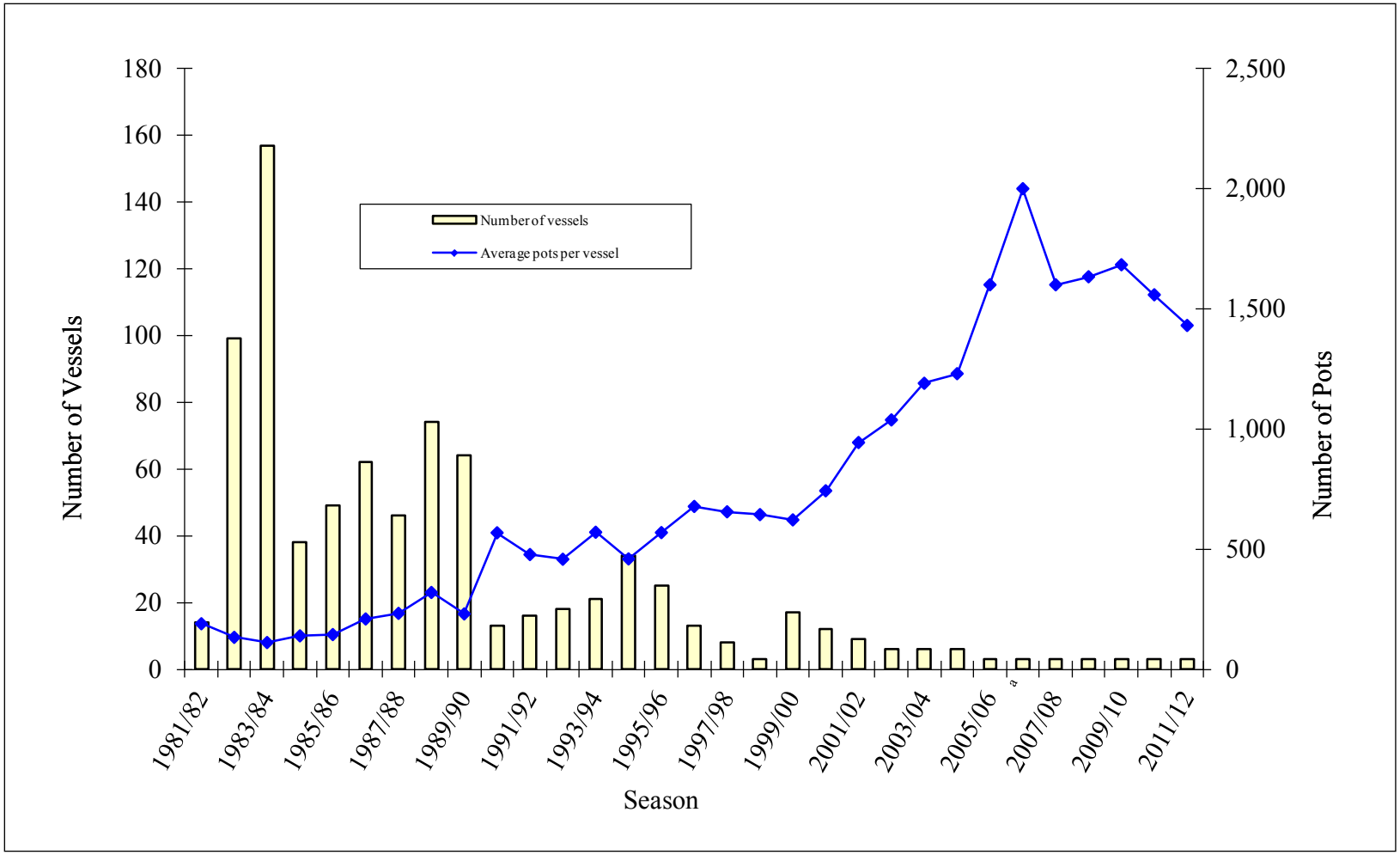


Figure 1-7.–Western Aleutian Islands golden king crab fishery vessel registrations and average number of pots per vessel 1981/82–2011/12, includes Adak Community Allocation fishery.

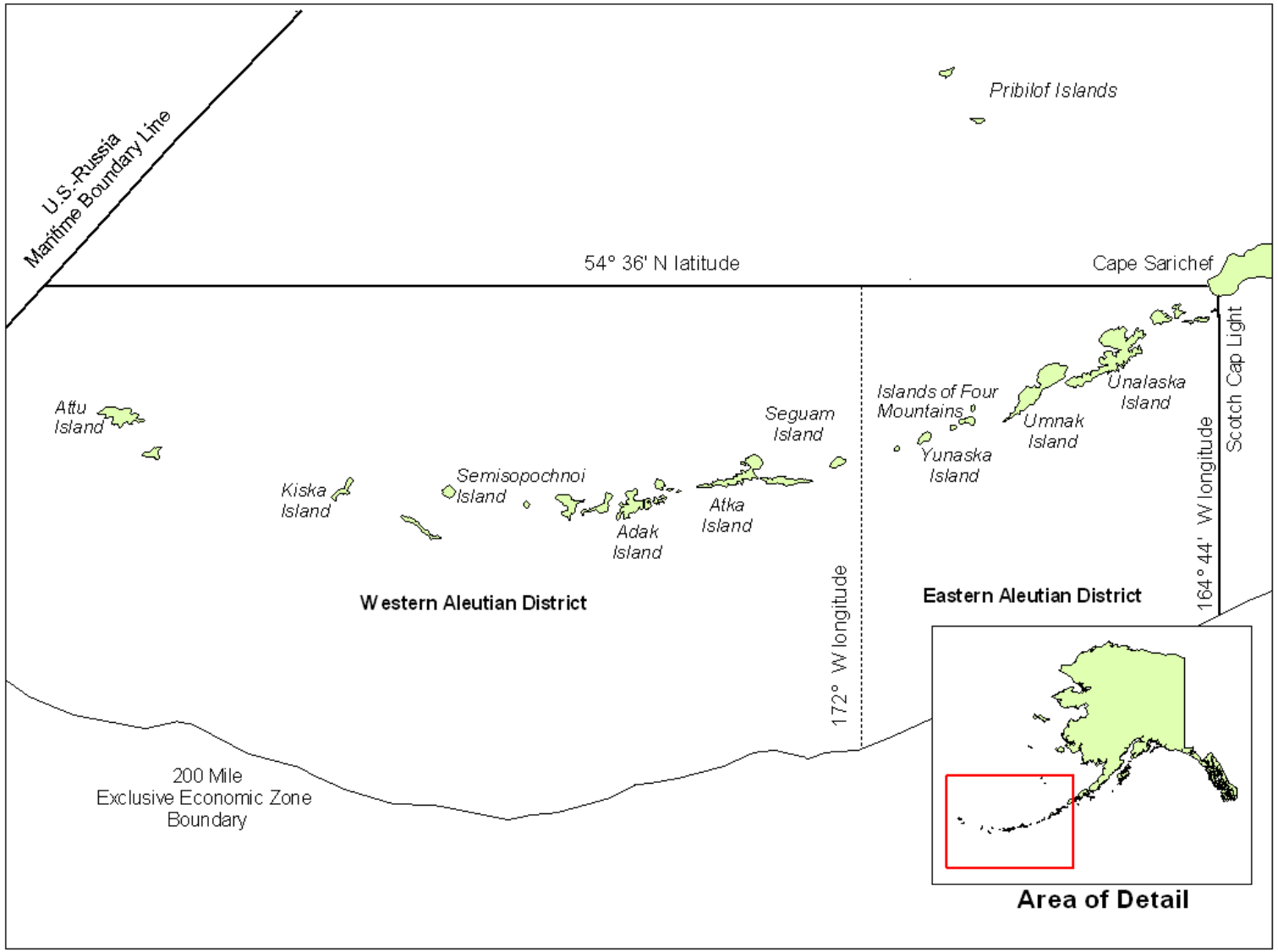


Figure 1-8.–Eastern and Western Aleutian Tanner crab Districts of Registration Area J.

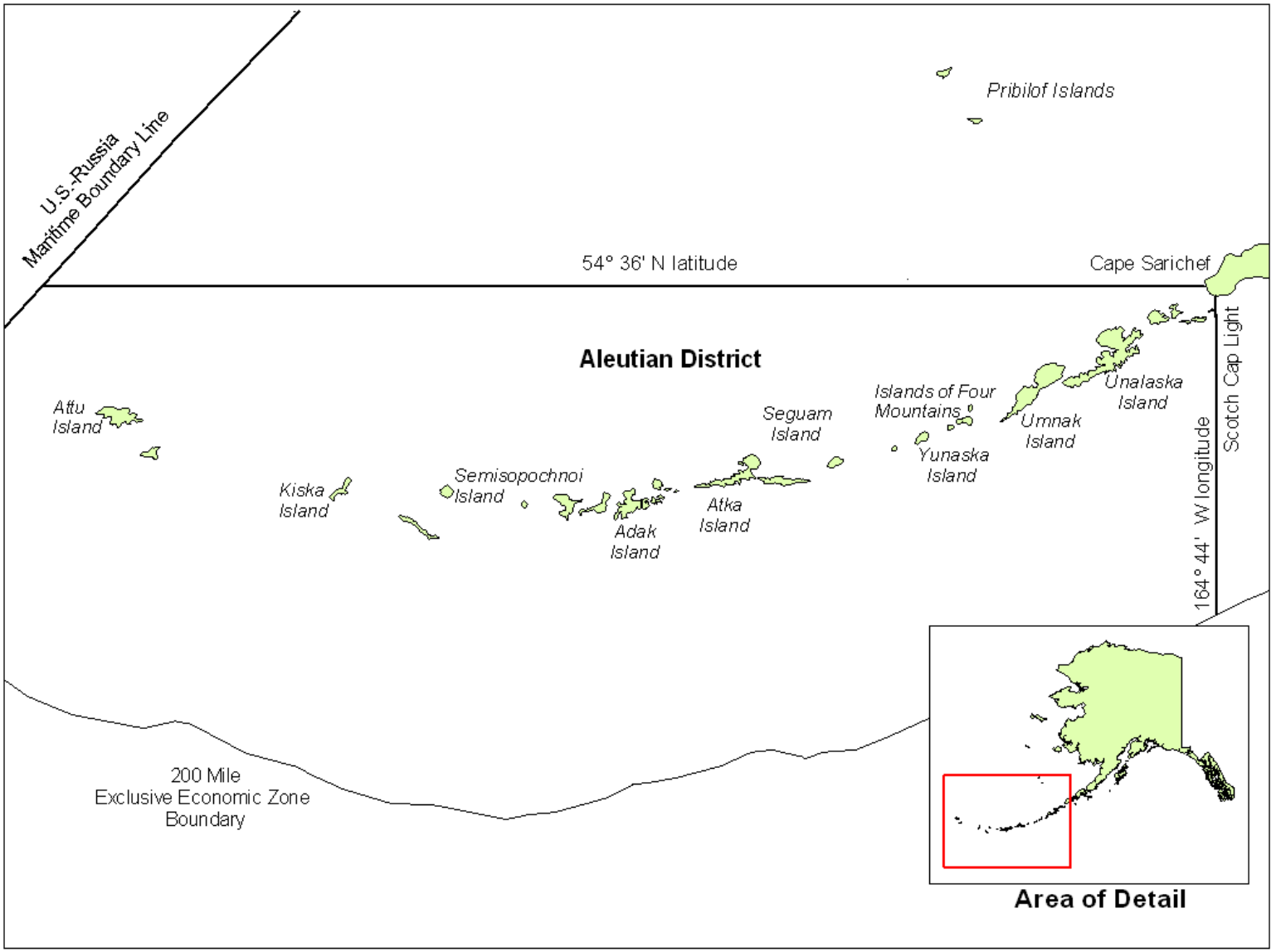


Figure 1-9.–Aleutian District for Dungeness crab management.

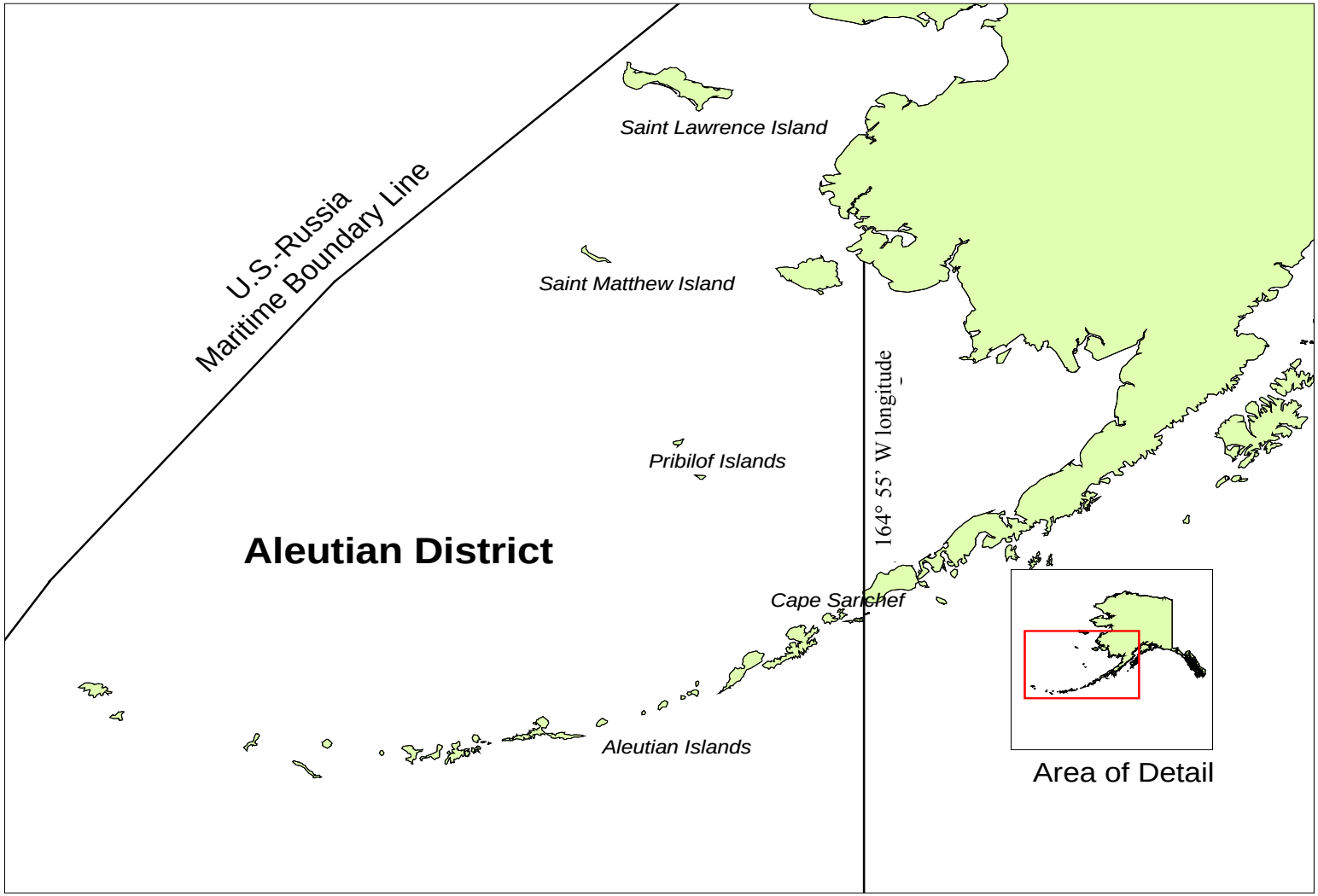


Figure 1-10.–Aleutian District for shrimp management.

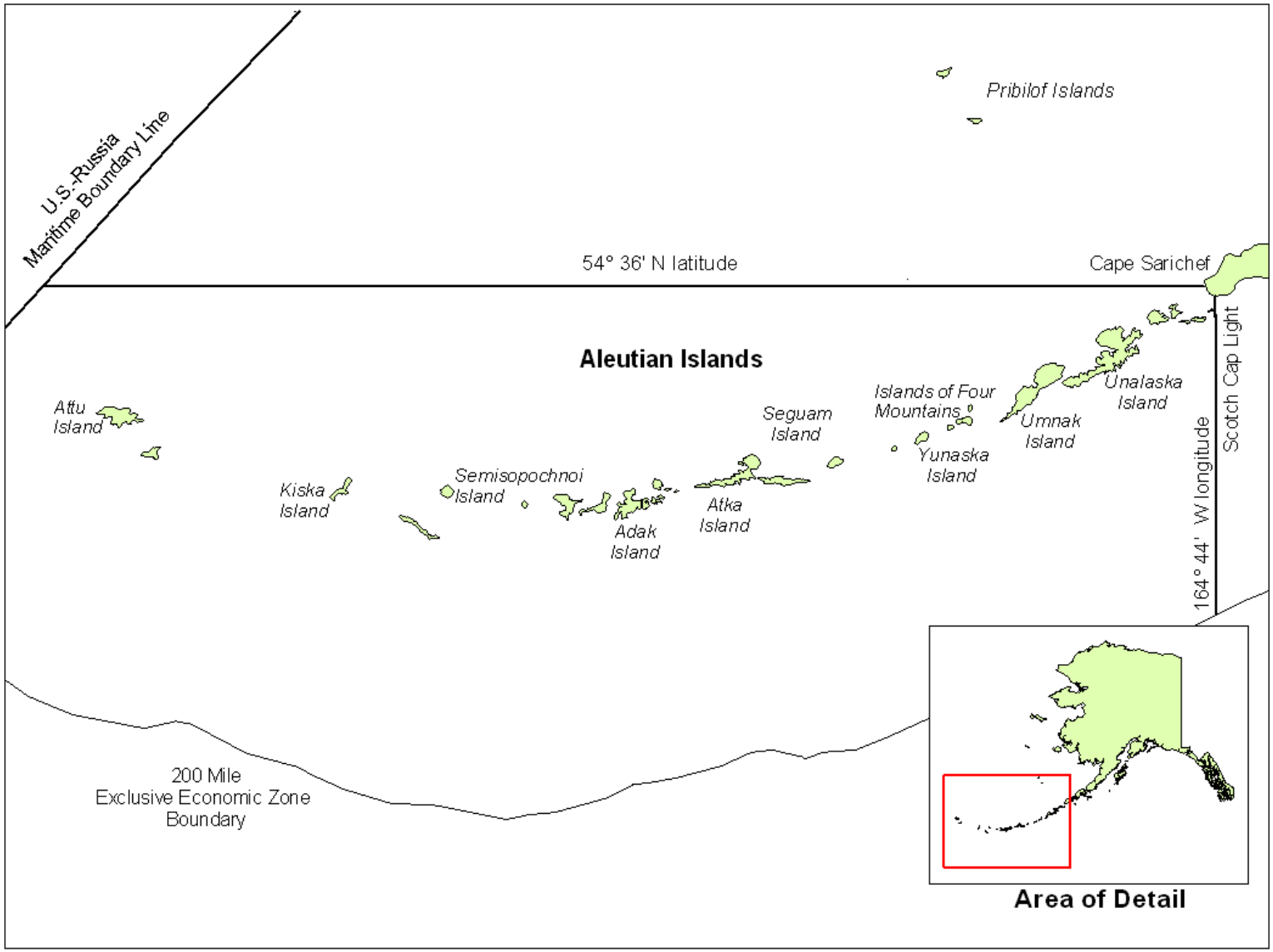


Figure 1-11.–Aleutian Islands District of miscellaneous shellfish Registration Area J.

# ANNUAL MANAGEMENT REPORT FOR COMMERCIAL SHELLFISH FISHERIES OF THE BERING SEA, 2011/12

by

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# BRISTOL BAY KING CRAB REGISTRATION AREA T

## DESCRIPTION OF AREA

Bristol Bay king crab Registration Area T includes all waters of the Territorial Sea (0–3 nautical miles) and all waters of the Exclusive Economic Zone (EEZ; 3–200 nautical miles) north of Cape Sarichef (54°36' N lat), south of Cape Newenham (58°39' N lat), and east of 168° W long (Figure 2-1).

## BRISTOL BAY RED KING CRAB

### Historical Background

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

Exvessel value of the BBR fishery was highest in 1980 at $115.3 million. Product value peaked in 2011/12 at $9.06 per pound. The lowest fishery value was in 1982 at $8.9 million (Table 2-2, Figure 2-3).

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

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

Fishing effort increased dramatically from 89 vessels in 1984 to 300 vessels in 1991 (Table 2-1, Figure 2-3). The number of pots also increased, with almost 90,000 pots registered for the 1991 fishery compared to just under 22,000 pots registered in 1984. Due to the high number of pots in the fishery, the BOF established a 250-pot per vessel limit for the 1992 BBR fishery. This action was intended to improve inseason management by extending the length of the fishing season as

well as reducing potential for pot loss and gear conflict. Immediately following the 1992 BBR fishery, NMFS suspended the 250-pot limit due to inconsistencies between state regulations and provisions of the Federal Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs (FMP), mandating application of pot limits in a nondiscriminatory manner (NPFMC 1998). In spring 1993, the BOF set pot limits based on overall vessel length. Beginning in 1993, vessels greater than 125 feet in overall length were limited to 250 pots and vessels 125 feet or less in overall length were allowed a maximum of 200 pots. Pot limits were administered and enforced through a buoy tag program.

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

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

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

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

Using LBA, the 1999 through 2002 fisheries exploitation rate was 10 percent. ESB ranged from a low of 37.7 million pounds in 2002 to a high of 47.0 million pounds in 1999. The BOF modified the BBR harvest strategy in 2003, implementing a 12.5 percent harvest rate on mature males, based on an ESB greater than or equal to 34.75 million pounds but less than 55 million pounds. ESB substantially increased in 2003 and an exploitation rate of 15 percent was applied to mature males. The 2004 BBR fishery was 80 hours in length. Only the 2002 season was shorter, at 68 hours (Table 2-2).

To address difficulty in managing at low GHLs, the BOF held a special meeting in August of 1997, implementing tiered pot limits and vessel preseason registration requirements. Also

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

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

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

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

Implementation of the CR program resulted in a decrease in vessel participation. Vessel effort declined from an average of 243 vessels per year in the 5 years prior to CR to 89 vessels in 2005/06 season. Participation decreased, to 65 vessels in the 2010/11 season (Table 2-1). Season length has substantially increased since the beginning of CR, from seasons lasting 3 to 5 days in

the 5 years prior to CR, to a regulatory 93 day season during CR (Table 2-2). Since CR, the majority of the harvest occurs by mid-November; however, fishing effort has occurred until the season closure in mid-January. Vessels averaged 28 fishing days over the past three seasons. In all years since CR, harvest has been within 0.5 percent of the TAC.

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

## 2011/12 Season

The 2011/12 BBR fishery opened October 15 with a combined IFQ and CDQ TAC of 7.834 million pounds (Table 2-1). Sixty two vessels participated in the fishery and harvested 7.834 million pounds, of which less than 1 percent was deadloss. The fleet registered 12,090 pots, an average of 195 pots per vessel. Total effort for the 2011/12 fishery was 45,166 pot lifts, a 65 percent decrease from 2010/11. The average vessel was active in the fishery for 14 days. Despite the fishing season lasting through January 15, nearly the entire harvest occurred by early November, with the last delivery occurring on November 18 (Table 2-3). Harvest during the first month of the season takes advantage of favorable weather and market conditions.

CPUE was 28 legal crab per pot, the highest CPUE in 4 years. Similar to the prior 3 seasons, harvest was spread over 18 ADF&G statistical reporting areas (Table 2-4). Nearly 68 percent of the harvest occurred between 161° W long and 162° W long, and 56°30’ N lat and 57°30’ N lat. Sampling of delivered catch indicated that just under 89 percent of crab measured were new-shell, the same as 2010/11. Average carapace length was 149 mm, 1 mm less than in 2010/11. The percentage of recruit-sized crab in the commercial harvest increased from 71 percent in 2010/11 to 75 percent, and was the highest percent of recruit-sized crab in the commercial harvest since the 1987 season (Table 2-5).

BBR cost-recovery was conducted by ADF&G in 2011 and 118,690 pounds were harvested. At an exvessel price of $7.30 per pound, the total value of cost-recovery was $864,984. The 21-day charter occurred from September 30 to October 21, 2011 (Table 2-6).

### *IFQ Fishery*

The 2011/12 TAC of the BBR IFQ fishery was 7,050,600 pounds (Table 2-1). Sixty two vessels harvested 99.9 percent of the TAC. Harvesters were paid an average price of $8.95 per pound, the highest BBR exvessel value since the inception of the fishery. The total exvessel IFQ fishery value was $62.8 million (Table 2-2).

### *CDQ Fishery*

The 2011/12 BBR CDQ fishery allocation was 783,400 pounds (Table 2-1). Five of the six CDQ groups participated in this fishery. The remaining group transferred their entire allocation to another group. No group exceeded their allocation.

Nine vessels made 11 landings for an overall harvest of 783,399 pounds (Table 2-1), and fishery value was approximately $7.1 million (Table 2-2).

### Port Sampling

During the 2011/12 BBR fishery, ADF&G personnel sampled red king crab from vessels without onboard observers at shorebased processors in King Cove, Akutan, Kodiak, Saint Paul, and Dutch Harbor. Biological data collected on landed red king crab consisted of carapace length, shell condition, and average weight. Confidential interviews, supplemented by daily fishing log (DFL) 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 116 of the 161 total landings during the 2011/12 BBR fishery.

### Stock Status

Based on 2011 NMFS trawl survey area-swept estimates (Chilton et al. 2012), mature male biomass decreased 35 percent and legal male biomass decreased 28 percent from 2010 estimates, while mature female biomass decreased 8 percent. The estimated legal male biomass of 34 million pounds was the lowest since 2001, and below the 20 year average of 54 million pounds. While the estimated mature female biomass was lower than 2010, it was still well above all prior annual estimates since 1981.

The 2011 NMFS trawl survey of Bristol Bay was conducted in early June; however, stations were resurveyed in late July due to low counts of newly molted females with clutches of uneyed embryos during June. The 2011 survey ratio of eyed embryos to uneyed embryos decreased from 0.81 in early June to 0.06 in the resampled stations in late July. Density of mature females increased in the resampled stations in late July.

Data from the NMFS trawl survey is incorporated into the LBA model used by the BBR regulatory harvest strategy to determine the fishery TAC. The harvest strategy may be found in 5 AAC 34.816 *Bristol Bay Red King Crab Harvest Strategy*. LBA model results indicated an ESB of 43 million pounds; therefore, an exploitation rate of 12.5 percent was applied to mature male red king crab for a TAC of 7.834 million pounds.

Additional stock status information and details on federal overfishing levels (OFL) and annual catch limits (ACL) for BBR may be found in the 2011 Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions (NPFMC 2011).

# BERING SEA KING CRAB REGISTRATION AREA Q

## DESCRIPTION OF AREA

The Bering Sea king crab Registration Area Q southern boundary is a line from 54°36' N lat, 168° W long, to 54°36' N lat, 171° W long, to 55°30' N lat, 171° W long, to 55°30' N lat, 173° 30' E long. The northern boundary is the latitude of Point Hope (68°21' N lat). The eastern boundary is a line from 54°36' N lat, 168° W long, to 58°39' N lat, 168° W long, to Cape Newenham (58°39' N lat). The western boundary is the United States-Russia Maritime Boundary Line of 1990 (Figure 2-4). Area Q is divided into 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. The Norton Sound Section includes all waters north of Cape Romanzof, and south of 66° N lat.

The Kotzebue Sound Section encompasses all remaining waters of the district. Registration Area Q includes waters of both the Territorial Sea and EEZ. The Norton Sound Section and Kotzebue Sound Section are not addressed in this report.

## PRIBILOF DISTRICT RED AND BLUE KING CRAB

### Historical Background

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

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

The 1993 NMFS summer trawl survey of the Bering Sea indicated a marked increase in the abundance of red king crab around the Pribilof Islands. Although no threshold abundance level for opening the red king crab fishery was established in regulation for the Pribilof District, survey results indicated a harvestable surplus of legal-sized male red king crab. A red king crab fishery in the Pribilof District opened for the first time in September 1993 with a GHL of 3.4 million pounds; 112 vessels participated, but only 2.6 million pounds were harvested. In 1994, the Pribilof District again opened to red king crab with a GHL of 2.0 million pounds; however, only 1.3 million pounds were taken by 104 vessels (Table 2-8).

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

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

The Pribilof blue king crab stock was declared overfished by NMFS in September 2002. ADF&G developed a rebuilding harvest strategy as part of a comprehensive rebuilding plan for the stock (Zheng and Pengilly 2003). The rebuilding harvest strategy, adopted by the BOF, 5 AAC 34.918 includes: a minimum estimated spawning biomass of 13.2 million pounds for two

consecutive years, a harvest rate of 10 percent of mature males or 20 percent of legal males (whichever is less), and a 500,000 pound minimum general fishery GHL (TAC).

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

The Pribilof District red and blue king crab fisheries were included in the CR program; however, neither the red nor blue king crab fisheries have opened since the implementation of the CR program, which began in 2005/06.

### 2011/12 Season

The blue king crab fishery in the Pribilof District was not opened in 2011/12 due to continued low blue king crab abundance. The stock remains well below the threshold level of abundance required for a fishery opening. Due to significant uncertainty surrounding estimated red king crab abundance and concerns for blue king crab bycatch in a directed red king crab fishery, the red king crab fishery also remained closed for the 2011/12 season.

### Stock Status

The Pribilof blue king crab stock was declared overfished September 2002 and the stock has remained severely depressed. Results from the 2011 Pribilof District blue king crab stock assessment indicated the stock remained well below the minimum spawning biomass threshold for a fishery opening and would not have met the minimum IFQ TAC. Data from the 2011 NMFS trawl survey indicated that Pribilof District blue king crab were caught at only 5 of the 77 trawl survey stations. Though biomass estimates are imprecise due to the small number of tows yielding crab, the legal-size male biomass estimate was 0.88 million pounds, well below the most recent 20 year average biomass of 3.5 million pounds, but an increase from the 2010 estimate of 0.45 million pounds (Chilton et al. 2012).

Given the continued low abundance of blue king crab in the Pribilof District and distribution of the stock, ADF&G statistical areas 675730, 685730, 695730, 685700, 695700, 695701, 705701, 705703, 695631, 695632 and 705630 were closed to fishing for Tanner and snow crab. The southwest half of 705630 was opened during the Bering Sea snow crab season based on ADF&G analysis that blue king crab were unlikely to be found in that portion of the statistical area.

No formal harvest strategy has been developed for Pribilof District red king crab. The fishery has been closed since the 1999 season due to imprecision of abundance estimates and concerns about bycatch of blue king crab. Past fishery and trawl survey data have indicated the potential for bycatch of blue king crab during a directed fishery on the Pribilof red king crab stock. Pot surveys performed by ADF&G between 2003 and 2011, as well as an attempt at cost-recovery fishing on Pribilof red king crab in 2003, demonstrated the difficulty of establishing a TAC for Pribilof red king crab on the basis of the trawl survey estimates and of prosecuting a fishery on Pribilof red king crab without risking bycatch of Pribilof blue king crab (Gish 2010).

## SAINT MATTHEW ISLAND SECTION BLUE KING CRAB

### Historical Background

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

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

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

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

The St. Matthew blue king crab fishery re-opened in 2009/10 under the CR program. After a fishery closure that lasted from 1999 until 2008/09, the 2009/10 TAC was 1.167 million pounds

with 10% of the TAC allocated to the CDQ fishery. IFQ harvest was 0.46 million pounds and there was no CDQ harvest. Seven vessels participated in the fishery and had a CPUE of 10 legal crab per pot. Exvessel value was $2.19 per pound (Table 2-10). The 2010/11 TAC was 1.6 million pounds; however, similar to the 2009/10 season, the TAC was not reached. CPUE during the 2010/11 season was 10 legal crab per pot. During the 2009/10 and 2010/11 seasons, fishermen reported difficulty locating high concentrations of crab.

### 2011/12 Season

The 2011/12 Saint Matthew Island Section blue king crab fishery opened October 15 with a combined IFQ and CDQ TAC of 2.359 million pounds (Table 2-9). Eighteen vessels participated and harvested 1.88 million pounds, or 80 percent of the total TAC. The pot limit for the 2011/12 season was 250 pots per vessel. The fleet registered 3,116 pots, an average of 173 pots per vessel. Total effort for the 2011/12 fishery was 48,554 pot lifts, a 62 percent increase from 2010/11, with a CPUE of 9 legal crab per pot. Harvest during the 2011/12 season was spread over 10 ADF&G statistical reporting areas with most fishing effort occurring south of 60°30' N lat. Approximately 62 percent of the harvest occurred in statistical area 735930, similar to the 2010/11 season (Table 2-11). The average vessel was active in the fishery for 35 days, though the fishery was open for 110 days. Although the fishery was open through February 1, all harvest occurred by late November.

Average carapace length was 125.7 mm, 3.1 mm larger than in 2010/11. The percentage of recruit-sized crab in the commercial harvest increased to 62 percent, up 1 percent from the 2010/11 season (Table 2-9).

#### *IFQ Fishery*

The 2011/12 Saint Matthew Island section blue king crab fishery IFQ TAC was 2,123,100 pounds. Eighteen vessels participated in the fishery and harvested 1,698,707 pounds, of which less than 2 percent was deadloss. CPUE was 9 legal crab per pot, which is slightly lower than the 2010/11 season (Table 2-9). The average price per pound for blue king crab in the IFQ fishery was $4.34 with an IFQ exvessel fishery value of $7.3 million (Table 2-10).

#### *CDQ Fishery*

The 2011/12 Saint Matthew Island Section blue king crab CDQ allocation was 235,900 pounds (Table 2-9). Group permits were issued to 5 groups, of which 3 groups transferred their entire quota to another group. One group does not have an allocation for this fishery. Five vessels harvested 182,615 pounds, with a total of 13 landings, which resulted in a fishery value of $0.8 million. No group exceeded their allocation.

## Port Sampling

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

## Stock Status

After a 10-year closure and rebuilding plan, the Saint Matthew Island blue king crab stock reached the rebuilt level and opened for the 2009/10 season, based on the 2009 NMFS area-swept abundance estimate. During the 2011 NMFS bottom trawl survey, blue king crab were

captured at 28 of 57 trawl survey stations (Chilton et al. 2012). The legal male biomass estimate of 12.6 million pounds was an increase of 24 percent from the 2010 estimate, and higher than the previous 20-year average biomass estimate of 6.6 million pounds. The estimated mature female abundance decreased 86 percent from the 2010 estimate and was the lowest estimate since 1999. Blue king crab abundance estimates in the St. Matthew Island Section have a high degree of uncertainty.

ADF&G conducted triennial pot surveys in the Saint Matthew Island Section from 1995 to 2010, with a focus on the near-shore waters. Results from commonly fished stations in 2010 indicated legal male catch was slightly higher than the average legal-male catch in prior pot surveys (Gish et al. 2012).

## PRIBILOF DISTRICT GOLDEN KING CRAB

### Historical Background

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

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

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

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

The Pribilof District golden king crab fishery was not included in the CR program. The golden king crab fishery is managed through commissioner's permit on a calendar-year basis. Inseason management is based on catch reports provided by processors and observers. Fishing is restricted to depths of 100 fathoms or greater. Starting in 2001, 100 percent observer coverage was

required for each vessel registered for the fishery to provide fishery and biological data that has not previously been available. In addition, vessel logbooks, issued with the commissioner's permit, provide fishing operation locations, effort, and bycatch estimates that supplement data collected by observers. With the issuance of a Bering Sea Deepwater King and Tanner Crabs Commissioner's Permit, vessels may also legally retain certain bycatch species during the Pribilof District golden king crab fishery. These include scarlet king crab *Lithodes couesi,* grooved Tanner crab *Chionoecetes tanneri*, and triangle Tanner crab *C. angulatus.*

### 2011 Season

Two vessels participated in the 2011 Pribilof District golden king crab fishery, harvest information is confidential. The GHL was not reached, and the fishery remained open until the end of the year.

### Stock Status

The golden king crab fishery is managed using a GHL based on long-term average harvest. Data collected by onboard observers in conjunction with biological data from landed catch are used to annually evaluate status of the stock. In December 2007, NMFS amended the FMP, adopting new overfishing definitions for BSAI crab (NPFMC 2007). Overfishing levels for this Tier V stock are based on historic catch and are not anticipated to constrain the GHL.

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

## NORTHERN DISTRICT GOLDEN KING CRAB

### Historical Background

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

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

The golden king crab fishery in the Bering Sea is managed using inseason catch reports provided by processors and observers. Starting in 2001, 100 percent observer coverage was required for each vessel registered for the fishery in order to provide fishery and biological data that was previously unavailable. In addition, vessel logbooks, issued with the commissioner's permit, provided fishing operation locations, effort, and bycatch estimates that supplemented data

collected by observers. Primary bycatch species include non-retained golden king crab, Pacific halibut, Pacific cod, and snow crab. Fishing is restricted to depths of 100 fathoms or greater.

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

### 2011 Season

The fishery opened January 1 with a GHL range of 10,000 to 20,000 pounds and closed December 31, 2011. No vessels registered to fish for golden king crab in the Northern District in 2011.

### Stock Status

The golden king crab population in the Northern District is not surveyed annually, but was surveyed in the NMFS upper continental slope trawl survey in 2002, 2004, 2008 and 2010 (Hoff and Britt 2011). Survey biomass estimates have not been used in management of the fishery. The current GHL range of 10,000 to 20,000 pounds is designed to allow for some exploratory fishing and data gathering.

## BERING SEA SCARLET KING CRAB

### Historical Background

Scarlet king crab are harvested under authority of a permit issued by the commissioner of ADF&G authorized in 5 AAC 34.082 *Permits For Lithodes Couesi King Crab*. Harvest of scarlet king crab in the Bering Sea has primarily occurred as incidental harvest in the grooved Tanner crab and golden king crab fisheries. Although vessels first registered to fish for Bering Sea scarlet king crab in 1992, no commercial landings occurred prior to 1995. In 1995, 4 vessels harvested 26,684 pounds (Table 2-15) valued at $2.45 per pound. Scarlet king crab incidental harvest has been permitted since the species was first commercially exploited by the domestic fleet; however, in 2000 incidental harvest was capped at a rate of 5 percent of the weight of the target species. Since 2001, incidental harvest has been capped at 50 percent of the weight of the target species. Only 2 vessels participated in 1996, so, consequently, all harvest information is confidential. No vessels registered to fish for scarlet king crab from 1997 to 1999. A single vessel was permitted to retain scarlet king crab as incidental harvest during the grooved Tanner crab fishery in 2000 and 2001. No vessels registered to retain incidental catch of scarlet king crab in 2002. One vessel registered to retain scarlet king crab as incidental harvest in 2003 and 3 registered in 2004 during the Bering Sea golden king and deepwater Tanner crab fisheries. A single vessel registered for scarlet king crab in 2005 but none have registered since. Due to limited participation in recent incidental fisheries for scarlet king crab, all harvest information is confidential.

### 2011 Season

No vessels registered to fish for Bering Sea scarlet king crab in 2011.

### Fishery Management and Stock Status

No abundance estimates are available for scarlet king crab. Onboard observers have been required on most vessels that targeted deepwater crab species since 1994 and have collected information detailing the size and sex composition of the retained and non-retained scarlet king

crab and bycatch species. This information is used to help develop management measures for deepwater crab stocks. Currently, ADF&G does not intend to register vessels to fish directly for scarlet king crab in the Bering Sea. Retention of scarlet king crab captured in other deepwater crab fisheries is permitted in non-rationalized fisheries.

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

# BERING SEA TANNER CRAB MANAGEMENT DISTRICT

## DESCRIPTION OF AREA

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

## BERING SEA TANNER CRAB

### Historical Background

The first reported U.S. harvest of Tanner crab occurred in 1968 as incidental harvest during the Bristol Bay red king crab fishery. In 1974, a directed Tanner crab fishery began. Harvest peaked at 66.6 million pounds during the 1977/78 season. In the fall of 1978, NMFS predicted sharp declines in Tanner crab abundance. As anticipated, Tanner crab stocks declined, and by 1983/84 the commercial harvest fell to 1.20 million pounds. Further stock declines led to fishery closure during the 1985/86 and 1986/87 seasons (Table 2-16).

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

Also in 1993, the BOF passed regulation opening and closing the Eastern Subdistrict east of 168° W long to Tanner crab fishing concurrent with the regulatory opening and emergency order closure of the BBR fishery. If sufficient GHL remained after the BBR fishery was closed, the BOF allowed a reopening of the Eastern Subdistrict between 163° and 173° W long for the directed Tanner crab fishery, 10 days after the closure of the BBR fishery. If the BBR fishery failed to open, only the Eastern Subdistrict, west of 163° W long, would open to a directed Tanner crab fishery on November 1. These BOF actions were based on observer bycatch data and historic harvest patterns which indicated the majority of female red king crab bycatch in the Bristol Bay red king crab and Bering Sea Tanner crab fisheries came from waters east of 163° W long.

During the 1994/95 and 1995/96 seasons, the Bristol Bay red king crab fishery did not open due to low stock abundance. As a result, the Tanner crab fishery opened on November 1 in the Eastern Subdistrict west of 163° W long. The commercial Tanner crab harvest in 1994/95 was

7.77 million pounds from a 7.5 million pounds GHL. In 1995/96, the GHL was reduced to 5.5 million pounds with a harvest of 4.23 million pounds (Table 2-16).

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

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

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

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

After the 2005/06 season, the BOF eliminated the minimum TAC for Bering Sea Tanner crab and defined the boundary separating the Bering Sea Tanner crab stocks at 166° W long, with separate TACs for each area. The 2006/07 Bering Sea Tanner crab TAC was set at 1.88 million pounds for the area east of 166° W long, Eastern Bering Sea Tanner Crab (EBT), and 1.09 million pounds for the area west of 166° W long, Western Bering Sea Tanner Crab (WBT). TACs were increased in 2007/08 to 3.45 million pounds for the EBT fishery and 2.18 million pounds for the WBT fishery. The 2008/09 season TACs decreased to 2.8 million pounds for the EBT fishery and 1.5 million pounds for the WBT fishery. In 2009/10, the TAC for the EBT fishery dropped to a low of 1.35 million pounds, and the WBT fishery was closed. In 2010/11, the entire Bering Sea was closed. Although the fishery previously opened on October 15, recent catch and effort in the EBT fishery occurred January through March. Since the 2006/07 harvest

of 2.12 million pounds, harvest continued to decrease until a low of 1.33 million pounds was harvested by 17 vessels in the 2009/10 season (Table 2-16).

Like the EBT fishery, most catch and effort in the WBT fishery occurs January through March, with limited catch and effort during October and November. The WBT fishery has shown similar trends with vessel participation; however, harvest significantly decreased after the 2005/06 season with a low of 109,111 pounds harvested during the 2008/09 season (Table 2-16).

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

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

In 2009/10, 1.32 million pounds of the 1.35 million pound TAC were harvested in the EBT fishery. The Tanner crab fishery west of 166° was closed; however, 3,778 pounds were recorded as being illegally harvested in the Bering Sea snow crab fishery.

In March 2011, the BOF lowered the minimum legal-size limit for Bering Sea Tanner crab from 5.5 inches CW to 4.8 inches in the area east of 166° W long and 4.4 inches in the area west of 166° W long. The BOF also modified the harvest strategy, employing exploitation rates on the portion of legal male crab 5.5 inches or greater in the area east of 166° W long and 5.0 inches in the area west of 166° W long. The minimum mature female biomass threshold was modified based long-term average (1975-2010) mature female biomass and the female size at maturity was reduced to 84 mm in the area east of 166° W long and 79 mm in the area west of 166° W long.

### 2011/12 Season

The 2011/12 Bering Sea Tanner crab fisheries were closed because NMFS trawl survey area-swept estimates of mature female abundance was below the threshold for opening a fishery. However, 4,612 pounds of bycatch were illegally retained in the Bering Sea snow crab fishery (Table 2-16, Figure 2-10).

## Port Sampling

No port sampling of Bering Sea Tanner crab occurred during the 2011/12 season; however, port samplers measured Tanner crab that were randomly selected in Bering Sea snow crab offloads.

## Stock Status

The Bering Sea Tanner crab stock met rebuilding criteria of two consecutive years above the rebuilt level in 2008/09; however, the stock continued to decline in 2010 and was once again determined to be overfished. Estimated 2011 biomass of male Tanner crab greater than 5.5 inches for the area east of 166° W long was 11.8 million pounds, a 13 percent increase from 2010 (Chilton et al. 2012). Biomass estimated for male Tanner crab greater than 5.5 inches for the area west of 166° W long was 34.5 million pounds, an increase of 34 percent from 2010. Female mature biomass for Bering Sea Tanner crab was 13.4 million pounds, below the harvest strategy minimum threshold for a commercial fishery opening (5 AAC 35.508). Further

information on Tanner crab stock status and federal overfishing levels may be found in the 2011 Stock Assessment and Fishery Evaluation Report for the King and Tanner Crab Fisheries of the Bering Sea and Aleutian Islands Regions (NPFMC 2011).

## BERING SEA SNOW CRAB

### Historical Background

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

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

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

In collaboration with the United States Coast Guard (USCG) and industry, the 2000 snow crab season was delayed from January 15 to April 1 due to sea ice covering the majority of the fishing grounds (Table 2-23). The 2000 snow crab harvest of 33.3 million pounds exceeded the 28.5 million pound GHL by 17 percent (Table 2-22). The exvessel price for snow crab harvested in the 2000 fishery was two-tiered due to concerns for higher than normal percentage of old-shell crab expected in the catch. Fishermen were offered $1.84 per pound for new-shell crab and $1.00 per pound for old-shell crab. Fishermen reported encountering high percentages of old-shell crab in the first two days of the fishery, but thereafter located areas which contained predominantly new-shell crab. As a result, less than 10 percent of crab landed were old-shell crab (Table 2-25).

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

921.6 million pounds, which resulted in a GHL for the 2001 season of 27.4 million pounds (Table 2-22).

The 2001 Bering Sea snow crab fishery harvest was 25.3 million pounds, or 92 percent of the GHL. The average exvessel price per pound in 2001 was $1.53, which resulted in a general fishery value of $37.95 million, a significant decrease from the 2000 fishery value of $60.61 million (Table 2-25).

The 2002 GHL was initially calculated at 51.0 million pounds based on NMFS survey estimates. This constituted a harvest greater than 50 percent of the estimated exploitable legal male abundance. In accordance with harvest strategy requirements, the GHL was adjusted downward to not exceed 50 percent of the exploitable legal male abundance. The 2003 Bering Sea snow crab fishery harvest of 28.3 million pounds exceeded the GHL by 10.6 percent. Relatively little of the snow crab harvest occurred in the Eastern Subdistrict; a sharp contrast to the fisheries of the 1990s when the majority of the harvest occurred east of 173° W long. During 2003, approximately 6.6 million pounds (23%) of snow crab were harvested east of 173° W long. In contrast to 2002, the fleet did not encounter large numbers of old or very old shell crab on the grounds (Table 2-24). In the 2004 fishery, a harvest of 23.9 million pounds exceeded the GHL of 20.8 million pounds by 15 percent. A similar pattern followed in the 2005 fishery, where the 20.9 million pound GHL was over harvested by a similar percent. The 2005 fishery CPUE was higher than any previous year (Table 2-22).

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

The TAC decreased slightly for the 2006/07 season to a rationalized season low of 36.6 million pounds, but increased in the following season to 63.0 million pounds, the highest since 1999. From 2007/08 until 2009/10, the TAC declined to 48.0 million pounds but then increased to 54.3 million pounds in 2010/11. Vessel participation fluctuated since rationalization, from a low of 69 vessels in 2006/07 and 2009/10, to a high of 78 vessels in 2005/06 and 2007/08. The CPUE reached a high of 349 retained crab per pot in 2007/08; more than 40 percent higher than the 2005/06 season and the highest on record for the fishery, likely due to efficiency gains achieved after the implementation of the CR program. Average catch rate decreased during the 2008/09 season to 281 retained crab per pot lift, and further decreased to 257 and 256 during the 2009/10 and 2010/11 seasons, respectively (Table 2-22).

In the 2006/07 season, vessels were registered for an average of 36 days, and during the following two seasons, vessels averaged 48 and 50 days respectively. During the 2009/10 and 2010/11 seasons, snow crab vessels were registered for an average of 40 days.

## 2011/12 Season

The 2011/12 Bering Sea snow crab season opened on October 15 with a combined IFQ and CDQ TAC of 88.9 million pounds (Table 2-21). The season closed by emergency order on June 15, 2012, 30 and 15 days after the normal season closures for the Eastern and Western Subdistricts, respectively. The 2011/12 season was extended due to record sea ice coverage significantly reducing the available fishing grounds throughout the season. During the six rapid ice advances during the season, 56 vessels stood down for seven or more consecutive days an average of three times. Significant ice retreat did not occur until mid-May.

Seventy two vessels participated in the fishery, with a harvest of 88.83 million pounds, of which less than one percent was deadloss. Catch rates in the beginning of the season were 338 retained crab per pot lift; however, CPUE declined after ice began to impede fishing. For the final three weeks of the fishery, after significant ice retreat, CPUE increased. Average catch rates were still lower than the previous three seasons. The fleet registered 12,310 pots, an average of 171 pots per vessel. Total effort for the 2011/12 season was 270,602 pot lifts, an 83 percent increase from 2010/11 season.

Snow crab vessels were active in the fishery for an average of 83 days during the 2011/12 season, more than double the average of the past two seasons. The 56 vessels that stood down during the season each averaged 40 total days of inactivity.

Average CW was 115 mm, the same as in 2010/11. Retained catch was 94 percent new shell. The average weight of landed crab was 1.5 pounds, 0.1 pound higher than the average weight in 2009/10 and 2010/11 (Table 2-24). Snow crab were similar in size in the Western Subdistrict and Eastern Subdistrict. Seventy-seven percent of harvest occurred in the Eastern Subdistrict, and 23 percent from the Western Subdistrict. (Table 2-31).

### *IFQ Fishery*

The 2011/12 Bering Sea snow crab fishery IFQ TAC was 80,004,600 pounds (Table 2-21). Seventy one vessels harvested 79.9 million pounds, or nearly 100 percent of the TAC. Effort for the IFQ fishery was 243,237 pot lifts with a CPUE of 224 retained crab per pot. Harvesters were paid an average price of $1.89 per pound for snow crab which generated an IFQ exvessel fishery value of $150 million, the highest fishery value in the last 11 seasons (Table 2-25). Landed crab averaged 1.5 pounds, an increase of 0.1 pounds from the 2010/11 fishery average weight.

### *CDQ Fishery*

The 2010/11 Bering Sea snow crab CDQ allocation was 8,889,400 pounds (Table 2-21). Sixteen vessels made 70 landings for a total harvest of 8,889,396 pounds and had a fishery value of approximately $16.8 million. All CDQ groups participated in the fishery and none exceeded their allocation.

## Port Sampling

ADF&G port samplers in Dutch Harbor, Saint Paul, King Cove, Akutan, and Kodiak collected data from vessels without onboard observers. Collected data included: carapace width, average

weight, fishing effort, and location. Data was collected by dockside samplers from 450 of the 724 landings during the 2011/12 snow crab fishery.

### Stock Status

The Bering Sea snow crab stock was declared overfished in 2000 by NMFS and failed to rebuild within the required 10-year period; however, the 2011 stock assessment model estimates that the stock is now rebuilt and has been for the past three years (NPFMC 2011). Biomass of industry-preferred males (males 4 inches or greater) increased 6 percent, from 196 million pounds in 2010 to 209 million pounds in 2011 (Chilton et al. 2012). Total mature biomass in 2011 increased 13 percent from the 2010 estimate. Approximately 11 percent of legal male snow crab were in the Western Subdistrict, compared to 30 percent in 2010.

## BERING SEA GROOVED TANNER CRAB

### Historical Background

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

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

In 1997, ADF&G set GHLs for grooved Tanner crab based on prior harvest information. In previous years, the Bering Sea, Alaska Peninsula, and Eastern Aleutian districts supported the largest catches of grooved Tanner crab. A GHL of 200,000 pounds was established for each of these districts. A GHL of 100,000 pounds was established in the Western Aleutian District to allow for exploratory fishing. Additionally, due to concerns about handling mortality on undersized male and female deepwater crab caught and released, ADF&G began to require a minimum of two escape rings per pot with a minimum inside ring diameter of 4.5 inches.

Given fishery performance and a decline in the harvest of the mid 1990s, ADF&G reevaluated deepwater Tanner crab harvest levels in 1999. A GHL range of 50,000 to 200,000 pounds was

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

### 2011 Fishery

No vessels registered to fish for grooved Tanner crab in the Bering Sea during 2011.

### Stock Status and Fishery Management

Fishery data is the primary source of information regarding stock status. Based on available information, the Bering Sea grooved Tanner crab stock was heavily exploited in the mid 1990s and catch rates decreased to a level where the commercial fishery was no longer economically viable. Since the late 1990s, the stock has been managed more conservatively and recent fishery performance data, although confidential, indicates that the stock has stabilized. NMFS Bering Sea slope survey results indicate a biomass of 0.66 million pounds in the Pribilof Canyon; however, these estimates are highly uncertain and not currently used in fishery management.

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

## BERING SEA TRIANGLE TANNER CRAB

### Historical Background

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

Due to the lack of stock abundance data for this species, additional fishing for triangle Tanner crab in the Bering Sea District will be limited to incidental harvest during the grooved Tanner crab and Pribilof District golden king crab fisheries. Vessels registered to fish for grooved Tanner crab were previously permitted to retain incidentally taken triangle Tanner crab up to 50 percent of the weight of grooved Tanner crab. In the Pribilof District golden king crab fishery, incidentally taken triangle Tanner crab may be retained up to 5 percent of the weight of the golden king crab onboard the vessel. This harvest level is consistent with the historic catches and allows for limited retention of this deepwater species that is believed to experience significant handling mortality when caught and released.

### 2011 Fishery

No vessel registered to fish for triangle Tanner crab in the Bering Sea District during 2011.

### Stock Status and Fishery Management

Fishery data is the primary source of information regarding stock status. Triangle Tanner crab are currently managed as bycatch only to other non-rationalized fisheries. The 2010 NMFS Bering Sea slope survey results indicate a biomass of 2.8 million pounds in the Pribilof Canyon; however, these estimates are uncertain and not currently used in fishery management (Hoff and Britt 2011).

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

# BERING SEA DUNGENESS CRAB AND MISCELLANEOUS SHELLFISH SPECIES

## DESCRIPTION OF AREA

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

## INTRODUCTION

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

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

Those species of current or historic interest in the Bering Sea include: *P. multispina*, hair and Dungeness crab *Metacarcinus magister*, octopus, and snails. Bering Sea Dungeness crab and North Peninsula District shrimp do not fall under the miscellaneous species category, but are included in this section of the report due to low or infrequent harvest.

## BERING SEA HAIR CRAB

### Description of Area

The area for the Bering Sea hair crab fishery includes all waters north of 54°36' N lat, south of 60° N lat, east of the United States-Russia Maritime Boundary Line of 1990, and west of 168° W

long (Figure 2-13). There is no formal hair crab registration area established in regulation; rather, the fishing area is set using the terms of a commissioner's permit.

## Historical Background

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

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

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

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

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

Beginning in 1993, the hair crab season opening date was set at November 1, which conflicted with the Bristol Bay red king crab fishery. In 1998, ADF&G solicited comments from industry regarding a new opening date. A consensus was reached that the fishery would open 10 days after the closure of the Pribilof District or Saint Matthew Island Section king crab fisheries, whichever closed later. The fishery opened on October 8 in 1998. In 1999, the BOF changed the Bristol Bay red king crab season opening to October 15; thus, the hair crab fishery was again in conflict. Consensus was reached with industry to open the fishery 10 days after closure of the Bristol Bay red king crab fishery. Subsequently, in 1999 and 2000, the hair crab season opened on October 30.

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

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

In the 2002 legislative session, a bill was passed (AS.16.05.450) that gave CFEC authority to use a vessel-based limited entry program for Bering Sea hair crab and Alaska weathervane scallop fisheries. The statute was originally set to sunset in 2008; however, was extended and is scheduled to sunset on December 30, 2013. The Alaska Legislature plans to review the statute to decide whether or not the vessel-based program should be extended. The vessel-based limitation would assist in controlling effort when the fishery reopens. CFEC designates the Bering Sea hair crab administrative area as waters of the Bering Sea beyond five miles from shore, 20 AAC 05.1400 – 20 AAC 05.1420. A fishery within five miles of shore would be open to any vessel 58 feet or less and is not subject to the limited entry program.

## 2011 Season

The 2011 Bering Sea hair crab fishery was closed in all districts due to low stock abundance.

## Stock Status

Abundance of hair crab in the Pribilof District has decreased since the early 1990s. Large male abundance is currently at low levels and survey data does not indicate recruitment to the large male size-class is likely in the near term. Estimates of abundance for the Bristol Bay and Northern District portion of the stock are larger than those for the Pribilof District, but show considerable variability from one year to the next.

Population trends observed during the last 8 years indicate the Bering Sea hair crab population is depressed and is unable to sustain a commercial fishery. Precise estimates of total female and small male hair crab abundance are not available from trawl survey data. In general, the biology and habitat of hair crab makes them difficult to survey with trawl gear.

As of 2011, biomass estimates for male hair crab have increased relative to 2006, and legal-male hair crab abundance is estimated at 4.7 million pounds, above the 20-year average of 3.9 million pounds (Chilton, et al. 2012).

## BERING SEA OCTOPUS

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

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

Since 1995, landed incidental octopus harvest from state waters ranged from 59 pounds in 1997 to 7,177 pounds in 2008. Harvest of octopus bycatch reported from federal waters is significantly higher. Before 2011, harvest from both state and federal waters peaked at 156,381 pounds in 2005, and vessel effort and landings peaked at 110 vessels and 375 landings in 2007. In 2011, harvest was 193,220 pounds by 124 vessels during 470 landings (Table 2-32).

Average exvessel value based on landed weight of octopus peaked in 2011, at $4.20 per pound, a $3.55 increase from the next most valuable year, 2005. On August 31, 2011, NMFS announced that retention of octopus in the Bering Sea-Aleutian Islands federal fisheries would be prohibited for the remainder of the year, limiting octopus bycatch harvest in 2011. To maintain consistency between parallel and federal groundfish fisheries, ADF&G included octopus caught in parallel fisheries to fall under federal rules.

## PARALOMIS MULTISPINA

Fishing for *Paralomis multispina* is managed under the terms of a commissioner's permit under 5 AAC 38.062. Although 1 vessel was registered to fish for *P. multispina* in 1995, no commercial harvest was reported. One vessel participated in the 1996 fishery, for which landing data is confidential. No vessels have requested a commissioner's permit to fish for *P. multispina* in the Bering Sea District since 1996. Given the lack of available data on this stock, the department will not issue permits allowing the harvest of *P. multispina*.

## SEA CUCUMBERS AND SEA URCHINS

ADF&G annually develops GHLs for red sea cucumbers and green sea urchins in the Westward Region. The Bering Sea Area opens October 1 under terms of a commissioner's permit as noted under 5 AAC 38.062. Historically, GHLs have been established at 5,000 pounds of eviscerated red sea cucumbers and 5,000 pounds round weight for green sea urchins. Fishing seasons are described in 5 AAC 38.411 and 5 AAC 38.412. The small GHLs were established to permit conservative commercial exploration of areas that lacked historic harvest data and to allow ADF&G to collect critical information for future management purposes (Ruccio and Jackson 2000). No commercial harvest of either species occurred in the Bering Sea District in 2001. In 2002, a separate guideline harvest range of 30,000 to 60,000 pounds was established for the waters around Saint George Island. This harvest level was based on abundance estimates obtained from dive survey data and marketing factors. One diver harvested green sea urchins in the Saint George Island area in 2002; therefore all harvest information is confidential. Since 2002, no divers have registered to harvest green sea urchins or red sea cucumbers.

In 2011, the GHL for the Bering Sea Area was set at 5,000 pounds each, for red sea cucumbers and green sea urchins; however, there was no participation in the fishery.

## SNAILS

### Historical Background

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

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

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

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

Observer coverage was not required again until 1997 when 2 vessel operators expressed interest in fishing east of 168° W long. Vessels were restricted to grounds west of 164° W long and north of 54°36' N lat. These restrictions were conditions of the permit issued under 5 AAC 38.062 *Permits for Octopi, Squid, Hair Crab, Sea Urchins, Sea Cucumbers, Sea Snails, Coral, and Other Marine Invertebrates*. There was no bycatch of king crab; however, bycatch of Tanner crab was observed. An estimated 17,300 female and 2,100 sublegal male Tanner crab, and 57,600 sublegal snow crab were captured in the 192,000 pots pulled.

In the 1997 fishery, average CPUE was 16 snails per pot, equal to the CPUE from vessels fishing northwest of the Pribilof Islands in the 1996 fishery. The majority of the catch for the 1997

season was composed of the genera *Neptunea* and *Buccinum*. Catches increased from 313,000 pounds in 1993 to 3.57 million pounds in 1996 and then declined to 932,000 pounds in 1997 (Table 2-33). The value of the fishery increased from $130 thousand in 1993 to $1.10 million in 1996 and then dropped to $310 thousand in 1997 (Table 2-33). Since 1998, no fishing effort for snails has occurred in the Bering Sea.

### 2011 Season

No vessels registered to harvest snails from the Bering Sea in 2011.

### Stock Status

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

# NORTH PENINSULA DISTRICT

## DESCRIPTION OF AREA

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

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

## SHRIMP

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

## DUNGENESS CRAB

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

### 2011 Season

The North Peninsula Dungeness crab fishery opened May 1, 2011. Two vessels registered for the 2011 season; however, only 1 vessel made landings. Harvest information is confidential (Table 2-34).

### Stock Status and Fishery Management

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

# BUOY IDENTIFICATION PROGRAM

### Introduction and Background

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

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

With the implementation of crab rationalization in 2005, the BOF revised regulations to allow a maximum of 450 pots per vessel regardless of vessel length for Bering Sea king and Tanner crab fisheries. In addition, beginning in 2005, fishermen were allowed to use the same tags purchased for the IFQ fishery for the corresponding CDQ fishery. In March 2008, the BOF eliminated pot limits and tag requirements for the Bristol Bay red king crab, Bering Sea Tanner, and Bering Sea snow crab fisheries.

### 2011/12 Buoy Tag Sales

For the 2011 Eastern Aleutian District Tanner crab fishery, three vessels purchased 120 tags. For the 2011 Pribilof Island golden king crab fishery, two vessels purchased 101 tags, including one replacement tag. For the 2011/2012 St. Matthew Island section blue king crab fishery, 18 vessels purchased 3,371 tags (Table 2-36).

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# TABLES AND FIGURES

Table 2-1.–Bristol Bay red king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest data, 1966 – 2011/12.

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

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Table 2-1.–Page 2 of 3.

| Season | Fishery | Number of Vessels | Number of Landings | GHL/TAC[a,b] | Harvest[a,c] | Number of crab[c] | Deadloss[a] | Number of Pots Registered | Number of Pots Lifted | Average Weight[a] | Average CPUE[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1998 | General | 274 | 284 | 15,800,000 | 14,290,271 | 2,140,604 | 53,716 | 56,420 | 141,707 | 6.7 | 15 |
| | CDQ | 7 | CF | 525,115[g] | CF | CF | CF | CF | CF | CF | 23 |
| | **TOTAL** | **274** | **CF** | **16,400,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **15** |
| 1999 | General | 257 | 268 | 10,127,000 | 11,070,729 | 1,812,357 | 44,132 | 42,403 | 146,997 | 6.1 | 12 |
| | CDQ | 10 | CF | 580,641[g] | CF | CF | CF | CF | CF | CF | 29 |
| | **TOTAL** | **257** | **CF** | **10,660,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **13** |
| 2000[f] | General | 244 | 256 | 7,724,000 | 7,546,145 | 1,166,796 | 32,118 | 26,352 | 98,694 | 6.5 | 12 |
| | CDQ | 11 | CF | 610,265[g] | CF | CF | CF | CF | CF | CF | 20 |
| | **TOTAL** | **244** | **CF** | **8,350,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **12** |
| 2001[f] | General | 230 | 238 | 6,613,750 | 7,786,446 | 1,196,469 | 57,294 | 24,571 | 63,192 | 6.5 | 19 |
| | CDQ | 10 | CF | 617,623[g] | CF | CF | CF | CF | CF | CF | 29 |
| | **TOTAL** | **230** | **CF** | **7,150,000** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **19** |
| 2002[f] | General | 242 | 254 | 8,575,202 | 8,856,828 | 1,377,922 | 32,177 | 25,833 | 68,328 | 6.4 | 20 |
| | CDQ | 10 | CF | 714,239[g] | CF | CF | CF | CF | CF | CF | 30 |
| | **TOTAL** | **242** | **CF** | **9,270,489** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **21** |
| 2003[f] | General | 250 | 275 | 14,535,000 | 14,529,124 | 2,344,436 | 228,270 | 46,964 | 128,430 | 6.2 | 18 |
| | CDQ | 13 | 20 | 1,167,040[g] | 1,166,662 | 174,907 | 2,197 | 2,470 | 5,704 | 6.7 | 31 |
| | **TOTAL** | **250** | **296** | **15,713,000** | **15,695,786** | **2,519,343** | **230,467** | **46,964** | **134,134** | **6.2** | **18** |
| 2004[f] | General | 251 | 270 | 14,267,000 | 14,112,438 | 2,075,622 | 160,563 | 49,506 | 90,976 | 6.8 | 23 |
| | CDQ | 12 | 21 | 1,135,326[g] | 1,133,013 | 166,829 | 2,549 | 2,258 | 5,359 | 6.8 | 31 |
| | **TOTAL** | **251** | **294** | **15,424,000** | **15,245,451** | **2,242,451** | **163,112** | **49,506** | **96,335** | **6.8** | **23** |
| 2005/06 | IFQ | 89 | 264 | 16,496,100 | 16,478,458 | 2,460,856 | 77,507 | 15,713 | 96,335 | 6.7 | 25 |
| | CDQ | 13 | 32 | 1,832,900 | 1,830,877 | 271,718 | 8,781 | 2,095 | 15,376 | 6.7 | 18 |
| | **TOTAL** | **89** | **300** | **18,329,000** | **18,309,335** | **2,732,574** | **86,288** | **15,713** | **114,949** | **6.7** | **24** |
| 2006/07 | IFQ | 81 | 187 | 13,974,300 | 13,892,044 | 2,186,967 | 98,720 | 14,685 | 64,325 | 6.4 | 34 |
| | CDQ | 13 | 26 | 1,552,700 | 1,552,133 | 242,520 | 18,907 | 3,032 | 7,415 | 6.4 | 32 |
| | **TOTAL** | **81** | **217** | **15,527,000** | **15,444,177** | **2,429,487** | **117,627** | **14,685** | **71,740** | **6.4** | **34** |

-continued-

Table 2-1.–Page 3 of 3.

| Season | Fishery | Number of Vessels | Number of Landings | GHL/TAC[a,b] | Harvest[a,c] | Number of crab[c] | Deadloss[a] | Number of Pots Registered | Number of Pots Lifted | Average Weight[a] | Average CPUE[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2007/08 | IFQ | 74 | 246 | 18,344,700 | 18,327,780 | 2,817,766 | 131,954 | 11,885 | 101,739 | 6.5 | 28 |
| | CDQ | 10 | 35 | 2,038,300 | 2,038,285 | 323,537 | 8,430 | 2,109 | 11,475 | 6.3 | 28 |
| | **TOTAL** | **74** | **285** | **20,383,000** | **20,366,065** | **3,141,303** | **140,384** | **11,885** | **113,214** | **6.5** | **28** |
| 2008/09 | IFQ | 77 | 254 | 18,327,600 | 18,303,012 | 2,765,282 | 160,812 | 15,098 | 124,739 | 6.6 | 22 |
| | CDQ | 15 | 35 | 2,036,400 | 2,026,390 | 301,006 | 12,351 | 3,176 | 15,200 | 6.7 | 20 |
| | **TOTAL** | **78** | **289** | **20,364,000** | **20,329,402** | **3,066,288** | **173,163** | **15,347** | **139,939** | **6.6** | **22** |
| 2009/10 | IFQ | 70 | 210 | 14,408,100 | 14,331,803 | 2,277,434 | 111,467 | 14,977 | 107,058 | 6.3 | 21 |
| | CDQ | 11 | 23 | 1,600,900 | 1,600,851 | 259,787 | 10,740 | 3,067 | 11,463 | 6.2 | 23 |
| | **TOTAL** | **70** | **233** | **16,009,000** | **15,932,654** | **2,537,221** | **122,207** | **14,977** | **118,521** | **6.3** | **21** |
| 2010/11 | IFQ | 65 | 236 | 13,355,100 | 13,349,929 | 2,157,354 | 99,612 | 13,769 | 118,458 | 6.2 | 18 |
| | CDQ | 10 | 18 | 1,483,900 | 1,483,899 | 241,284 | 7,262 | 3,446 | 13,169 | 6.2 | 18 |
| | **TOTAL** | **65** | **254** | **14,839,000** | **14,833,828** | **2,398,638** | **106,874** | **13,769** | **131,627** | **6.2** | **18** |
| 2011/12 | IFQ | 62 | 150 | 7,050,600 | 7,050,195 | 1,151,945 | 30,155 | 12,090 | 41,086 | 6.1 | 28 |
| | CDQ | 9 | 11 | 783,400 | 783,399 | 127,109 | 1,913 | 2,765 | 4,080 | 6.2 | 31 |
| | **TOTAL** | **62** | **161** | **7,834,000** | **7,833,594** | **1,279,054** | **32,068** | **12,090** | **45,166** | **6.1** | **28** |

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

[a] In pounds.

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

[c] Deadloss included.

[d] Number of retained 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.

Table 2-2.–Bristol Bay red king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery economic performance and season dates, 1980 – 2011/12.

| | | Value | | Season length | |
|---|---|---|---|---|---|
| Season | Fishery | Exvessel[a] | Total[b] | Days | Dates |
| 1980 | General | $0.90 | $115.3 | 40 | 09/10-10/20 |
| 1981 | General | $1.50 | $49.3 | 91 | 09/10-12/15 |
| 1982 | General | $3.05 | $8.9 | 30 | 09/10-10/10 |
| 1983 | General | FC | FC | FC | FC |
| 1984 | General | $2.60 | $10.8 | 15 | 10/01-10/16 |
| 1985 | General | $2.90 | $12.1 | 8 | 09/25-10/02 |
| 1986 | General | $4.05 | $45.0 | 13 | 09/25-10/07 |
| 1987 | General | $4.00 | $48.7 | 12 | 09/25-10/06 |
| 1988 | General | $5.10 | $37.6 | 8 | 09/25-10/02 |
| 1989 | General | $5.00 | $50.9 | 12 | 09/25-10/06 |
| 1990 | General | $5.00 | $101.2 | 12 | 11/01-11/13 |
| 1991 | General | $3.00 | $51.2 | 7 | 11/01-11-08 |
| 1992 | General | $5.00 | $40.2 | 7 | 11/01-11/08 |
| 1993 | General | $3.80 | $55.1 | 9 | 11/01-11/10 |
| 1994 - 1995 | General | FC | FC | FC | FC |
| 1996 | General | $4.01 | $33.6 | 4 | 11/01-11/05 |
| 1997 | General | $3.26 | $28.5 | 4 | 11/01-11/05 |
| 1998 | General | $2.64 | $37.4 | 5 | 11/01-11/06 |
| | CDQ | CF | CF | | - [c] |
| | **TOTAL** | **CF** | **CF** | | |
| 1999 | General | $6.26 | $69.1 | 5 | 10/15-10/20 |
| | CDQ | CF | CF | | - [c] |
| | **TOTAL** | **CF** | **CF** | | |
| 2000[e] | General | $4.81 | $36.0 | 4 | 10/16-10/20 |
| | CDQ | CF | CF | | - [c] |
| | **TOTAL** | **CF** | **CF** | | |
| 2001 | General | $4.81 | $37.5 | 3 | 10/15-10/18 |
| | CDQ | CF | CF | | - [c] |
| | **TOTAL** | **CF** | **CF** | | |
| 2002 | General | $6.14 | $54.2 | 3 | 10/15-10/18 |
| | CDQ | CF | CF | | - [c] |
| | **TOTAL** | **CF** | **CF** | | |
| 2003 | General | $5.08 | $72.7 | 5 | 10/15-10/20 |
| | CDQ | $4.67 | $5.4 | | - [c] |
| | **TOTAL** | **$5.05** | **$78.1** | | |

-continued-

Table 2-2.–Page 2 of 2.

| | | Value | | Season length | |
|---|---|---|---|---|---|
| Season | Fishery | Exvessel[a] | Total[b] | Days | Dates |
| 2004 | General | $4.71 | $65.7 | 3 | 10/15-10/18 |
| | CDQ | $3.97 | $4.5 | | - [c] |
| | **TOTAL** | **$4.65** | **$70.2** | | |
| 2005/06 | IFQ | $4.24 | $69.5 | 93 | 10/15-01/15 |
| | CDQ | $3.12 | $5.7 | 93 | 10/15-01/15 |
| | **TOTAL** | **$4.13** | **$75.2** | | |
| 2006/07 | IFQ | $3.48 | $48.0 | 93 | 10/15-01/15 |
| | CDQ | $3.16 | $4.8 | 93 | 10/15-01/15 |
| | **TOTAL** | **$3.45** | **$52.8** | | |
| 2007/08 | IFQ | $4.19 | $76.2 | 93 | 10/15-01/15 |
| | CDQ | $3.85 | $7.8 | 93 | 10/15-01/15 |
| | **TOTAL** | **$4.15** | **$84.0** | | |
| 2008/09 | IFQ | $4.98 | $90.3 | 93 | 10/15-01/15 |
| | CDQ | $5.02 | $10.1 | 93 | 10/15-01/15 |
| | **TOTAL** | **$4.98** | **$100.4** | | |
| 2009/10 | IFQ | $4.44 | $63.1 | 93 | 10/15-01/15 |
| | CDQ | $4.43 | $7.0 | 93 | 10/15-01/15 |
| | **TOTAL** | **$4.43** | **$70.1** | | |
| 2010/11 | IFQ | $6.28 | $83.2 | 93 | 10/15-01/15 |
| | CDQ | $6.28 | $9.3 | 93 | 10/15-01/15 |
| | **TOTAL** | **$6.28** | **$92.5** | | |
| 2011/12 | IFQ | $8.95 | $62.8 | 93 | 10/15-01/15 |
| | CDQ | $9.06 | $7.1 | 93 | 10/15-01/15 |
| | **TOTAL** | **$8.96** | **$69.9** | | |

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

[a] Average price per pound.

[b] Millions of dollars.

[c] CDQ fishery opened after general fishery.

Table 2-3.–Bristol Bay red king crab Community Development Quota (CDQ) and Individual Fishing Quota (IFQ) fishery harvest and effort by week, 2011/12.

| | Number of | | | Number of | | | Average | |
|---|---|---|---|---|---|---|---|---|
| Week ending | Vessels | Landings | Harvest[a,b] | crab[a] | Deadloss[b] | Pots lifted | Weight[b] | CPUE[c] |
| 15-Oct | 35 | 48 | 3,399,410 | 561,422 | 14,267 | 21,601 | 6.1 | 26 |
| 16-Oct | 28 | 45 | 2,338,775 | 384,174 | 10,988 | 14,355 | 6.1 | 27 |
| 29-Oct | 28 | 47 | 1,640,291 | 262,163 | 5,063 | 7,013 | 6.3 | 37 |
| 5-Nov | 12 | 18 | 422,041 | 66,085 | 1,706 | 2,001 | 6.4 | 33 |
| 12-Nov | 2 | CF | CF | CF | CF | CF | CF | CF |
| 19-Nov | 1 | CF | CF | CF | CF | CF | CF | CF |
| **Total** | **62** | **161** | **7,833,594** | **1,279,054** | **32,068** | **45,166** | **6.1** | **28** |

*Note:* CF = confidential.

[a] Deadloss included.

[b] In pounds.

[c] Number of retained crab per pot lift.

Table 2-4.–Bristol Bay red king crab Community Development Quota (CDQ) and Individual Fishing Quota (IFQ) fishery harvest by statistical area, 2011/12.

| Statistical | Number of | | | Number of | | | Average | |
|---|---|---|---|---|---|---|---|---|
| area | Vessels | Landings | Harvest[a,b] | crab[a] | Deadloss[b] | Pots lifted | Weight[b] | CPUE[c] |
| 615601 | 25 | 58 | 524,134 | 84,717 | 3,120 | 3,243 | 6.2 | 26 |
| 615630 | 46 | 107 | 3,059,228 | 498,307 | 13,125 | 17,043 | 6.1 | 29 |
| 615700 | 14 | 25 | 604,680 | 98,767 | 2,036 | 3,513 | 6.1 | 28 |
| 625531 | 13 | 21 | 67,182 | 11,139 | 223 | 493 | 6.0 | 23 |
| 625600 | 35 | 79 | 1,036,465 | 169,015 | 3,857 | 6,109 | 6.1 | 28 |
| 625630 | 27 | 57 | 512,066 | 83,349 | 1,962 | 3,281 | 6.1 | 25 |
| 625700 | 6 | 9 | 66,270 | 10,869 | 230 | 451 | 6.1 | 24 |
| 635530 | 23 | 56 | 1,307,758 | 215,812 | 5,443 | 7,556 | 6.1 | 29 |
| 635600 | 20 | 48 | 603,524 | 98,331 | 2,010 | 2,772 | 6.1 | 35 |
| 635630 | 5 | 9 | 42,062 | 7,086 | 45 | 250 | 5.9 | 28 |
| 645530 | 4 | 6 | 2,140 | 355 | 4 | 297 | 6.0 | 1 |
| Other[d] | - | - | 8,085 | 1,307 | 14 | 158 | 6.2 | 8 |
| **Total** | **62** | **161** | **7,833,594** | **1,279,054** | **32,068** | **45,166** | **6.1** | **28** |

[a] Deadloss included.

[b] In pounds.

[c] Number of retained crab per pot lift.

[d] Combination of seven statistical areas from which less than three vessels made landings from each statistical area.

Table 2-5.–Bristol Bay red king crab commercial fishery harvest composition by season, 1973 – 2011/12.

| | Percent | | | Average | | Percent |
|---|---|---|---|---|---|---|
| Season | Recruit | Postrecruit[a] | Size limit[b] | Weight[c] | Length[d] | new shell |
| 1973 | 63 | 37 | 6¼ | 5.6 | NA | NA |
| 1974 | 60 | 40 | 6¼ | 5.5 | NA | NA |
| 1975[e] | 21 | 79 | 6¼ | 5.7 | NA | NA |
| 1976 | 56 | 44 | 6½ | 6.0 | 148 | 73 |
| 1977 | 67 | 33 | 6½ | 5.9 | 148 | 87 |
| 1978 | 75 | 25 | 6½ | 5.9 | 147 | 93 |
| 1979 | 47 | 53 | 6½ | 6.4 | 152 | 90 |
| 1980 | 44 | 56 | 6½ | 6.2 | 151 | 89 |
| 1981[f] | 14 | 86 | 6½ | 6.3 | 151 | 53 |
| 1982 | 68 | 32 | 6½ | 5.5 | 145 | 75 |
| 1983 | FC | FC | FC | FC | FC | FC |
| 1984 | 59 | 41 | 6½ | 5.2 | 142 | 74 |
| 1985 | 66 | 34 | 6½ | 5.2 | 142 | 74 |
| 1986 | 65 | 35 | 6½ | 5.4 | 142 | 75 |
| 1987 | 77 | 23 | 6½ | 5.8 | 145 | 81 |
| 1988 | 64 | 36 | 6½ | 6.0 | 147 | 85 |
| 1989 | 66 | 32 | 6½ | 6.1 | 148 | 82 |
| 1990 | 46 | 54 | 6½ | 6.5 | 152 | 85 |
| 1991 | 55 | 45 | 6½ | 6.5 | 152 | 88 |
| 1992 | 44 | 56 | 6½ | 6.7 | 153 | 78 |
| 1993 | 57 | 43 | 6½ | 6.5 | 152 | 85 |
| 1994 - 1995 | FC | FC | FC | FC | FC | FC |
| 1996 | 49 | 51 | 6½ | 6.7 | 153 | 76 |
| 1997 | 51 | 49 | 6½ | 6.7 | 152 | 89 |
| 1998 | 44 | 56 | 6½ | 6.7 | 152 | 81 |
| 1999 | 69 | 31 | 6½ | 6.1 | 148 | 94 |
| 2000 | 50 | 50 | 6½ | 6.5 | 151 | 84 |
| 2001 | 47 | 53 | 6½ | 6.5 | 151 | 78 |
| 2002 | 56 | 44 | 6½ | 6.4 | 151 | 78 |
| 2003 | 53 | 47 | 6½ | 6.2 | 149 | 78 |
| 2004 | 42 | 58 | 6½ | 6.8 | 154 | 79 |
| 2005/06 | 38 | 62 | 6½ | 6.7 | 152 | 79 |
| 2006/07 | 60 | 40 | 6½ | 6.4 | 151 | 74 |
| 2007/08 | 48 | 52 | 6½ | 6.5 | 151 | 68 |
| 2008/09 | 48 | 52 | 6½ | 6.6 | 153 | 82 |
| 2009/10 | 64 | 36 | 6½ | 6.3 | 150 | 88 |
| 2010/11 | 71 | 29 | 6½ | 6.2 | 150 | 89 |
| 2011/12 | 75 | 25 | 6½ | 6.1 | 149 | 89 |

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

[a] Legal sized old and new shell red king crab greater than 153 mm carapace length.

[b] Minimum carapace width in inches.

[c] In pounds.

[d] Carapace length in millimeters.

[e] 6½ inches after November 1.

[f] 7 inches after October 20.

Table 2-6.–Bristol Bay red king crab cost-recovery harvest data, 1990 – 2011.

| Season | Landings | Harvest[a,b] | Number of crab[a] | Deadloss[b] | Pots lifted | Average Weight[b] | Average CPUE[c] | Value Exvessel[d] | Value Total | Charter length Days | Charter length Dates |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1990[e] | 3 | 80,701 | 9,567 | 24,540 | 870 | 5.9 | 16 | $5.10 | $286,421 | 30 | 08/07-09/07 |
| 1991[e] | 2 | 205,851 | 30,351 | 12,817 | 518 | 6.4 | 62 | $3.75 | $723,878 | 35 | 09/02-10/07 |
| 1992[e] | 1 | 74,089 | 11,213 | 3,000 | 670 | 6.3 | 17 | $5.24 | $372,506 | 15 | 10/08-10/23 |
| 1993[e] | 1 | 53,200 | 8,384 | 800 | 464 | 6.3 | 18 | $6.57 | $344,268 | 31 | 08/20-09/20 |
| 1994[e] | 1 | 93,336 | 14,806 | 4,500 | 732 | 6.0 | 21 | $5.21 | $462,836 | 30 | 09/25-10/25 |
| 1995[e] | 2 | 80,158 | 14,123 | 2,339 | 564 | 5.5 | 26 | $6.65 | $517,496 | 31 | 08/01-08/31 |
| 1996[e] | 3 | 107,955 | 15,390 | 1,918 | 355 | 6.9 | 44 | $4.53 | $480,348 | 31 | 08/01-08/31 |
| 1997[e] | 4 | 154,739 | 21,698 | 18,040 | 658 | 6.3 | 37 | $3.55 | $485,281 | 28 | 07/25-08/21 |
| 1998[e] | 2 | 188,176 | 22,230 | 32,564 | 738 | 7.0 | 36 | $3.25 | $505,739 | 28 | 08/01-08/28 |
| 1999[f] | 4 | 185,944 | 29,368 | 410 | 1,239 | 6.3 | 24 | $6.18 | $1,148,695 | 34 | 09/25-10/11,10/25-11/10 |
| 2000[e] | 2 | 86,218 | 14,196 | 347 | 702 | 6.1 | 20 | $5.82 | $499,769 | 15 | 09/20-10/04 |
| 2001[f] | 3 | 120,435 | 17,605 | 138 | 597 | 6.8 | 29 | $5.18 | $623,138 | 36 | 09/22-10/10, 10/23-11/08 |
| 2002[f] | 2 | 96,221 | 14,528 | 181 | 277 | 6.6 | 52 | $6.45 | $619,761 | 27 | 09/23-10/09, 10/17-10/27 |
| 2003[e,g] | 1 | 33,817 | 5,327 | 143 | 584 | 6.4 | 9 | $5.56 | $187,227 | 34 | 09/01-10/04 |
| 2004[f] | 3 | 201,579 | 29,733 | 638 | 1,286 | 6.8 | 23 | $4.98 | $1,000,686 | 20 | 10/21-10/25, 10/23-10/31, 10/27-11/01 |
| 2005[f] | 4 | 208,828 | 30,585 | 1,500 | 1,376 | 6.8 | 22 | $5.07 | $1,051,153 | 19 | 11/12-12/02 |
| 2006[f] | 4 | 303,867 | 47,215 | 3,313 | 1,067 | 6.4 | 44 | $2.15 | $646,210 | 31 | 09/23-10/23 |
| 2007[f] | 4 | 145,619 | 22,951 | 469 | 734 | 6.3 | 31 | $4.02 | $583,503 | 22 | 10/02-10/23 |
| 2008 | 0 | 0 | 0 | 0 | 0 | - | - | $0.00 | $0 | 0 | No cost recovery effort |
| 2009[f] | 3 | 100,400 | 15,726 | 463 | 646 | 6.4 | 24 | $4.27 | $426,731 | 18 | 09/25-10/12 |
| 2010[f] | 3 | 72,787 | 11,462 | 69 | 556 | 6.4 | 21 | $5.50 | $399,949 | 25 | 09/27-10/20 |
| 2011[f] | 3 | 118,690 | 18,963 | 199 | 618 | 6.3 | 31 | $7.30 | $864,984 | 21 | 09/30-10/21 |

[a] Deadloss included.

[b] In pounds.

[c] Number of retained crab per pot lift.

[d] Price per pound.

[e] Bering Sea and Aleutian Islands shellfish research program cost recovery.

[f] Bering Sea and Aleutian Islands shellfish research and observer program cost recovery.

[g] Includes 1,222 pounds harvested in the Pribilof District.

Table 2-7.–Pribilof District red and blue king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest data, 1973/74 – 2011/12.

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

-continued-

Table 2-7.–Page 2 of 2.

| Season | Species | Number of Vessels | Number of Landings | GHL/TAC[b] | Harvest[a, c] | Number of crab[a] | Deadloss[c] | Number of pots Registered | Number of pots Lifted | Average Weight[c] | Average CPUE[d] | Average Length[e] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1997 | Red king crab | 53 | 110 | - | 756,818 | 90,641 | 18,807 | - | 28,458 | 8.4 | 3 | 164.3 |
| | Blue king crab | 51 | 105 | - | 512,374 | 68,603 | 16,747 | - | 27,652 | 7.5 | 3 | 163.6 |
| | **TOTAL** | **53** | **110** | **1,500,000** | **1,269,192** | **159,244** | **35,554** | **2,230** | **30,400** | **8.0** | **5** | **-** |
| 1998 | **General** | | | | | | | | | | | |
| | Red king crab | 57 | 84 | - | 510,365 | 68,129 | 8,703 | - | 23,381 | 7.5 | 3 | - |
| | Blue king crab | 57 | 83 | - | 516,306 | 68,419 | 21,599 | - | 22,965 | 7.5 | 3 | - |
| | **TOTAL** | **57** | **166** | **1,250,000** | **1,026,671** | **136,548** | **30,302** | **CF** | **46,346** | **7.5** | **3** | **-** |
| | **CDQ** | | | | | | | | | | | |
| | Red king crab | 1 | CF | - | CF | CF | CF | CF | CF | CF | CF | CF |
| | Blue king crab | 1 | CF | - | CF | CF | CF | CF | CF | CF | CF | CF |
| | **TOTAL** | **1** | **CF** | **35,958** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** |
| | ***Pribilof District Total*** | | | | | | | | | | | |
| | Red king crab | 58 | CF | - | CF | CF | CF | - | CF | CF | CF | 158.8 |
| | Blue king crab | 58 | CF | - | CF | CF | CF | - | CF | CF | CF | 156.1 |
| | **TOTAL** | **58** | **CF** | **1,285,958** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** | **CF** |
| 1999 - 2011/12 | | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC |

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

[a] Deadloss included.

[b] Guideline harvest level (GHL), total allowable catch (TAC) began in 2005/06. Combined GHL for both red and blue king crab from 1995-1998.

[c] In pounds.

[d] Number of retained crab per pot lift.

[e] Carapace length in millimeters.

Table 2-8.–Pribilof District red and blue king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery economic performance and season length summary, 1980/81 – 2011/12.

| | | Value | | Season length | |
|---|---|---|---|---|---|
| Season | Species | Exvessel[a] | Total[b] | Days | Dates |
| 1980/81 | Blue king crab | $0.90 | $9.6 | 60 | 09/15-11/15 |
| 1981/82 | Blue king crab | $1.50 | $13.6 | 47 | 09/10-10/28 |
| 1982/83 | Blue king crab | $3.05 | $13.4 | 15 | 09/10-09/25 |
| 1983/84 | Blue king crab | $3.00 | $6.6 | 10 | 09/01-09/11 |
| 1984/85 | Blue king crab | $2.50 | $0.1 | 15 | 09/01-09/16 |
| 1985/86 | Blue king crab | $2.90 | $1.4 | 26 | 09/25-10/21 |
| 1986/87 | Blue king crab | $4.05 | $1.2 | 55 | 09/25-11/20 |
| 1987/88 | Blue king crab | $4.00 | $2.8 | 86 | 09/25-12/20 |
| 1988/89 - 1992/93 | | FC | FC | FC | FC |
| 1993 | Red king crab | $4.98 | $13.0 | 6 | 09/15-09/21 |
| 1994 | Red king crab | $6.45 | $8.6 | 6 | 09/15-09/21 |
| 1995 | Red king crab | $3.37 | $2.9 | - | - |
| | Blue king crab | $2.92 | $3.9 | - | - |
| | **TOTAL** | **-** | **$6.8** | **7** | **09/15-09/22** |
| 1996 | Red king crab | $2.76 | $0.6 | - | - |
| | Blue king crab | $2.65 | $2.4 | - | - |
| | **TOTAL** | **-** | **$3.0** | **11** | **09/15-09/26** |
| 1997 | Red king crab | $3.09 | $2.3 | - | - |
| | Blue king crab | $2.82 | $1.4 | - | - |
| | **TOTAL** | **-** | **$3.7** | **14** | **09/15-09/29** |
| 1998 | **General** | | | | |
| | Red king crab | $2.39 | $1.2 | - | 09/15-09/28 |
| | Blue king crab | $2.34 | $1.2 | - | 09/15-09/28 |
| | **TOTAL** | **-** | **$2.4** | **13** | **09/15-09/28** |
| | **CDQ** | | | | |
| | Red king crab | CF | CF | - | - |
| | Blue king crab | CF | CF | - | - |
| | **TOTAL** | **CF** | **CF** | **-** | **-** |
| | ***Pribilof District Total*** | | | | |
| | Red king crab | CF | CF | - | - |
| | Blue king crab | CF | CF | - | - |
| | **TOTAL** | **CF** | **CF** | **13** | **-** |
| 1999 - 2011/12 | FC | FC | FC | FC | FC |

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

[a] Average price per pound.

[b] Millions of dollars.

Table 2-9.–Saint Matthew Island Section blue king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery data, 1977 – 2011/12.

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

-continued-

Table 2-9.–Page 2 of 2.

| Fishery | Number of Vessels | Number of Landings | GHL/TAC[a,b] | Number of Harvest[c,d] | Number of crab[c] | Deadloss[d] | Number of Pots Registered[e] | Number of Pots Lifted | Average Weight[d] | Average CPUE[f] | Average Length[g] | Percent Recruits[h] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IFQ | 7 | 30 | 1,050,300 | 460,859 | 103,376 | 10,484 | 1,147 | 10,697 | 4.5 | 10 | - | - |
| CDQ | 0 | 0 | 116,700 | 0 | 0 | 0 | 0 | 0 | - | - | - | - |
| **TOTAL** | **7** | **30** | **1,167,000** | **460,859** | **103,376** | **10,484** | **1,147** | **10,697** | **4.5** | **10** | **130.0** | **57** |
| IFQ | 11 | 63 | 1,440,000 | 1,107,668 | 261,502 | 9,253 | 1,615 | 25,301 | 4.2 | 10 | - | - |
| CDQ | 3 | 7 | 160,000 | 156,314 | 37,167 | 953 | 745 | 4,045 | 4.2 | 9 | - | - |
| **TOTAL** | **11** | **70** | **1,600,000** | **1,263,982** | **298,669** | **10,206** | **1,615** | **29,346** | **4.2** | **10** | **122.6** | **61** |
| IFQ | 18 | 77 | 2,123,100 | 1,698,707 | 395,652 | 25,582 | 3,116 | 43,901 | 4.3 | 9 | - | - |
| CDQ | 5 | 13 | 235,900 | 182,615 | 42,210 | 1,006 | 1,076 | 4,653 | 4.3 | 9 | - | - |
| **TOTAL** | **18** | **90** | **2,359,000** | **1,881,322** | **437,862** | **26,588** | **3,116** | **48,554** | **4.3** | **9** | **125.7** | **62** |

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

[a] Millions of pounds.

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

[c] Deadloss included.

[d] In pounds.

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

[f] Number of retained crab per pot lift.

[g] Carapace length in millimeters.

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

Table 2-10.–Saint Matthew Island Section blue king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery economic performance and season length summary, 1977 – 2011/12.

| | | Value | | Season Length | |
|---|---|---|---|---|---|
| Season | Fishery | Exvessel[a] | Total[b] | Days | Dates |
| 1977 | General | $1.00 | $1.10 | 70 | 06/07-08/16 |
| 1978 | General | $0.95 | $1.80 | 50 | 07/15-09/03 |
| 1979 | General | $0.70 | $0.10 | 40 | 07/15-08/24 |
| 1980 | General | CF | CF | 50 | 07/15-09/03 |
| 1981 | General | $0.90 | $4.10 | 37 | 07/15-08/21 |
| 1982 | General | $2.00 | $17.40 | 15 | 08/01-08/16 |
| 1983[c] | General | $3.00 | $25.80 | 17 | 08/20-08/06 |
| 1984 | General | $1.75 | $6.50 | 7 | 08/01-09/08 |
| 1985 | General | $1.60 | $3.80 | 5 | 09/01-09/06 |
| 1986 | General | $3.20 | $3.20 | 5 | 09/01-09/06 |
| 1987 | General | $2.85 | $3.10 | 4 | 09/01-09/05 |
| 1988 | General | $3.10 | $4.00 | 4 | 09/01-09/05 |
| 1989 | General | $2.90 | $3.50 | 2.5 | 09/01-09/04 |
| 1990 | General | $3.35 | $5.70 | 6 | 09/01-09/07 |
| 1991 | General | $2.80 | $9.00 | 4 | 09/16-09/20 |
| 1992 | General | $3.00 | $7.40 | 2.5 | 09/04-09/07 |
| 1993 | General | $3.23 | $9.70 | 6 | 09/15-09/21 |
| 1994 | General | $4.00 | $15.00 | 7 | 09/15-09/22 |
| 1995 | General | $2.32 | $7.10 | 5 | 09/15-09/22 |
| 1996 | General | $2.20 | $6.70 | 8 | 09/15-09/16 |
| 1997 | General | $2.21 | $9.80 | 7 | 09/15-09/22 |
| 1998 | General | $1.87 | $5.34 | 11 | 09/15-09/26 |
| | CDQ | CF | CF | - | - |
| | **TOTAL** | **CF** | **CF** | **-** | - |
| 1999 - 2008/09 | | FC | FC | FC | FC |
| 2009/10 | IFQ | $2.19 | $1.00 | 110 | 10/15-02/01 |
| | CDQ | $0.00 | $0.00 | 110 | 10/15-02/01 |
| | **TOTAL** | **$2.19** | **$1.00** | **-** | **-** |
| 2010/11 | IFQ | $4.11 | $4.50 | 110 | 10/15-02/01 |
| | CDQ | $4.14 | $0.60 | 110 | 10/15-02/01 |
| | **TOTAL** | **$4.11** | **$5.20** | **-** | **-** |
| 2011/12 | IFQ | $4.34 | $7.30 | 110 | 10/15-02/01 |
| | CDQ | $4.26 | $0.80 | 110 | 10/15-02/01 |
| | **TOTAL** | **$4.33** | **$8.00** | **-** | **-** |

*Note: C*F = confidential, FC = fishery closed.

[a] Average price per pound.

[b] Millions of dollars.

[c] Part of Northern District open until September 20. Saint Lawrence Island harvest included.

Table 2-11.–Saint Matthew Island Section blue king crab commercial fishery harvest by statistical area, 2011/12.

| Statistical area | Number of landings | Harvest[a,b] | Number of crab[a] | Deadloss[b] | Pots lifted | Average Weight[b] | Average CPUE[c] |
|---|---|---|---|---|---|---|---|
| 725930 | 29 | 125,149 | 28,904 | 2,753 | 2,903 | 4.3 | 10 |
| 726001 | 13 | 42,811 | 10,298 | 523 | 1,185 | 4.2 | 9 |
| 726031 | 6 | 13,071 | 3,018 | 98 | 552 | 4.3 | 5 |
| 735930 | 79 | 1,166,978 | 269,827 | 17,398 | 26,413 | 4.3 | 10 |
| 736001 | 56 | 504,366 | 118,955 | 5,583 | 16,218 | 4.2 | 7 |
| 736031 | 4 | 19,414 | 4,591 | 99 | 931 | 4.2 | 5 |
| 746000 | 6 | 8,522 | 2,033 | 133 | 266 | 4.2 | 8 |
| Other[d] | 8 | 1,011 | 236 | 0 | 86 | 4.3 | 3 |
| **Total** | **90** | **1,881,322** | **437,862** | **26,588** | **48,554** | **4.3** | **9** |

[a] Deadloss included.

[b] In pounds.

[c] Number of retained crab per pot lift.

[d] Combination of three statistical areas from which less than 3 vessels made landings in each statistical area.

Table 2-12.–Pribilof District golden king crab commercial fishery harvest data, 1981/82 – 2011.

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

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

[a] Deadloss included.

[b] Guideline harvest level (GHL) in pounds.

[c] In pounds.

[d] Number of retained crab per pot lift.

[e] Carapace length in millimeters.

Table 2-13.–Pribilof District golden king crab commercial fishery economic data, 1991 – 2011.

| | Value | | Season length | |
|---|---|---|---|---|
| Season | Exvessel[a] | Total[b] | Days | Dates |
| 1991 - 1992 | $0.00 | $0.00 | 365 | 01/01-12/31 |
| 1993 | $2.42 | $0.16 | 365 | 01/01-12/31 |
| 1994 | $3.99 | $0.36 | 365 | 01/01-12/31 |
| 1995 | $3.23 | $1.10 | 365 | 01/01-12/31 |
| 1996 | $2.10 | $0.69 | 365 | 01/01-12/31 |
| 1997 | $2.23 | $0.39 | 365 | 01/01-12/31 |
| 1998 | $2.06 | $0.07 | 365 | 01/01-12/31 |
| 1999 | $2.34 | $0.40 | 162 | 01/01-06/10 |
| 2000 | $3.22 | $0.39 | 365 | 01/01-12/31 |
| 2001 | $3.12 | $0.43 | 105 | 01/01-04/15 |
| 2002 | $3.10 | $0.44 | 134 | 01/01-05/14 |
| 2003 | CF | CF | 121 | 01/01-05/01 |
| 2004 | CF | CF | 72 | 01/01-03/12 |
| 2005 | CF | CF | 365 | 01/01-12/31 |
| 2006 - 2009 | $0.00 | $0.00 | 365 | 01/01-12/31 |
| 2010 - 2011 | CF | CF | 365 | 01/01-12/31 |

*Note:* CF = confidential.

[a] Average price per pound.

[b] Millions of dollars.

Table 2-14.–Saint Matthew Island Section golden king crab commercial fishery harvest and economic data, 1982/83 – 2011.

| | Number of | | Number of | | | | Average | | | Value | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Season | Vessels | Landings | Harvest[a,b] | crab[a] | Deadloss[b] | Pots lifted | Weight[b] | CPUE[c] | Length[d] | Exvessel[e] | Total |
| 1982/83 | 22 | 30 | 193,507 | 51,714 | 957 | 7,825 | 3.7 | 7 | 138 | $2.00 | $385,100 |
| 1983/84 - 1986 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 1987 | 10 | 28 | 414,034 | 99,101 | 12,750 | 13,825 | 4.2 | 7 | 142 | $2.60 | $1,043,338 |
| 1988 | 10 | 22 | 160,441 | 36,470 | 14,000 | 11,672 | 4.4 | 3 | 150 | $3.10 | $453,967 |
| 1989 | 2 | CF | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1990 - 1991 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 1992 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1993 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 1994 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1995 | 5 | 5 | 992 | 212 | 0 | 313 | 4.7 | 1 | NA | $2.77 | $2,748 |
| 1996 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1997 - 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 2001 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |
| 2003 | 1 | CF | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 2004 - 2011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0 |

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

[a] Deadloss included.

[b] In pounds.

[c] Number of retained crab per pot lift.

[d] Carapace length in millimeters.

[e] Average price per pound.

Table 2-15.–Bering Sea scarlet king crab commercial fishery data, 1992 – 2011.

| Season | Number of Vessels | Harvest[a,b] | Number of crab[a] | Deadloss[b] | Pots lifted | Average Weight[b] | Average CPUE[c] | Value Exvessel[d] | Value Total[e] |
|---|---|---|---|---|---|---|---|---|---|
| 1992 - 1994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 1995 | 4 | 26,684 | 11,048 | 465 | 24,551 | 2.4 | 1 | $2.45 | $0.06 |
| 1996 | 2 | CF | CF | CF | CF | CF | CF | CF | CF |
| 1997 - 1999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 2000[f] | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2001[f] | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 2003[f] | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2004[f] | 3 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2005[f] | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2006 - 2011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |

*Note:* CF = confidential.

[a] Deadloss included.

[b] In pounds.

[c] Number of retained crab per pot lift.

[d] Average price per pound.

[e] Thousands of dollars.

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

Table 2-16.–Bering Sea District Tanner crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest data by subdistrict, 1968 – 2011/12.

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

-continued-

Table 2-16.–Page 2 of 5.

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

-continued-

Table 2-16.–Page 3 of 5.

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

-continued-

Table 2-16.–Page 4 of 5.

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

-continued-

Table 2-16.–Page 5 of 5.

| Season | Location[a] | Number of Vessels | Number of Landings | GHL/TAC | Harvest[b,c] | Number of crab[b] | Deadloss[c] | Pots Registered | Pots Lifted | Average Weight[c] | Average CPUE[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2011/12 | ***East of 166° W long*** | | | | | | | | | | |
| | IFQ | 0 | 0 | FC | 0 | 0 | 0 | FC | 0 | - | - |
| | CDQ | 0 | 0 | FC | 0 | 0 | 0 | FC | 0 | - | - |
| | **TOTAL** | **0** | **0** | **FC** | **0** | **0** | **0** | **FC** | **0** | **-** | **-** |
| | ***West of 166° W long*** | | | | | | | | | | |
| | IFQ | 54 | 164 | FC | 4,317 | 2,880 | 4,317 | FC | 63,339 | - | <1 |
| | CDQ | 8 | 14 | FC | 295 | 215 | 295 | FC | 5,187 | - | <1 |
| | **TOTAL** | **56** | **178** | **FC** | **4,612** | **3,095** | **4,612** | **FC** | **68,526** | **-** | **<1** |
| | ***Bering Sea District Total*** | | | | | | | | | | |
| | IFQ | 54 | 164 | FC | 4,317 | 2,880 | 4,317 | FC | 63,339 | - | <1 |
| | CDQ | 8 | 14 | FC | 295 | 215 | 295 | FC | 5,187 | - | <1 |
| | **TOTAL** | **56** | **178** | **FC** | **4,612** | **3,095** | **4,612** | **FC** | **68,526** | **-** | **<1** |

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

[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 1987/87 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 the directed Tanner crab fishery. From 2005/06 to current the fishery is divided east and west of 166° W long, and harvest east of 163° W long is only allowed as incidental catch during the Bristol Bay red king crab fishery.

[b] Deadloss included.

[c] In pounds.

[d] Number of retained crab per pot lift.

[e] Initial guideline harvest level (GHL) announcement was 39.2 million pounds, GHL was later adjusted to 38.1 million pounds.

[f] GHL for waters east of 163° W long.

[g] GHL for waters west of 163° W long.

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

Table 2-17.–Bering Sea District Tanner crab commercial fishery economic performance, 1968 – 2011/12.

| | Value | |
|---|---|---|
| Season | Exvessel[a] | Total[b] |
| 1968 - 1974 | NA | NA |
| 1974/75 | $0.20 | $1.4 |
| 1975/76 | $0.19 | $4.2 |
| 1976/77 | $0.30 | $15.4 |
| 1977/78 | $0.38 | $25.3 |
| 1978/79 | $0.52 | $22.1 |
| 1979/80 | $0.52 | $19.0 |
| 1980/81 | $0.58 | $17.2 |
| 1981/82 | $1.06 | $11.5 |
| 1982/83 | $1.20 | $6.2 |
| 1983/84 | $0.95 | $1.1 |
| 1984/85 | $1.40 | $4.3 |
| 1985/86 - 1986/87 | FC | FC |
| 1987/88 | $2.17 | $4.8 |
| 1988/89 | $2.90 | $20.3 |
| 1989/90 | $1.85 | $45.3 |
| 1990/91 | $1.12 | $44.5 |
| 1991/92 | $1.50 | $47.3 |
| 1992/93 | $1.69 | $58.8 |
| 1993/94 | $1.90 | $31.6 |
| 1994/95 | $3.75 | $28.5 |
| 1995/96 | $2.80 | $11.7 |
| 1996/97 | $2.50 | $4.5 |
| 1997/98 - 2004/05 | FC | FC |
| 2005/06 | $1.27 | $1.2 |
| 2006/07 | $1.27 | $2.7 |
| 2007/08 | $1.64 | $3.4 |
| 2008/09 | $1.52 | $2.9 |
| 2009/10 | $1.64 | $2.2 |
| 2010/11 - 2011/12 | FC | FC |

*Note:* FC = fishery closed, NA = not available.
[a] Average price per pound.
[b] Millions of dollars.

Table 2-18.–Bering Sea District Tanner crab commercial fishery season dates, 1968 – 2011/12.

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

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Table 2-18.–Page 2 of 2.

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

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

[a] Concurrent with Bristol Bay red king crab fishery.

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

Table 2-19.–Bering Sea District Tanner crab commercial fishery harvest by statistical area, 2011/12.

| Statistical area | Number of Landings | Number of Crab[a] | Number of Pots lifted | Harvest[a,b] | Deadloss[b] | CPUE[c] |
|---|---|---|---|---|---|---|
| **East of 166° W long** | 0 | 0 | 0 | 0 | 0 | - |
| **West of 166° W long** | | | | | | |
| 665530 | 3 | 4 | 112 | 5 | 5 | <1 |
| 675500 | 8 | 18 | 401 | 27 | 27 | <1 |
| 675530 | 31 | 257 | 6,170 | 390 | 390 | <1 |
| 675600 | 23 | 289 | 2,982 | 434 | 434 | <1 |
| 675630 | 5 | 10 | 415 | 15 | 15 | <1 |
| 685530 | 13 | 16 | 685 | 21 | 21 | <1 |
| 685600 | 24 | 405 | 3,281 | 610 | 610 | <1 |
| 685630 | 12 | 134 | 1,039 | 198 | 198 | <1 |
| 705600 | 37 | 251 | 5,138 | 371 | 371 | <1 |
| 705630 | 21 | 193 | 2,515 | 295 | 295 | <1 |
| 715600 | 20 | 57 | 1,084 | 83 | 83 | <1 |
| 715630 | 84 | 759 | 17,239 | 1,126 | 1,126 | <1 |
| 715700 | 31 | 100 | 3,419 | 152 | 152 | <1 |
| 725630 | 48 | 97 | 5,210 | 145 | 145 | <1 |
| 725700 | 60 | 227 | 7,345 | 331 | 331 | <1 |
| 725730 | 13 | 30 | 1,751 | 42 | 42 | <1 |
| 735630 | 12 | 8 | 1,248 | 10 | 10 | <1 |
| 735700 | 30 | 129 | 4,786 | 194 | 194 | <1 |
| 735730 | 16 | 64 | 1,923 | 95 | 95 | <1 |
| 735800 | 5 | 28 | 724 | 42 | 42 | <1 |
| Other[d] | 11 | 19 | 1,059 | 25 | 25 | <1 |
| **Total** | **178** | **3,095** | **68,526** | **4,612** | **4,612** | **<1** |

*Note:* Directed fishery closed, includes only deadloss incidentally harvested during Bering Sea snow crab and Bristol Bay red king crab fisheries.

[a] Deadloss included.

[b] In pounds.

[c] Number of retained crab per pot lift.

[d] Combination of six statistical areas where less than three vessels made landings.

Table 2-20.–Bering Sea District Tanner crab commercial fishery harvest composition by fishing season, 1968 – 2011/12.

| | Average | | Percent |
|---|---|---|---|
| Season | Weight[a] | Width[b] | new shell |
| 1968 | 2.8 | NA | NA |
| 1969 | 2.9 | NA | NA |
| 1970 | 2.9 | NA | NA |
| 1971 | 2.7 | NA | NA |
| 1972 | 2.6 | NA | NA |
| 1973 | 2.5 | NA | NA |
| 1974 | 2.0 | NA | NA |
| 1974/75 | 2.5 | NA | NA |
| 1975/76 | 2.5 | NA | 99.8 |
| 1976/77 | 2.5 | NA | NA |
| 1977/78 | 2.5 | 153 | 88.0 |
| 1978/79 | 2.5 | 153 | 95.0 |
| 1979/80 | 2.5 | 151 | 90.0 |
| 1980/81 | 2.5 | 149 | 89.0 |
| 1981/82 | 2.3 | 149 | 91.8 |
| 1982/83 | 2.3 | 149 | 70.6 |
| 1983/84 | 2.3 | 147 | 40.5 |
| 1984/85 | 2.4 | 150 | 64.9 |
| 1985/86 - 1986/87 | FC | FC | FC |
| 1987/88 | 2.5 | 144 | 89.0 |
| 1988/89 | 2.4 | 149 | 79.3 |
| 1989/90 | 2.3 | 148 | 96.5 |
| 1990/91 | 2.4 | 150 | 95.3 |
| 1991/92 | 2.5 | 150 | 93.0 |
| 1992/93 | 2.3 | 148 | 90.5 |
| 1993/94 | 2.3 | 151 | 93.9 |
| 1994/95 | 2.3 | 150 | 92.5 |
| 1995/96 | 2.3 | 149 | 58.6 |
| 1996/97 | 2.5 | 152 | 46.6 |
| 1997/98 - 2004/05 | FC | FC | FC |
| 2005/06 | 2.2 | 145 | 92.1 |
| 2006/07 | 2.3 | 150 | 35.8 |
| 2007/08 | 2.3 | 148 | 62.8 |
| 2008/09 | 2.3 | 149 | 90.1 |
| 2009/10 | 2.7 | 157 | 98.0 |
| 2010/11 - 2011/12 | FC | FC | FC |

*Note:* NA = not available, FC = fishery closed.
[a] In pounds.
[b] Carapace width in millimeters.

Table 2-21.–Bering Sea District snow crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest data, 1977/78 – 2011/12.

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

-continued-

Table 2-21.–Page 2 of 3.

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

-continued-

Table 2-21.–Page 3 of 3.

| Season | Fishery | Number of Vessels | Number of Landings | GHL/TAC[a] | Harvest[b,c] | Number of crab[b] | Deadloss[c] | Number of Pots Registered | Number of Pots Lifted | Average Weight[c] | Average CPUE[d] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2009/10 | IFQ | 69 | 325 | 43,215,300 | 43,212,583 | 31,751,359 | 500,049 | 11,316 | 124,935 | 1.4 | 254 |
| | CDQ | 11 | 29 | 4,801,700 | 4,801,506 | 3,537,664 | 36,639 | 1,993 | 12,357 | 1.4 | 286 |
| | **TOTAL** | **69** | **354** | **48,017,000** | **48,014,089** | **35,289,023** | **536,688** | **11,316** | **137,292** | **1.4** | **257** |
| 2010/11 | IFQ | 68 | 348 | 48,852,900 | 48,852,452 | 33,963,757 | 314,505 | 11,739 | 133,899 | 1.4 | 254 |
| | CDQ | 14 | 38 | 5,428,100 | 5,410,748 | 3,794,739 | 37,883 | 2,478 | 13,345 | 1.4 | 284 |
| | **TOTAL** | **68** | **386** | **54,281,000** | **54,263,200** | **37,758,496** | **352,388** | **11,739** | **147,244** | **1.4** | **256** |
| 2011/12 | IFQ | 71 | 654 | 80,004,600 | 79,941,256 | 54,469,952 | 585,054 | 12,100 | 243,237 | 1.5 | 224 |
| | CDQ | 16 | 70 | 8,889,400 | 8,889,396 | 6,085,153 | 52,378 | 3,400 | 27,365 | 1.5 | 222 |
| | **TOTAL** | **72** | **724** | **88,894,000** | **88,830,652** | **60,555,105** | **637,432** | **12,310** | **270,602** | **1.5** | **224** |

*Note:* NA = not available.

[a] Guideline harvest level (GHL), total allowable catch (TAC) began in 2005/06. Before the 2005/06 season, the CDQ fishery occurred subsequent to the general fishery and the CDQ GHL was adjusted based on the general fishery harvest. As a result, the general GHL and the CDQ GHL may not equal the total GHL.

[b] Deadloss included.

[c] In pounds.

[d] Number of retained crab per pot lift.

Table 2-22.–Bering Sea District snow crab commercial fishery harvest data by subdistrict, 1977/78 – 2011/12.

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

-continued-

Table 2-22.–Page 2 of 5.

| Season | Subdistrict | Number of Vessels | Number of Landings | GHL/TAC[a] | Harvest[b,c] | Number of crab[b] | Deadloss[c] | Pots lifted | Average Weight[c] | Average CPUE[d] |
|---|---|---|---|---|---|---|---|---|---|---|
| 1985 | Southeastern | 55 | 301 | - | 27,373,232 | 21,963,882 | 461,001 | 158,819 | 1.4 | 138 |
| | Pribilof | 60 | 301 | - | 29,804,093 | 24,089,526 | 505,146 | 142,937 | 1.2 | 169 |
| | Northern | 24 | 116 | - | 8,821,550 | 6,849,838 | 98,037 | 70,289 | 1.3 | 97 |
| | **TOTAL** | **75** | **718** | **98,000,000** | **65,998,875** | **52,903,246** | **1,064,184** | **372,045** | **1.3** | **142** |
| 1986 | Southeastern | 47 | 112 | - | 10,957,578 | 8,491,694 | 44,755 | 63,889 | 1.3 | 133 |
| | Pribilof | 80 | 508 | - | 50,525,150 | 39,851,767 | 472,342 | 281,337 | 1.3 | 142 |
| | Northern | 67 | 372 | - | 36,501,811 | 28,155,662 | 861,436 | 198,518 | 1.3 | 142 |
| | **TOTAL** | **88** | **992** | **57,000,000** | **97,984,539** | **76,499,123** | **1,378,533** | **543,744** | **1.3** | **141** |
| 1987 | Southeastern | 28 | 64 | - | 5,106,473 | 4,116,778 | 24,619 | 24,619 | 1.2 | 167 |
| | Pribilof | 94 | 458 | - | 47,676,734 | 38,604,802 | 261,337 | 261,337 | 1.2 | 148 |
| | Northern | 99 | 516 | - | 49,120,181 | 38,586,079 | 330,157 | 330,157 | 1.2 | 117 |
| | **TOTAL** | **103** | **1,038** | **56,400,000** | **101,903,388** | **81,307,659** | **978,449** | **616,113** | **1.2** | **132** |
| 1988 | Eastern | 162 | 771 | - | 75,926,942 | 60,019,586 | 740,976 | 423,919 | 1.3 | 142 |
| | Western | 151 | 518 | - | 58,314,786 | 45,913,956 | 2,501,693 | 323,476 | 1.3 | 142 |
| | **TOTAL** | **171** | **1,285** | **110,700,000** | **134,241,728** | **105,933,542** | **3,424,021** | **747,395** | **1.3** | **142** |
| 1989 | Eastern | 164 | 872 | - | 103,163,307 | 77,717,813 | 1,137,971 | 393,251 | 1.3 | 198 |
| | Western | 127 | 470 | - | 45,142,955 | 34,986,402 | 802,511 | 271,991 | 1.3 | 129 |
| | **TOTAL** | **168** | **1,300** | **132,000,000** | **148,306,262** | **112,704,215** | **1,940,482** | **665,242** | **1.3** | **169** |
| 1990 | Eastern | 177 | 956 | - | 94,775,962 | 76,285,217 | 1,010,755 | 511,949 | 1.2 | 149 |
| | Western | 152 | 659 | - | 66,989,453 | 52,645,809 | 785,909 | 399,354 | 1.3 | 132 |
| | **TOTAL** | **189** | **1,563** | **139,800,000** | **161,765,415** | **128,931,026** | **1,796,664** | **911,303** | **1.3** | **141** |
| 1991 | Eastern | 218 | 2,013 | - | 240,090,666 | 190,139,612 | 1,593,021 | 912,631 | 1.3 | 208 |
| | Western | 185 | 867 | - | 88,556,603 | 74,984,348 | 1,871,015 | 478,832 | 1.2 | 157 |
| | **TOTAL** | **220** | **2,788** | **315,000,000** | **328,647,269** | **265,123,960** | **3,464,036** | **1,391,463** | **1.2** | **191** |
| 1992 | Eastern | 248 | 2,696 | - | 302,364,005 | 217,376,231 | 2,269,467 | 1,228,280 | 1.4 | 177 |
| | Western | 55 | 152 | - | 12,938,029 | 10,000,351 | 56,385 | 56,385 | 1.3 | 187 |
| | **TOTAL** | **250** | **2,763** | **333,000,000** | **315,302,034** | **227,376,582** | **2,325,852** | **1,284,665** | **1.4** | **177** |

-continued-

Table 2-22.–Page 3 of 5.

| Season | Subdistrict | Number of Vessels | Number of Landings | GHL/TAC[a] | Harvest[b,c] | Number of crab[b] | Deadloss[c] | Pots lifted | Average Weight[c] | Average CPUE[d] |
|---|---|---|---|---|---|---|---|---|---|---|
| 1993 | Eastern | 250 | 1,383 | - | 151,324,024 | 110,756,768 | 1,108,520 | 675,936 | 1.4 | 164 |
| | Western | 185 | 632 | - | 79,430,229 | 58,778,849 | 465,432 | 294,710 | 1.4 | 199 |
| | **TOTAL** | **254** | **1,835** | **207,200,000** | **230,754,253** | **169,535,617** | **1,573,952** | **970,646** | **1.4** | **175** |
| 1994 | Eastern | 219 | 820 | - | 72,008,424 | 56,012,433 | 901,674 | 375,928 | 1.3 | 149 |
| | Western | 171 | 586 | - | 77,784,294 | 58,797,753 | 898,089 | 340,596 | 1.3 | 173 |
| | **TOTAL** | **273** | **1,293** | **105,800,000** | **149,792,718** | **114,810,186** | **1,799,763** | **716,524** | **1.3** | **160** |
| 1995 | Eastern | 217 | 628 | - | 39,793,496 | 32,677,836 | 659,051 | 314,711 | 1.2 | 104 |
| | Western | 153 | 357 | - | 35,515,691 | 27,981,053 | 630,118 | 192,892 | 1.3 | 145 |
| | **TOTAL** | **253** | **870** | **55,700,000** | **75,309,187** | **60,658,899** | **1,289,169** | **507,603** | **1.2** | **120** |
| 1996 | Eastern | 161 | 465 | - | 28,232,574 | 23,663,995 | 555,326 | 252,159 | 1.2 | 94 |
| | Western | 146 | 354 | - | 37,463,599 | 29,228,325 | 777,689 | 268,512 | 1.3 | 109 |
| | **TOTAL** | **234** | **771** | **50,700,000** | **65,696,173** | **52,892,320** | **1,333,015** | **520,671** | **1.2** | **102** |
| 1997 | Eastern | 225 | 1,041 | - | 105,695,147 | 88,524,929 | 2,115,217 | 649,319 | 1.2 | 136 |
| | Western | 83 | 164 | - | 13,894,192 | 11,488,887 | 236,338 | 104,821 | 1.2 | 110 |
| | **TOTAL** | **226** | **1,127** | **117,000,000** | **119,543,024** | **100,013,816** | **2,351,555** | **754,140** | **1.2** | **133** |
| 1998 | Eastern | 229 | 1,808 | - | 239,651,113 | 183,421,483 | 2,903,695 | 887,458 | 1.3 | 207 |
| | Western | 50 | 115 | - | 12,688,171 | 10,197,067 | 133,804 | 43,336 | 1.2 | 235 |
| | **TOTAL** | **230** | **1,853** | **234,100,000** | **252,339,284** | **193,618,550** | **3,037,499** | **930,794** | **1.3** | **208** |
| 1999 | Eastern | 236 | 1,490 | - | 145,042,457 | 110,912,479 | 1,330,994 | 702,282 | 1.3 | 158 |
| | Western | 121 | 391 | - | 49,321,412 | 40,271,319 | 595,503 | 243,251 | 1.2 | 166 |
| | **TOTAL** | **241** | **1,734** | **196,000,000** | **194,363,869** | **151,183,798** | **1,926,497** | **945,533** | **1.3** | **160** |
| 2000 | Eastern | 173 | 241 | - | 22,931,135 | 16,673,204 | 214,445 | 120,556 | 1.4 | 138 |
| | Western | 82 | 98 | - | 10,360,209 | 8,408,477 | 138,680 | 62,078 | 1.2 | 135 |
| | **TOTAL** | **231** | **315** | **28,500,000** | **33,291,344** | **25,081,681** | **353,125** | **182,634** | **1.3** | **137** |

-continued-

Table 2-22.–Page 4 of 5.

| Season | Subdistrict | Number of Vessels | Number of Landings | GHL/TAC[a] | Harvest[b,c] | Number of crab[b] | Deadloss[c] | Pots lifted | Average Weight[c] | Average CPUE[d] |
|---|---|---|---|---|---|---|---|---|---|---|
| 2001 | Eastern | 164 | 232 | - | 13,016,278 | 9,201,950 | 229,454 | 118,311 | 1.4 | 78 |
| | Western | 90 | 135 | - | 12,240,106 | 9,410,655 | 223,327 | 72,889 | 1.3 | 129 |
| | **TOTAL** | **207** | **322** | **27,300,000** | **25,256,384** | **18,612,605** | **452,781** | **191,200** | **1.4** | **97** |
| 2002 | Eastern | 146 | 290 | - | 13,858,099 | 10,642,041 | 314,240 | 167,328 | 1.3 | 64 |
| | Western | 111 | 220 | - | 18,775,111 | 14,513,180 | 344,216 | 159,649 | 1.3 | 91 |
| | **TOTAL[e]** | **191** | **436** | **30,820,000** | **32,633,210** | **25,155,221** | **658,456** | **326,977** | **1.3** | **77** |
| 2003 | Eastern | 66 | 104 | - | 6,644,118 | 5,407,755 | 121,572 | 41,409 | 1.2 | 131 |
| | Western | 159 | 228 | - | 21,672,805 | 17,845,149 | 559,215 | 112,453 | 1.2 | 159 |
| | **TOTAL[f]** | **190** | **285** | **25,610,000** | **28,316,923** | **23,252,904** | **680,787** | **153,862** | **1.2** | **151** |
| 2004 | Eastern | 63 | 93 | - | 3,496,441 | 2,688,063 | 37,117 | 22,514 | 1.3 | 119 |
| | Western | 171 | 227 | - | 20,445,932 | 15,981,528 | 211,459 | 101,195 | 1.3 | 158 |
| | **TOTAL** | **189** | **265** | **20,831,000** | **23,942,373** | **18,669,591** | **248,576** | **123,709** | **1.3** | **151** |
| 2005 | Eastern | 69 | 107 | - | 9,631,571 | 6,791,145 | 65,643 | 22,026 | 1.4 | 308 |
| | Western | 128 | 138 | - | 15,260,557 | 11,069,175 | 169,836 | 51,182 | 1.4 | 219 |
| | **TOTAL** | **168** | **219** | **20,932,000** | **24,892,128** | **17,860,320** | **235,479** | **73,208** | **1.4** | **246** |
| 2005/06 | Eastern | 66 | 269 | - | 22,870,121 | 14,929,482 | 218,325 | 82,496 | 1.5 | 181 |
| | Western | 51 | 169 | - | 14,104,010 | 9,622,676 | 139,116 | 38,543 | 1.5 | 250 |
| | **TOTAL** | **78** | **350** | **37,184,000** | **36,974,131** | **24,552,158** | **357,441** | **121,039** | **1.5** | **203** |
| 2006/07 | Eastern | 65 | 292 | - | 31,862,426 | 26,087,650 | 359,093 | 78,486 | 1.2 | 332 |
| | Western | 24 | 70 | - | 4,493,223 | 3,490,010 | 54,650 | 10,933 | 1.3 | 323 |
| | **TOTAL** | **69** | **307** | **36,566,000** | **36,355,649** | **29,577,660** | **413,743** | **89,419** | **1.2** | **331** |
| 2007/08 | Eastern | 78 | 499 | - | 59,135,784 | 47,220,645 | 533,841 | 135,607 | 1.3 | 348 |
| | Western | 11 | 47 | - | 3,892,252 | 3,092,773 | 17,588 | 8,505 | 1.3 | 365 |
| | **TOTAL** | **78** | **513** | **63,034,000** | **63,028,036** | **50,313,418** | **551,429** | **144,112** | **1.3** | **349** |

-continued-

Table 2-22.–Page 5 of 5.

| Season | Subdistrict | Number of Vessels | Number of Landings | GHL/TAC[a] | Harvest[b,c] | Number of crab[b] | Deadloss[c] | Pots lifted | Average Weight[c] | Average CPUE[d] |
|---|---|---|---|---|---|---|---|---|---|---|
| 2008/09 | Eastern | 74 | 329 | - | 30,177,432 | 23,468,644 | 222,674 | 90,286 | 1.3 | 260 |
| | Western | 51 | 278 | - | 28,370,417 | 22,476,449 | 211,948 | 73,251 | 1.3 | 307 |
| | **TOTAL** | **77** | **487** | **58,550,000** | **58,547,849** | **45,945,093** | **434,622** | **163,537** | **1.3** | **281** |
| 2009/10 | Eastern | 69 | 336 | - | 41,657,695 | 30,474,768 | 490,535 | 120,398 | 1.4 | 253 |
| | Western | 27 | 82 | - | 6,356,393 | 4,814,255 | 46,153 | 16,894 | 1.3 | 285 |
| | **TOTAL** | **69** | **354** | **48,017,000** | **48,014,089** | **35,289,023** | **536,688** | **137,292** | **1.4** | **257** |
| 2010/11 | Eastern | 67 | 348 | - | 42,106,333 | 29,020,322 | 267,919 | 115,671 | 1.5 | 251 |
| | Western | 32 | 117 | - | 12,156,867 | 8,738,174 | 84,469 | 31,573 | 1.4 | 277 |
| | **TOTAL** | **68** | **386** | **54,281,000** | **54,263,200** | **37,758,496** | **352,388** | **147,244** | **1.4** | **256** |
| 2011/12 | Eastern | 72 | 651 | - | 68,554,578 | 46,578,426 | 493,209 | 214,324 | 1.5 | 217 |
| | Western | 52 | 254 | - | 20,276,074 | 13,976,679 | 144,223 | 56,278 | 1.5 | 248 |
| | **TOTAL** | **72** | **724** | **88,894,000** | **88,830,652** | **60,555,105** | **637,432** | **270,602** | **1.5** | **224** |

*Note:* NA = not available.
[a] Guideline harvest level (GHL), total allowable catch (TAC) began in 2005/06.
[b] Deadloss included.
[c] In pounds.
[d] Number of retained crab per pot lift.
[e] Total harvest included 30,919 pounds taken from an unidentified statistical area.
[f] Includes 181,457 pounds illegally taken in Russian waters.

Table 2-23.–Bering Sea District snow crab commercial fishery season dates and area closures, 1977/78 – 2011/12.

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

-continued-

Table 2-23.–Page 2 of 2.

| Season | Opened | Closed | Season length[a] | Comments |
|---|---|---|---|---|
| 1990 | 01/15/90 | 04/09/90 | 148 | Eastern Subdistrict east of 165° W long closure |
| | | 04/24/90 | | Eastern Subdistrict west of 165° W long closure |
| | | 06/12/90 | | Western Subdistrict closure |
| 1991 | 01/15/91 | 05/05/91 | 159 | Eastern Subdistrict closure |
| | | 06/23/91 | | Western Subdistrict closure |
| 1992 | 01/15/92 | 04/22/92 | 97 | Bering Sea District closure |
| 1993 | 01/15/93 | 03/15/93 | 59 | Bering Sea District closure |
| 1994 | 01/15/94 | 03/01/94 | 45 | Bering Sea District closure |
| 1995 | 01/15/95 | 02/17/95 | 33 | Bering Sea District closure |
| 1996 | 01/15/96 | 02/29/96 | 45 | Bering Sea District closure |
| 1997 | 01/15/97 | 03/21/97 | 65 | Bering Sea District closure |
| 1998 | 01/15/98 | 03/20/98 | 64 | Bering Sea District closure |
| 1999 | 01/15/99 | 03/22/99 | 66 | Bering Sea District closure |
| 2000 | 04/01/00 | 04/08/00 | 7 | Bering Sea District closure |
| 2001 | 01/15/01 | 02/14/01 | 30 | Bering Sea District closure |
| 2002 | 01/15/02 | 02/08/02 | 24 | Bering Sea District closure |
| 2003 | 01/15/03 | 01/25/03 | 9 | Bering Sea District closure |
| 2004 | 01/15/04 | 01/23/04 | 8 | Bering Sea District closure |
| 2005 | 01/15/05 | 01/20/05 | 6 | Bering Sea District closure |
| 2005/06[d] | 10/15/05 | 05/15/06 | 229 | Eastern Subdistrict closure |
| | | 05/31/06 | | Western Subdistrict closure |
| 2006/07 | 10/15/06 | 05/15/07 | 229 | Eastern Subdistrict closure |
| | | 05/31/07 | | Western Subdistrict closure |
| 2007/08 | 10/15/07 | 05/15/08 | 229 | Eastern Subdistrict closure |
| | | 05/31/08 | | Western Subdistrict closure |
| 2008/09 | 10/15/08 | 05/15/09 | 229 | Eastern Subdistrict closure |
| | | 05/31/09 | | Western Subdistrict closure |
| 2009/10 | 10/15/09 | 05/15/10 | 229 | Eastern Subdistrict closure |
| | | 05/31/10 | | Western Subdistrict closure |
| 2010/11 | 10/15/10 | 05/15/11 | 229 | Eastern Subdistrict closure |
| | | 05/31/11 | | Western Subdistrict closure |
| 2011/12 | 10/15/11 | 05/31/12 | 244 | Eastern Subdistrict east of 171° W long closure |
| | | 06/15/12 | | Western and Eastern Subdistricts west of 171° W long closure |

[a] In days.
[b] State-managed domestic fishery.
[c] Concurrent state and federal date. Prior to 1987, some state and federal management authority overlapped.
[d] Crab Rationalization begins.

Table 2-24.–Bering Sea District snow crab commercial fishery harvest composition by season, 1978/79 – 2011/12.

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

*Note:* NA = not available.

[a] In pounds.

[b] Carapace width in millimeters.

[c] Partial district and subdistrict closures, see Table 2-23.

Table 2-25.–Bering Sea District snow crab commercial fishery economic performance, 1979/80 – 2011/12.

| Season | Value | |
|---|---|---|
| | Exvessel[a] | Total[b] |
| 1979/80 | $0.21 | $8.26 |
| 1981 | $0.27 | $13.63 |
| 1982 | $0.83 | $23.46 |
| 1983 | $0.38 | $9.43 |
| 1984 | $0.30 | $7.80 |
| 1985 | $0.01 | $0.65 |
| 1986 | $0.55 | $53.13 |
| 1987 | $0.79 | $79.73 |
| 1988 | $0.82 | $107.27 |
| 1989 | $0.77 | $112.70 |
| 1990 | $0.66 | $105.58 |
| 1991 | $0.49 | $159.34 |
| 1992 | $0.53 | $165.88 |
| 1993 | $0.74 | $169.59 |
| 1994 | $1.42 | $210.15 |
| 1995 | $2.43 | $179.87 |
| 1996 | $1.33 | $85.60 |
| 1997 | $0.79 | $92.58 |
| 1998 | $0.55 | $137.12 |
| 1999 | $0.88 | $169.34 |
| 2000 | $1.84 | $60.61 |
| 2001 | $1.53 | $37.95 |
| 2002 | $1.48 | $47.32 |
| 2003 | $1.83 | $50.57 |
| 2004 | $2.05 | $48.57 |
| 2005 | CF | CF |
| 2005/06 | $0.83 | $30.39 |
| 2006/07 | CF | CF |
| 2007/08 | CF | CF |
| 2008/09 | $1.37 | $79.62 |
| 2009/10 | $1.13 | $53.65 |
| 2010/11 | $2.14 | $115.37 |
| 2011/12 | $1.89 | $166.69 |

*Note:* CF = confidential.
[a] Average price per pound.
[b] Millions of dollars.

Table 2-26.–Bering Sea District snow crab commercial harvest and effort by week, 2011/12.

| Week ending | Number of Vessels | Number of Landings | Harvest[a,b] | Number of crab[a] | Deadloss[b] | Pots lifted | CPUE[c] |
|---|---|---|---|---|---|---|---|
| 29-Oct - 31-Dec | 1 | CF | CF | CF | CF | CF | CF |
| 7-Jan | 25 | 27 | 5,528,668 | 3,808,129 | 23,125 | 11,279 | 338 |
| 14-Jan | 29 | 32 | 6,424,407 | 4,396,882 | 35,443 | 12,625 | 348 |
| 21-Jan | 31 | 37 | 6,977,432 | 4,831,290 | 65,622 | 14,132 | 342 |
| 28-Jan | 33 | 38 | 4,467,037 | 3,114,639 | 41,150 | 10,646 | 293 |
| 4-Feb | 14 | 15 | 2,555,700 | 1,727,948 | 20,957 | 7,702 | 224 |
| 11-Feb | 24 | 27 | 4,123,175 | 2,824,241 | 18,297 | 11,616 | 243 |
| 18-Feb | 30 | 36 | 5,075,449 | 3,416,354 | 32,447 | 14,080 | 243 |
| 25-Feb | 43 | 51 | 7,290,430 | 4,989,399 | 50,358 | 19,594 | 255 |
| 3-Mar | 27 | 32 | 3,874,876 | 2,602,905 | 25,739 | 11,137 | 234 |
| 10-Mar | 33 | 36 | 4,111,257 | 2,803,490 | 28,439 | 14,969 | 187 |
| 17-Mar | 28 | 31 | 2,888,930 | 1,950,433 | 20,814 | 10,063 | 194 |
| 24-Mar | 22 | 22 | 2,545,076 | 1,727,478 | 11,002 | 7,052 | 245 |
| 31-Mar | 20 | 23 | 2,201,364 | 1,502,939 | 14,071 | 6,671 | 225 |
| 7-Apr | 13 | 13 | 1,531,028 | 1,040,466 | 9,184 | 5,480 | 190 |
| 14-Apr | 35 | 39 | 3,516,616 | 2,417,045 | 21,592 | 13,751 | 176 |
| 21-Apr | 8 | 9 | 220,637 | 146,983 | 2,684 | 1,960 | 75 |
| 28-Apr | 45 | 50 | 3,723,761 | 2,500,333 | 20,284 | 24,276 | 103 |
| 5-May | 20 | 22 | 722,126 | 493,906 | 5,587 | 6,586 | 75 |
| 12-May | 1 | CF | CF | CF | CF | CF | CF |
| 19-May | 46 | 60 | 7,647,321 | 5,179,432 | 63,506 | 31,723 | 163 |
| 2-Jun | 30 | 44 | 5,155,215 | 3,508,693 | 53,539 | 12,095 | 290 |
| 9-Jun | 20 | 31 | 2,791,390 | 1,881,176 | 30,215 | 7,090 | 265 |
| 16-Jun | 7 | 10 | 595,968 | 418,121 | 3,728 | 2,003 | 209 |
| **Total** | **72** | **724** | **88,830,652** | **60,555,105** | **637,432** | **270,602** | **224** |

*Note:* CF = confidential.
[a] Deadloss included.
[b] In pounds.
[c] Number of retained crab per pot lift.

Table 2-27.–Bering Sea District snow crab commercial fishery harvest by statistical area, 2011/12.

| Statistical area | Number of landings[a] | Harvest[b,c] | Number of crab[b] | Deadloss[c] | Pots lifted | Average CPUE[d] | Average Weight[c] |
|---|---|---|---|---|---|---|---|
| **EASTERN SUBDISTRICT STATISTICAL AREAS** | | | | | | | |
| 665500 | 4 | 1,275 | 812 | 7 | 88 | 9 | 1.57 |
| 665530 | 6 | 27,338 | 16,874 | 184 | 194 | 87 | 1.62 |
| 665600 | 4 | 63,385 | 38,750 | 512 | 561 | 69 | 1.64 |
| 675500 | 16 | 114,829 | 73,862 | 2,073 | 694 | 106 | 1.55 |
| 675530 | 59 | 2,864,462 | 1,801,273 | 24,609 | 11408 | 158 | 1.59 |
| 675600 | 46 | 2,018,829 | 1,283,101 | 12,087 | 7051 | 182 | 1.57 |
| 675630 | 8 | 84,256 | 53,233 | 574 | 380 | 140 | 1.58 |
| 685530 | 28 | 1,090,432 | 689,411 | 16,387 | 4071 | 169 | 1.58 |
| 685600 | 46 | 2,279,049 | 1,487,254 | 14,679 | 7734 | 192 | 1.53 |
| 685630 | 20 | 356,329 | 228,509 | 2,553 | 1737 | 132 | 1.56 |
| 695600 | 5 | 53,979 | 36,500 | 241 | 324 | 113 | 1.48 |
| 705600 | 99 | 4,478,419 | 3,009,470 | 24,256 | 14925 | 202 | 1.49 |
| 705630 | 54 | 1,178,477 | 794,025 | 6,461 | 5561 | 143 | 1.48 |
| 715600 | 67 | 1,178,304 | 790,297 | 8,347 | 3785 | 209 | 1.49 |
| 715630 | 278 | 16,463,851 | 11,243,553 | 113,513 | 55037 | 204 | 1.46 |
| 715700 | 148 | 7,440,617 | 5,066,525 | 79,163 | 22501 | 225 | 1.47 |
| 715730 | 12 | 206,380 | 145,067 | 1,147 | 1320 | 110 | 1.42 |
| 725600 | 7 | 317,305 | 219,678 | 1,657 | 861 | 255 | 1.44 |
| 725630 | 193 | 13,635,774 | 9,490,490 | 86,137 | 32795 | 289 | 1.44 |
| 725700 | 239 | 10,678,722 | 7,379,866 | 66,569 | 30396 | 243 | 1.45 |
| 725730 | 87 | 3,761,947 | 2,551,786 | 29,080 | 12015 | 212 | 1.47 |
| 725800 | 20 | 259,625 | 177,434 | 2,950 | 768 | 231 | 1.46 |
| Other[e] | - | 993 | 656 | 23 | 118 | 6 | 1.51 |
| Subtotal | 651 | 68,554,578 | 46,578,426 | 493,209 | 214,324 | 217 | 1.47 |

-continued-

Table 2-27.–Page 2 of 2.

| Statistical area | Number of landings[a] | Harvest[b,c] | Number of crab[b] | Deadloss[c] | Pots lifted | Average CPUE[d] | Average Weight[c] |
|---|---|---|---|---|---|---|---|
| **WESTERN SUBDISTRICT STATISTICAL AREAS** | | | | | | | |
| 735600 | 5 | 13,991 | 9,879 | 23 | 65 | 152 | 1.42 |
| 735630 | 57 | 1,279,273 | 900,165 | 8,177 | 5,252 | 171 | 1.42 |
| 735700 | 118 | 5,551,024 | 3,904,907 | 34,915 | 16,183 | 241 | 1.42 |
| 735730 | 79 | 3,594,862 | 2,514,833 | 17,828 | 7,831 | 321 | 1.43 |
| 735800 | 96 | 8,791,553 | 5,939,078 | 78,046 | 23,450 | 253 | 1.48 |
| 735830 | 23 | 972,659 | 657,279 | 4,894 | 3,140 | 209 | 1.48 |
| 745830 | 8 | 69,314 | 48,333 | 295 | 312 | 155 | 1.43 |
| Other[f] | - | 3,396 | 2,205 | 45 | 45 | 49 | 1.54 |
| Subtotal | 254 | 20,276,074 | 13,976,679 | 144,223 | 56,278 | 248 | 1.45 |
| **Total** | **724** | **88,830,652** | **60,555,105** | **637,432** | **270,602** | **224** | **1.47** |

*Note*: CF = confidential.

[a] Number of statistical area landings is greater than the total number of landings because a single vessel may fish in several statistical areas.

[b] Deadloss included.

[c] In pounds.

[d] Number of retained crab per pot lift.

[e] Combination of five statistical areas from which fewer than three vessels made landings from each statistical area.

[f] Combination of four statistical areas from which fewer than three vessels made landings from each statistical area.

Table 2-28.–Bering Sea District grooved Tanner crab commercial fishery harvest data, 1992 – 2011.

| Season | Number of vessels | Harvest[a,b] | Number of crab[a] | Deadloss[b] | Pots lifted | Average Weight[b] | Average CPUE[c] | Value Exvessel[d] | Value Total[e] |
|---|---|---|---|---|---|---|---|---|---|
| 1992 | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 1993 | 6 | 658,796 | 342,095 | 71,000 | 35,650 | 1.9 | 9 | $0.92 | $0.61 |
| 1994 | 4 | 322,444 | 165,365 | 30,585 | 13,739 | 2.0 | 11 | $2.65 | $0.85 |
| 1995 | 8 | 984,648 | 461,401 | 67,329 | 59,028 | 2.1 | 7 | $2.09 | $2.06 |
| 1996 | 3 | 95,795 | 46,338 | 11,120 | 10,802 | 2.1 | 4 | $1.12 | $0.11 |
| 1997 - 1999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 2000 | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2001 | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 2003 | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2004 | 4 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2005 | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2006 - 2011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |

*Note:* CF = confidential.
[a] Deadloss included.
[b] In pounds.
[c] Number of retained crab per pot lift.
[d] Average price per pound.
[e] Millions of dollars.

Table 2-29.–Bering Sea District triangle Tanner crab commercial fishery harvest data, 1992 – 2011.

| Season | Number of vessels | Harvest[a,b] | Number of crab[a] | Deadloss[b] | Pots lifted | Average Weight[b] | Average CPUE[c] | Value Exvessel[d] | Value Total[e] |
|---|---|---|---|---|---|---|---|---|---|
| 1992 - 1994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 1995 | 4 | 40,991 | 35,236 | 11,943 | 21,070 | 1.2 | 1 | $1.45 | $0.06 |
| 1996 | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 1997 - 1999 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 2000[f] | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2001[f] | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |
| 2003[f] | 1 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2004[f] | 4 | CF | CF | CF | CF | CF | CF | CF | CF |
| 2005 - 2011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |

*Note:* CF = confidential.
[a] Deadloss included.
[b] In pounds.
[c] Number of retained crab per pot lift.
[d] Average price per pound.
[e] Millions of dollars.
[f] Restricted to incidental harvest during grooved Tanner crab fishery.

Table 2-30.–Bering Sea District hair crab commercial fishery data, 1979 – 2011.

| | Number of | | | | Number of | | Number of Pots | | Average | |
|---|---|---|---|---|---|---|---|---|---|---|
| Season | Vessels | Landings | GHL[a] | Harvest[b,c] | crab[b] | Deadloss[c] | Registered | Lifted | Weight[c] | CPUE[d] |
| 1979 | 11 | 16 | - | 5,213 | 2,457 | 0 | NA | 9,908 | 2.1 | <1 |
| 1980 | 9 | 17 | - | 53,914 | 25,417 | 0 | NA | 14,506 | 2.1 | 2 |
| 1980/81 | 67 | 192 | - | 2,439,483 | 1,127,309 | 265,369 | NA | 172,695 | 2.2 | 7 |
| 1981/82 | 48 | 159 | - | 932,584 | 466,560 | 29,749 | NA | 117,518 | 2 | 4 |
| 1982/83 | 52 | 161 | - | 1,211,420 | 575,453 | 122,456 | NA | 84,346 | 2.1 | 7 |
| 1983/84 | 19 | 48 | - | 406,538 | 200,670 | 28,062 | NA | 20,414 | 2 | 10 |
| 1984[e] | 7 | 26 | - | 396,630 | 197,209 | 19,436 | NA | 22,392 | 2 | 9 |
| 1985[e] | 3 | 9 | - | 66,042 | 34,410 | 593 | NA | 3,905 | 2 | 9 |
| 1986 | 3 | 7 | - | 14,835 | 7,289 | 500 | NA | 4,720 | 2 | 2 |
| 1987[f] | 2 | CF | - | CF | CF | CF | CF | CF | CF | CF |
| 1988 - 1990[e] | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1991[e] | 7 | 42 | - | 377,708 | 441,533 | 0 | NA | 44,444 | 0.9 | 10 |
| 1992[e,f] | 9 | 20 | - | 240,767 | 203,758 | 11,495 | NA | 38,808 | 1.2 | 5 |
| 1992[e,g] | 10 | 47 | - | 1,198,590 | 1,127,948 | 65,674 | NA | 125,943 | 1.1 | 9 |
| 1993[e,f] | 4 | 5 | - | 3,038 | 2,347 | 0 | NA | 9,345 | 1.3 | <1 |
| 1993/94[e,g,h,i] | 19 | 129 | 3.0 | 2,331,686 | 1,936,795 | 124,596 | NA | 585,913 | 1.2 | 3 |
| 1994[e,g] | 10 | 55 | 1.1 | 1,199,246 | 897,070 | 49,275 | 13,350 | 287,954 | 1.3 | 3 |
| 1995[e,g] | 21 | 81 | 1.8 | 2,059,988 | 1,485,097 | 73,882 | 25,750 | 441,494 | 1.4 | 3 |

-continued-

Table 2-30.–Page 2 of 2.

| Season | Number of Vessels | Number of Landings | GHL[a] | Harvest[b,c] | Number of crab[b] | Deadloss[c] | Number of Pots Registered | Number of Pots Lifted | Average Weight[c] | Average CPUE[d] |
|---|---|---|---|---|---|---|---|---|---|---|
| 1996[e] | 19 | 99 | 0.9 | 745,804 | 485,735 | 32,495 | 20,680 | 410,548 | 1.5 | 1 |
| 1997[e] | 16 | 52 | 0.8 | 668,096 | 420,121 | 17,522 | 18,180 | 211,970 | 1.6 | 2 |
| 1998[e] | 12 | 31 | 0.4 | 307,739 | 188,784 | 17,392 | 14,330 | 128,495 | 1.6 | 2 |
| 1999[e] | 8 | 27 | 0.3 | 221,656 | 139,894 | 4,677 | 9,840 | 92,333 | 1.6 | 1 |
| 2000[e] | 3 | 3 | 0.3 | 1,546 | 1,058 | 0 | 3,900 | 3,300 | 1.5 | <1 |
| 2001 - 2011 | FC | FC | FC | FC | FC | FC | FC | FC | FC | FC |

*Note:* CF = confidential, FC = fishery closed, NA = not available.
[a] Guideline harvest level (GHL), in millions of pounds.
[b] Deadloss included.
[c] In pounds.
[d] Number of retained crab per pot lift.
[e] Permit fishery.
[f] Spring fishery.
[g] Fall fishery.
[h] Fishery opened November 1, 1993 and closed April 20, 1994.
[i] Includes seven vessels that landed hair crab incidental to Tanner crab.

Table 2-31.–Bering Sea District commercial hair crab fishery economic performance and season dates, 1979 – 2011.

| | Value | | Season | |
|---|---|---|---|---|
| Season | Exvessel[a] | Total[b] | Days | Dates |
| 1979 | $0.54 | $0.003 | 257 | 04/19-12/31 |
| 1980 | $0.75 | $0.04 | 244 | 01/01-08/30 |
| 1980/81 | $0.80 | $1.70 | 242 | 11/01-06/30 |
| 1981/82 | $0.55 | $0.50 | 288 | 11/01-08/15 |
| 1982/83 | $0.65 | $0.70 | 297 | 10/08-08/01 |
| 1983/84 | $1.20 | $0.50 | 335 | 08/01-06/30 |
| 1984 | $1.60 | $0.60 | 184 | 07/01-12/31 |
| 1985 | $1.60 | $0.10 | 365 | 01/01-12/31 |
| 1986 | $1.15 | $0.20 | 365 | 01/01-12/31 |
| 1987 | CF | CF | 365 | 01/01-12/31 |
| 1988 - 1990 | $0.00 | $0.00 | 365 | 01/01-12/31 |
| 1991 | $3.08 | $1.20 | 365 | 01/01-12/31 |
| 1992 | $2.25 | $0.50 | 32 | 01/01-06/04 |
| 1992 | $2.46 | $2.80 | 156 | 10/01-11/01 |
| 1993 | NA | NA | 45 | 04/01-05/15 |
| 1993/94 | $2.42 | $5.30 | 171 | 11/01-04/20 |
| 1994 | $3.55 | $4.00 | 41 | 11/01-12/12 |
| 1995 | $2.87 | $5.70 | 25 | 11/01-11/26 |
| 1996 | $2.65 | $1.90 | 31 | 11/01-12/02 |
| 1997 | $2.97 | $1.90 | 25 | 11/01-11/25 |
| 1998 | $2.70 | $0.80 | 16 | 10/08-10/23 |
| 1999 | $3.20 | $0.70 | 37 | 10/30-12/07 |
| 2000 | $3.84 | $0.005 | 7 | 10/30-11/05 |
| 2001 - 2011 | FC | FC | FC | FC |

*Note:* CF = confidential, NA = not available, FC = fishery closed.
[a] Average price per pound.
[b] Millions of dollars.

Table 2-32.–Bering Sea District commercial octopus incidental harvest in groundfish fisheries, 1995 – 2011.

| | State waters | | | State and federal waters | | | | |
|---|---|---|---|---|---|---|---|---|
| Season | Vessels | Landings | Whole pounds[a] | Vessels | Landings | Whole pounds[a] | At-sea discards | Exvessel value[b] |
| 1995[c] | 5 | 12 | 2,252 | 49 | 135 | 17,554 | 5,587 | $0.14 |
| 1996 | 6 | 10 | 1,195 | 63 | 191 | 26,343 | 21,144 | $0.33 |
| 1997 | 3 | 3 | 59 | 44 | 92 | 12,202 | 5,205 | $0.20 |
| 1998 | 4 | 8 | 673 | 47 | 81 | 8,204 | 5,624 | $0.03 |
| 1999 | 2 | CF | CF | 22 | 56 | 7,002 | 6,593 | $0.00 |
| 2000 | 4 | 6 | 551 | 78 | 272 | 39,915 | 23,611 | $0.03 |
| 2001 | 2 | CF | CF | 62 | 158 | 49,641 | 41,215 | $0.03 |
| 2002 | 2 | CF | CF | 68 | 187 | 56,078 | 16,628 | $0.05 |
| 2003 | 4 | 7 | 4,064 | 80 | 237 | 122,443 | 27,780 | $0.63 |
| 2004 | 4 | 6 | 4,615 | 92 | 279 | 88,534 | 25,527 | $0.39 |
| 2005 | 5 | 19 | 4,033 | 80 | 271 | 156,381 | 12,583 | $0.65 |
| 2006 | 6 | 8 | 1,004 | 88 | 304 | 93,624 | 5,310 | $0.63 |
| 2007 | 4 | 6 | 1,946 | 110 | 375 | 102,128 | 37,436 | $0.45 |
| 2008 | 5 | 7 | 7,177 | 82 | 252 | 66,742 | 14,071 | $0.47 |
| 2009 | 1 | CF | CF | 67 | 144 | 20,107 | 7,858 | $0.30 |
| 2010 | 1 | CF | CF | 81 | 201 | 67,187 | 35,477 | $0.24 |
| 2011 | 2 | CF | CF | 124 | 470 | 193,220 | 158,040 | $4.20 |

*Note*: CF = confidential.
[a] Includes discards.
[b] Average price per pound, based on landed weight.
[c] The 1995 directed fishery data is confidential, and is not included in this table.

Table 2-33.–Bering Sea District commercial snail harvest and economic performance data, 1992 – 2011.

| | Number of | | Number of pots | | | | Pounds | | Value | |
|---|---|---|---|---|---|---|---|---|---|---|
| Season | Vessels | Landings | Registered | Lifted | Harvest[a,b] | Deadloss[b] | per pot[d] | CPUE[c] | Exvessel[e] | Total[f] |
| 1992 | CF | CF | CF | CF | CF | CF | CF | CF | CF | CF |
| 1993 | 4 | 10 | 13,800 | 44,686 | 312,876 | NA | 7 | 25 | $0.40 | $0.13 |
| 1994 | 4 | 42 | 14,850 | 279,349 | 2,027,328 | 62,571 | 7.3 | 21 | $0.34 | $0.67 |
| 1995 | 4 | 38 | 18,800 | 262,096 | 2,352,825 | 22,371 | 9 | 28 | $0.30 | $0.70 |
| 1996 | 5 | 67 | 31,300 | 741,326 | 3,572,992 | 62,494 | 4.8 | 16 | $0.30 | $1.10 |
| 1997 | 3 | 17 | 14,500 | 191,893 | 932,048 | 77,131 | 4.9 | 16 | $0.36 | $0.31 |
| 1998 - 2011 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0.00 | $0.00 |

*Note:* CF = confidential, NA = not available.
[a] Deadloss included.
[b] In pounds.
[c] Number of snails per pot lift.
[d] Whole weight.
[e] Average price per pound.
[f] Millions of dollars.

Table 2-34.–North Peninsula District Dungeness crab commercial fishery data, 1992 – 2011.

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

*Note:* CF = confidential
[a] Deadloss included.
[b] In pounds.
[c] Number of retained crab per pot lift.
[d] Average price per pound.
[e] Millions of dollars.

Table 2-35.–Pot limits for Bering Sea and Aleutian Islands king and Tanner crab commercial fisheries, 2011/12.

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

[a] Pot limit is for entire fishery and is divided among participating vessels, with a maximum of 50 pots per vessel.

Table 2-36.–Number of Bering Sea and Aleutian Islands buoy tags printed and issued by fishery, 2011/12.

| Fishery | Tag sets issued | | Total sets issued | Tags issued | | Tags replaced | Total tags issued |
|---|---|---|---|---|---|---|---|
| | ≤ 125' [a] | > 125' [a] | | ≤ 125' [a] | > 125' [a] | | |
| Eastern Aleutian District Tanner | 3 | 0 | 3 | 120 | - | 0 | 120 |
| St. Matthew Section Blue King Crab | 12 | 6 | 18 | 2,220 | 1,151 | 0 | 3,371 |
| Pribilof Golden King Crab | 2 | 0 | 2 | 101 | - | 1 | 101 |
| **Total** | **17** | **6** | **23** | **2,441** | **1,151** | **1** | **3,592** |

[a] Overall vessel length.

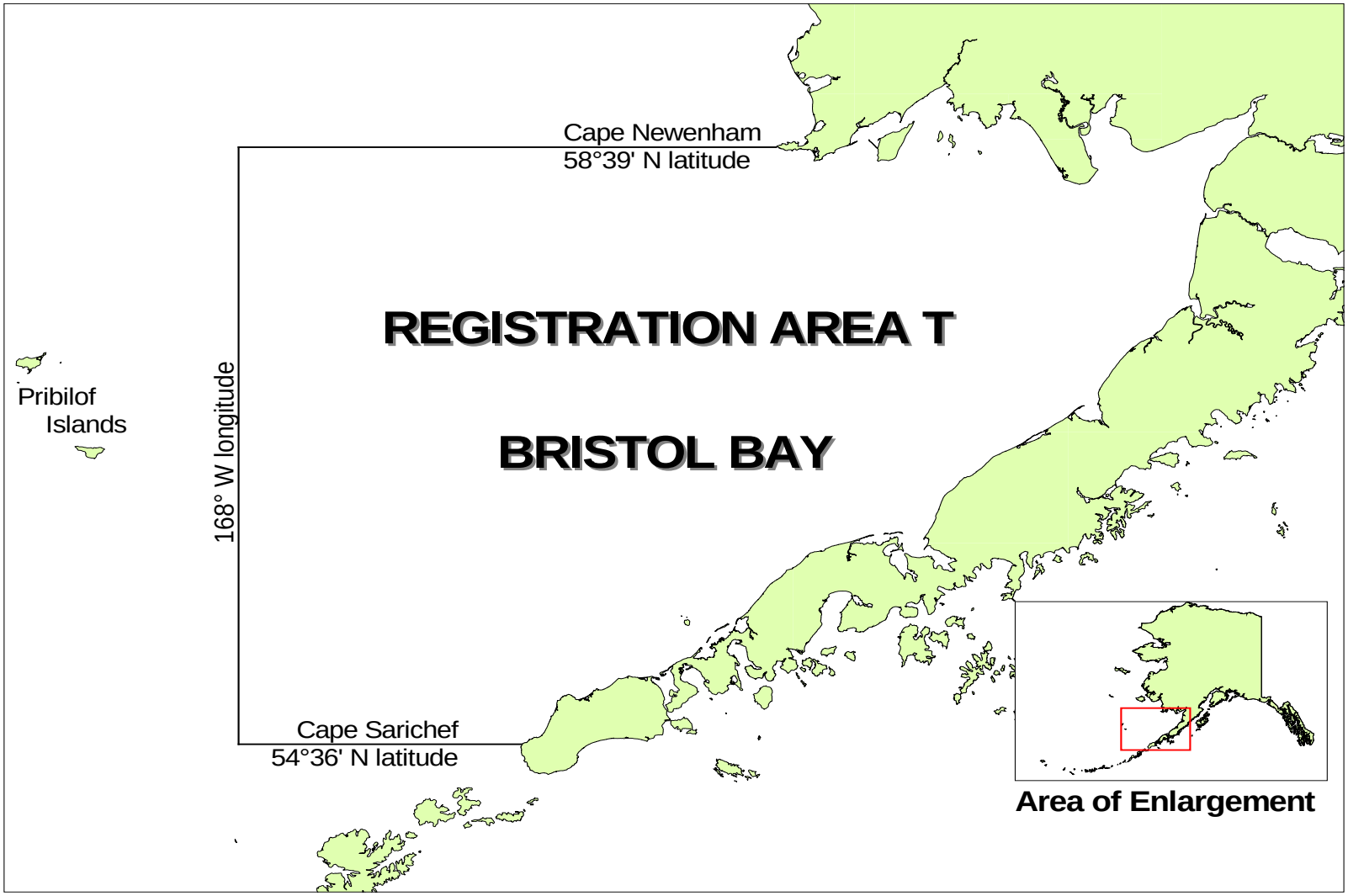


Figure 2-1.–Bristol Bay king crab commercial fishery Registration Area T.

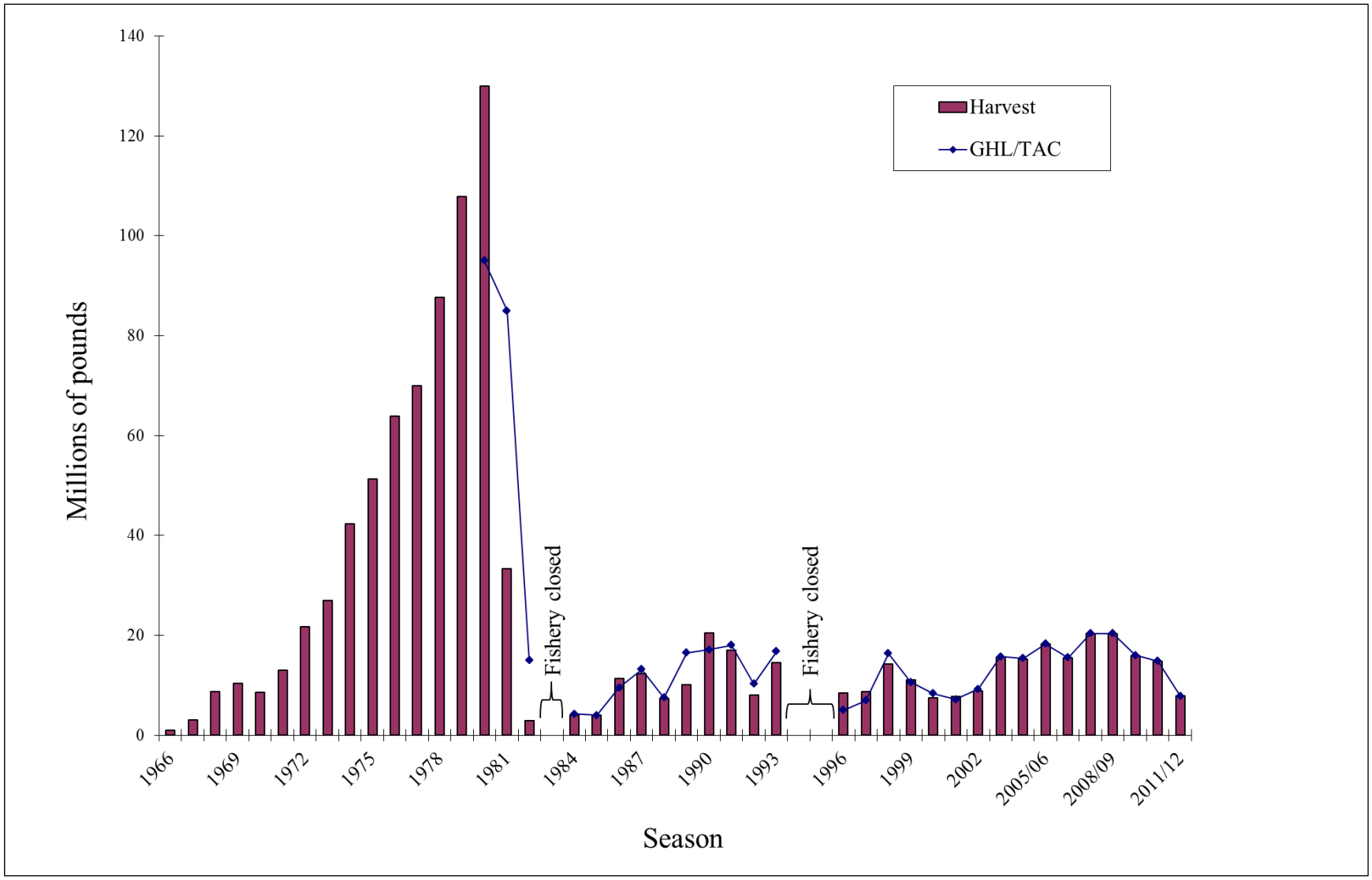


Figure 2-2.–Bristol Bay red king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest and guideline harvest level/total allowable catch (GHL/TAC), 1966 – 2011/12.

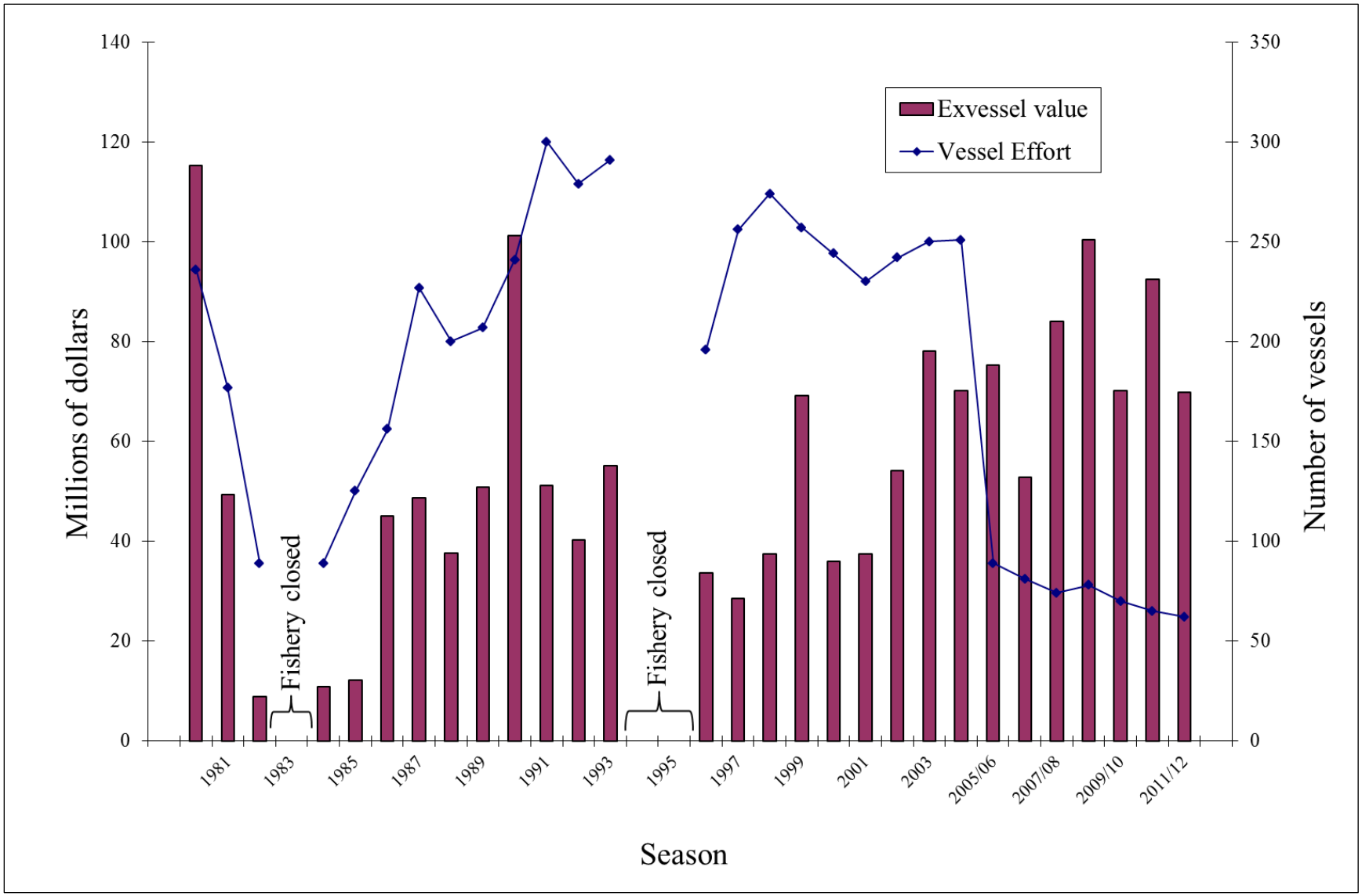


Figure 2-3.–Bristol Bay red king crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery exvessel value and vessel effort, 1980 – 2011/12.

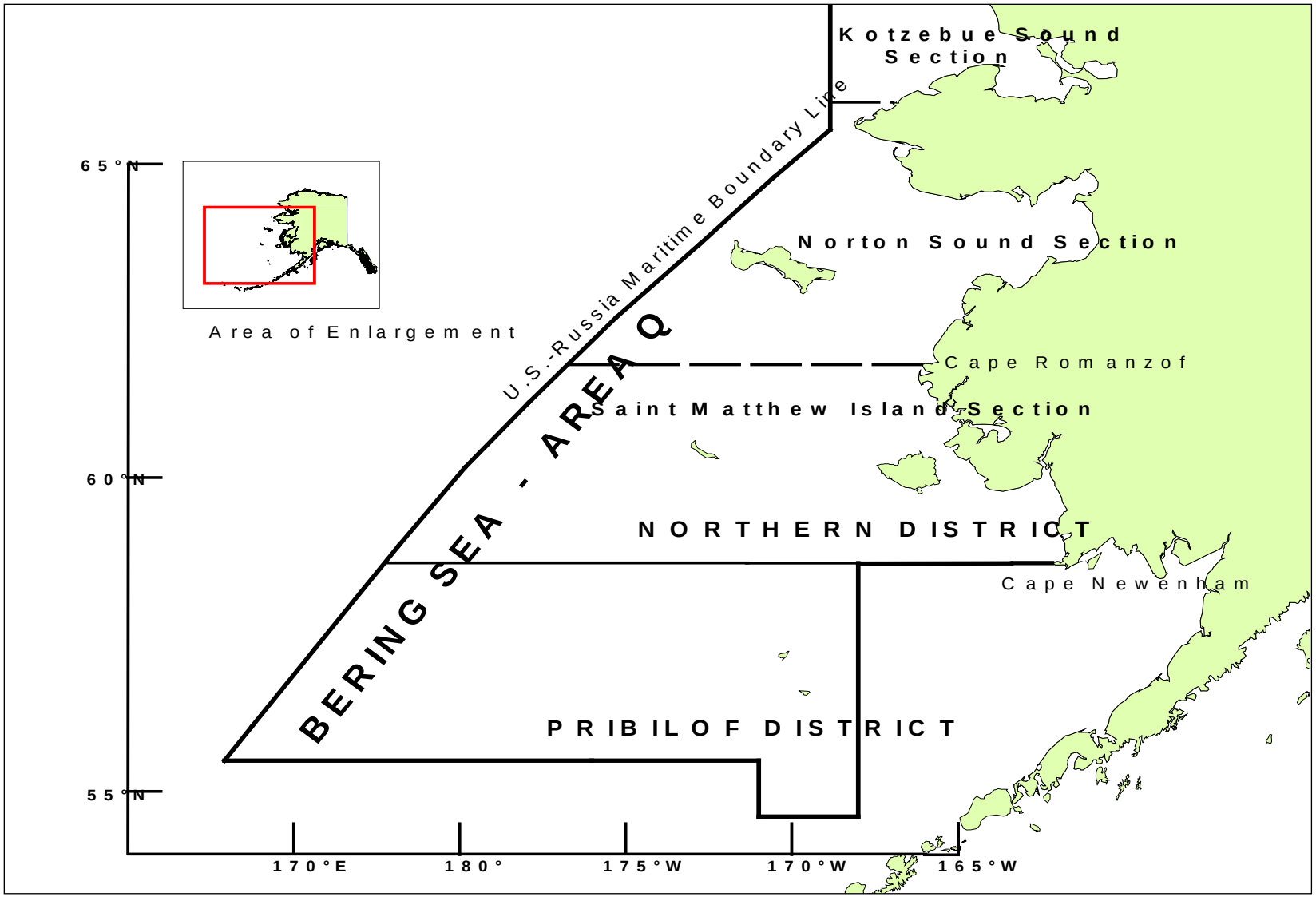


Figure 2-4.–Bering Sea king crab commercial fishery Registration Area Q.

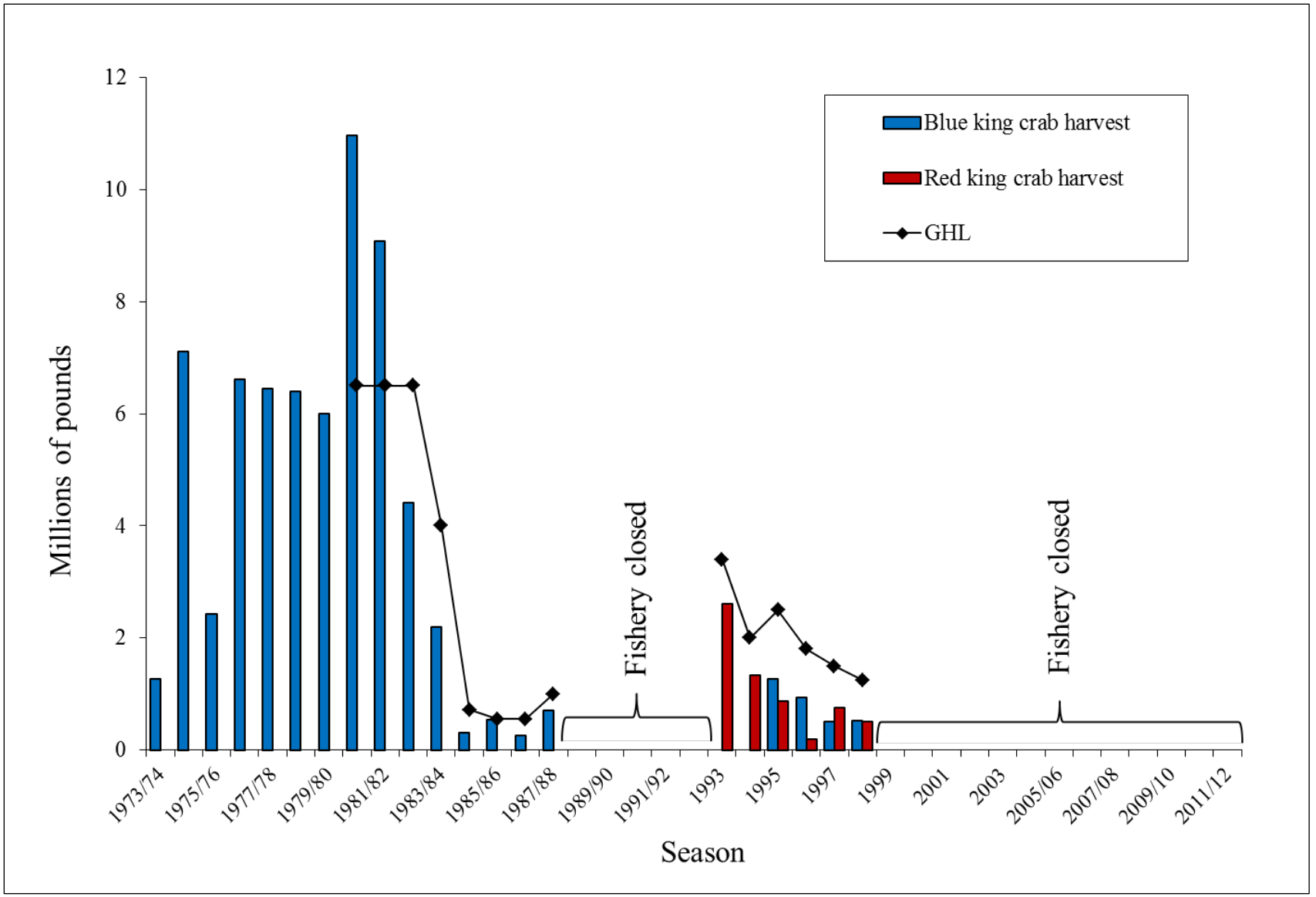


Figure 2-5.–Pribilof District red and blue king crab commercial fishery harvest and guideline harvest level (GHL), 1973/74 – 2011/12. GHL for red and blue king crab is combined from 1987/88 – 1995.

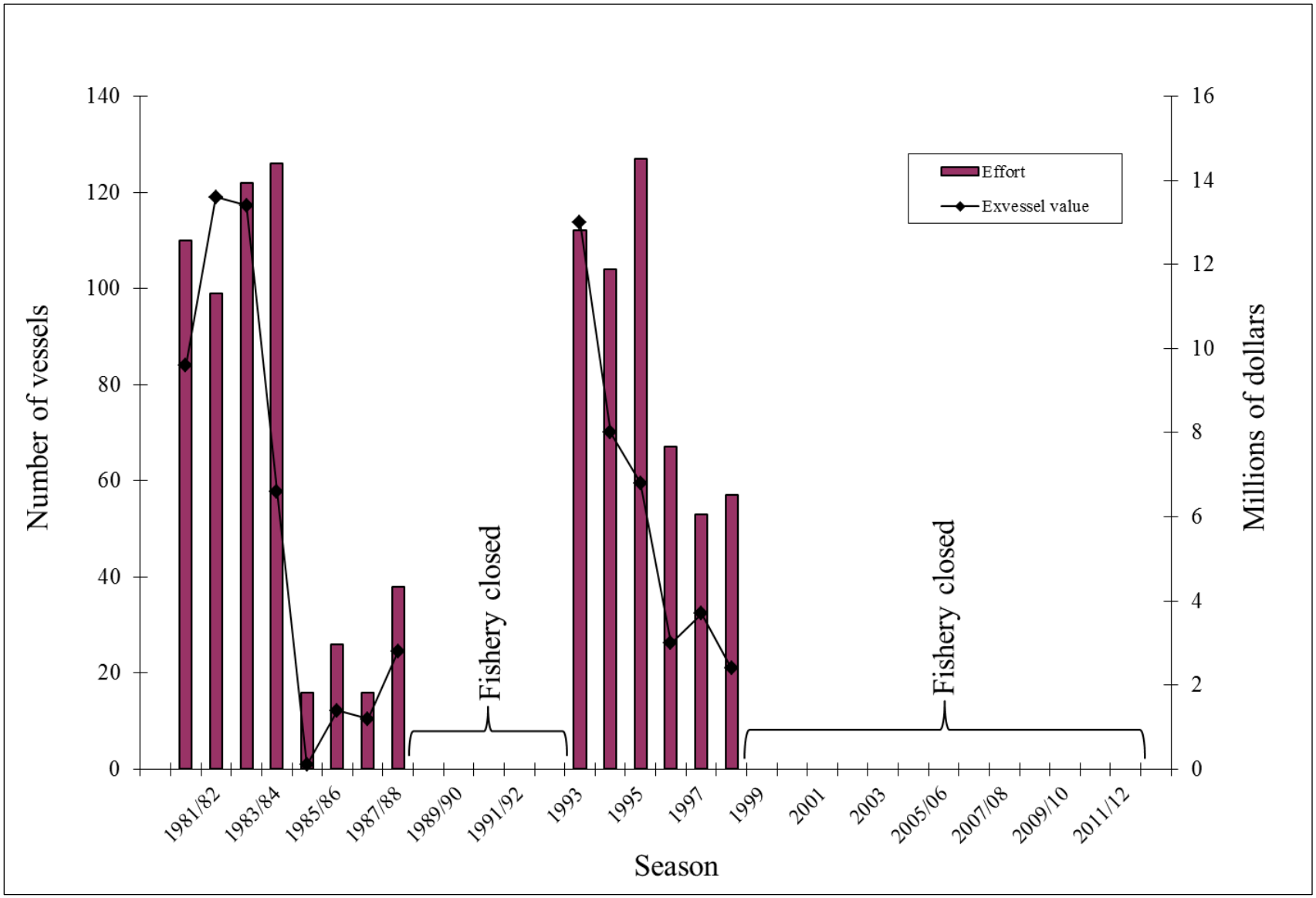


Figure 2-6.–Pribilof District red and blue king crab commercial fishery effort and exvessel value, 1980/81 – 2011/12.

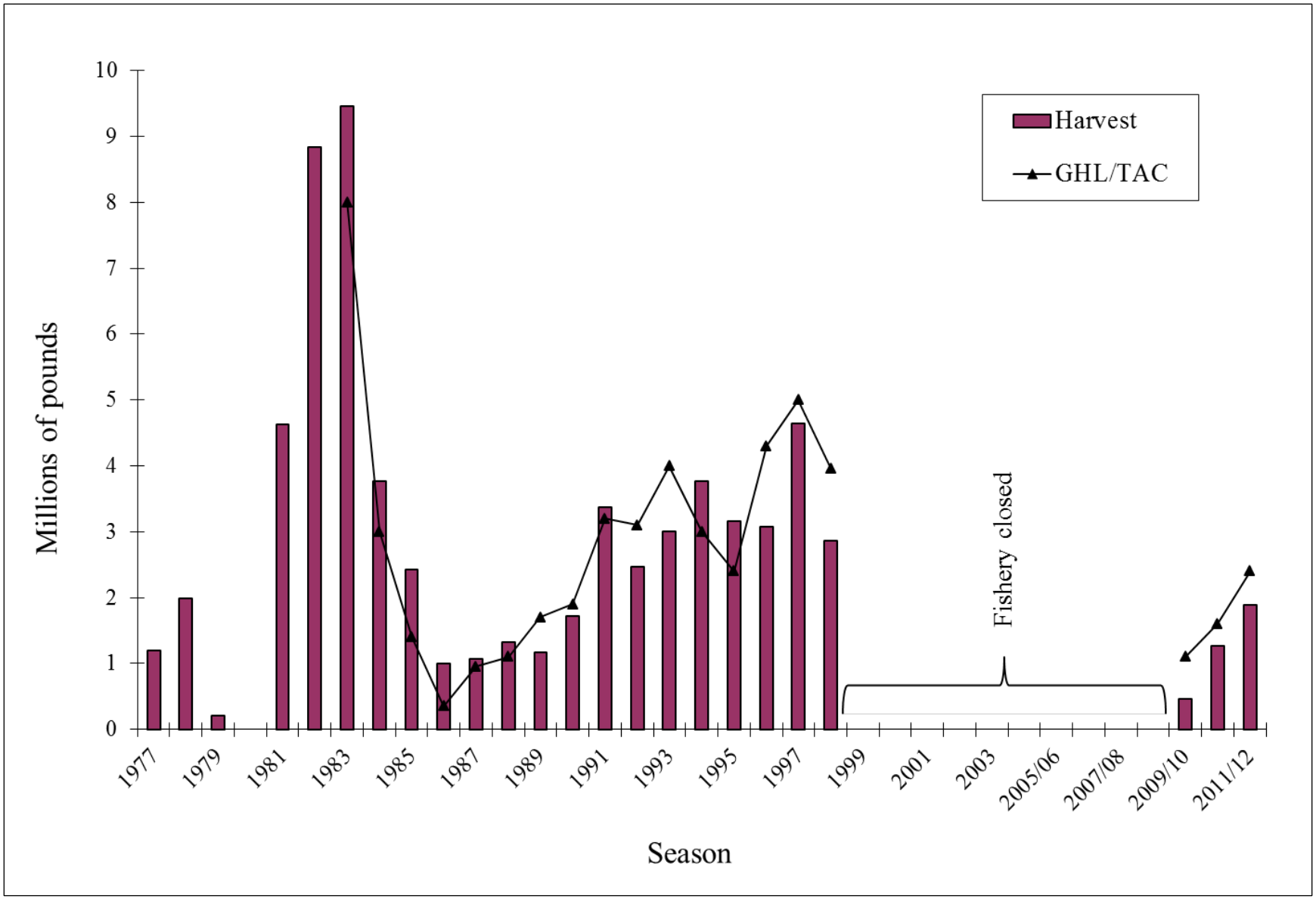


Figure 2-7.–Saint Matthew Island Section blue king crab commercial fishery harvest and guideline harvest level (GHL), 1977 – 2011/12.

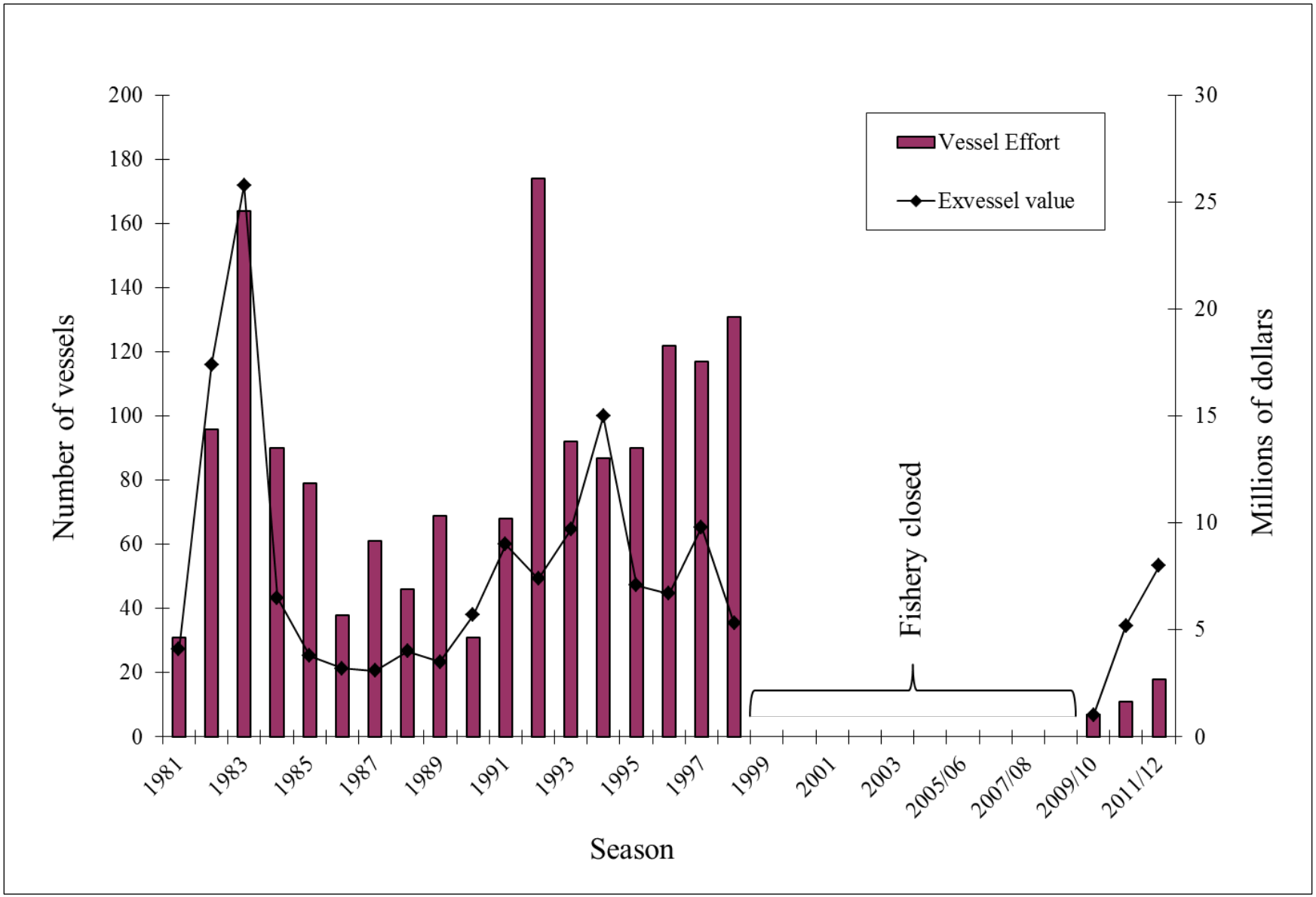


Figure 2-8.–Saint Matthew Island Section blue king crab commercial fishery effort and exvessel value, 1981 – 2011/12.

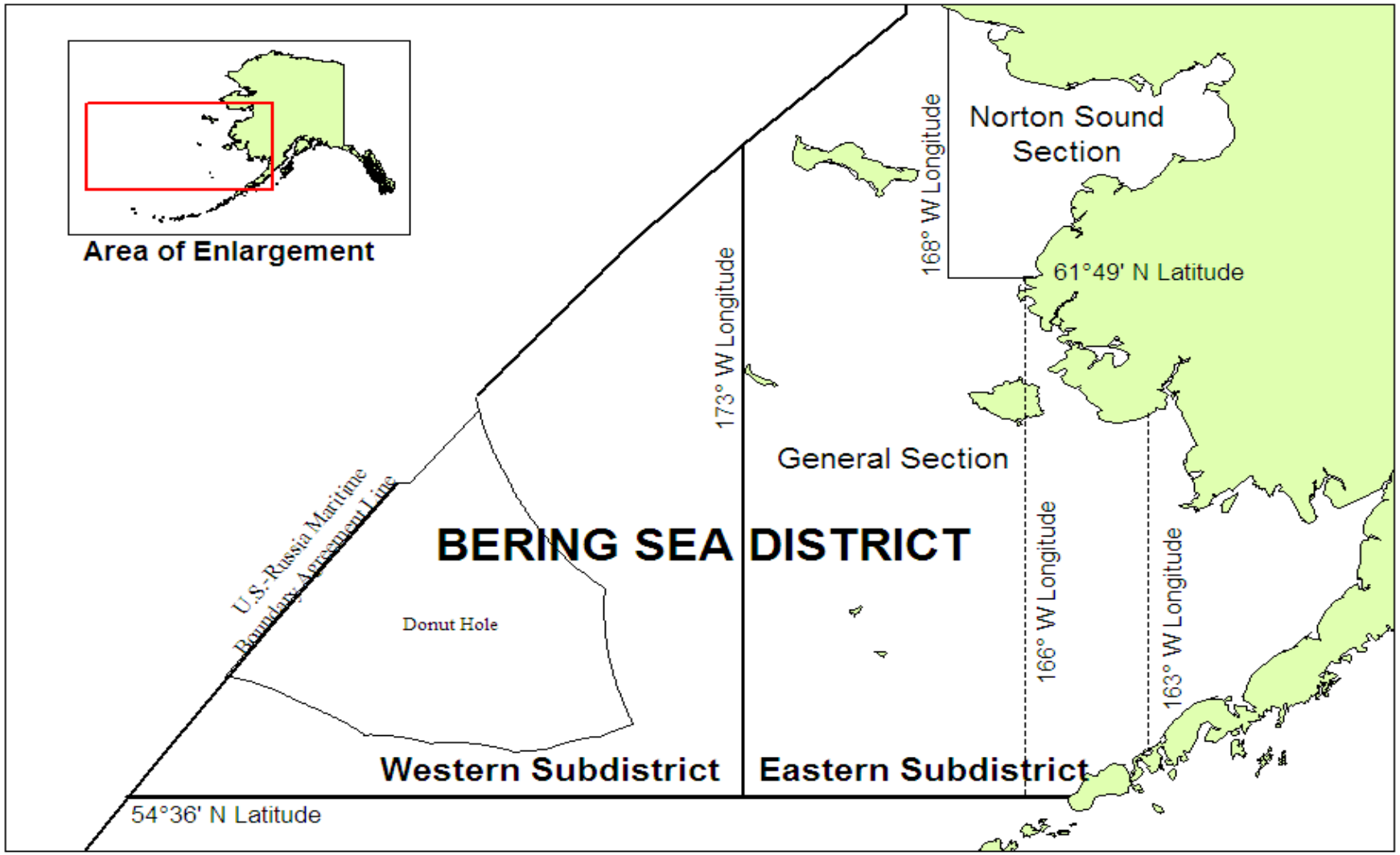


Figure 2-9.–Bering Sea District Tanner crab commercial fishery Registration Area J including subdistricts and sections.

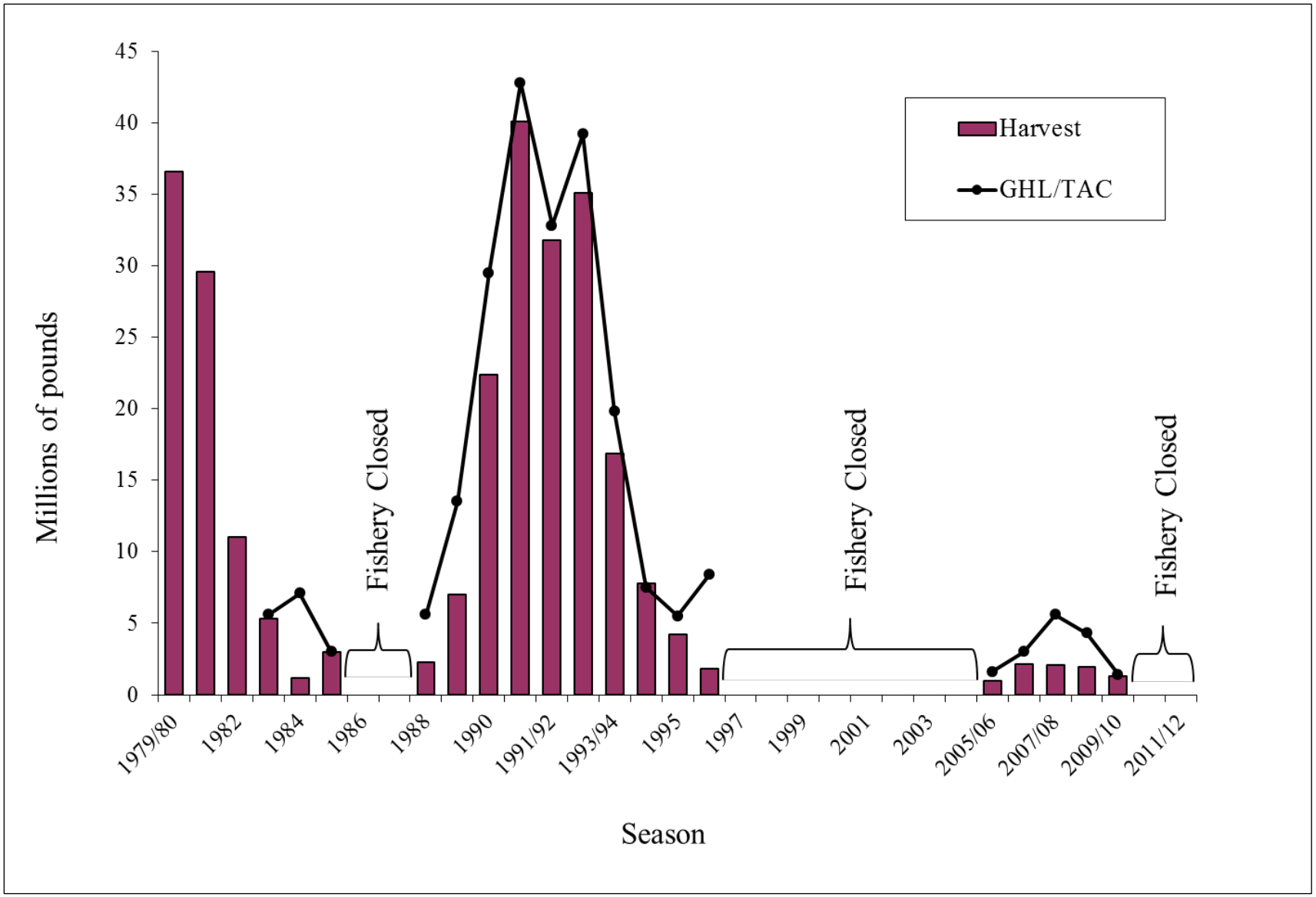


Figure 2-10.–Bering Sea District Tanner crab general, Community Development Quota (CDQ), and Individual Fishing Quota (IFQ) fishery harvest and guideline harvest level/total allowable catch (GHL/TAC), 1979/80 – 2011/12.

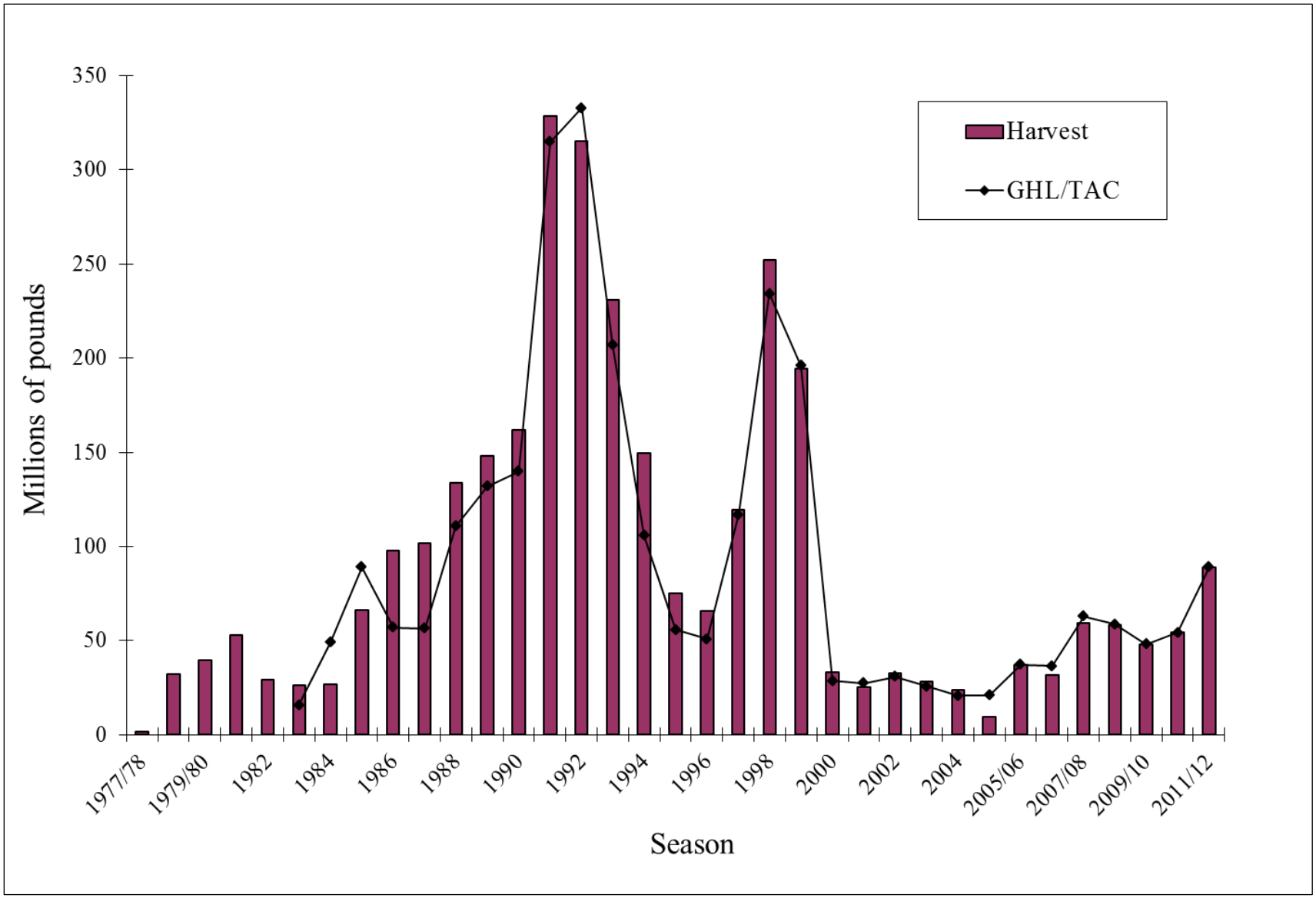


Figure 2-11.–Bering Sea District snow crab commercial fishery harvest and guideline harvest level/total allowable catch (GHL/TAC), 1977/78 – 2011/12.

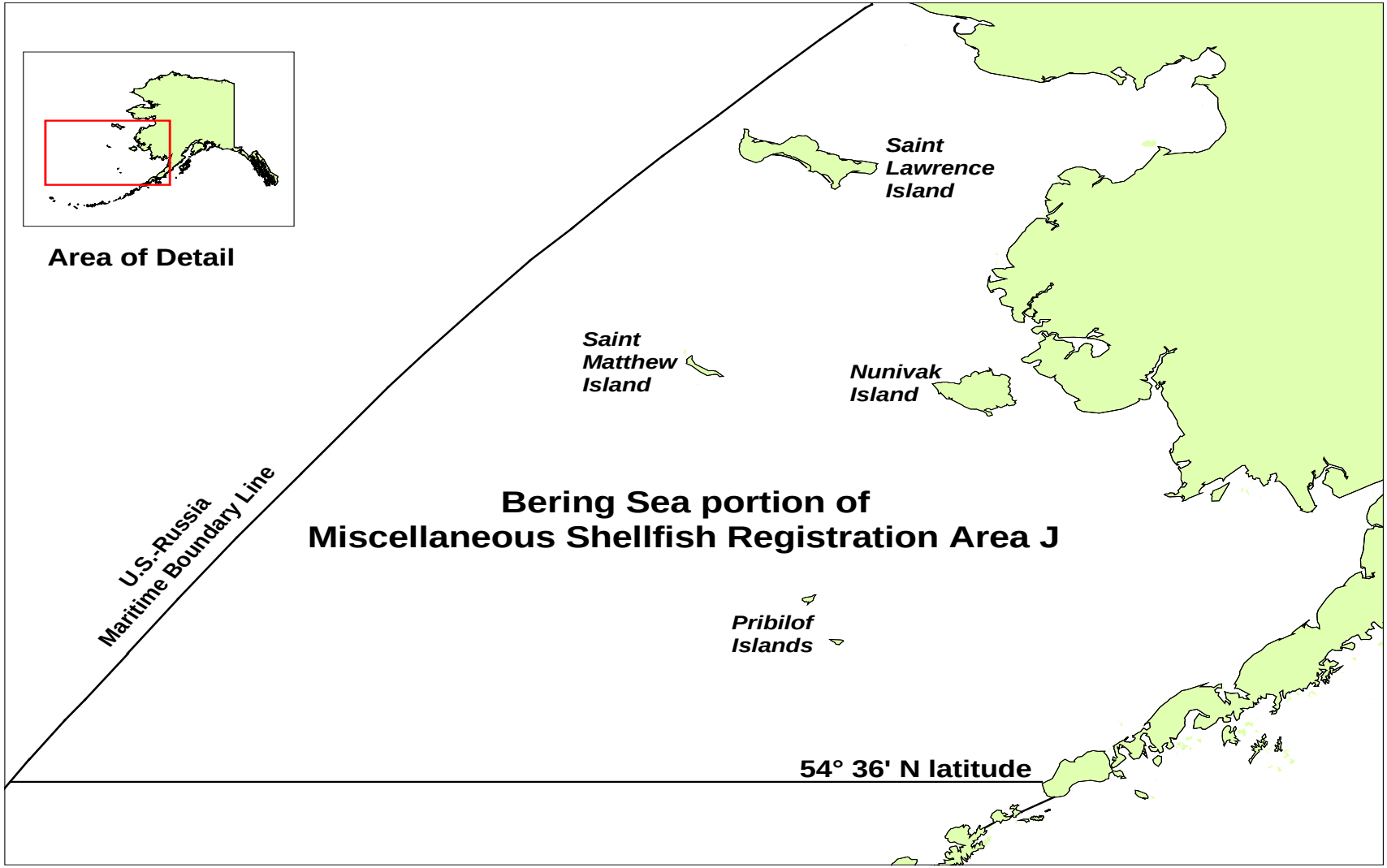


Figure 2-12.–Bering Sea portion of miscellaneous shellfish Registration Area J.

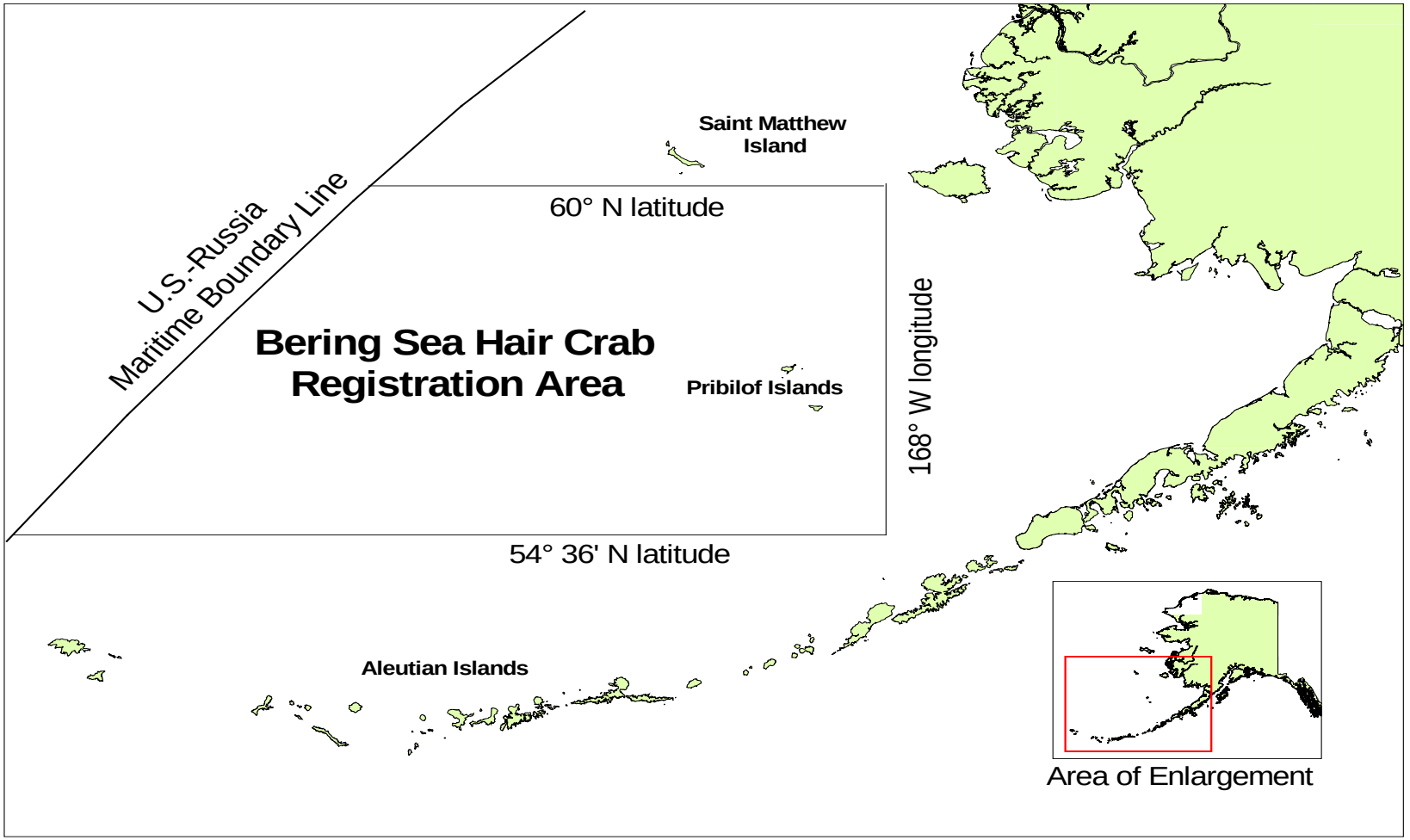


Figure 2-13.–Bering Sea hair crab fishing area of miscellaneous shellfish Registration Area J.

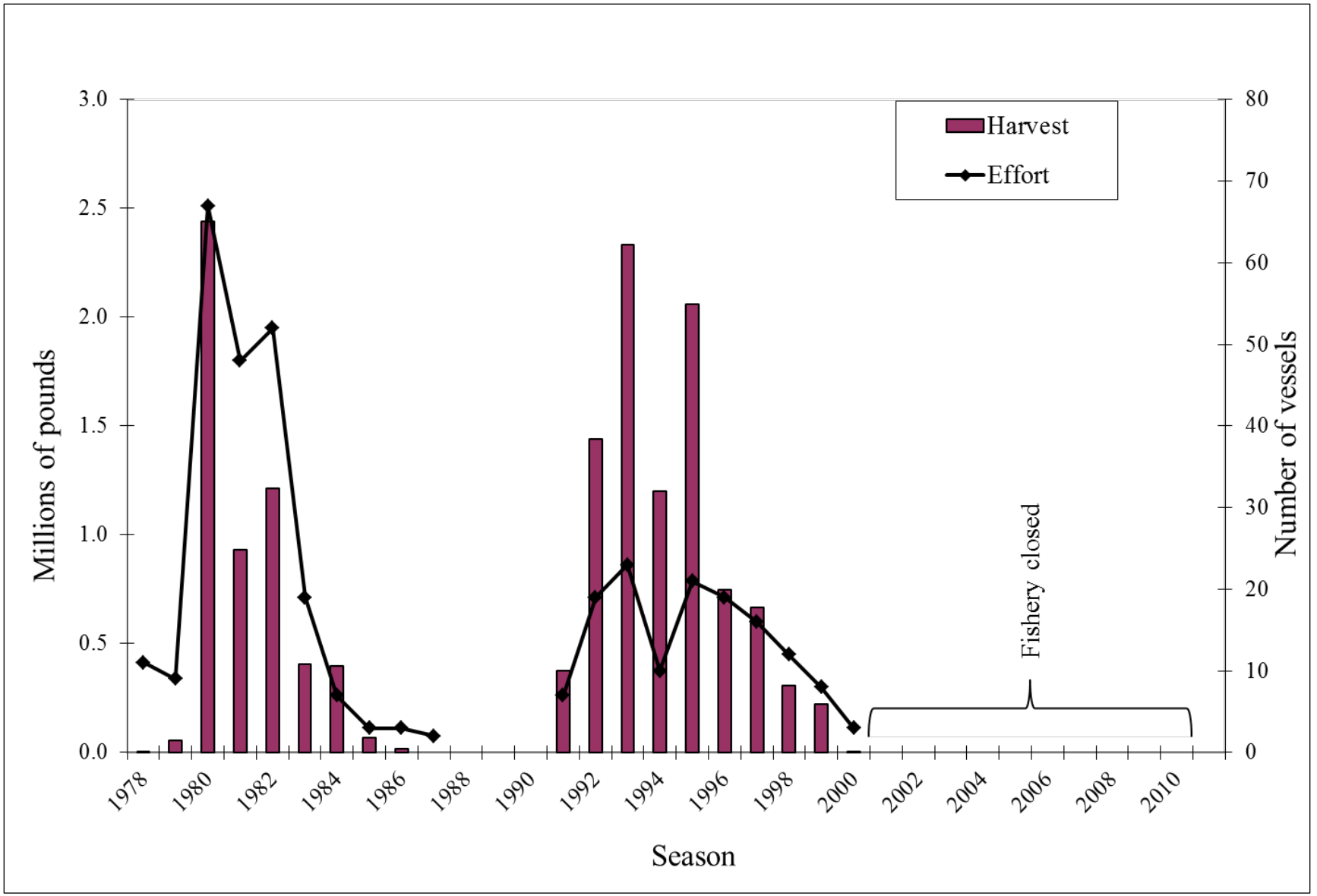


Figure 2-14.–Bering Sea hair crab commercial fishery harvest and effort, 1978 – 2011.

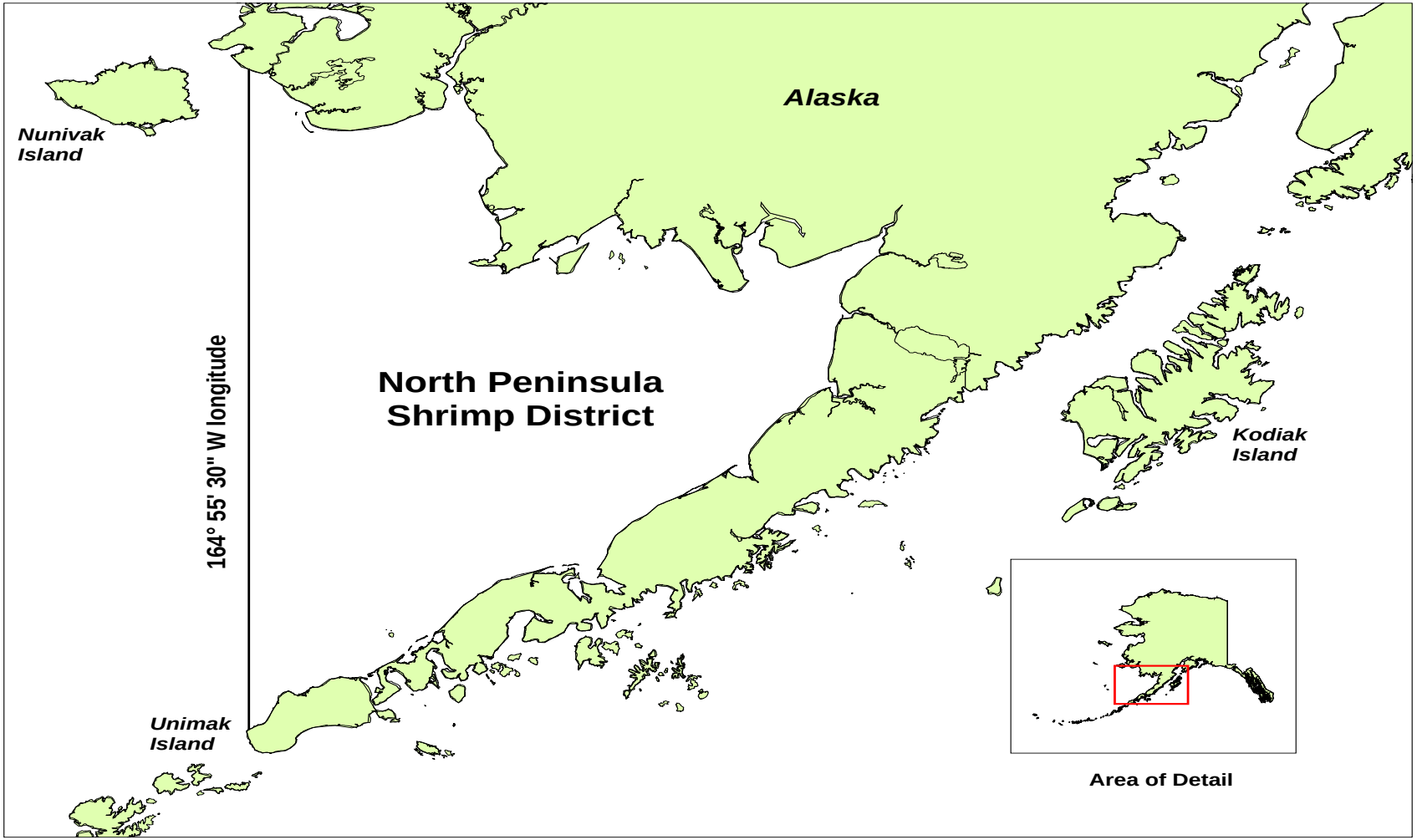


Figure 2-15.–North Peninsula District of shrimp Registration Area J.

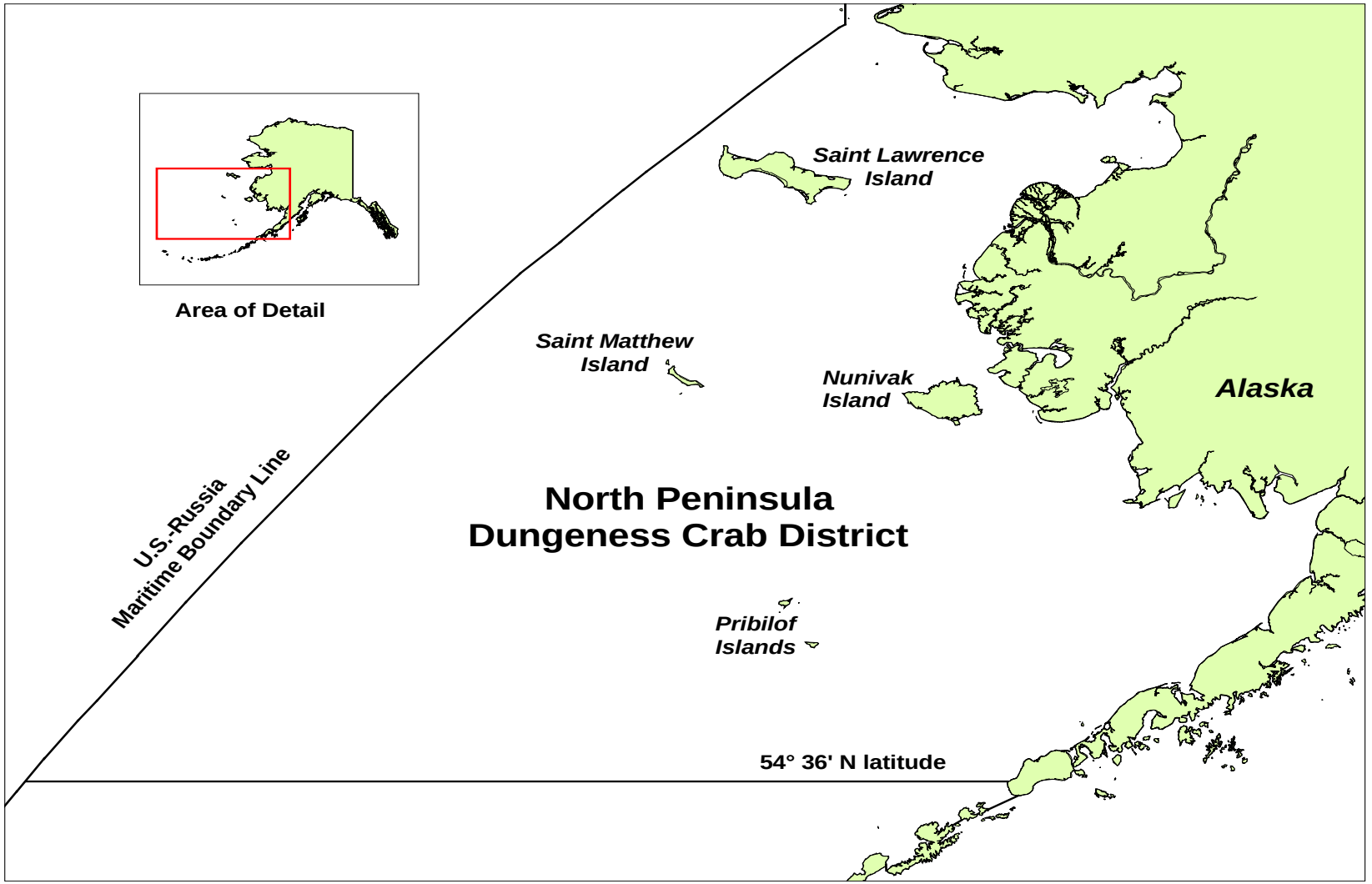


Figure 2-16.–North Peninsula District of Dungeness crab Registration Area J.

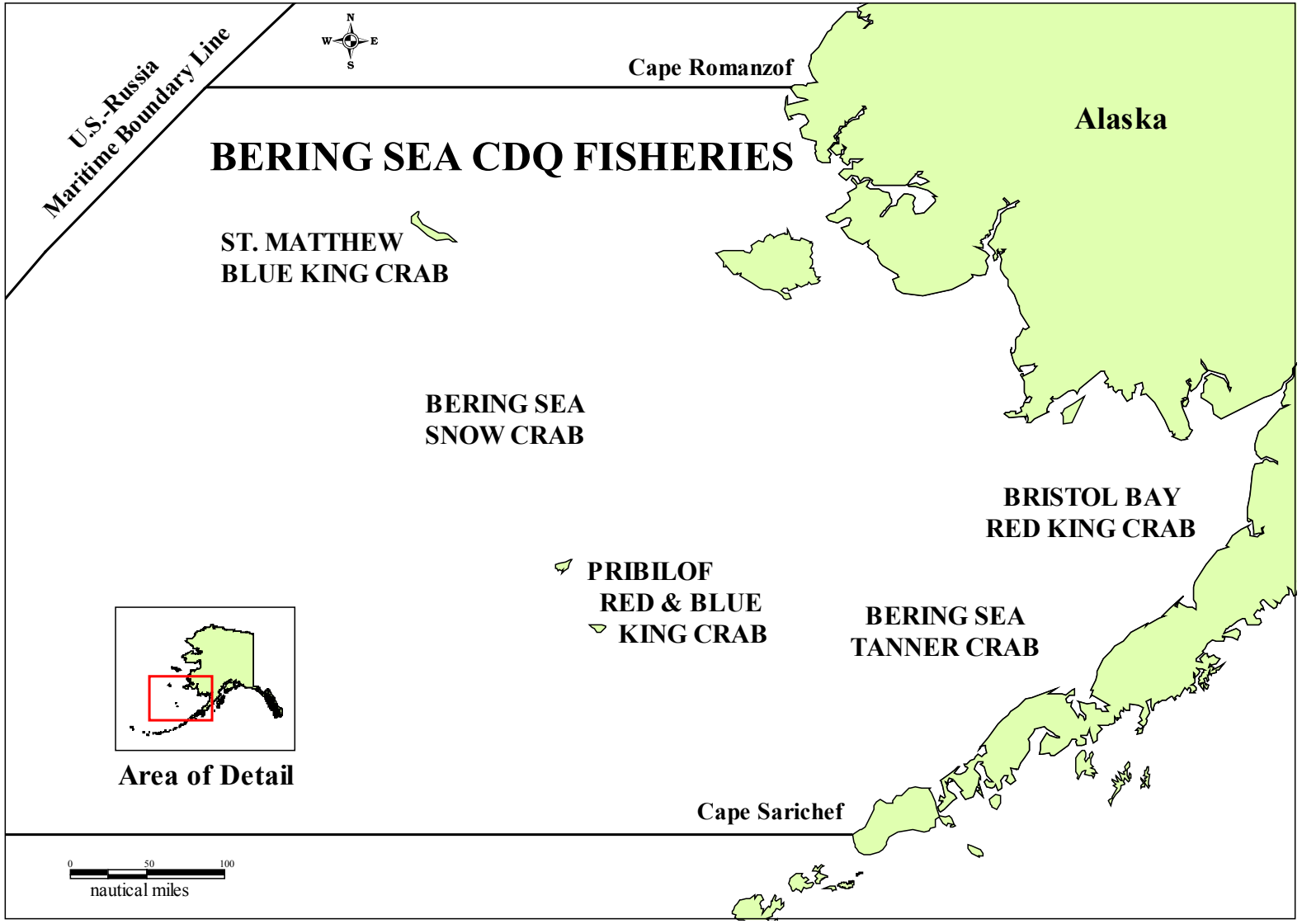


Figure 2-17.–Bering Sea Community Development Quota (CDQ) Program commercial crab fisheries managed by ADF&G, Westward Region.

# BACKGROUND AND HISTORY FOR THE COMMUNITY DEVELOPMENT QUOTA AND ADAK COMMUNITY ALLOCATION CRAB FISHERIES IN THE BERING SEA AND ALEUTIAN ISLANDS, 2011/12

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

## DESCRIPTION OF AREA

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

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

## CDQ PROGRAM BACKGROUND

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

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

CDQ groups are non-profit 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 3-1). CDQ groups receive

allocations for the following BSAI crab fisheries: Norton Sound red king crab *Paralithodes camtschaticus*, Bristol Bay red king crab, Pribilof red and blue king crab *Paralithodes platypus*, St. Matthew Island Section blue king crab, Bering Sea snow crab *Chionoecetes opilio*, Bering Sea Tanner crab *Chionoecetes bairdi*, Aleutian Islands golden king crab *Lithodes aequispinus* (east of 174° W long), and Aleutian Islands red king crab (west of 179° W long; Table 3.1). Groups may choose not to participate or transfer their allocation to another group. To be eligible as a CDQ crab fishery, the crab stock must have an established total allowable catch (TAC) and be managed under the federal BSAI crab fishery management plan (FMP).

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

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

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

## ACA PROGRAM BACKGROUND

In 2005, in conjunction with the CR program, the BOF adopted regulations for an ACA Western Aleutian Islands golden king crab fishery. The program was established to benefit the community of Adak, who created a group called the Adak Community Development Corporation (ACDC). ACDC is a non-profit 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 (DCCE) 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 percent of the TAC of the western Aleutian Islands (west of 174° W long) golden king crab fishery (Table 3-1). The fishery opened for the first time in August 2005.

## FISHERY HISTORY

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

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

CDQ regulations before Crab Rationalization authorized CDQ harvest prior to the general fishery; however, in 1998 the department did not allow CDQ harvest before the general fishery. A full understanding of the impact of new CDQ fisheries and adequate staff to handle the increased management was needed before allowing CDQ fisheries to occur prior to the general fisheries. National Marine Fisheries Service (NMFS) determined that the federal CDQ regulatory language did not allow for harvest of the allocation outside of the calendar year to which it was assigned. The federal CDQ regulations were revised, but not in time for harvest of the 1999 allocation of snow crab to occur in the fall of 1998. The BOF addressed an agenda change request at the March 1999 meeting that would prohibit CDQ harvest prior to the general fishery. Due to concerns that CDQ crabs on the market prior to the general fishery would be detrimental to the value of the general fishery, the BOF directed stakeholders to develop a plan for managing CDQ fisheries preseason. A compromise was adopted into regulation. The new regulation would allow a CDQ king or Tanner crab fishery prior to the general fishery only when the GHL was 50 million pounds or more, and a maximum of 30% of the CDQ allocation was allowed to be harvested preseason. However, no CDQ fishing ever occurred before the general fishery.

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

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

pre-season registered to participate in the IFQ and CDQ crab fisheries. During the Bristol Bay red king crab fishery, 20 percent of vessels have observer coverage for 100 percent of their fishing time. For Bering Sea snow crab fishery, 30 percent of vessels have observer coverage for 100 percent of their fishing time. During the Bering Sea Tanner crab fishery, 30 percent to 100 percent of the vessels are required to have observer coverage for 100 percent of their fishing time. Each vessel fishing for Aleutian Islands golden king crab is required to carry an observer for 50 percent of their harvest in each of three trimesters (August 15–November 15, November 16–February 15 and February 16–May 15). All remaining CDQ fisheries require 100% observer coverage.

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

During the March 2008 BOF meeting, pot limits were repealed in the Bristol Bay red king crab, Bering Sea Tanner crab, and Bering Sea snow crab fisheries. Because pot limits are no longer in place for these fisheries, CDQ fishermen no longer need buoy tags to participate. Pot limits and pot tags remain in effect for the Aleutian Islands red king crab, St. Matthew blue king crab, and Pribilof red and blue king crab CDQ fisheries.

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

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

# REFERENCES CITED

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

# TABLES AND FIGURES

Table 3-1.–The 2003–2011/12 Community Development Quota (CDQ) and Adak Community Allocation (ACA) percent allocation by crab fishery to each group.

| Fishery | Percent allocation by group[a] | | | | | | |
|---|---|---|---|---|---|---|---|
| | 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.

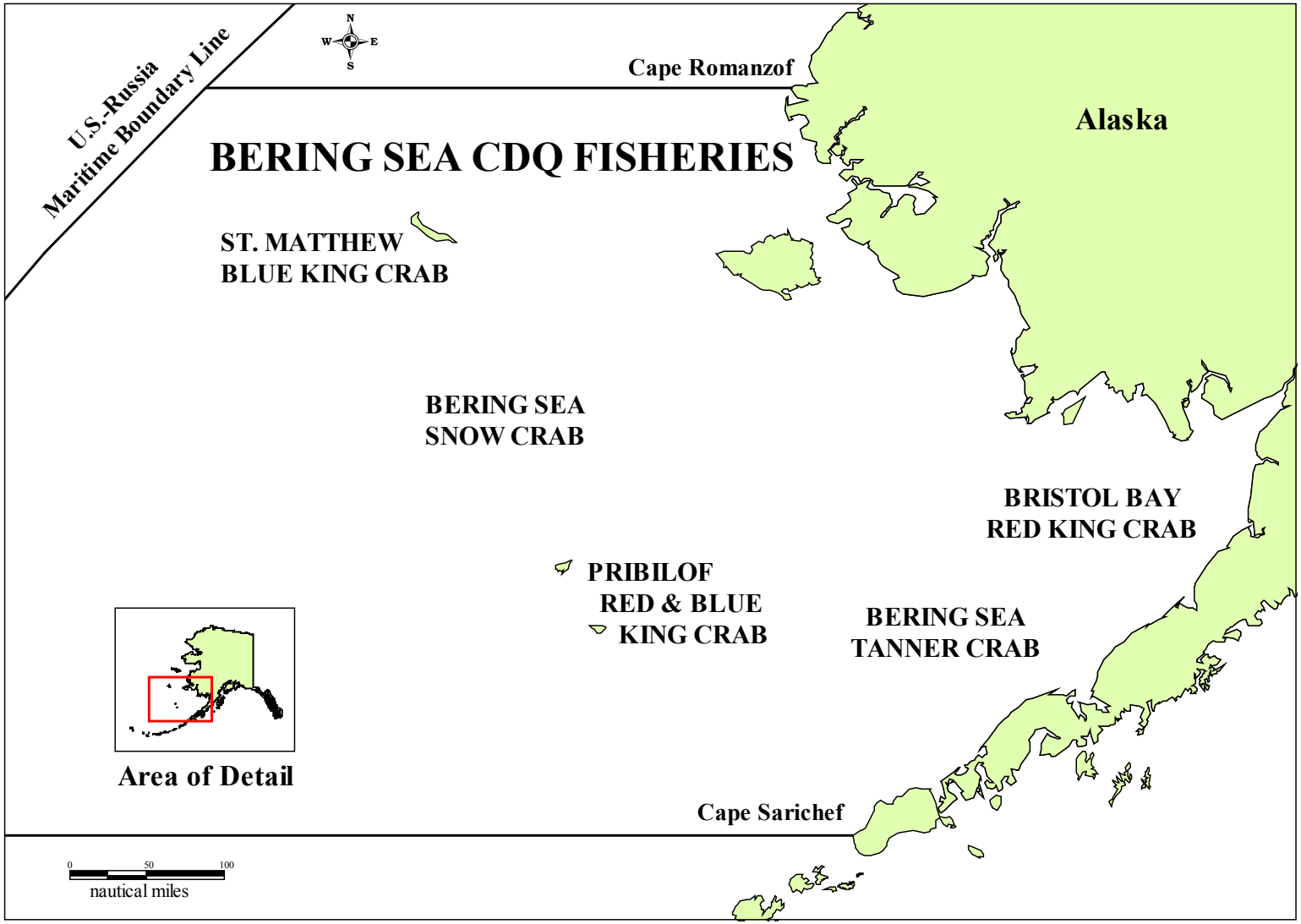


Figure 3-1.–Bering Sea Community Development Quota (CDQ) Program crab fisheries managed by ADF&G, Westward Region.

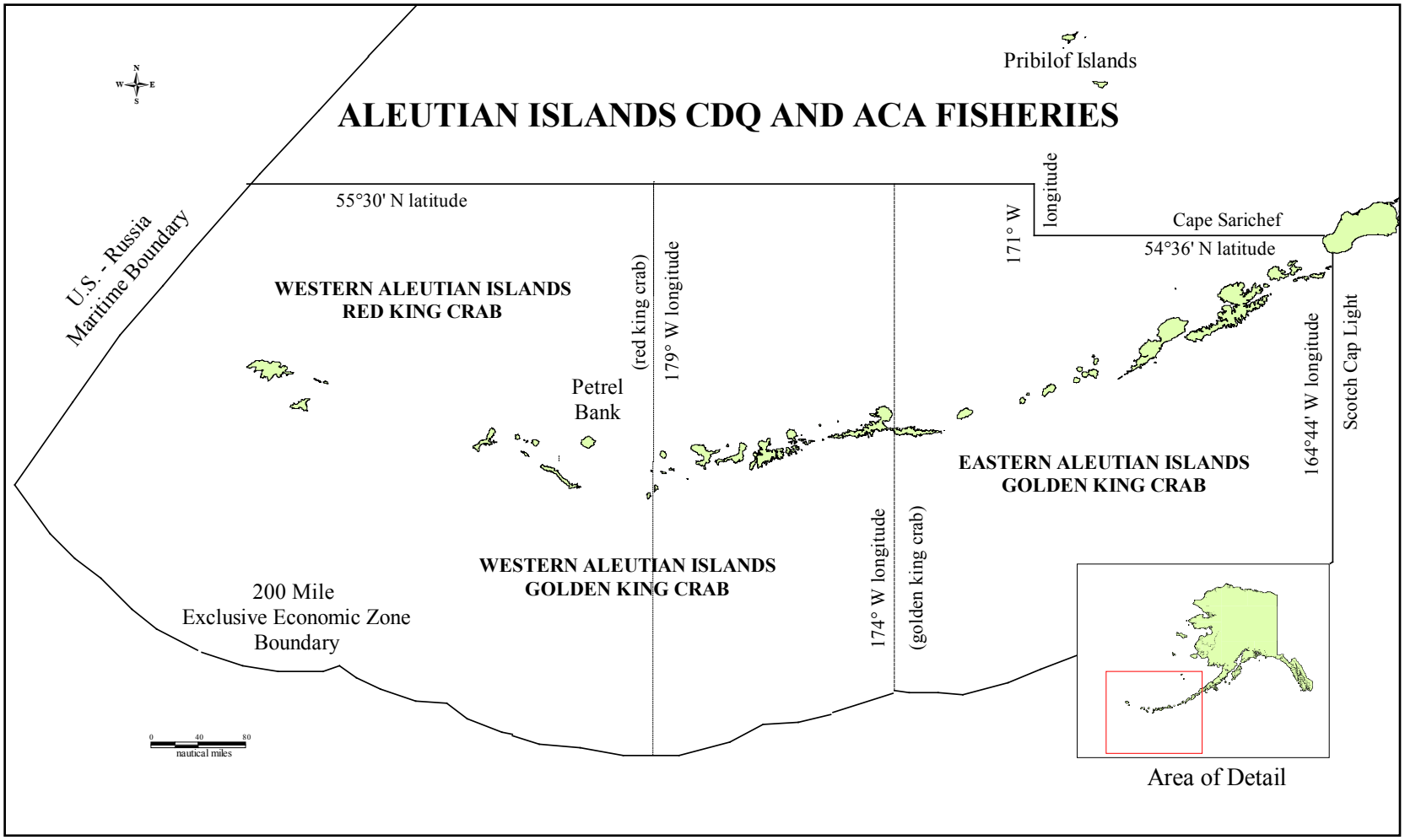


Figure 3-2.–Aleutian Islands Community Development Quota (CDQ) Program and Adak Community Allocation (ACA) crab fisheries managed by ADF&G.

# ANNUAL REPORT OF THE ONBOARD OBSERVER PROGRAM FOR THE BERING SEA AND ALEUTIAN ISLANDS CRAB FISHERIES, 2011/2012

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# INTRODUCTION

The State of Alaska's shellfish onboard observer data collection and fishery monitoring program is an integral component of Bering Sea and Aleutian Islands (BSAI) shellfish fisheries management. The Magnuson-Stevens Fishery Conservation and Management Act (MSA) states in Findings (8) "The collection of reliable data is essential to the effective conservation, management, and scientific understanding of the fishery resources of the United States" (DOC 2007). To achieve MSA requirements, State of Alaska regulation 5 AAC 39.645 (c) *Shellfish Onboard Observer Program* has determined that the deployment of onboard observers in commercial Bering Sea and Aleutian Islands Area crab fisheries, or any fisheries conducted under a commissioner's permit, as necessary for fishery management and data-gathering needs. Observer-collected data are used in annual crab stock assessments, determining harvest strategies, setting catch limits, evaluating the impact of various management actions, and in support of BSAI shellfish research.

This report provides an overview of the program's development and historical observer coverage levels, describes program regulations and guidelines and observer duties, and summarizes observer data collection efforts during the calendar year 2011 and fishing season 2011/12 for the BSAI crab fisheries.

# HISTORY OF THE STATE OF ALASKA'S SHELLFISH ONBOARD OBSERVER PROGRAM

Beginning in 1988 observers have been required by regulation on all vessels that process red king crab *Paralithodes camtschaticus*, blue king crab *P. platypus,* golden king crab *Lithodes aequispinus*, and Tanner crab *Chionoecetes bairdi*. The observer requirement was prompted by Alaska Department of Fish and Game (ADF&G) catch information suggesting illegal processing of undersize and female crab by catcher-processors (C/P) in BSAI fisheries. The shellfish onboard observer program was initially designed to monitor compliance of sex and size regulations of retained crab and collect data for inseason management of BSAI crab fisheries and was paid for by the harvesters under a policy referred to as "pay-as-you-go."

The first crab observer deployments occurred in September 1988 during the Bristol Bay red king crab fishery. In 1990 the Alaska Board of Fisheries (BOF) broadened observer coverage to include vessels processing snow crab *C. opilio* due to reports of undersize Tanner crab processed and labeled as snow crab. At that time the BOF also adopted ADF&G-proposed observer qualification standards and responsibilities. In the fall of 1991, the BOF additionally adopted ADF&G-proposed observer certification and decertification standards.

In 1992 observers deployed on three vessels prosecuting the Bering Sea hair crab *Erimacrus isenbeckii* fishery, and in 1993 ADF&G began requiring, as a condition of a commissioner's permit, 100 percent observer coverage on vessels in this fishery. In 1996 the Alaska Legislature passed House Bill 538 authorizing the Commercial Fisheries Entry Commission to regulate vessel licenses for the Bering Sea hair crab fishery. Regulation 5 AAC 39.645 (d) (5) (C) provides ADF&G the authority to require observer coverage on all vessels that fish hair crab; however, ADF&G has exempted vessels under 44 feet in length from mandatory observer coverage because of observer safety considerations (ADF&G 1998).

King and Tanner crab regulations 5 AAC 34.082 *Permits for Lithodes couesi king crab* (d) (5) and 5 AAC 35.511 *Permits for tanneri and angulatus Tanner crab in Registration Area J* (d) (5) implemented in 1994 allows ADF&G to require, as a condition of the commissioner's permit, observer coverage on vessels targeting scarlet king crab *L. couesi,* grooved Tanner crab *C. tanneri,* and triangle Tanner crab *C. angulatus*. Management and research efforts in these fisheries rely on observer-collected data on retained and discarded crab to describe impacts of fishing activities on crab populations. Beginning in 1995, observers were required on all vessels fishing Aleutian Islands (AI) red and golden king crabs. After the BSAI crab fisheries were rationalized, observer coverage requirements were reduced to 50 percent of the harvest on each vessel for the AI golden king crab fisheries.

By 1999 the number of C/Ps participating in various BSAI crab fisheries had decreased from 10 percent of the fleet in 1988 to three percent. As a result observer-collected data no longer provided sufficient information about fleet-wide activities and restricted the department's ability to adequately monitor bycatch. In 1999 the BOF granted ADF&G authority to deploy observers on any vessel participating in BSAI crab fisheries. The BOF also established a 15-member Crab Observer Oversight Task Force (COOTF) comprised of crab industry representatives to provide recommendations for the crab observer program to ADF&G. In addition to pay-as-you-go observer coverage, the BOF endorsed funding additional observer deployments through ADF&G cost-recovery fishing under State of Alaska test-fishery authority (Boyle and Schwenzfeier 2000). Test-fishery funding of a portion of the observer program began July 1, 2000. The COOTF is advisory to the BOF and ADF&G regarding funds that are used to pay for crab observer deployments. ADF&G annually reports test-fishery expenditures for crab observer deployments in BSAI crab fisheries to the COOTF. The ADF&G test fishery program is structured to allow unspent revenue to be carried across fiscal years.

Beginning in 2000 observer training and logistic efforts could not keep pace with the increase in observer coverage needs on catcher vessels (C/V). To address observer shortages, in 2002 the BOF relaxed conflict of interest standards by increasing the number of days a fisheries onboard observer may be deployed on a single vessel during 12 consecutive months from 90 to 120 days in fisheries greater than 75 days or longer in duration; 5 AAC 39.142 *Conflict of Interest Standards for Onboard Observers and Independent Contracting Agents* (a) (8). The BOF also increased the length of time a crab observer may be a trainee to allow observers sufficient time to obtain the experience needed to become certified. Regulation 5 AAC 39.143 *Onboard Observer Certification and Decertification* (c) (1) (B) permits ADF&G to extend a trainee permit an additional 365 days from the original expiration date.

A 1996 amendment to the MSA provided for development of a Community Development Quota (CDQ) program for specific Bering Sea crab fisheries, and in 1998 the crab CDQ fisheries were incorporated into existing state managed shellfish fisheries. CDQ fisheries were established for Bristol Bay red king crab, Bering Sea snow crab, Saint Matthew Island Section blue king crab, and Pribilof District red and blue king crab, where six CDQ groups received Bering Sea crab fisheries allocations.

From 1998 through 2000 observer coverage for Bristol Bay red king crab, Saint Matthew Island Section blue king crab, and Pribilof District red and blue king crab CDQ fisheries was set at 100 percent of all fishing operations on all vessels. From 2001 through 2004 observer coverage in these fisheries was reduced to one C/V per group at any time CDQ king crab were harvested. Coverage for Bering Sea snow crab CDQ was set at 100 percent of all C/V fishing operations in

1998 then was reduced in 1999 to one observer per CDQ group, with each group's observer deploying for at least one trip on each C/V in the group. Thereafter, CDQ snow crab observer coverage was increased to two C/Vs per group through 2005. All vessels processing CDQ crab were required to carry an observer 100 percent of the time. All CDQ observer coverage was pay-as-you-go.

In March 2005 the BOF adopted regulations to accommodate changes in fishing practices attending the Crab Rationalization (CR) Program, including implementation of an individual fishing quota (IFQ) fisheries management plan (5 AAC 39.670) for major BSAI crab fisheries. The North Pacific Fishery Management Council (NPFMC) established two CDQ crab fisheries as part of CR in 2005; Aleutian Islands CDQ golden king crab east of 174° W long, and Aleutian Islands CDQ red king crab west of 179° W long. The NPFMC also established one CDQ-type fishery; Aleutian Islands Adak Community Allocation (ACA) golden king crab fishery west of 174° W long (Milani 2010).

Beginning August 2005 observer coverage for BSAI IFQ, CDQ and ACA crab harvest is now included in provisions of 5 AAC 39.645. With CR, BSAI crab fishery seasons lengthened from short derby-style seasons to seasons of 90 or more days during which crab harvesters may fish IFQ and CDQ or ACA catch shares simultaneously.

Current observer program regulations adopted by BOF in conjunction with CR allow ADF&G to implement C/V observer coverage requirements in two ways for most CR fisheries when mandatory observer coverage is less than 100 percent. ADF&G may select a percentage of the registered vessels to carry observers during 100 percent of their fishing time or require that a specified percentage of harvest on each vessel be observed; 5 AAC 39.645(d)(3). Requirements for C/V observer coverage levels are 20 percent of participating vessels for Bristol Bay red king crab (BBR), 30 percent for Bering Sea snow crab (BSS), 100 percent for Saint Matthew Island Section blue king crab (SMB), 100 percent for Pribilof District red and blue king crab (PIK), 100 percent for Western Aleutian Islands red king crab (WAI), and 30 percent to 100 percent for both Eastern Bering Sea Tanner crab (EBT) and Western Bering Sea Tanner crab (WBT; Table 4-1). In cases where coverage is less than 100 percent, observed vessels are randomly selected from among all registered vessels in each year. Regulations for C/V observer coverage for both the Aleutian Islands golden king crab fishery east of 174° W long (EAG) and Aleutian Islands golden king crab fishery west of 174° W long (WAG) require every C/V to carry an observer during at least 50 percent of the harvest brought aboard and landed in during each of three trimesters dated August 15 through November 15, November 16 through February 15, and February 16 through May 15 of each registration year.

Funding for observer deployments on C/Vs in the BBR, EBT, WBT and BSS and corresponding CDQ fisheries is provided through cost-recovery test fishing and funds granted to ADF&G from proceeds generated by a federal CR fee. Observer coverage in the SMB, PIK, EAG, and WAG fisheries is pay-as-you-go (Table 4-1). ADF&G and COOTF determined that for fisheries where observer coverage is less than 100 percent and funding for observer costs is provided, randomly selecting vessels is the most cost effective and efficient manner in which to meet data collection needs. Under a pay-as-you-go system, selection of only a portion of the registered vessels to carry observers would unfairly require some harvesters to pay for observer coverage. For more on the history of Alaska's mandatory shellfish observer program see Boyle and Schwenzfeier 2000.

# SHELLFISH ONBOARD OBSERVER PROGRAM REGULATIONS AND GUIDELINES

Regulatory responsibilities for ADF&G, observer companies, observers, and vessels are specified in Alaska Statutes AS 16.05.050 *Powers and Duties of the Commissioner*, AS 16.05.055 *Onboard Observer Program*, and AS 16.05.251 *Regulations of the Board of Fisheries* and in the Alaska Administrative Codes 5 AAC 39.141 *Onboard Observer Program*, 5 AAC 39.142 *Conflict of Interest Standards for Onboard Observers and Independent Contracting Agents*, 5 AAC 39.143 *Onboard Observer Certification and Decertification*, 5 AAC 39.144 *Onboard Observer Independent Contracting Agent Certification and Decertification*, 5 AAC 39.146 *Onboard Observer Briefing and Debriefing*, 5 AAC 39.645 *Shellfish Onboard Observer Program*, and 5 AAC 39.646 *Shellfish Onboard Observer Trainee Program Qualifications and Requirements*.

## SHELLFISH OBSERVER PROGRAM RESPONSIBILITIES

The ADF&G shellfish observer program is responsible for briefing and debriefing observers, and establishing policies and procedures to implement regulations addressing certification and decertification of observers and observer contracting agents. ADF&G is responsible for establishing sampling procedures, and data collection and review protocols. To promote data consistency and reliability, ADF&G has developed observer training standards, and briefing, and debriefing protocols.

## INDEPENDENT CONTRACTING AGENT RESPONSIBILITIES

Regulations require independent observer contracting agents to hire, train, and support their observers with food, accommodations, sampling equipment, and transportation. These agents secure contracts for observer services directly with vessel representatives or with ADF&G, depending on the funding source for observer coverage. In 2011/12 six independent contracting agents were certified by ADF&G to provide onboard observers: Alaskan Observers Inc. (AOI), East-West Technical Services (EWTS), Marine Resources Assessment Group Americas (MRAG), Northwest Observers (NWO), Saltwater Incorporated (SWI), and TechSea International (TSI).

## OBSERVER RESPONSIBILITIES

Observer qualifications require a minimum of a Bachelor's degree in any branch of biology, a valid National Marine Fisheries Service (NMFS) observer certification, or other fisheries related experience or education approved by ADF&G, including minimum qualification requirements for an entry level ADF&G fishery biologist position. Observer candidates are required to undergo ADF&G approved training and must demonstrate 90 percent proficiency on the final ADF&G observer examination. As part of their instruction, observers must also participate in a practical training exercise administered by ADF&G. As representatives of ADF&G, observers are required to adhere to a specific set of professional standards as outlined in program regulations. Since 1991 the University of Alaska Anchorage North Pacific Fisheries Observer Training Center (OTC) has trained all BSAI crab observers. The OTC is supported with university, federal, and ADF&G funds.

## VESSEL OWNER AND OPERATOR RESPONSIBILITIES

BSAI crab harvesters procure observers through a certified observer contractor. Observers must be provided with food and accommodations equal to that of the vessel's crew. A dedicated and safe work area must be provided for catch sampling, along with a sufficient number of totes to hold the entire contents of each sample pot. Observers must be given opportunity and time to adequately sample catch according to detailed ADF&G data collection protocols. Harvesters are responsible for providing observers with accurate fishing effort, location, and harvest information, as well as access to communication equipment for contacting ADF&G. In fisheries with pay-as-you-go funding of observer coverage, harvesters are additionally required to secure and pay for observers.

Regulations require that each vessel carrying an observer meet United States Coast Guard (USCG) commercial fishing vessel safety standards and possess a current Commercial Fishing Vessel Safety Examination (CFVSE) decal.

# CRAB OBSERVER DUTIES

Onboard crab observers are tasked with a range of important duties requiring them to complete independent work assignments in a professional manner under oftentimes harsh and potentially dangerous conditions. These duties include species composition sampling of randomly selected crab pots, daily interviews with the vessel captain to obtain fishing effort, catch, and location information, documenting vessel and fishing activities, submitting regular reports to ADF&G, conducting size-frequency and legal-tally sampling of delivered catch, and estimating average weight of retained crab. Species composition sampling of randomly selected crab pots proceeds according to two distinct protocols. In "count-pot" sampling, observers identify and enumerate all organisms in the sampled pot, with all commercially important crabs classified by sex and legal status, as well as by species. In "measure-pot" sampling, observers additionally record the size of selected species of fish and all commercially important crabs along with other biological information about the crabs including shell condition, female clutch condition and fullness, and the presence of injury or disease.

Observers also monitor fishing operations for regulatory compliance. As part of observer training, the Division of Alaska Wildlife Troopers (AWT) instructs observers regarding evidence collection, documentation, and proper chain-of-custody procedures. In the event an observer reports a suspected violation, troopers will interview the observer and may request a written statement. Observers are also required to confirm the vessel is displaying a current CFVSE decal, and safety equipment on the vessel is in usable condition and possesses acceptable expiration dates. This inspection is conducted when observers first board their vessel. Observers may also be assigned other miscellaneous projects supporting a variety of studies and research efforts by ADF&G. These projects can include collection of marine specimens and other biological samples, gathering and recording data, documenting sea bird or marine mammal observations, and tag recovery. The full range of crab observer duties and responsibilities are described in the 2011 ADF&G Crab Observer Training and Deployment Manual available through the ADF&G Dutch Harbor office.

## CRAB CATCHER VESSEL

Crab observer duties on C/Vs include 1) daily, interview vessel's captain for confidential catch, effort, and location information, 2) during each fishing day, collect data on the entire contents of

a specified number of randomly selected pots including species composition and catch location, 3) at time of landing, (a) determine the average weight of retained crab, (b) conduct size-frequency samples of 100 randomly selected retained crab for species, sex, biological measurements, legal status and shell condition, (c) conduct legal tally samples of 600 randomly selected retained crab for species, sex and legal status, 4) summarize fishing and landing information such as catch and effort per statistical area, average weight, deadloss weight, partial deliveries, crab retained for personal use, and number of rail-dumped and lost pots, and 5) regularly report information to ADF&G.

### CRAB CATCHER-PROCESSOR VESSEL

Crab observer duties on C/Ps include 1) daily, interview vessel's captain for confidential catch, effort, and location information, 2) during each fishing day, collect data on the entire contents of a specified number of randomly selected pots including species composition and catch location, 3) on a daily basis before crab are processed, (a) determine an average weight from a specified number of retained crab, (b) conduct size-frequency samples of 100 randomly selected retained crab for species, sex, biological measurements, legal status and shell condition, (c) conduct legal tally samples of 100 - 600 randomly selected retained crab for species, sex and legal status, 4) summarize fishing and landing information such as catch and effort per statistical area, average weight, crab retained for personal use, and number of rail-dumped and lost pots, and 5) regularly report information to ADF&G.

### CRAB FLOATING PROCESSOR VESSEL

Floating processor (F/P) observers sample the retained catch from crab vessels at each landing to the floating processor. Observer duties on F/Ps include 1) at time of landing, (a) interview vessel's captain for confidential catch, effort, and location information, (b) determine the average weight of retained crab, (c) summarize fishing and landing information such as catch and effort per statistical area, average weight, deadloss weight, partial deliveries, number of crab retained for personal use, and rail-dumped and lost pots, (d) conduct size-frequency samples of 100 randomly selected retained crab for species, sex, biological measurements, legal status and shell condition, and (e) conduct legal tally samples of 600 randomly selected retained crab for species, sex and legal status, and 2) report information to ADF&G for each landing.

## 2011/2012 OBSERVER PROGRAM ACTIVITY

### OBSERVER PROGRAM TEST FISHERY

Test-fishery harvest and sale of crab was contracted to the highest bidder responding to the ADF&G's publicly solicited Invitation to Bid on July 19, 2011. The test fishery occurred in October 2011 with an ADF&G representative onboard the contracting vessel. Test-fishery harvest was 82,192 live pounds of Bristol Bay red king crab which generated $600,002 in revenue. Harvested crab were purchased from ADF&G for $7.30 per pound, with the cost to harvest being the responsibility of the purchaser (Tables 4-2 and 4-3).

### 2011/12 ALEUTIAN ISLANDS GOLDEN KING CRAB FISHERY OBSERVER ACTIVITY

The 2011/12 Aleutian Islands golden king crab season opened on August 15, 2011, with TACs of 3.150 and 2.835 million pounds for EAG and WAG, respectively. Five vessels participated in

the 2011/12 Aleutian Islands golden king crab fishery, including four C/Vs and one C/P. Fishing commenced the first week of the season and continued throughout the season. No landings were made during the first week in November or third week in December (statistical weeks 48 and 52, Figure 4-1). The season closed by regulation on May 15, 2012. To preserve confidentiality, 2011/12 information for EAG and WAG management areas has been combined in this report.

Each catcher vessel in the Aleutian Islands golden king crab fishery is required to carry an observer during harvest of a minimum of 50 percent of its total harvest weight in each management area during each of three trimesters. (Observed harvest is defined as having an observer onboard while the vessel is operating fishing gear and retaining crab.) Observer coverage requirements for C/Ps and F/Ps are set at 100 percent. All observer coverage in EAG and WAG is pay-as-you-go (Table 4-1).

Catcher vessels made 64 landings and observed C/Vs harvested 64.6 percent of the EAG and WAG C/V catch. One C/P made 17 landings (Table 4-4). Observers on C/Vs were assigned a quota of seven measure pots per fishing day, whereas observers on C/Ps were assigned four measure pots per fishing day. Observers sampled 1,198 (2.7 %) of 44,241 pots lifted in the fishery. Catcher vessel observers sampled 866 (4.0 %) of 21,924 pots lifted on observed C/Vs and completed 30 size-frequency samples and 22 legal tallies. Catcher-processor observers sampled 332 (3.5 percent) of 9,386 C/P pots lifted and completed 90 size-frequency samples and 90 legal tallies (Table 4-5). Fishing occurred in 57 statistical areas (Table 4-6). There were 2,314 pot lifts in 7 statistical areas that had less than 50 percent observer coverage; of those, 47 pot lifts from three statistical areas were not observed. The other 44,241 pot lifts in 50 statistical areas were between 50 percent and 100 percent observed. All C/Vs that harvested Aleutian Islands golden king crab maintained a 50 percent or greater observer coverage level for each management area and trimester.

Observers reported harvest information to ADF&G every Monday morning. Observers deployed in EAG reported recovered tagged golden king crab and those deployed in WAG were required to measure and document red king crab bycatch.

## 2011/12 Western Aleutian Islands Red King Crab Fishery Observer Activity

The 2011/12 WAI was closed during 2011/12. Required observer coverage is set at 100 percent and is pay-as-you-go for all vessels (Table 4-1). Information about historical observer activity in the 2001 through 2003 Petrel Bank red king crab fishery is given in Table 4-7.

## 2011/12 Aleutian Islands Red King Crab Fishery, Between 171° W Longitude and 179° W Longitude, Observer Activity

The 2011/12 Aleutian Islands red king crab fishery between 171° W long and 179° W long was closed during 2011/12. Required observer coverage for red king crab harvest in this fishing area is set at 100 percent and is pay-as-you-go for all vessels (Table 4-1).

## 2011 Aleutian Islands Scarlet King Crab Fishery Observer Activity

No vessels registered to harvest scarlet king crab in 2011. Specific information about historical observer activity in this fishery is unavailable because harvest of scarlet king crab has been

minimal and incidental to golden king crab harvest. This fishery was not rationalized and scarlet king crab may no longer be harvested at the same time as golden king crab in the Aleutian Islands. Because little is known about scarlet king crab, 100 percent observer coverage with pay-as-you-go funding is required during all fishing activities (Table 4-1).

## 2011 Aleutian Islands Grooved Tanner Crab Fishery Observer Activity

No vessels registered to harvest grooved Tanner crab in 2011. Because little is known about grooved Tanner crab, 100 percent observer coverage with pay-as-you-go funding is required during all fishing activities (Table 4-1). Information about historical observer activity in grooved Tanner crab fisheries is located in Table 4-8.

## 2011 Aleutian Islands Triangle Tanner Crab Fishery Observer Activity

No vessels registered to harvest triangle Tanner crab in 2011. Harvest of triangle crab is typically incidental to grooved Tanner crab harvest. Because little is known about triangle Tanner crab, 100 percent observer coverage funded under the pay-as-you-go system is required during all fishing activities (Table 4-1).

## 2011/12 Bristol Bay Red King Crab Fishery Observer Activity

The 2011/12 BBR season opened on October 15, 2011 with a TAC of 7.834 million pounds. Sixty-two vessels participated in the fishery, including 60 C/Vs and 2 C/Ps. The season closed by regulation on January 15, 2012.

Sixteen (20%) of the 81 C/Vs that preseason registered were randomly selected to carry observers for 100 percent of their fishing activity, and sixteen (26.7%) of the 60 C/Vs that registered to fish carried observers throughout the season. ADF&G paid the cost of C/V observer deployments. Required observer coverage for C/Ps and F/Ps is 100 percent, with pay-as-you-go funding (Table 4-1). Observers on C/Vs were assigned a quota of seven measure pots per fishing day; observers on C/Ps were assigned a quota of four measure pots per fishing day. Observers reported harvest information to ADF&G every Monday morning.

Catcher vessels made 153 landings, with observed C/Vs harvesting 33.2 percent of the BBR C/V catch (Table 4-9). Observers sampled a total of 697 (1.5%) of 45,166 pots lifted in the fishery. Catcher-vessel observers sampled 647 (4.7%) of the 13,763 pots lifted on observed C/Vs and conducted 33 size-frequency samples and 27 legal tallies. Catcher-processor observers sampled 50 (3.6%) of 1,387 C/P pots lifted and conducted 46 size-frequency samples and 40 legal tallies (Table 4-10). Fishing occurred in 18 statistical areas with a total of 45,166 pot lifts (Table 4-11). There were 557 pot lifts in six statistical areas that had less than 20 percent observer coverage; of those, 307 pot lifts from five statistical areas were not observed. The other 44,603 pot lifts in 12 statistical areas were between 20 percent and 100 percent observed.

The C/V observer coverage level was maintained at 20 percent or greater from October 15 through November 6 (statistical weeks 42, 43, 44, and 45). Observer coverage was under 20 percent during the second and third week of November (statistical weeks 46 and 47, Figure 4-2).

## 2011/12 Saint Matthew Island Section Blue King Crab Fishery Observer Activity

The 2011/12 SMB season opened on October 15, 2011 with a TAC of 2.359 million pounds. Eighteen C/Vs participated in the fishery. Vessels commenced fishing during the second week of October (statistical week 42) and continued fishing through first week of December (statistical week 50; Figure 4-3). The season closed by regulation on February 1, 2012.

Observer coverage in this fishery is 100 percent, with pay-as-you-go funding (Table 4-1). In 2011/12 observers on C/Vs were assigned a quota of 10 measure pots per day and were required to report harvest information to ADF&G three times each week. Only C/Vs took part in this fishery. Observers sampled a total of 3,362 (6.9 %) of 48,554 pots lifted during the fishery and conducted 51 size-frequency samples and 51 legal tallies. The fleet made 90 landings and harvested 1,881,332 pounds of crab (Tables 4-12, 4-13, and 4-14).

## 2011/12 Pribilof District Red and Blue King Crab Fishery Observer Activity

The 2011/12 PIK fishery has been closed since 1999 due to low stock abundance. Observer coverage is 100 percent with pay-as-you-go funding for all vessels (Table 4-1).

## 2011/12 Eastern Bering Sea Tanner Crab Fishery Observer Activity

The 2011/12 EBT crab season was closed.

ADF&G requires observer coverage on 30 percent to 100 percent of the C/Vs during 100 percent of their fishing. ADF&G covers the cost of observers for C/Vs in this fishery. The observer coverage requirement for C/Ps and F/Ps is 100 percent as pay-as-you-go (Table 4-1). The 2008/09, and 2009/10 EBT observer activity is located in Tables 4-15 and 4-16.

## 2011/12 Western Bering Sea Tanner Crab Fishery Observer Activity

The 2011/12 WBT crab season was closed.

ADF&G requires observer coverage on 30 percent to 100 percent of the C/Vs during 100 percent of their fishing. ADF&G covers the cost of observers for C/Vs in this fishery. The observer coverage requirement for C/Ps and F/Ps is 100 percent as pay-as-you-go (Table 4-1). The 2008/09 WBT observer activity is located in Tables 4-17 and 4-18.

## 2011/12 Bering Sea Snow Crab Fishery Observer Activity

The 2011/12 BSS crab season opened on October 15, 2011 with a TAC of 88.894 million pounds and closed on June 15, 2012. Seventy-four vessels participated in the fishery, including 70 C/Vs, 2 C/Ps, and 2 F/Ps. One unobserved vessel harvested snow crab during the fourth week in October (statistical week 44). Beginning the first week in November one observed vessel harvested snow crab through the beginning of December (statistical weeks 46 through 49). During the last week in December one unobserved vessel harvested snow crab (statistical week 53). From the first week in January to the close of the season (statistical weeks 1 through 24) observers were deployed on vessels every week. Harvest dropped off significantly during the

third week of April and the first week of May (statistical weeks 16 and 19) due to Bering Sea ice cover on much of the fishing grounds (Figure 4-4).

The BSS season in the eastern subdistrict (east of 173° W long) is usually closed by regulation on May 15, but due to record sea ice coverage of the Bering Sea, an ADF&G emergency order extended the season for waters between 171° and 173° W long through May 31 to coincide with the western subdistrict (west of 173° W long) closure at the end of May. Continued ice coverage led to a May 15 additional extension of the fishing season for all waters of the Bering Sea west of 171° W long through June 15 to allow complete harvest of the TAC. Full harvest of the 2011/12 snow crab TAC took 34 weeks compared to 18 weeks in 2009/2010 (48.017 million pounds) and 2010/2011 (54.281 million pounds), respectively.

Twenty-four (34%) of the 70 C/Vs registered for the fishery carried observers for up to 100 percent of their fishing activity. Although required coverage of observed C/Vs in this fishery is 100 percent of their fishing activity, during the 2011/12 season most of the observed C/Vs carried observers for less than 100 percent of the time as a result of logistical complications associated with the record sea ice coverage. ADF&G found it necessary to reduce overall C/V observer coverage in order to assure data collection throughout the extended season while remaining within budget constraints. Observer deployment on C/Vs in this fishery is typically paid for by ADF&G, but in 2011/12 industry provided some funding during the season extension in June. Observer coverage on C/Ps and F/Ps is 100% and is pay-as-you-go (Table 4-1). Observers on C/Vs were assigned a daily quota of one measure pot and three count pots; those on C/Ps were assigned a daily quota of one measure pot and two count pots. All observers reported harvest information to ADF&G every Monday morning.

Catcher vessels made 685 landings and the C/V harvest was 20.9 percent observed (Table 4-19). Observers sampled 2,179 (0.8%) of 270,602 pots lifted in the fishery. Catcher vessel observers sampled 1,796 (3.4%) of 52,983 pots lifted on observed C/Vs and conducted 130 size-frequency samples and 124 legal tallies. Catcher-processor observers sampled 383 (2.2%) of 17,076 pots lifted on C/Ps and conducted 157 size-frequency samples and 155 legal tallies. Observers on F/Ps conducted 64 size-frequency samples and 64 legal tallies (Table 4-20). Fishing occurred in 38 statistical areas. There were 218,911 pot lifts in 24 statistical areas that had less than 30 percent observer coverage; of those, 902 pot lifts in five statistical areas were not observed. The other 51,691 pot lifts in 14 statistical areas were between 30 percent and 100 percent observed (Table 4-21).

## 2011 Bering Sea Registration Area Golden King Crab Fishery Observer Activity

One catcher vessel registered to harvest Pribilof District golden king crab in the Bering Sea Area during 2011. Observer coverage is 100 percent with pay-as-you-go funding (Table 4-1). Harvest occurred in April and May. Observers sampled 463 (24.7%) of 1,872 pots lifted, and conducted two size-frequency samples and two legal tallies (Table 4-22).

## 2011 Bering Sea Hair Crab Fishery Observer Activity

The Bering Sea hair crab fishery has been closed since 2001 due to low stock abundance. Observer coverage is 100 percent with pay-as-you-go funding (Table 4-1). Information about historical observer activity is provided in Tables 4-23 and 4-24.

## 2011 Bering Sea District Grooved Tanner Crab Fishery Observer Activity

No vessels registered to harvest Bering Sea District grooved Tanner crab in 2011. Because little is known about grooved Tanner crab, the observer coverage requirement is 100 percent with pay-as-you-go funding (Table 4-1). Table 4-8 provides combined information about historical observer activity in the grooved Tanner crab fisheries.

## 2011 Bering Sea District Triangle Tanner Crab Fishery Observer Activity

No vessels registered to harvest triangle Bering Sea District Tanner crab in 2011. Triangle crab is typically harvested incidental to grooved Tanner crab. Because little is known about triangle Tanner crab, observer coverage is 100 percent under pay-as-you-go funding (Table 4-1).

## 2011 South Peninsula District Grooved Tanner Crab Fishery Observer Activity

No vessels registered to harvest South Peninsula District grooved Tanner crab in 2011. Because little is known about grooved Tanner crab, required, observer coverage is 100 percent under pay-as-you-go funding (Table 4-1). Combined information relating to historical observer activity in the grooved Tanner crab fisheries is given in Table 4-8.

# OBSERVER-COLLECTED DATA USE AND ANALYSIS

Observer-collected crab data are used to generate estimates of crab bycatch and bycatch mortality in BSAI crab fisheries. In addition, observer-collected data are used to characterize size composition of the retained catch and to document fishing practices and fleet behavior. Applications of observer-collected crab data are discussed in Schwenzfeier et al. 2000. ADF&G annually summarizes biological data collected by crab observers and observer-collected data are used in reports generated by ADF&G, NPFMC, and NMFS and are available to the public. The most recent summary and analysis of observer-collected BSAI crab fisheries data may be found in Gaeuman 2013.

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# TABLES AND FIGURES

Table 4-1.–Observer coverage levels in the Bering Sea and Aleutian Islands crab fisheries.

| Fishery | Preseason registration deadline [a] | Catcher vessels | | At-sea processors | |
|---|---|---|---|---|---|
| | | Observer coverage | Observer costs funded [b] | Observer coverage | Observer costs funded [b] |
| Saint Matthew Island Section blue king crab (SMB) | none | 100% | no | 100% | no |
| Pribilof District red & blue king crab (PIK) | none | 100% | no | 100% | no |
| Bering Sea golden king crab [c] | none | 100% | no | 100% | no |
| Bristol Bay red king crab (BBR) | Sep-24 | 20% [d] | yes | 100% | no |
| Eastern Bering Sea Tanner crab (EBT) | Sep-24 | 30–100% [d] | yes | 100% | no |
| Western Bering Sea Tanner crab (WBT) | Sep-24 | 30–100% [d] | yes | 100% | no |
| Bering Sea snow crab (BSS) | Sep-24 | 30% [c] | yes | 100% | no |
| Bering Sea hair crab | none | 100% | no | 100% | no |
| Area J grooved and triangle Tanner crab | none | 100% | no | 100% | no |
| Eastern Aleutian Islands golden king crab (EAG) | none | 50% [e] | no | 100% | no |
| Western Aleutian Islands golden king crab (WAG) | none | 50% [e] | no | 100% | no |
| Aleutian Islands red king crab between 171° W long and 179° W long | none | 100% | no | 100% | no |
| Western Aleutian Islands red king crab west of 179° W long (WAI) | none | 100% | no | 100% | no |

[a] When the preseason vessel registration deadline occurs on a weekend or holiday, the deadline is extended to the next business day.

[b] Catcher vessel (C/V) observer coverage is funded with test fishery revenue and a federal-fee reimbursement grant.

[c] Includes St. Matthew Island Section, Pribilof District and Bristol Bay Area.

[d] For Bristol Bay red king crab, Eastern and Western Bering Sea Tanner crab, and Bering Sea snow crab, the C/V coverage is the percentage of randomly selected C/Vs preseason registered for each fishery where C/V observer deployment costs are paid with test fishery revenues and federal funds.

[e] For Aleutian Islands golden king crab the coverage is set at a percentage of the harvest on each C/V during each of three trimesters.

Table 4-2.–Economic performance of the shellfish onboard observer program test fishery, 1999–2011.

| Year | Targeted species | Harvest [a] | Exvessel value | | | Charter dates | Charter days | Vessel charter cost |
|---|---|---|---|---|---|---|---|---|
| | | | Test-fish [b] | Fishery [b, c] | Total | | | |
| 1999 | Bristol Bay red king crab | 105,934 | $6.32 | $6.26 | $669,500 | 10/25–11/10 | 17 | $40,800 |
| 2000 | No test fishery | | | | | | | |
| 2001 | Bristol Bay red king crab | 90,048 | $5.12 | $4.81 | $461,045 | 10/23–11/08 | 17 | $46,925 |
| 2002 | Bristol Bay red king crab | 71,527 | $6.41 | $6.14 | $458,488 | 10/17–10/27 | 10 | $32,900 |
| 2003 | No test fishery | | | | | | | |
| 2004 | Bristol Bay red king crab | 116,521 | $5.13 | $4.71 | $598,245 | 10/21–11/01 | 14 | $49,900 |
| 2005 | Bristol Bay red king crab | 128,165 | $5.07 | $4.22 | $649,999 | 11/12–12/04 | 23 [d] | $69,900 |
| 2006 | Bristol Bay red king crab | 186,047 | $2.15 | $3.40 | $400,000 | 9/22–10/11 | 17 [d] | 0 [e] |
| 2007 | Bristol Bay red king crab | 78,360 | $4.02 | $4.19 | $315,000 | 10/02–10/12 | 10 [d] | 0 [e] |
| 2008 | No test fishery | | | | | | | |
| 2009 | Bristol Bay red king crab | 97,190 | $4.27 | $4.44 | $415,000 | 9/25–10/12 | 18 [d] | 0 [e] |
| 2010 | Bristol Bay red king crab | 52,718 | $5.50 | $6.28 | $289,949 | 9/26-10/15 | 19 [d] | 0 [e] |
| 2011 | Bristol Bay red king crab | 82,192 | $7.30 | $8.96 | $600,002 | 9/30-10/15 | 16 [d] | 0 [e] |

[a] Live pounds, deadloss not included.

[b] Price per pound.

[c] General fishery up to 2004 and Individual Fishing Quota (IFQ) fishery beginning in 2005.

[d] Harvest of both test-fishery and IFQ crab.

[e] No ADF&G vessel charter expenditures; successful bidder was responsible for all crab harvesting costs, resulting in ADF&G receiving a lower price per pound for the test fishery compared to the general and quota fisheries.

Table 4-3.–Shellfish onboard observer program test fishery harvest statistics, 1999–2011.

| Year | Targeted species | Number of Landings | Number of Crab [a] | Harvest [a,b] | Number of pots lifted | CPUE | Average weight [b] | Deadloss [b] |
|---|---|---|---|---|---|---|---|---|
| 1999 [c] | Bristol Bay red king crab | 2 | 16,930 | 106,179 | 541 | 31.0 | 6.3 | 245 |
| 2000 | No test fishery | | | | | | | |
| 2001 [c] | Bristol Bay red king crab | 2 | 13,065 | 90,151 | 463 | 28.2 | 6.9 | 103 |
| 2002 [c] | Bristol Bay red king crab | 1 | 10,837 | 71,661 | 198 | 54.7 | 6.6 | 134 |
| 2003 | No test fishery | | | | | | | |
| 2004 [c] | Bristol Bay red king crab | 2 | 17,145 | 116,583 | 650 | 26.4 | 6.8 | 62 |
| 2005 [d] | Bristol Bay red king crab | 2 | 18,610 | 128,412 | 1,130 | 16.5 | 6.9 | 247 |
| 2006 [d] | Bristol Bay red king crab | 2 | 29,720 | 188,495 | 837 | 35.5 | 6.4 | 2,448 |
| 2007 [d] | Bristol Bay red king crab | 2 | 12,190 | 78,670 | 449 | 27.1 | 6.4 | 310 |
| 2008 | No test fishery | | | | | | | |
| 2009 [d] | Bristol Bay red king crab | 2 | 15,295 | 97,643 | 632 | 24.2 | 6.4 | 453 |
| 2010 [d] | Bristol Bay red king crab | 2 | 8,600 | 52,787 | 439 | 19.6 | 6.3 | 69 |
| 2011 [d] | Bristol Bay red king crab | 2 | 13,103 | 82,355 | 459 | 28.5 | 6.3 | 163 |

[a] Deadloss included.

[b] In pounds.

[c] Test fishing occurred after the Bristol Bay red king crab general fishery.

[d] Contracted vessel harvested Individual Fishing Quota crab in conjunction with test-fishery crab.

Table 4-4.–Eastern and Western Aleutian Islands golden king crab harvest by vessel type and percent harvest observed, 2004/05–2011/12.

| Season | Vessel type | Number of Vessels | Number of Landings | Percent observed harvest [a] |
|---|---|---|---|---|
| 2004/05 | C/V | 21 | 64 | 100.0 |
| | C/P | 1 | 19 | 100.0 |
| | Total | 22 | 83 | 100.0 |
| 2005/06 [b] | C/V | 7 | 60 | 69.9 |
| | C/P | 1 | 22 | 100.0 |
| | Total | 8 | 82 | 76.1 |
| 2006/07 [b] | C/V | 6 | 51 | 69.1 |
| | C/P | 1 | 24 | 100.0 |
| | Total | 7 | 75 | 75.7 |
| 2007/08 [b] | C/V | 4 | 57 | 59.1 |
| | C/P | 1 | 24 | 100.0 |
| | Total | 5 | 81 | 68.4 |
| 2008/09 [b] | C/V | 4 | 59 | 61.9 |
| | C/P | 1 | 20 | 100.0 |
| | Total | 5 | 79 | 69.8 |
| 2009/10 [b] | C/V | 4 | 62 | 56.6 |
| | C/P | 1 | 18 | 100.0 |
| | Total | 5 | 80 | 65.2 |
| 2010/11 [b] | C/V | 4 | 55 | 57.2 |
| | C/P | 1 | 18 | 100.0 |
| | Total | 5 | 73 | 65.6 |
| 2011/12 [b] | C/V | 4 | 64 | 64.6 |
| | C/P | 1 | 17 | 100.0 |
| | Total | 5 | 81 | 71.6 |

*Note:* East and west of 174° W long combined for reporting purposes to preserve data confidentiality. C/V = Catcher vessel, C/P = Catcher-processor vessel

[a] Observer onboard during harvest.

[b] Data includes Individual Fishing Quota (IFQ), Community Development Quota (CDQ), and Adak Community Allocation (ACA). 2005/06 is the first year of Crab Rationalization and IFQ, CDQ and ACA harvest.

Table 4-5.–Eastern and Western Aleutian Islands golden king crab fishery observer sampling efforts, 1996/97–2011/12.

| Season | Vessel type | Number of [a] | | Percent observer coverage | Number of | | | | | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels [b] | Number of | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Vessels | Observed vessels | | Observer deploy-ments | Observer months | Pot lifts sampled [b] | Total pot lifts | Pot lifts on observed vessels | | | Size freq. [c] | Legal tallies [d] |
| 1996/97 | C/V | 15 | 15 | 100.0 | 44 | 73.6 | 11,255 | 101,423 | 101,423 | 11.1 | 11.1 | 90 | 111 |
| | C/P | 3 | 3 | 100.0 | 11 | 16.0 | 975 | 18,326 | 18,326 | 5.3 | 5.3 | 239 | 257 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 18 | 18 | 100.0 | 55 | 88.6 | 12,230 | 119,749 | 119,749 | 10.2 | 10.2 | 329 | 368 |
| 1997/98 | C/V | 11 | 11 | 100.0 | 41 | 62.0 | 7,481 | 161,761 | 161,761 | 4.6 | 4.6 | 83 | 94 |
| | C/P | 4 | 4 | 100.0 | 12 | 18.8 | 1,105 | 26,152 | 26,152 | 4.2 | 4.2 | 267 | 259 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 15 | 15 | 100.0 | 53 | 80.8 | 8,586 | 187,913 | 187,913 | 4.6 | 4.6 | 350 | 353 |
| 1998/99 | C/V | 13 | 13 | 100.0 | 17 | 29.0 | 4,273 | 99,928 | 99,928 | 4.3 | 4.3 | 43 | 47 |
| | C/P | 3 | 3 | 100.0 | 7 | 13.0 | 694 | 25,501 | 25,501 | 2.7 | 2.7 | 230 | 233 |
| | F/P | 1 | 1 | 100.0 | 1 | 1.0 | 0 | 0 | 0 | 0.0 | 0.0 | 4 | 4 |
| | Total | 17 | 17 | 100.0 | 25 | 43.0 | 4,967 | 125,429 | 125,429 | 4.0 | 4.0 | 277 | 284 |
| 1999/00 | C/V | 15 | 15 | 100.0 | 49 | 69.0 | 7,610 | 168,109 | 168,109 | 4.5 | 4.5 | 97 | 121 |
| | C/P | 1 | 1 | 100.0 | 5 | 11.2 | 820 | 18,060 | 18,060 | 4.5 | 4.5 | 228 | 230 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 16 | 16 | 100.0 | 54 | 80.2 | 8,430 | 186,169 | 186,169 | 4.5 | 4.5 | 325 | 351 |
| 2000/01 | C/V | 16 | 16 | 100.0 | 47 | 63.5 | 9,023 | 149,319 | 149,319 | 6.0 | 6.0 | 102 | 106 |
| | C/P | 1 | 1 | 100.0 | 5 | 9.2 | 711 | 23,471 | 23,471 | 3.0 | 3.0 | 183 | 174 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 17 | 17 | 100.0 | 52 | 72.7 | 9,734 | 172,790 | 172,790 | 5.6 | 5.6 | 285 | 280 |
| 2001/02 | C/V | 20 | 20 | 100.0 | 44 | 58.7 | 8,382 | 145,154 | 145,154 | 5.7 | 5.7 | 100 | 102 |
| | C/P | 1 | 1 | 100.0 | 4 | 7.7 | 700 | 22,997 | 22,997 | 3.0 | 3.0 | 146 | 147 |
| | F/P | 1 | 1 | 100.0 | 1 | 0.1 | 0 | 0 | 0 | 0.0 | 0.0 | 1 | 1 |
| | Total | 21 | 21 | 100.0 | 49 | 66.5 | 9,082 | 168,151 | 168,151 | 5.4 | 5.4 | 247 | 250 |

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Table 4-5.–Page 2 of 3.

| Season | Vessel type | Number of [a] Vessels | Number of [a] Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Number of Observer months | Number of Pot lifts sampled [b] | Number of Total pot lifts | Number of Pot lifts on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels [b] | Number of Size freq. [c] | Number of Legal tallies [d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2002/03 | C/V | 21 | 21 | 100.0 | 31 | 44.3 | 5,835 | 106,675 | 106,675 | 5.5 | 5.5 | 81 | 81 |
| | C/P | 1 | 1 | 100.0 | 2 | 7.0 | 660 | 24,345 | 24,345 | 2.7 | 2.7 | 144 | 146 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 22 | 22 | 100.0 | 33 | 51.3 | 6,494 | 131,021 | 131,021 | 5.0 | 5.0 | 225 | 227 |
| 2003/04 | C/V | 20 | 20 | 100.0 | 28 | 40.5 | 6,744 | 106,011 | 106,011 | 6.4 | 6.4 | 73 | 73 |
| | C/P | 1 | 1 | 100.0 | 3 | 6.1 | 550 | 19,108 | 19,108 | 2.9 | 2.9 | 115 | 115 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 21 | 21 | 100.0 | 31 | 46.6 | 7,294 | 125,119 | 125,119 | 5.8 | 5.8 | 188 | 188 |
| 2004/05 | C/V | 21 | 21 | 100.0 | 25 | 45.8 | 4,408 | 75,814 | 75,814 | 5.8 | 5.8 | 61 | 63 |
| | C/P | 1 | 1 | 100.0 | 2 | 4.9 | 417 | 15,880 | 15,880 | 2.6 | 2.6 | 100 | 100 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 22 | 22 | 100.0 | 27 | 50.7 | 4,825 | 91,694 | 91,694 | 5.3 | 5.3 | 161 | 163 |
| 2005/06 [e] | C/V | 7 | 7 | 50.0 [f] | 10 | 14.7 | 2,058 | 41,553 | 27,651 | 5.0 | 7.4 | 32 | 31 |
| | C/P | 1 | 1 | 100.0 | 2 | 6.2 | 509 | 13,132 | 13,132 | 3.9 | 3.9 | 114 | 115 |
| | F/P | 1 | 1 | 100.0 | 2 | 2.0 | 0 | 0 | 0 | 0.0 | 0.0 | 3 | 4 |
| | Total | 9 | 9 | - | 14 | 22.9 | 2,567 | 54,685 | 40,783 | 4.7 | 6.3 | 149 | 150 |
| 2006/07 [e] | C/V | 6 | 6 | 50.0 [f] | 11 | 11.2 | 1,793 | 43,087 | 29,440 | 4.2 | 6.1 | 30 | 25 |
| | C/P | 1 | 1 | 100.0 | 2 | 6.1 | 493 | 9,978 | 9,978 | 4.9 | 4.9 | 110 | 109 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 7 | 7 | - | 13 | 17.3 | 2,286 | 53,065 | 39,418 | 4.3 | 5.8 | 140 | 134 |
| 2007/08 [e] | C/V | 4 | 4 | 50.0 [f] | 6 | 9.4 | 1,662 | 41,244 | 24,413 | 4.0 | 6.8 | 25 | 25 |
| | C/P | 1 | 1 | 100.0 | 2 | 5.9 | 426 | 11,359 | 11,359 | 3.8 | 3.8 | 109 | 109 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 5 | 5 | - | 8 | 15.3 | 2,088 | 52,603 | 35,772 | 4.0 | 5.8 | 134 | 134 |
| 2008/09 [e] | C/V | 4 | 4 | 50.0 [f] | 8 | 10.8 | 1,258 | 40,888 | 22,916 | 3.1 | 5.5 | 24 | 19 |
| | C/P | 1 | 1 | 100.0 | 2 | 5.6 | 327 | 9,778 | 9,778 | 3.3 | 3.3 | 94 | 94 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 5 | 5 | - | 10 | 16.4 | 1,585 | 50,666 | 32,694 | 3.1 | 4.8 | 118 | 113 |

- continued -

Table 4-5.–Page 3 of 3.

| Season | Vessel type | Number of [a] Vessels | Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Observer months | Pot lifts sampled [b] | Total pot lifts | Pot lifts on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels [b] | Number of Size freq. [c] | Legal tallies [d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2009/10 [e] | C/V | 4 | 4 | 50.0 [f] | 7 | 10.6 | 982 | 44,534 | 25,194 | 2.2 | 3.9 | 25 | 25 |
| | C/P | 1 | 1 | 100.0 | 2 | 5.1 | 323 | 8,253 | 8,253 | 3.9 | 3.9 | 84 | 84 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 5 | 5 | - | 9 | 16.7 | 1,305 | 52,787 | 33,447 | 2.5 | 3.9 | 109 | 109 |
| 2010/11 [e] | C/V | 4 | 4 | 50.0 [f] | 9 | 9.8 | 992 | 46,760 | 26,462 | 2.1 | 3.7 | 25 | 19 |
| | C/P | 1 | 1 | 100.0 | 3 | 5.2 | 311 | 9,035 | 9,035 | 3.4 | 3.4 | 82 | 82 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 5 | 5 | - | 12 | 15.0 | 1,303 | 55,795 | 35,497 | 2.3 | 3.7 | 107 | 101 |
| 2011/12 [e] | C/V | 4 | 4 | 50.0 [f] | 7 | 9.8 | 866 | 34,855 | 21,924 | 2.5 | 4.0 | 30 | 22 |
| | C/P | 1 | 1 | 100.0 | 3 | 5.4 | 332 | 9,386 | 9,386 | 3.5 | 3.5 | 90 | 90 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 5 | 5 | - | 10 | 15.2 | 1,198 | 44,241 | 31,310 | 2.7 | 3.8 | 120 | 112 |

*Note:* East and West of 174° W long combined for reporting purposes to preserve confidentiality.
C/V = Catcher vessel, C/P = Catcher-processor vessel, F/P = Floating processor vessel

[a] Some vessels participated as both a C/P and F/P, and are counted once in the total number of vessels.

[b] Pot contents sampled for species composition and biological measurements and conditions of commerically-important species. Daily sampling goals varied East and West of 174° W long and over time due to other observer tasks, most notably during tagged crab recovery efforts following some of the ADF&G pot surveys.

[c] Crab size-frequency and shell-condition sampling conducted on retained catch; each data set typically consists of 100 crab.

[d] Each legal tally typically consists of 600 crab.

[e] Data includes Individual Fishing Quota (IFQ), Community Development Quota (CDQ), and Adak Community Allocation (ACA). 2005/06 is the first year of Crab Rationalization, and IFQ , CDQ and ACA harvest.

[f] All catcher vessels are required to have an observer onboard during 50% of their harvest in each of three trimesters.

Table 4-6.– Eastern and Western Aleutian Islands golden king crab fisheries pot lifts on observed and non-observed vessels for each statistical area fished, 2011/12.

| Statistical area | Pots lifted | | | Percent of total pot lifts observed [a] |
|---|---|---|---|---|
| | Observed vessels [a] | Non-observed vessels | Total pots lifted | |
| 695200 | 655 | 481 | 1,136 | 57.7 |
| 695238 | 260 | 61 | 321 | 81.0 |
| 695239 | 75 | 205 | 280 | 26.8 |
| 695301 | 281 | 252 | 533 | 52.7 |
| 695302 | 120 | 32 | 152 | 78.9 |
| 705200 | 914 | 265 | 1,179 | 77.5 |
| 705232 | 2,944 | 1,183 | 4,127 | 71.3 |
| 705234 | 24 | 22 | 46 | 52.2 |
| 705300 | 617 | 349 | 966 | 63.9 |
| 715201 | 0 | 10 | 10 | 0.0 |
| 715202 | 2,496 | 1,653 | 4,149 | 60.2 |
| 715231 | 797 | 415 | 1,212 | 65.8 |
| 715232 | 698 | 613 | 1,311 | 53.2 |
| 725201 | 1,092 | 746 | 1,838 | 59.4 |
| 725203 | 103 | 55 | 158 | 65.2 |
| 725230 | 173 | 184 | 357 | 48.5 |
| 735230 | 70 | 70 | 140 | 50.0 |
| 775131 | 298 | 239 | 537 | 55.5 |
| 775133 | 70 | 68 | 138 | 50.7 |
| 775137 | 0 | 35 | 35 | 0.0 |
| 775138 | 0 | 2 | 2 | 0.0 |
| 775139 | 5 | 3 | 8 | 62.5 |
| 785102 | 992 | 546 | 1,538 | 64.5 |
| 785103 | 8 | 0 | 8 | 100.0 |
| 785131 | 609 | 629 | 1,238 | 49.2 |
| 785132 | 39 | 0 | 39 | 100.0 |
| 785134 | 177 | 215 | 392 | 45.2 |

-continued-

Table 4-6.–Page 2 of 2.

| Statistical area | Pots lifted | | | Percent of total pot lifts observed [a] |
|---|---|---|---|---|
| | Observed vessels [a] | Non-observed vessels | Total pots lifted | |
| 785135 | 226 | 152 | 378 | 59.8 |
| 795102 | 142 | 17 | 159 | 89.3 |
| 795131 | 343 | 245 | 588 | 58.3 |
| 795132 | 569 | 444 | 1,013 | 56.2 |
| 795200 | 603 | 358 | 961 | 62.7 |
| 805101 | 81 | 8 | 89 | 91.0 |
| 805102 | 95 | 49 | 144 | 66.0 |
| 805103 | 949 | 358 | 1,307 | 72.6 |
| 805131 | 492 | 320 | 812 | 60.6 |
| 805132 | 1,930 | 781 | 2,711 | 71.2 |
| 805133 | 63 | 46 | 109 | 57.8 |
| 805201 | 1,149 | 139 | 1,288 | 89.2 |
| 815100 | 754 | 196 | 950 | 79.4 |
| 815131 | 635 | 109 | 744 | 85.3 |
| 815132 | 263 | 51 | 314 | 83.8 |
| 815134 | 50 | 0 | 50 | 100.0 |
| 815136 | 75 | 26 | 101 | 74.3 |
| 815202 | 96 | 9 | 105 | 91.4 |
| 825132 | 244 | 49 | 293 | 83.3 |
| 825134 | 3 | 0 | 3 | 100.0 |
| 825201 | 646 | 80 | 726 | 89.0 |
| 825202 | 530 | 33 | 563 | 94.1 |
| 825203 | 200 | 32 | 232 | 86.2 |
| 835130 | 961 | 224 | 1,185 | 81.1 |
| 835200 | 2,135 | 293 | 2,428 | 87.9 |
| 845130 | 745 | 131 | 876 | 85.0 |
| 845201 | 124 | 40 | 164 | 75.6 |
| 845202 | 3,389 | 408 | 3,797 | 89.3 |
| 855200 | 223 | 0 | 223 | 100.0 |
| 855231 | 78 | 0 | 78 | 100.0 |
| Totals | 31,310 | 12,931 | 44,241 | 70.8 |

*Note:* Catcher vessel and catcher-processor vessel information has been combined for reporting purposes to preserve data confidentiality.

[a] Observer onboard during harvest.

Table 4-7.–Western Aleutian Islands red king crab observer sampling efforts, 2001/2002–2011/12.

| Season | Vessel type | Number of Vessels | Number of Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Number of Observer months | Number of Pot lifts sampled [a] | Number of Total pot lifts | Percent pot lifts sampled | Number of Size freq. [b] | Number of Legal tallies [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2000/2001 [d] | C/V | 0 | 0 | 0.0 | CF | CF | CF | CF | CF | CF | CF |
| | C/P | 1 | 1 | 100.0 | CF | CF | CF | CF | CF | CF | CF |
| | F/P | 0 | 0 | 0.0 | CF | CF | CF | CF | CF | CF | CF |
| | Total | 1 | 1 | 100.0 | CF | CF | CF | CF | CF | CF | CF |
| 2001/2002 [d] | C/V | 3 | 3 | 100.0 | 4 | 3.3 | 105 | 524 | 20.0 | 3 | 3 |
| | C/P | 1 | 1 | 100.0 | 2 | 5.1 | 133 | 671 | 19.8 | 5 | 5 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 4 | 4 | 100.0 | 6 | 8.4 | 238 | 1,195 | 19.9 | 8 | 8 |
| 2002/2003 [e] | C/V | 31 | 30 | 96.8 | 30 | 11.9 | 579 | 3,513 | 16.4 | 21 | 22 |
| | C/P | 2 | 2 | 100.0 | 2 | 1.2 | 18 | 273 | 6.6 | 3 | 3 |
| | F/P | 1 | 1 | 100.0 | 1 | 0.6 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 33 | 32 | 97.0 | 33 | 13.6 | 597 | 3,786 | 15.7 | 24 | 25 |
| 2003/2004 | C/V | 28 | 28 | 100.0 | 28 | 10.9 | 884 | 5,459 | 16.0 | 25 | 25 |
| | C/P | 2 | 2 | 100.0 | 2 | 0.6 | 47 | 315 | 15.0 | 4 | 4 |
| | F/P | 1 | 1 | 100.0 | 1 | 0.07 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 30 | 30 | 100.0 | 31 | 11.6 | 931 | 5,774 | 16.1 | 29 | 29 |
| 2004/2005 - 2011/12 | FC | | | | | | | | | | |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, F/P = Floating processor vessel, FC = Fishery closed, CF = Confidential

[a] Pot contents sampled for species composition and biological measurements and conditions of commercially-important species.

[b] Crab size-frequency and shell-condition sampling conducted on retained catch; each data set typically consists of 100 crab.

[c] Each legal tally typically consists of 600 crab.

[d] Surveys in 2001 were conducted during the months of January and November.

[e] In 2002, one catcher vessel received an observer coverage waiver due to circumstances beyond their control.

Table 4-8.–Bering Sea District, Aleutian Islands District, Kodiak District, South Peninsula District, and Yakutat District grooved Tanner crab observer sampling efforts, 1994–2011.

| | | Number of | | | Number of | | | | Percent pot | Number of | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Season | Vessel type | Vessels | Observed vessels | Percent observer coverage | Observer deployments | Observer months | Pot lifts sampled [a] | Total pot lifts | lifts sampled on observed vessels | Size freq. [b] | Legal tallies [c] |
| 1994 | C/V | 6 | 6 | 100.0 | 14 | 16.6 | 1,782 | 52,062 | 3.4 | 58 | 30 |
| | C/P | 2 | 2 | 100.0 | 3 | 2.3 | 336 | 1,582 | 21.2 | 46 | 45 |
| | Total | 8 | 8 | 100.0 | 17 | 18.8 | 2,118 | 53,644 | 3.8 | 104 | 75 |
| 1995 | C/V | 16 | 16 | 100.0 | 47 | 55.2 | 10,343 | 158,461 | 6.5 | 155 | 145 |
| | C/P | 2 | 2 | 100.0 | 8 | 6.2 | 620 | 5,824 | 1.1 | 66 | 85 |
| | Total | 18 | 18 | 100.0 | 55 | 61.3 | 10,963 | 164,285 | 6.7 | 221 | 230 |
| 1996 | C/V | 9 | 9 | 100.0 | 20 | 26.3 | 4,469 | 73,960 | 6.0 | 40 | 62 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 9 | 9 | 100.0 | 20 | 26.3 | 4,469 | 73,960 | 6.0 | 40 | 62 |
| 1997 - 1999 | | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| 2000 | C/V | 1 | 1 | 100.0 | 1 | 1.4 | 164 | 2,160 | 7.6 | 3 | 3 |
| | C/P | 2 | 2 | 100.0 | 2 | 0.7 | 17 | 205 | 8.3 | 5 | 0 |
| | Total | 3 | 3 | 100.0 | 3 | 2.0 | 181 | 2,365 | 7.7 | 8 | 3 |
| 2001 | C/V | 2 | 2 | 100.0 | 4 | 2.7 | 258 | 3,181 | 8.1 | 15 | 15 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 2 | 2 | 100.0 | 4 | 2.7 | 258 | 3,181 | 8.1 | 15 | 15 |
| 2002 | | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| 2003 | C/V | 1 | 1 | 100.0 | 2 | 3.2 | 393 | 4,772 | 8.2 | 11 | 10 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 1 | 1 | 100.0 | 2 | 3.2 | 393 | 4,772 | 8.2 | 11 | 10 |
| 2004 | C/V | 2 | 2 | 100.0 | 4 | 5.0 | 628 | 10,046 | 6.3 | 18 | 14 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 2 | 2 | 100.0 | 4 | 5.0 | 628 | 10,046 | 6.3 | 18 | 14 |
| 2005 - 2011 | | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel

[a] Pot contents sampled for species composition and biological measurements and conditions of commercially-important species.

[b] Crab size-frequency and shell-condition sampling conducted on retained catch; each data set typically consists of 100 crab.

[c] Each legal tally typically consists of 600 crab.

Table 4-9.–Bristol Bay red king crab harvest by vessel type and percent harvest observed, 2004–2011/12.

| Season | Vessel type | Number of Vessels | Number of Landings | Harvest [a,b] | Observed harvest [a,b,c] | Percent observed harvest [c] |
|---|---|---|---|---|---|---|
| 2004 | C/V | 243 | 256 | 13,506,397 | 1,165,737 | 8.6 |
| | C/P | 8 | 14 | 606,041 | 606,041 | 100.0 |
| | CDQ | 12 | 21 | 1,133,013 | 904,294 | 79.8 |
| | Total | 263 | 291 | 15,245,451 | 2,676,072 | 17.6 |
| 2005/06 [d] | C/V | 85 | 270 | 17,284,281 | 4,453,697 | 25.8 |
| | C/P | 4 | 26 | 1,025,054 | 1,025,054 | 100.0 |
| | Total | 89 | 296 | 18,309,335 | 5,478,751 | 29.9 |
| 2006/07 [d] | C/V | 80 | 201 | 14,882,355 | 4,099,757 | 27.5 |
| | C/P | 3 | 12 | 561,822 | 561,822 | 100.0 |
| | Total | 83 | 213 | 15,444,177 | 4,661,579 | 30.2 |
| 2007/08 [d] | C/V | 73 | 266 | 19,519,828 | 5,034,013 | 25.8 |
| | C/P | 3 | 15 | 846,237 | 846,237 | 100.0 |
| | Total | 76 | 281 | 20,366,065 | 5,880,250 | 28.9 |
| 2008/09 [d] | C/V | 75 | 268 | 19,498,303 | 4,745,026 | 24.3 |
| | C/P | 3 | 21 | 831,099 | 831,099 | 100.0 |
| | Total | 78 | 289 | 20,329,402 | 5,576,125 | 27.4 |
| 2009/10 [d] | All Vessels | 70 | 233 | 15,932,654 | 4,659,599 | 29.2 |
| 2010/11 [d] | All Vessels | 65 | 254 | 14,833,829 | 3,860,036 | 26.0 |
| 2011/12 [d] | All Vessels | 62 | 161 | 7,833,594 | 2,765,495 | 35.3 |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, CDQ = Community Development Quota

[a] In pounds.

[b] Includes deadloss.

[c] Observer onboard during harvest.

[d] Data includes Individual Fishing Quota (IFQ) and Community Development Quota. 2005/06 is the first year of Crab Rationalization and IFQ harvest.

Table 4-10.–Bristol Bay red king crab observer sampling efforts, 1988–2011/12.

| | | Number of [a] | | | Number of | | | | | | | Number of | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Season | Vessel type | Vessels | Observed vessels | Percent observer coverage | Observer deploy-ments | Observer months | Pot lifts sampled [b] | Total pot lifts | on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Size freq. [c] | Legal tallies [d] |
| 1988 | C/V | 180 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 20 | 20 | 100.0 | 20 | 8.4 | 31 | NA | NA | NA | NA | NA | NA |
| | F/P | 5 | 5 | 100.0 | 5 | 1.9 | 0 | 0 | 0 | 0.0 | 0.0 | NA | NA |
| | Total | 205 | 25 | 12.2 | 25 | 10.3 | 31 | 146,179 | NA | <0.1 | NA | NA | NA |
| 1989 | C/V | 193 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 18 | 18 | 100.0 | 18 | 10.9 | 94 | NA | NA | NA | NA | 110 | NA |
| | F/P | 12 | 12 | 100.0 | 12 | 6.8 | 0 | 0 | 0 | 0.0 | 0.0 | 101 | NA |
| | Total | 223 | 30 | 13.5 | 30 | 17.6 | 94 | 205,528 | NA | <0.1 | NA | 211 | NA |
| 1990 | C/V | 220 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 20 | 20 | 100.0 | 20 | 11.9 | 140 | NA | NA | NA | NA | NA | NA |
| | F/P | 15 | 15 | 100.0 | 15 | 8.9 | 0 | 0 | 0 | 0.0 | 0.0 | NA | NA |
| | Total | 255 | 35 | 13.7 | 35 | 20.8 | 140 | 262,761 | NA | 0.1 | NA | NA | NA |
| 1991 | C/V | 277 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 25 | 25 | 100.0 | 26 | 14.2 | 272 | NA | NA | NA | NA | 163 | NA |
| | F/P | 14 | 14 | 100.0 | 14 | 7.4 | 0 | 0 | 0 | 0.0 | 0.0 | 130 | NA |
| | Total | 316 | 39 | 12.3 | 40 | 21.5 | 272 | 226,999 | NA | 0.1 | NA | 293 | NA |
| 1992 | C/V | 263 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 18 | 18 | 100.0 | 19 | 9.0 | 290 | NA | NA | NA | NA | 99 | NA |
| | F/P | 6 | 6 | 100.0 | 6 | 3.0 | 0 | 0 | 0 | 0.0 | 0.0 | 80 | NA |
| | Total | 287 | 24 | 8.4 | 25 | 12.0 | 290 | 206,172 | NA | 0.1 | NA | 179 | NA |
| 1993 | C/V | 275 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 17 | 17 | 100.0 | 19 | 10.6 | 558 | NA | NA | NA | NA | 124 | NA |
| | F/P | 7 | 7 | 100.0 | 7 | 4.5 | 0 | 0 | 0 | 0.0 | 0.0 | 112 | NA |
| | Total | 299 | 24 | 8.0 | 26 | 15.1 | 558 | 252,739 | NA | 0.2 | NA | 236 | NA |
| 1994-1995 | FC | | | | | | | | | | | | |

- continued -

Table 4-10.–Page 2 of 4

| Season | Vessel type | Number of [a] Vessels | Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Observer months | Pot lifts sampled [b] | Total pot lifts | on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [c] | Legal tallies [d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1996 | C/V | 192 | 0 | 0.0 | 0 | 0.0 | 0 | 73,908 | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 4 | 4 | 100.0 | 7 | 2.0 | 84 | 2,525 | 2,525 | 3.3 | 3.3 | 19 | 19 |
| | F/P | 2 | 2 | 100.0 | 2 | 0.8 | 0 | 0 | 0 | 0.0 | 0.0 | 26 | 62 |
| | Total | 197 | 5 | 2.5 | 9 | 2.8 | 84 | 76,433 | 2,525 | 0.1 | 3.3 | 45 | 81 |
| 1997 | C/V | 248 | 0 | 0.0 | 0 | 0.0 | 0 | 86,885 | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 8 | 8 | 100.0 | 12 | 3.9 | 146 | 3,542 | 3,542 | 4.1 | 4.1 | 28 | 28 |
| | F/P | 3 | 3 | 100.0 | 3 | 1.6 | 0 | 0 | 0 | 0.0 | 0.0 | 52 | 56 |
| | Total | 259 | 11 | 4.2 | 15 | 5.5 | 146 | 90,427 | 3,542 | 0.2 | 3.9 | 80 | 84 |
| 1998 | C/V | 263 | 0 | 0.0 | 0 | 0.0 | 0 | 131,757 | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 11 | 11 | 100.0 | 19 | 6.7 | 131 | 6,614 | 6,614 | 2.0 | 2.0 | 48 | 52 |
| | F/P | 5 | 5 | 100.0 | 3 | 1.8 | 0 | 0 | 0 | 0.0 | 0.0 | 37 | 52 |
| | CDQ | 7 | 7 | 100.0 | 7 | 3.1 | 193 | 3,326 | 3,326 | 5.8 | 5.8 | 9 | 10 |
| | Total | 284 | 21 | 7.4 | 29 | 11.6 | 324 | 141,697 | 9,940 | 0.2 | 3.3 | 94 | 114 |
| 1999 | C/V | 249 | 0 | 0.0 | 0 | 0.0 | 0 | 138,322 | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 8 | 8 | 100.0 | 10 | 4.6 | 135 | 5,699 | 5,699 | 2.4 | 2.4 | 46 | 56 |
| | F/P | 3 | 3 | 100.0 | 1 | 1.0 | 0 | 0 | 0 | 0.0 | 0.0 | 22 | 26 |
| | CDQ | 10 | 10 | 100.0 | 10 | 3.5 | 263 | 2,976 | 2,976 | 8.8 | 8.8 | 9 | 12 |
| | Total | 268 | 19 | 7.1 | 21 | 9.1 | 398 | 146,997 | 8,675 | 0.3 | 4.6 | 77 | 94 |
| 2000 | C/V | 214 | 11 | 5.1 | 11 | 5.1 | 403 | 82,453 | 4,429 | 0.5 | 9.1 | 10 | 11 |
| | AFA C/V[e] | 25 | 3 | 12.0 | 3 | 1.1 | 88 | 8,340 | 1,024 | 1.1 | 8.6 | 3 | 3 |
| | C/P | 7 | 7 | 100.0 | 9 | 3.4 | 156 | 3,238 | 3,238 | 4.8 | 4.8 | 28 | 29 |
| | F/P | 2 | 2 | 100.0 | 3 | 0.6 | 0 | 0 | 0 | 0.0 | 0.0 | 14 | 17 |
| | CDQ | 11 | 11 | 100.0 | 11 | 4.4 | 423 | 4,663 | 4,663 | 9.1 | 9.1 | 1 | 0 |
| | Total | 258 | 33 | 12.8 | 37 | 14.6 | 1,070 | 98,694 | 13,354 | 1.1 | 8.0 | 56 | 60 |
| 2001 | C/V | 193 | 20 | 10.4 | 20 | 9.5 | 359 | 51,624 | 5,746 | 0.7 | 6.2 | 19 | 19 |
| | AFA C/V[e] | 31 | 3 | 9.7 | 3 | 1.0 | 48 | 6,662 | 682 | 0.7 | 7.0 | 3 | 3 |
| | C/P | 6 | 6 | 100.0 | 7 | 2.3 | 97 | 1,776 | 1,776 | 5.5 | 5.5 | 13 | 13 |
| | F/P | 3 | 3 | 100.0 | 3 | 1.2 | 0 | 0 | 0 | 0.0 | 0.0 | 19 | 19 |
| | CDQ | 10 | 6 | 60.0 | 6 | 2.9 | 166 | 3,130 | 2,516 | 5.3 | 6.6 | 9 | 9 |
| | Total | 241 | 36 | 14.9 | 39 | 16.9 | 670 | 63,192 | 10,720 | 1.1 | 6.3 | 63 | 63 |

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Table 4-10.–Page 3 of 4

| Season | Vessel type | Number of [a] Vessels | Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Observer months | Pot lifts sampled [b] | Total pot lifts | on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [c] | Legal tallies [d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2002 | C/V | 204 | 17 | 8.3 | 17 | 7.1 | 330 | 56,448 | 5,236 | 0.6 | 6.3 | 16 | 18 |
| | AFA C/V[e] | 31 | 3 | 9.7 | 3 | 1.3 | 37 | 5,776 | 551 | 0.6 | 6.7 | 3 | 3 |
| | C/P | 7 | 7 | 100.0 | 8 | 2.3 | 144 | 2,591 | 2,591 | 5.6 | 5.6 | 21 | 21 |
| | F/P | 3 | 3 | 100.0 | 3 | 1.0 | 0 | 0 | 0 | 0.0 | 0.0 | 9 | 9 |
| | CDQ | 10 | 6 | 60.0 | 6 | 2.7 | 242 | 3,513 | 2,875 | 6.9 | 8.4 | 9 | 9 |
| | Total | 253 | 34 | 13.4 | 37 | 14.5 | 753 | 68,328 | 11,253 | 1.1 | 6.7 | 58 | 60 |
| 2003 | C/V | 211 | 19 | 9.0 | 20 | 10.0 | 485 | 110,531 | 10,531 | 0.4 | 4.6 | 11 | 11 |
| | AFA C/V[e] | 32 | 3 | 9.4 | 3 | 1.2 | 71 | 12,913 | 911 | 0.5 | 7.8 | 1 | 1 |
| | C/P | 8 | 8 | 100.0 | 10 | 3.6 | 175 | 4,986 | 4,986 | 3.5 | 3.5 | 35 | 32 |
| | F/P | 4 | 4 | 100.0 | 4 | 1.6 | 0 | 0 | 0 | 0.0 | 0.0 | 16 | 18 |
| | CDQ | 13 | 8 | 61.5 | 9 | 3.7 | 279 | 5,704 | 4,372 | 4.9 | 6.4 | 22 | 12 |
| | Total | 264 | 39 | 14.8 | 46 | 20.1 | 1,010 | 134,134 | 20,800 | 0.8 | 4.9 | 85 | 74 |
| 2004 | C/V | 211 | 17 | 8.1 | 17 | 6.6 | 339 | 79,513 | 6,304 | 0.4 | 5.4 | 16 | 16 |
| | AFA C/V[e] | 32 | 3 | 9.4 | 3 | 1.1 | 67 | 8,093 | 842 | 0.8 | 8.0 | 3 | 3 |
| | C/P | 8 | 8 | 100.0 | 9 | 2.8 | 130 | 3,370 | 3,370 | 3.9 | 3.9 | 17 | 17 |
| | F/P | 4 | 4 | 100.0 | 4 | 1.4 | 0 | 0 | 0 | 0.0 | 0.0 | 31 | 33 |
| | CDQ | 12 | 8 | 66.7 | 9 | 4.7 | 226 | 5,359 | 4,312 | 4.2 | 5.2 | 23 | 23 |
| | Total | 263 | 37 | 14.0 | 42 | 16.6 | 762 | 96,335 | 14,828 | 0.8 | 5.1 | 90 | 92 |
| 2005/06 [f] | C/V | 85 | 20 | 23.5 | 22 | 19.5 | 1,390 | 103,538 | 25,283 | 1.3 | 5.5 | 50 | 48 |
| | C/P | 4 | 4 | 100.0 | 4 | 5.0 | 465 | 11,411 | 11,411 | 4.1 | 4.1 | 90 | 90 |
| | F/P | 1 | 1 | 100.0 | 2 | 2.0 | 0 | 0 | 0 | 0.0 | 0.0 | 7 | 7 |
| | Total | 90 | 25 | 27.8 | 28 | 26.5 | 1,855 | 114,949 | 36,694 | 1.6 | 5.1 | 144 | 142 |
| 2006/07 [f] | C/V | 80 | 19 | 23.8 | 21 | 16.6 | 1,074 | 67,929 | 18,972 | 1.6 | 5.7 | 44 | 39 |
| | C/P | 3 | 3 | 100.0 | 3 | 3.1 | 140 | 3,811 | 3,811 | 3.7 | 3.7 | 38 | 38 |
| | F/P | 1 | 1 | 100.0 | 1 | 1.3 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 83 | 22 | 26.5 | 25 | 21.1 | 1,214 | 71,740 | 22,783 | 1.7 | 5.3 | 82 | 77 |
| 2007/08 [f] | C/V | 73 | 19 | 26.0 | 20 | 18.5 | 1,708 | 107,926 | 28,797 | 1.6 | 5.7 | 46 | 47 |
| | C/P | 3 | 3 | 100.0 | 3 | 2.7 | 210 | 5,288 | 5,288 | 3.5 | 3.5 | 52 | 49 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 76 | 22 | 26.5 | 23 | 21.2 | 1,918 | 113,214 | 34,085 | 1.7 | 5.3 | 98 | 96 |

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Table 4-10.–Page 4 of 4

| Season | Vessel type | Number of [a] Vessels | Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Observer months | Pot lifts sampled [b] | Total pot lifts | on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [c] | Legal tallies [d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2008/09 [f] | C/V | 75 | 18 | 24.0 | 19 | 20.8 | 1,634 | 132,316 | 31,478 | 1.2 | 5.2 | 56 | 50 |
| | C/P | 3 | 3 | 100.0 | 3 | 3.7 | 186 | 7,623 | 7,623 | 2.4 | 2.4 | 48 | 48 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 78 | 21 | 26.9 | 22 | 24.5 | 1,820 | 139,939 | 39,101 | 1.3 | 4.7 | 104 | 98 |
| 2009/10 [f] | C/V | 68 | 19 | 27.9 | 21 | 18.8 | 1,823 | 113,175 | 32,063 | 1.6 | 5.7 | 50 | 47 |
| | C/P | 2 | 2 | 100.0 | 2 | 2.0 | 129 | 5,346 | 5,346 | 2.4 | 2.4 | 36 | 36 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 70 | 21 | 30.0 | 23 | 20.8 | 1,952 | 118,521 | 37,409 | 1.6 | 5.2 | 86 | 83 |
| 2010/11 [f] | C/V | 63 | 14 | 22.2 | 17 | 16.7 | 1,733 | 125,140 | 30,107 | 1.4 | 5.8 | 46 | 42 |
| | C/P | 2 | 2 | 100.0 | 2 | 2.4 | 209 | 6,487 | 6,487 | 3.2 | 3.2 | 41 | 41 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 65 | 16 | 24.6 | 19 | 19.1 | 1,942 | 131,627 | 36,594 | 1.5 | 5.3 | 87 | 83 |
| 2011/12 [f] | C/V | 60 | 16 | 26.7 | 17 | 9.7 | 647 | 43,779 | 13,763 | 1.5 | 4.7 | 33 | 27 |
| | C/P | 2 | 2 | 100.0 | 2 | 0.8 | 50 | 1,387 | 1,387 | 3.6 | 3.6 | 13 | 13 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 62 | 18 | 29.0 | 19 | 10.5 | 697 | 45,166 | 15,150 | 1.5 | 4.6 | 46 | 40 |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, F/P = Floating processor vessel, NA = Not available, FC = Fishery closed, CDQ = Community Development Quota

[a] Some vessels participated as both a C/P and F/P and are only counted once in the total number of vessels.

[b] Pot contents sampled for species composition and biological measurements and conditions of commercially-important species.

[c] Crab size-frequency and shell-condition sampling conducted on retained catch; each data set typically consists of 100 crab.

[d] Each legal tally typically consists of 600 crab.

[e] American Fisheries Act catcher vessels.

[f] Data includes Individual Fishing Quota (IFQ) and Community Development Quota. 2005/06 is the first year of Crab Rationalization and IFQ harvest.

Table 4-11.–Bristol Bay red king crab fishery pot lifts on observed and non-observed vessels for each statistical area fished, 2011/12.

| Statistical area | Pots lifted | | | Percent of total pot lifts observed [a] |
|---|---|---|---|---|
| | Observed vessels [a] | Non-observed vessels | Total pots lifted | |
| 605630 | 32 | 27 | 59 | 54.2 |
| 615601 | 712 | 2,531 | 3,243 | 22.0 |
| 615630 | 5,612 | 11,431 | 17,043 | 32.9 |
| 615700 | 1,343 | 2,170 | 3,513 | 38.2 |
| 615730 | 55 | 15 | 70 | 78.6 |
| 625531 | 263 | 230 | 493 | 53.3 |
| 625600 | 1,869 | 4,240 | 6,109 | 30.6 |
| 625630 | 1,410 | 1,871 | 3,281 | 43.0 |
| 625700 | 150 | 301 | 451 | 33.3 |
| 625730 | 19 | 0 | 19 | 100.0 |
| 635530 | 2,566 | 4,990 | 7,556 | 34.0 |
| 635600 | 1,082 | 1,690 | 2,772 | 39.0 |
| 635630 | 37 | 213 | 250 | 14.8 |
| 635700 | 0 | 2 | 2 | 0.0 |
| 645530 | 0 | 297 | 297 | 0.0 |
| 645600 | 0 | 3 | 3 | 0.0 |
| 645630 | 0 | 3 | 3 | 0.0 |
| 655530 | 0 | 2 | 2 | 0.0 |
| Totals | 15,150 | 30,016 | 45,166 | 33.5 |

*Note:* Catcher vessel and catcher-processor vessel information have been combined for reporting purposes to preserve data confidentiality.

[a] Observer onboard during harvest.

Table 4-12.–Saint Matthew Island blue king crab harvest by vessel type and percent harvest observed, 1989–2011/12.

| Season | Vessel type | Number of Vessels | Number of Landings | Harvest [a,b] | Observed harvest [a,b,c] | Percent observed harvest [c] |
|---|---|---|---|---|---|---|
| 1989 | C/V | 48 | NA | NA | NA | NA |
| | C/P | 15 | NA | NA | NA | NA |
| | F/P | 6 | NA | 0 | 0 | 0.0 |
| | Total | 69 | 69 | 1,166,258 | NA | NA |
| 1990 | C/V | 21 | NA | NA | NA | NA |
| | C/P | 7 | NA | NA | NA | NA |
| | F/P | 3 | NA | 0 | 0 | 0.0 |
| | Total | 31 | 38 | 1,725,349 | NA | NA |
| 1991 | C/V | 57 | NA | NA | NA | NA |
| | C/P | 9 | NA | NA | NA | NA |
| | F/P | 2 | NA | 0 | 0 | 0.0 |
| | Total | 68 | 69 | 3,372,066 | NA | NA |
| 1992 | C/V | 159 | NA | NA | NA | NA |
| | C/P | 8 | NA | NA | NA | NA |
| | F/P | 7 | NA | 0 | 0 | 0.0 |
| | Total | 174 | 179 | 2,474,080 | NA | NA |
| 1993 | C/V | 85 | NA | NA | NA | NA |
| | C/P | 3 | NA | NA | NA | NA |
| | F/P | 4 | NA | 0 | 0 | 0.0 |
| | Total | 92 | 136 | 2,999,921 | NA | NA |
| 1994 | C/V | 80 | NA | NA | NA | NA |
| | C/P | 6 | NA | NA | NA | NA |
| | F/P | 1 | NA | 0 | 0 | 0.0 |
| | Total | 87 | 133 | 3,764,262 | NA | NA |

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Table 4-12.–Page 2 of 3

| Season | Vessel type | Number of Vessels | Number of Landings | Harvest [a,b] | Observed harvest [a,b,c] | Percent observed harvest [c] |
|---|---|---|---|---|---|---|
| 1995 | C/V | 85 | NA | NA | NA | NA |
| | C/P | 4 | NA | NA | NA | NA |
| | F/P | 1 | NA | 0 | 0 | 0.0 |
| | Total | 90 | 111 | 3,166,093 | NA | NA |
| 1996 | C/V | 116 | NA | NA | NA | NA |
| | C/P | 3 | NA | NA | NA | NA |
| | F/P | 3 | NA | 0 | 0 | 0.0 |
| | Total | 122 | 189 | 3,080,916 | NA | NA |
| 1997 | C/V | 113 | NA | NA | NA | NA |
| | C/P | 1 | NA | NA | NA | NA |
| | F/P | 3 | NA | 0 | 0 | 0.0 |
| | Total | 117 | 166 | 4,649,660 | NA | NA |
| 1998 | C/V | 126 | NA | NA | NA | NA |
| | C/P | 2 | NA | NA | NA | NA |
| | F/P | 3 | NA | 0 | 0 | 0.0 |
| | Total | 131 | 255 | 2,868,965 | NA | NA |
| 1999 - 2008/09 | FC | | | | | |
| 2009/10 [d] | C/V | 7 | 30 | 460,859 | 460,859 | 100.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | F/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 7 | 30 | 460,859 | 460,859 | 100.0 |

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Table 4-12.–Page 3 of 3

| Season | Vessel type | Number of Vessels | Number of Landings | Harvest [a,b] | Observed harvest [a,b,c] | Percent observed harvest [c] |
|---|---|---|---|---|---|---|
| 2010/11 [d] | C/V | 11 | 70 | 1,263,982 | 1,263,982 | 100.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | F/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 11 | 70 | 1,263,982 | 1,263,982 | 100.0 |
| 2011/12 [d] | C/V | 18 | 90 | 1,881,322 | 1,881,322 | 100.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | F/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 18 | 90 | 1,881,322 | 1,881,332 | 100.0 |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, F/P = Floating processor vessel, FC = Fishery closed
NA = Not available

[a] In pounds.

[b] Includes deadloss.

[c] Observer onboard during harvest.

[d] Data includes Individual Fishing Quota (IFQ) and Community Development Quota. 2005/06 is the first year of Crab Rationalization and IFQ harvest.

Table 4-13.–Saint Matthew Island blue king crab observer sampling efforts, 1989–2011/12.

| Season | Vessel type | Number of Vessels | Number of Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Number of Observer months | Number of Pot lifts sampled [a] | Number of Total pot lifts | Number of Pot lifts on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [b] | Number of Legal tallies [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1989 | C/V | 48 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 15 | 15 | 100.0 | 15 | 6.8 | NA | NA | NA | NA | NA | NA | NA |
| | F/P | 6 | 6 | 100.0 | 6 | 2.3 | 0 | 0 | 0 | 0.0 | 0.0 | NA | NA |
| | Total | 69 | 21 | 30.4 | 21 | 9.1 | NA | NA | NA | NA | NA | NA | NA |
| 1990 | C/V | 21 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 7 | 7 | 100.0 | 7 | 2.9 | NA | NA | NA | NA | NA | NA | NA |
| | F/P | 3 | 3 | 100.0 | 3 | 1.2 | 0 | 0 | 0 | 0.0 | 0.0 | NA | NA |
| | Total | 31 | 10 | 32.3 | 10 | 4.1 | NA | NA | NA | NA | NA | NA | NA |
| 1991 | C/V | 57 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 9 | 9 | 100.0 | 9 | 4.0 | NA | NA | NA | NA | NA | NA | NA |
| | F/P | 2 | 2 | 100.0 | 2 | 1.3 | 0 | 0 | 0 | 0.0 | 0.0 | NA | NA |
| | Total | 68 | 11 | 16.2 | 11 | 5.3 | NA | NA | NA | NA | NA | NA | NA |
| 1992 | C/V | 159 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 8 | 8 | 100.0 | 9 | 3.0 | NA | NA | NA | NA | NA | NA | NA |
| | F/P | 7 | 7 | 100.0 | 7 | 3.0 | 0 | 0 | 0 | 0.0 | 0.0 | NA | NA |
| | Total | 174 | 15 | 8.6 | 16 | 6.0 | NA | NA | NA | NA | NA | NA | NA |
| 1993 | C/V | 85 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 3 | 3 | 100.0 | 3 | 1.4 | NA | NA | NA | NA | NA | NA | NA |
| | F/P | 4 | 4 | 100.0 | 4 | 2.2 | 0 | 0 | 0 | 0.0 | 0.0 | NA | NA |
| | Total | 92 | 7 | 7.6 | 7 | 3.6 | NA | NA | NA | NA | NA | NA | NA |
| 1994 | C/V | 80 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 6 | 6 | 100.0 | 6 | 3.1 | NA | NA | NA | NA | NA | NA | NA |
| | F/P | 1 | 1 | 100.0 | 1 | 0.5 | 0 | 0 | 0 | 0.0 | 0.0 | NA | NA |
| | Total | 87 | 7 | 8.0 | 7 | 3.6 | NA | NA | NA | NA | NA | NA | NA |
| 1995 | C/V | 85 | 1 | 1.2 | 1 | 0.5 | NA | NA | NA | NA | NA | NA | NA |
| | C/P | 4 | 4 | 100.0 | 4 | 2.3 | NA | NA | NA | NA | NA | NA | NA |
| | F/P | 1 | 1 | 100.0 | 1 | 0.3 | 0 | 0 | 0 | 0.0 | 0.0 | NA | NA |
| | Total | 90 | 6 | 6.7 | 6 | 3.1 | NA | NA | NA | NA | NA | NA | NA |

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Table 4-13.–Page 2 of 2

| Season | Vessel type | Number of Vessels | Number of Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Number of Observer months | Number of Pot lifts sampled [a] | Number of Total pot lifts | Number of Pot lifts on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [b] | Number of Legal tallies [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1996 | C/V | 116 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 3 | 4 | 100.0 | 3 | 1.9 | 96 | NA | NA | NA | NA | NA | NA |
| | F/P | 3 | 3 | 100.0 | 3 | 1.9 | 0 | 0 | 0 | 0.0 | 0.0 | NA | NA |
| | Total | 122 | 7 | 5.7 | 7 | 3.8 | 96 | NA | NA | NA | NA | NA | NA |
| 1997 | C/V | 113 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 1 | 1 | 100.0 | 1 | 0.4 | 43 | 607 | 607 | 7.1 | 0.0 | 7 | 4 |
| | F/P | 3 | 3 | 100.0 | 3 | 2.0 | 0 | 0 | 0 | 0.0 | 0.0 | 41 | 49 |
| | Total | 117 | 4 | 3.4 | 4 | 2.4 | 43 | NA | 607 | NA | NA | 48 | 53 |
| 1998 | C/V | 126 | 1 | 2.4 | 1 | 0.5 | 61 | NA | NA | NA | NA | 1 | 1 |
| | C/P | 2 | 2 | 100.0 | 2 | 1.2 | 73 | 1,413 | 1,413 | 5.2 | NA | 16 | 18 |
| | F/P | 3 | 3 | 100.0 | 3 | 2.3 | 0 | 0 | 0 | 0.0 | 0.0 | NA | 60 |
| | Total | 131 | 8 | 6.1 | 6 | 4.0 | 134 | NA | NA | NA | NA | NA | 79 |
| 1999-2008/09 | FC | | | | | | | | | | | | |
| 2009/10 [d] | C/V | 7 | 7 | 100.0 | 8 | 7.2 | 989 | 10,697 | 10,697 | 9.2 | 9.2 | 15 | 15 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 7 | 7 | 100.0 | 8 | 7.2 | 989 | 10,697 | 10,697 | 9.2 | 9.2 | 15 | 15 |
| 2010/11 [d] | C/V | 11 | 11 | 100.0 | 12 | 15.3 | 2,410 | 29,346 | 29,346 | 8.2 | 8.2 | 36 | 35 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 11 | 11 | 100.0 | 12 | 15.3 | 2,410 | 29,346 | 29,346 | 8.2 | 8.2 | 36 | 35 |
| 2011/12 [d] | C/V | 18 | 18 | 100.0 | 20 | 25.3 | 3,362 | 48,554 | 48,554 | 6.9 | 6.9 | 51 | 51 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 18 | 18 | 100.0 | 20 | 25.3 | 3,362 | 48,554 | 48,554 | 6.9 | 6.9 | 51 | 51 |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, F/P = Floating processor vessel, NA = Not available, FC = Fishery closed

[a] Pot contents sampled for species composition and biological measurements and conditions of commercially-important species.

[b] Crab size-frequency and shell-condition sampling conducted on retained catch; each data set typically consists of 100 crab.

[c] Each legal tally typically consists of 600 crab.

[d] Data includes Individual Fishing Quota (IFQ) and Community Development Quota. 2005/06 is the first year of Crab Rationalization and IFQ harvest.

Table 4-14.–Saint Matthew Island blue king crab fishery pot lifts on observed and non-observed vessels for each statistical area fished, 2011/12.

| Statistical area | Pots lifted | | | Percent of total pot lifts observed [a] |
|---|---|---|---|---|
| | Observed vessels [a] | Non-observed vessels | Total pots lifted | |
| 725900 | 1 | 0 | 1 | 100.0 |
| 725930 | 2,903 | 0 | 2,903 | 100.0 |
| 726001 | 1,185 | 0 | 1,185 | 100.0 |
| 726031 | 552 | 0 | 552 | 100.0 |
| 735830 | 16 | 0 | 16 | 100.0 |
| 735900 | 23 | 0 | 23 | 100.0 |
| 735930 | 26,413 | 0 | 26,413 | 100.0 |
| 736001 | 16,218 | 0 | 16,218 | 100.0 |
| 736031 | 931 | 0 | 931 | 100.0 |
| 746000 | 266 | 0 | 266 | 100.0 |
| 746030 | 46 | 0 | 46 | 100.0 |
| Totals | 48,554 | 0 | 48,554 | 100.0 |

*Note:* Catcher vessel and catcher-processor vessel information has been combined for reporting purposes to preserve data confidentiality.

[a] Observer onboard during harvest.

Table 4-15.–Eastern Bering Sea Tanner crab harvest by vessel type and percent harvest observed, 2008/09–2011/12.

| Season | Vessel type | Number of Vessels | Number of Landings | Harvest [a,b] | Observed harvest [a,b,c] | Percent observed harvest [c] |
|---|---|---|---|---|---|---|
| 2008/09 [d] | C/V | 12 | 40 | 1,785,317 | 1,500,388 | 84.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 12 | 40 | 1,785,317 | 1,500,388 | 84.0 |
| 2009/10 [d] | C/V | 10 | 38 | 1,310,742 | 1,310,742 | 100.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 10 | 38 | 1,310,742 | 1,310,742 | 100.0 |
| 2010/11 | FC | | | | | |
| 2011/12 | FC | | | | | |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, FC = Fishery closed

[a] In pounds.

[b] Includes deadloss.

[c] Observer onboard during harvest.

[d] Data includes Individual Fishing Quota and Community Development Quota. Observer activity tracking data for previous years is not specifically available for this fishery because prior to 2008 vessels could harvest Tanner crab with snow crab gear.

Table 4-16.–Eastern Bering Sea Tanner crab observer sampling efforts, 2008/09–2011/12.

| Season | Vessel type | Number of Vessels | Number of Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Number of Observer months | Number of Pot lifts sampled [a] | Number of Total pot lifts | Number of Pot lifts on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [b] | Number of Legal tallies [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2008/09 [d] | C/V | 12 | 8 | 66.7 | 11 | 8.0 | 608 | 21,400 | 13,508 | 2.8 | 4.5 | 22 | 22 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | F/P | 1 | 1 | 100.0 | 1 | 0.03 | 0 | 0 | 0 | 0.0 | 0.0 | 1 | 1 |
| | Fleet | 13 | 9 | 69.2 | 12 | 8.03 | 608 | 21,400 | 13,508 | 2.8 | 4.5 | 23 | 23 |
| 2009/10 [d] | C/V | 10 | 10 | 100.0 | 11 | 5.2 | 354 | 8,170 | 8,170 | 4.3 | 4.3 | 22 | 18 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Fleet | 10 | 10 | 100.0 | 11 | 5.2 | 354 | 8,170 | 8,170 | 4.3 | 4.3 | 22 | 18 |
| 2010/11 | FC | | | | | | | | | | | | |
| 2011/12 | FC | | | | | | | | | | | | |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, F/P = Floating processor vessel, FC = Fishery closed

[a] Pot contents sampled for species composition and biological measurements and conditions of commercially-important species.

[b] Crab size-frequency and shell-condition sampling conducted on retained catch; each data set typically consists of 100 crab.

[c] Each legal tally typically consists of 600 crab.

[d] Data includes Individual Fishery Quota and Community Development Quota. Observer activity tracking data for previous years is not specifically available for this fishery because prior to 2008 vessels could harvest Tanner crab with snow crab gear.

Table 4-17.–Western Bering Sea Tanner crab harvest by vessel type and percent harvest observed, 2008/09–2011/12.

| Season | Vessel type | Number of Vessels | Number of Landings | Harvest [a,b] | Observed harvest [a,b,c] | Percent observed harvest [c] |
|---|---|---|---|---|---|---|
| 2008/09 [d] | C/V | 5 | 10 | 104,319 | 85,592 | 82.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 5 | 10 | 104,319 | 85,592 | 82.0 |
| 2009/10 - 2011/12 | FC | | | | | |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, FC = Fishery closed

[a] In pounds.

[b] Includes deadloss.

[c] Observer onboard during harvest.

[d] Data includes Individual Fishing Quota and Community Development Quota. Observer activity tracking data for previous years is not specifically available for this fishery because prior to 2008 vessels could harvest Tanner crab with snow crab gear.

Table 4-18.–Western Bering Sea Tanner crab observer sampling efforts, 2008/09–2011/12.

| Season | Vessel type | Number of Vessels | Number of Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Number of Observer months | Number of Pot lifts sampled [a] | Number of Total pot lifts | Number of Pot lifts on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [b] | Number of Legal tallies [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2008/09 [d] | C/V | 6 | 5 | 83.3 | 6 | 2.3 | 78 | 3,342 | 1,869 | 2.3 | 4.2 | 4 | 4 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | F/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 6 | 5 | 83.3 | 6 | 2.3 | 78 | 3,342 | 1,869 | 2.3 | 4.2 | 4 | 4 |
| 2009/10 - 2011/12 | FC | | | | | | | | | | | | |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel , F/P = Floating processor vessel, FC = Fishery closed

[a] Pot contents sampled for species composition and biological measurements and conditions of commercially important species.

[b] Crab size-frequency and shell-condition sampling conducted on retained catch; each data set typically consists of 100 crab.

[c] Each legal tally typically consists of 600 crab.

[d] Data includes Individual Fishing Quota and Community Development Quota. Observer activity data for previous years is not specifically available for this fishery because prior to 2008 vessels could harvest Tanner crab with snow crab gear.

Table 4-19.–Bering Sea snow crab harvest by vessel type and percent harvest observed, 2005–2011/12.

| Season | Vessel type | Number of Vessels | Number of Landings | Harvest [a,b] | Observed harvest [a,b,c] | Percent observed harvest [c] |
|---|---|---|---|---|---|---|
| 2005 | C/V | 162 | 184 | 22,066,179 | 3,674,096 | 16.7 |
| | C/P | 6 | 12 | 970,108 | 970,108 | 100.0 |
| | CDQ | 9 | 23 | 1,855,841 | 1,855,841 | 100.0 |
| | Total | 177 | 219 | 24,892,128 | 6,500,045 | 26.1 |
| 2005/06 [d] | C/V | 76 | 306 | 33,650,679 | 11,979,880 | 35.6 |
| | C/P | 4 | 44 | 3,323,211 | 3,323,211 | 100.0 |
| | Total | 80 | 350 | 36,973,890 | 15,303,091 | 41.4 |
| 2006/07 [d] | C/V | 67 | 272 | 32,525,172 | 11,206,761 | 34.5 |
| | C/P | 4 | 35 | 3,830,477 | 3,830,477 | 100.0 |
| | Total | 71 | 307 | 36,355,649 | 15,037,238 | 41.4 |
| 2007/08 [d] | C/V | 85 | 468 | 57,488,538 | 15,851,014 | 27.6 |
| | C/P | 4 | 44 | 5,539,498 | 5,539,498 | 100.0 |
| | Total | 89 | 512 | 63,028,036 | 21,390,512 | 33.9 |
| 2008/09 [d] | C/V | 73 | 443 | 53,729,804 | 14,345,187 | 26.7 |
| | C/P | 4 | 44 | 4,818,045 | 4,818,045 | 100.0 |
| | Total | 77 | 487 | 58,547,849 | 19,163,232 | 32.7 |
| 2009/10 [d] | All vessels | 69 | 354 | 48,014,089 | 18,563,308 | 38.7 |
| 2010/11 [d] | All vessels | 68 | 386 | 54,263,200 | 26,676,703 | 49.2 |
| 2011/12 [d] | All vessels | 72 | 724 | 88,830,652 | 21,668,214 | 24.4 |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, CDQ = Community Development Quota

[a] In pounds.

[b] Includes deadloss.

[c] Observer onboard during harvest.

[d] Data includes Individual Fishing Quota (IFQ) and Community Development Quota. 2005/06 is the first year of Crab Rationalization and IFQ harvest.

Table 4-20.–Bering Sea snow crab observer sampling efforts, 1995–2011/12.

| Season | Vessel type | Number of [a] | | Percent observer coverage | Number of | | | | | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Vessels | Observed vessels | | Observer deploy-ments | Observer months | Pot lifts sampled [b] | Total pot lifts | Pot lifts on observed vessels | | | Size freq. [c] | Legal tallies [d] |
| 1995 | C/V | 234 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 19 | 19 | 100.0 | 36 | 31.6 | 1,574 | NA | NA | NA | NA | 465 | 475 |
| | F/P | 15 | 15 | 100.0 | 17 | 22.5 | 0 | 0 | 0 | 0.0 | 0.0 | NA | NA |
| | Total | 268 | 34 | 12.7 | 53 | 54.1 | 1,574 | 506,802 | NA | 0.3 | NA | 465 | 475 |
| 1996 | C/V | 219 | 0 | 0.0 | 0 | 0.0 | 0 | NA | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 15 | 15 | 100.0 | 35 | 31.3 | 1,412 | NA | NA | NA | NA | 479 | 494 |
| | F/P | 13 | 13 | 100.0 | 15 | 25.1 | 0 | 0 | 0 | 0.0 | 0.0 | 246 | 292 |
| | Total | 247 | 28 | 11.3 | 50 | 56.4 | 1,412 | 520,651 | NA | 0.3 | NA | 725 | 786 |
| 1997 | C/V | 216 | 0 | 0.0 | 0 | 0.0 | 0 | 680,725 | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 14 | 14 | 100.0 | 24 | 33.5 | 1,728 | 73,415 | 73,415 | 2.4 | 2.4 | 607 | 621 |
| | F/P | 11 | 11 | 100.0 | 17 | 26.5 | 0 | 0 | 0 | 0.0 | 0.0 | 440 | 447 |
| | Total | 237 | 25 | 10.5 | 41 | 60.0 | 1,728 | 754,140 | 73,415 | 0.2 | 2.4 | 1,047 | 1,068 |
| 1998 | C/V | 217 | 0 | 0.0 | 0 | 0.0 | 0 | 825,832 | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 12 | 12 | 100.0 | 21 | 30.7 | 5,872 | 65,436 | 65,436 | 9.0 | 9.0 | 598 | 609 |
| | F/P | 11 | 11 | 100.0 | 14 | 26.9 | 0 | 0 | 0 | 0.0 | 0.0 | 751 | 762 |
| | CDQ | 20 | 20 | 100.0 | 60 | 34.0 | 1,726 | 930,843 | 105,011 | 4.4 | 4.4 | 1,429 | 1,453 |
| | Total | 260 | 43 | 16.5 | 35 | 91.6 | 7,598 | 891,268 | 65,436 | 0.9 | 11.6 | 1,349 | 1,371 |
| 1999 | C/V | 231 | 0 | 0.0 | 0 | 0.0 | 0 | 846,163 | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 10 | 10 | 100.0 | 15 | 24.6 | 1,593 | 52,880 | 52,880 | 3.0 | 3.0 | 694 | 8 |
| | F/P | 11 | 11 | 100.0 | 12 | 26.3 | 0 | 0 | 0 | 0.0 | 0.0 | 736 | 683 |
| | CDQ | 276 | 22 | 91.7 | 28 | 12.1 | 789 | 46,490 | 14,131 | 1.7 | 5.6 | 59 | 46 |
| | Total | 252 | 43 | 17.1 | 55 | 63.0 | 2,382 | 945,533 | 67,011 | 0.3 | 3.6 | 1,489 | 737 |
| 2000 | C/V | 220 | 0 | 0.0 | 0 | 0.0 | 0 | 161,579 | 0 | 0.0 | 0.0 | 0 | 0 |
| | C/P | 9 | 9 | 100.0 | 10 | 5.7 | 202 | 8,485 | 8,485 | 2.4 | 2.4 | 76 | 60 |
| | F/P | 5 | 5 | 100.0 | 5 | 3.5 | 0 | 0 | 0 | 0.0 | 0.0 | 111 | 91 |
| | CDQ | 13 | 12 | 92.3 | 12 | 8.5 | 629 | 12,570 | 12,185 | 5.0 | 5.1 | 32 | 26 |
| | Total | 247 | 26 | 10.5 | 27 | 17.7 | 831 | 182,634 | 20,670 | 0.5 | 4.0 | 219 | 177 |

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Table 4-20.–Page 2 of 4.

| Season | Vessel type | Number of [a] Vessels | Number of [a] Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Number of Observer months | Number of Pot lifts sampled [b] | Number of Total pot lifts | Number of Pot lifts on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [c] | Number of Legal tallies [d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2001 | C/V | 200 | 7 | 3.5 | 7 | 9.6 | 241 | 159,438 | 4,663 | 0.2 | 5.2 | 7 | 6 |
| | C/P | 7 | 7 | 100.0 | 10 | 9.4 | 487 | 17,492 | 17,492 | 2.8 | 2.8 | 162 | 83 |
| | F/P | 3 | 3 | 100.0 | 3 | 4.3 | 0 | 0 | 0 | 0.0 | 0.0 | 74 | 64 |
| | CDQ | 11 | 11 | 100.0 | 11 | 9.9 | 771 | 14,270 | 14,270 | 5.4 | 5.4 | 33 | 11 |
| | Total | 221 | 28 | 12.7 | 31 | 33.2 | 1,499 | 191,200 | 36,425 | 0.8 | 4.1 | 276 | 164 |
| 2002 | C/V | 183 | 10 | 5.5 | 12 | 11.8 | 809 | 292,846 | 16,021 | 0.3 | 5.0 | 29 | 21 |
| | C/P | 8 | 8 | 100.0 | 9 | 8.0 | 509 | 14,820 | 14,820 | 3.4 | 3.4 | 170 | 121 |
| | F/P | 5 | 5 | 100.0 | 5 | 4.0 | 0 | 0 | 0 | 0.0 | 0.0 | 192 | 105 |
| | CDQ | 11 | 11 | 100.0 | 15 | 16.0 | 1,098 | 18,845 | 17,264 | 5.8 | 6.3 | 12 | 10 |
| | Total | 205 | 32 | 15.6 | 41 | 39.8 | 2,416 | 326,511 | 48,105 | 0.7 | 5.0 | 403 | 257 |
| 2003 | C/V | 188 | 18 | 9.6 | 19 | 14.1 | 741 | 136,280 | 12,813 | 0.5 | 5.8 | 20 | 20 |
| | C/P | 5 | 5 | 100.0 | 5 | 3.0 | 129 | 3,623 | 3,623 | 3.6 | 3.6 | 47 | 47 |
| | F/P | 5 | 5 | 100.0 | 6 | 3.5 | 0 | 0 | 0 | 0.0 | 0.0 | 61 | 61 |
| | CDQ | 10 | 9 | 90.0 | 10 | 10.4 | 746 | 14,583 | 13,519 | 5.1 | 5.5 | 61 | 61 |
| | Total | 206 | 35 | 17.0 | 40 | 31.0 | 1,616 | 154,486 | 29,955 | 1.0 | 5.4 | 189 | 189 |
| 2004 | C/V | 183 | 19 | 10.4 | 19 | 13.7 | 688 | 106,144 | 11,067 | 0.6 | 6.2 | 19 | 19 |
| | C/P | 6 | 6 | 100.0 | 7 | 3.2 | 159 | 3,943 | 3,943 | 4.0 | 4.0 | 44 | 44 |
| | F/P | 5 | 5 | 100.0 | 5 | 3.2 | 0 | 0 | 0 | 0.0 | 0.0 | 58 | 59 |
| | CDQ | 10 | 10 | 100.0 | 10 | 11.0 | 780 | 13,622 | 13,622 | 5.7 | 5.7 | 61 | 56 |
| | Total | 202 | 38 | 18.8 | 41 | 31.1 | 1,627 | 123,709 | 28,632 | 1.3 | 5.7 | 182 | 178 |
| 2005 | C/V | 162 | 13 | 8.0 | 13 | 8.1 | 336 | 66,712 | 5,571 | 0.5 | 6.0 | 18 | 17 |
| | C/P | 6 | 6 | 100.0 | 6 | 3.0 | 91 | 3,151 | 3,151 | 2.9 | 2.9 | 32 | 26 |
| | F/P | 3 | 3 | 100.0 | 4 | 1.9 | 0 | 0 | 0 | 0.0 | 0.0 | 37 | 38 |
| | CDQ | 9 | 9 | 100.0 | 9 | 6.5 | 210 | 3,345 | 3,345 | 6.3 | 6.3 | 48 | 39 |
| | Total | 179 | 31 | 17.3 | 32 | 19.5 | 637 | 73,208 | 12,067 | 0.9 | 5.3 | 135 | 120 |

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Table 4-20.–Page 3 of 4.

| Season | Vessel type | Number of [a] Vessels | Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Observer months | Pot lifts sampled [b] | Total pot lifts | Pot lifts on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [c] | Legal tallies [d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2005/06 [e] | C/V | 76 | 28 | 36.8 | 31 | 40.4 | 1,997 | 105,508 | 37,256 | 1.9 | 5.4 | 104 | 95 |
| | C/P | 4 | 4 | 100.0 | 7 | 11.0 | 586 | 15,004 | 15,004 | 3.9 | 3.9 | 208 | 197 |
| | F/P | 2 | 2 | 100.0 | 3 | 5.1 | 0 | 0 | 0 | 0.0 | 0.0 | 32 | 32 |
| | Total | 82 | 34 | 41.5 | 41 | 56.5 | 2,583 | 120,512 | 52,260 | 2.1 | 4.9 | 344 | 324 |
| 2006/07 [e] | C/V | 67 | 24 | 35.8 | 31 | 31.8 | 870 | 78,611 | 28,201 | 1.1 | 3.1 | 80 | 70 |
| | C/P | 4 | 4 | 100.0 | 9 | 10.0 | 248 | 10,808 | 10,808 | 2.3 | 2.3 | 181 | 157 |
| | F/P | 2 | 2 | 100.0 | 3 | 4.1 | 0 | 0 | 0 | 0.0 | 0.0 | 49 | 56 |
| | Total | 73 | 30 | 41.1 | 43 | 45.9 | 1,118 | 89,419 | 39,009 | 1.3 | 2.9 | 310 | 283 |
| 2007/08 [e] | C/V | 85 | 29 | 34.1 | 35 | 34.9 | 1,297 | 130,008 | 37,688 | 1.0 | 3.4 | 92 | 90 |
| | C/P | 4 | 4 | 100.0 | 4 | 10.0 | 416 | 13,834 | 13,834 | 3.0 | 3.0 | 136 | 132 |
| | F/P | 1 | 1 | 100.0 | 1 | 1.9 | 0 | 0 | 0 | 0.0 | 0.0 | 44 | 29 |
| | Total | 90 | 34 | 37.8 | 40 | 46.8 | 1,713 | 143,842 | 51,522 | 1.2 | 3.3 | 272 | 251 |
| 2008/09 [e] | C/V | 73 | 25 | 34.2 | 26 | 38.1 | 1,297 | 147,699 | 40,587 | 0.9 | 3.2 | 99 | 98 |
| | C/P | 4 | 4 | 100.0 | 5 | 9.3 | 416 | 15,837 | 15,837 | 2.6 | 2.6 | 194 | 184 |
| | F/P | 1 | 1 | 100.0 | 3 | 2.5 | 0 | 0 | 0 | 0.0 | 0.0 | 24 | 24 |
| | Total | 78 | 30 | 38.5 | 34 | 49.9 | 1,713 | 163,536 | 56,424 | 1.0 | 3.0 | 317 | 306 |
| 2009/10 [e] | C/V | 67 | 26 | 38.8 | 31 | 35.6 | 1,608 | 132,318 | 49,516 | 1.2 | 3.2 | 102 | 101 |
| | C/P | 2 | 2 | 100.0 | 3 | 3.0 | 130 | 4,700 | 4,700 | 2.8 | 2.8 | 54 | 54 |
| | F/P | 2 | 2 | 100.0 | 3 | 3.9 | 0 | 0 | 0 | 0.0 | 0.0 | 44 | 44 |
| | Total | 71 | 30 | 42.3 | 37 | 42.5 | 1,738 | 137,018 | 54,216 | 1.3 | 3.2 | 200 | 199 |

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Table 4-20.–Page 4 of 4.

| Season | Vessel type | Number of [a] Vessels | Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Observer months | Pot lifts sampled [b] | Total pot lifts | Pot lifts on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [c] | Legal tallies [d] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2010/11 [e] | C/V | 66 | 24 | 36.4 | 30 | 43.6 | 1,925 | 138,994 | 59,508 | 1.4 | 3.2 | 121 | 118 |
| | C/P | 2 | 2 | 100.0 | 3 | 4.5 | 212 | 8,250 | 8,250 | 2.6 | 2.6 | 91 | 91 |
| | F/P | 2 | 2 | 100.0 | 2 | 3.6 | 0 | 0 | 0 | 0.0 | 0.0 | 38 | 38 |
| | Total | 70 | 28 | 40.0 | 35 | 51.7 | 2,137 | 147,244 | 67,758 | 1.5 | 3.2 | 250 | 247 |
| 2011/12 [e] | C/V | 70 | 22 [f] | 31.4 | 48 | 53.8 | 1,796 | 253,526 | 52,983 | 0.7 | 3.4 | 130 | 124 |
| | C/P | 2 | 2 | 100.0 | 6 | 10.0 | 383 | 17,076 | 17,076 | 2.2 | 2.2 | 157 | 155 |
| | F/P | 2 | 2 | 100.0 | 3 | 7.4 | 0 | 0 | 0 | 0.0 | 0.0 | 64 | 64 |
| | Total | 74 | 26 | 35.1 | 57 | 71.2 | 2,179 | 270,602 | 70,059 | 0.8 | 3.1 | 351 | 343 |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, F/P = Floating processor vessel, NA = Not available

[a] Some vessels participated as both a C/P and F/P and are only counted once in the total number of vessels.

[b] Pot contents sampled for species composition and biological measurements and conditions of commercially-important species.

[c] Crab size-frequency and shell-condition sampling conducted on retained catch; each data set typically consists of 100 crab.

[d] Each legal tally typically consists of 600 crab.

[e] Data includes Individual Fishing Quota (IFQ) and Community Development Quota. 2005/06 is the first year of Crab Rationalization and IFQ harvest.

[f] Many of the observed C/Vs carried an observer for only a portion of their snow crab harvest due to Bering Sea ice conditions and program budgetary constraints allowing for only a set number of observer deployment days.

Table 4-21.–Bering Sea snow crab fishery pot lifts on observed and non-observed vessels for each statistical area fished, 2011/12.

| Statistical area | Pots lifted | | | Percent of total pot lifts observed [a] |
|---|---|---|---|---|
| | Observed vessels [a] | Non-observed vessels | Total pots lifted | |
| 665430 | 32 | 0 | 32 | 100.0 |
| 665500 | 58 | 30 | 88 | 65.9 |
| 665530 | 147 | 47 | 194 | 75.8 |
| 665600 | 91 | 470 | 561 | 16.2 |
| 675500 | 347 | 347 | 694 | 50.0 |
| 675530 | 5,672 | 5,736 | 11,408 | 49.7 |
| 675600 | 3,661 | 3,390 | 7,051 | 51.9 |
| 675630 | 175 | 205 | 380 | 46.1 |
| 685500 | 0 | 10 | 10 | 0.0 |
| 685530 | 719 | 3,352 | 4,071 | 17.7 |
| 685600 | 2,445 | 5,289 | 7,734 | 31.6 |
| 685630 | 99 | 1,638 | 1,737 | 5.7 |
| 695600 | 45 | 279 | 324 | 13.9 |
| 705600 | 3,339 | 11,586 | 14,925 | 22.4 |
| 705630 | 1,425 | 4,136 | 5,561 | 25.6 |
| 705730 | 0 | 9 | 9 | 0.0 |
| 715600 | 816 | 2,969 | 3,785 | 21.6 |
| 715630 | 11,983 | 43,054 | 55,037 | 21.8 |
| 715700 | 3,995 | 18,506 | 22,501 | 17.8 |
| 715730 | 19 | 1,301 | 1,320 | 1.4 |
| 715800 | 8 | 0 | 8 | 100.0 |
| 725600 | 0 | 861 | 861 | 0.0 |
| 725630 | 7,844 | 24,951 | 32,795 | 23.9 |
| 725700 | 8,224 | 22,172 | 30,396 | 27.1 |
| 725730 | 2,572 | 9,443 | 12,015 | 21.4 |
| 725800 | 137 | 631 | 768 | 17.8 |
| 725830 | 3 | 56 | 59 | 5.1 |
| 735600 | 20 | 45 | 65 | 30.8 |
| 735630 | 1,463 | 3,789 | 5,252 | 27.9 |
| 735700 | 5,867 | 10,316 | 16,183 | 36.3 |
| 735730 | 2,375 | 5,456 | 7,831 | 30.3 |
| 735800 | 5,565 | 17,885 | 23,450 | 23.7 |
| 735830 | 837 | 2,303 | 3,140 | 26.7 |
| 745700 | 20 | 0 | 20 | 100.0 |
| 745800 | 3 | 0 | 3 | 100.0 |
| 745830 | 53 | 259 | 312 | 17.0 |
| 755830 | 0 | 12 | 12 | 0.0 |
| 765830 | 0 | 10 | 10 | 0.0 |
| Totals | 70,059 | 200,543 | 270,602 | 25.9 |

*Note:* Catcher vessel and catcher-processor vessel information has been combined for reporting purposes to preserve data confidentiality.

[a] Observer onboard during harvest.

Table 4-22.–Bering Sea golden king crab observer sampling efforts, 1989–2011.

| Season | Vessel type | Number of Vessels | Number of Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Number of Observer months | Number of Pot lifts sampled [a] | Number of Total pot lifts | Percent pot lifts sampled | Number of Size freq. [b] | Number of Legal tallies [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1989 | C/V | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | C/P | 2 | 2 | 100.0 | 2 | 1.5 | NA | NA | NA | NA | NA |
| | Total | 2 | 2 | 100.0 | 2 | 1.5 | NA | NA | NA | NA | NA |
| 1990-1991 | | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| 1992 | C/V | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | C/P | 2 | 2 | 100.0 | 2 | 1.3 | NA | NA | NA | NA | NA |
| | Total | 2 | 2 | 100.0 | 0 | 1.3 | NA | NA | NA | NA | NA |
| 1993-2000 | | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| 2001 | C/V | 6 | 6 | 100.0 | 9 | 10.5 | 1,356 | 4,513 | 30.0 | 13 | 14 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 6 | 6 | 100.0 | 9 | 10.5 | 1,356 | 4,513 | 30.0 | 13 | 14 |
| 2002 | C/V | 8 | 8 | 100.0 | 11 | 11.4 | 1,505 | 5,464 | 27.5 | 9 | 10 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 8 | 8 | 100.0 | 11 | 11.4 | 1,505 | 5,464 | 27.5 | 9 | 10 |
| 2003 | C/V | 3 | 3 | 100.0 | 3 | 4.6 | 593 | 3,192 | 18.6 | 6 | 6 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 3 | 3 | 100.0 | 3 | 4.6 | 593 | 3,192 | 18.6 | 6 | 6 |
| 2004 | C/V | 5 | 5 | 100.0 | 5 | 3.4 | 551 | 2,312 | 23.8 | 7 | 7 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 5 | 5 | 100.0 | 5 | 3.4 | 551 | 2,312 | 23.8 | 7 | 7 |
| 2005 - 2009 | | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| 2010 | C/V | 1 | 1 | 100.0 | 2 | 2.1 | 483 | 1,823 | 26.5 | 3 | 3 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 1 | 1 | 100.0 | 2 | 2.1 | 483 | 1,823 | 26.5 | 3 | 3 |
| 2011 | C/V | 2 | 2 | 100.0 | 2 | 2.6 | 463 | 1,872 | 24.7 | 2 | 2 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0 | 0 |
| | Total | 2 | 2 | 100.0 | 2 | 2.6 | 463 | 1,872 | 24.7 | 2 | 2 |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, NA = Not available

[a] Pot contents sampled for species composition and biological measurements and conditions of commercially-important species.

[b] Crab size-frequency and shell-condition sampling conducted on retained catch; each data set typically consists of 100 crab.

[c] Each legal tally typically consists of 600 crab.

Table 4-23.–Bering Sea hair crab observer sampling efforts, 1992–2011.

| Season | Vessel type | Number of Vessels | Number of Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Number of Observer months | Number of Pot lifts sampled [a] | Number of Total pot lifts | Number of Pot lifts on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [b] | Number of Legal tallies [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1992 | C/V | 9 | 2 | 22.2 | 2 | 1.3 | 73 | 121,520 | 8,200 | 0.1 | 0.9 | NA | NA |
| | C/P | 1 | 1 | 100.0 | 1 | 0.6 | 45 | 9,743 | 9,743 | 0.5 | 0.5 | NA | NA |
| | Total | 10 | 3 | 30.0 | 3 | 1.9 | 118 | 131,263 | 17,943 | 0.1 | 0.7 | NA | NA |
| 1993 | C/V | 2 | 2 | 100.0 | 3 | 2.7 | 87 | 4,241 | 4,241 | 2.1 | 2.1 | NA | NA |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 2 | 2 | 100.0 | 3 | 1.5 | 87 | 4,241 | 4,241 | 2.1 | 2.1 | NA | NA |
| 1993/94 | C/V | 19 | 12 | 63.2 | 27 | 32.5 | 9,213 | 585,913 | 581,649 | 1.6 | 1.6 | 138 | 114 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 19 | 12 | 63.2 | 27 | 32.5 | 9,213 | 585,913 | 581,649 | 1.6 | 1.6 | 138 | 114 |
| 1994 | C/V | 10 | 10 | 100.0 | 12 | 15.2 | 8,333 | 287,954 | 287,954 | 2.9 | 2.9 | 62 | 51 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 10 | 10 | 100.0 | 12 | 15.2 | 8,333 | 287,954 | 287,954 | 2.9 | 2.9 | 62 | 51 |
| 1995 | C/V | 21 | 21 | 100.0 | 22 | 21.5 | 10,166 | 441,494 | 441,494 | 2.3 | 2.3 | 72 | 77 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 21 | 21 | 100.0 | 22 | 21.5 | 10,166 | 441,494 | 441,494 | 2.3 | 2.3 | 72 | 77 |
| 1996 | C/V | 19 | 18 | 94.7 | 21 | 19.6 | 9,194 | 410,548 | 408,798 | 2.2 | 2.2 | 60 | 85 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 19 | 18 | 94.7 | 21 | 19.6 | 9,194 | 410,548 | 408,798 | 2.2 | 2.2 | 60 | 85 |
| 1997 | C/V | 16 | 16 | 100.0 | 16 | 11.6 | 5,464 | 211,970 | 211,970 | 2.6 | 2.6 | 42 | 48 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 16 | 16 | 100.0 | 16 | 11.6 | 5,464 | 211,970 | 211,970 | 2.6 | 2.6 | 42 | 48 |
| 1998 | C/V | 12 | 12 | 100.0 | 12 | 6.8 | 2,947 | 128,495 | 128,495 | 2.3 | 2.3 | 27 | 26 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 12 | 12 | 100.0 | 12 | 6.8 | 2,947 | 128,495 | 128,495 | 2.3 | 2.3 | 27 | 26 |

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| Season | Vessel type | Number of Vessels | Number of Observed vessels | Percent observer coverage | Number of Observer deploy-ments | Number of Observer months | Number of Pot lifts sampled [a] | Number of Total pot lifts | Number of Pot lifts on observed vessels | Percent pot lifts sampled | Percent pot lifts sampled on observed vessels | Number of Size freq. [b] | Number of Legal tallies [c] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1999 | C/V | 8 | 8 | 100.0 | 8 | 5.5 | 2,275 | 92,333 | 92,333 | 2.5 | 2.5 | 21 | 26 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 8 | 8 | 100.0 | 8 | 5.5 | 2,275 | 92,333 | 92,333 | 2.5 | 2.5 | 21 | 26 |
| 2000 | C/V | 3 | 3 | 100.0 | 3 | 1.0 | 192 | 3,300 | 3,300 | 5.8 | 5.8 | 2 | 2 |
| | C/P | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0.0 | 0.0 | 0 | 0 |
| | Total | 3 | 3 | 100.0 | 3 | 1.0 | 192 | 3,300 | 3,300 | 5.8 | 5.8 | 2 | 2 |
| 2001-2011 | FC | | | | | | | | | | | | |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, NA = Not available, FC = Fishery closed

[a] Pot contents sampled for species composition and biological measurements and conditions of commercially-important species.

[b] Crab size-frequency and shell-condition sampling conducted on retained catch; each data set typically consists of 100 crab.

[c] Each legal tally typically consists of 600 crab.

Table 4-24.–Bering Sea hair crab harvest by vessel type and percent of harvest observed, 1992–2011.

| Season | Vessel type | Number of Vessels | Number of Landings | Harvest [a,b] | Observed harvest [a,b,c] | Percent observed harvest [c] |
|---|---|---|---|---|---|---|
| 1992 | C/V | 9 | 48 | 1,120,715 | 129,650 | 11.6 |
| | C/P | 1 | 1 | 71,975 | 71,975 | 100.0 |
| | Total | 10 | 72 | 1,192,690 | 201,625 | 16.9 |
| 1993 | C/V | 2 | 2 | 512 | 512 | 100.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 2 | 2 | 512 | 512 | 100.0 |
| 1993/94 | C/V | 19 | 177 | 2,331,686 | 2,322,353 | 99.6 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 19 | 177 | 2,331,686 | 2,322,353 | 99.6 |
| 1994 | C/V | 10 | 82 | 1,199,246 | 1,199,246 | 100.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 10 | 82 | 1,199,246 | 1,199,246 | 100.0 |
| 1995 | C/V | 21 | 78 | 2,059,988 | 2,059,988 | 100.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 21 | 78 | 2,059,988 | 2,059,988 | 100.0 |
| 1996 | C/V | 19 | 91 | 745,804 | 745,336 | 99.9 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 19 | 91 | 745,804 | 745,336 | 99.9 |
| 1997 | C/V | 16 | 52 | 668,096 | 668,096 | 100.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 16 | 52 | 668,096 | 668,096 | 100.0 |
| 1998 | C/V | 12 | 31 | 307,739 | 307,739 | 100.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 12 | 31 | 307,739 | 307,739 | 100.0 |

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| Season | Vessel type | Number of Vessels | Number of Landings | Harvest [a,b] | Observed harvest [a,b,c] | Percent observed harvest [c] |
|---|---|---|---|---|---|---|
| 1999 | C/V | 8 | 27 | 221,656 | 221,656 | 100.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 8 | 27 | 221,656 | 221,656 | 100.0 |
| 2000 | C/V | 3 | 3 | 1,546 | 1,546 | 100.0 |
| | C/P | 0 | 0 | 0 | 0 | 0.0 |
| | Total | 3 | 3 | 1,546 | 1,546 | 100.0 |
| 2001-2011 | FC | | | | | |

*Note:* C/V = Catcher vessel, C/P = Catcher-processor vessel, FC = Fishery closed

[a] In pounds.

[b] Includes deadloss.

[c] Observer onboard during harvest.

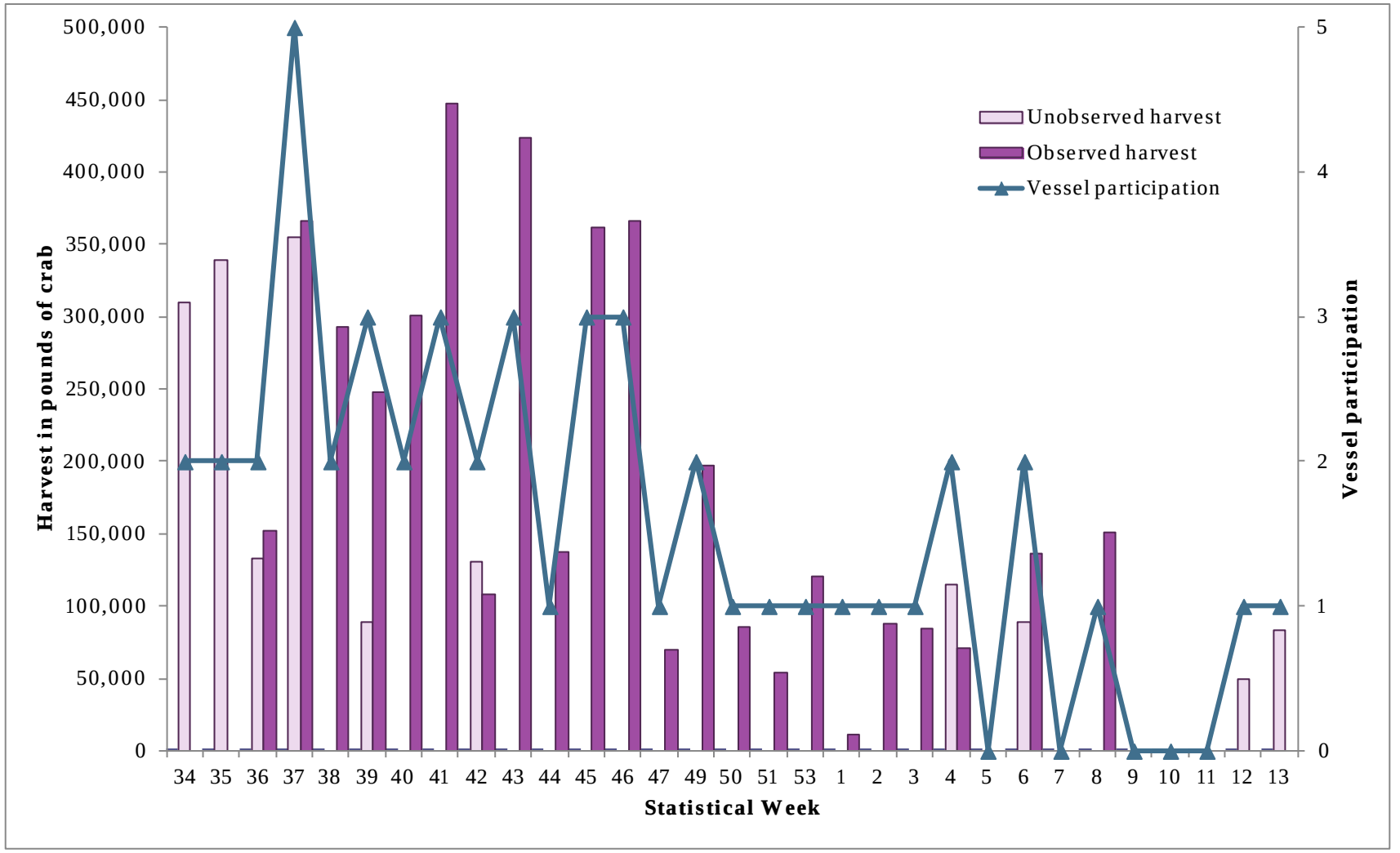


Figure 4-1.–Aleutian Islands golden king crab fishery comparison of observed harvest to unobserved harvest, and total vessel participation by statistical week between August 21, 2011 and March 13, 2012 combining harvest from both east and west of 174° W long.

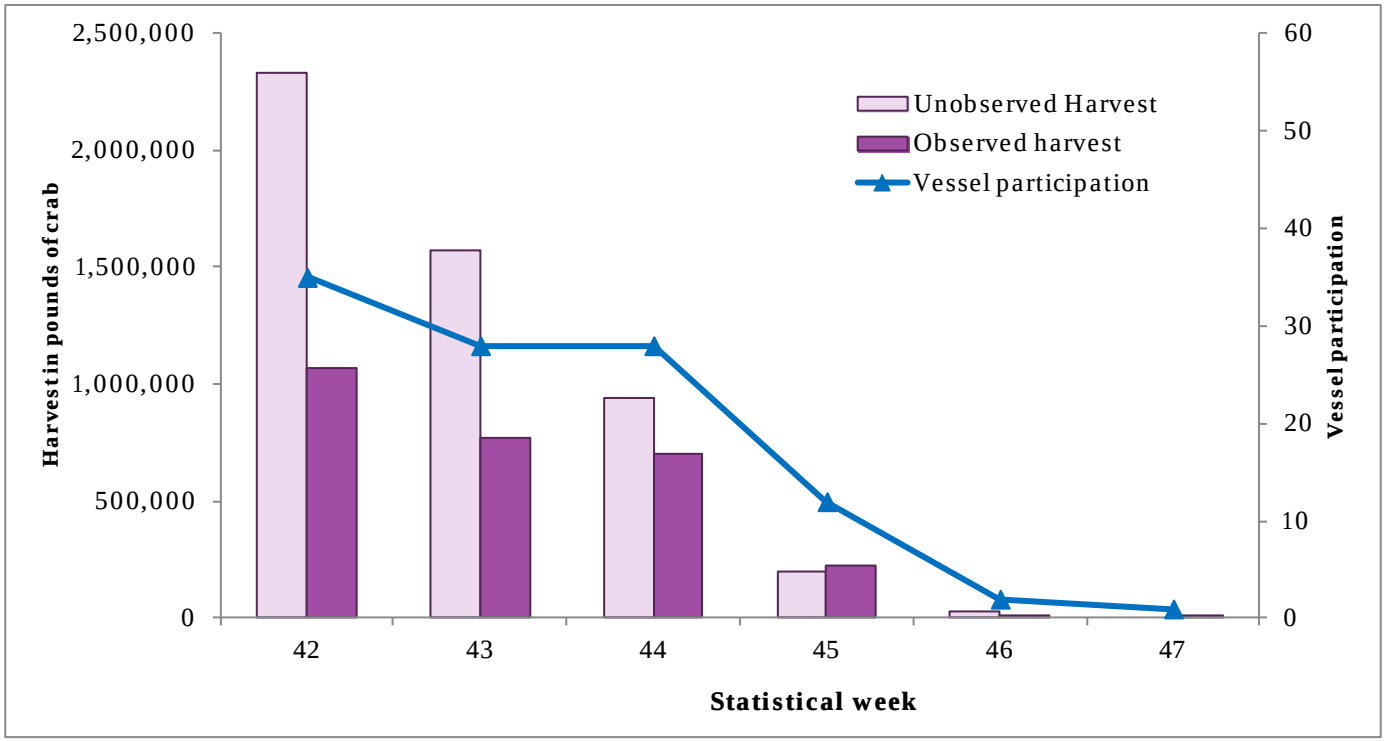


Figure 4-2.–Bristol Bay red king crab fishery comparison of observed harvest to unobserved harvest, and total vessel participation by statistical week between October 17, 2011 and December 11, 2012.

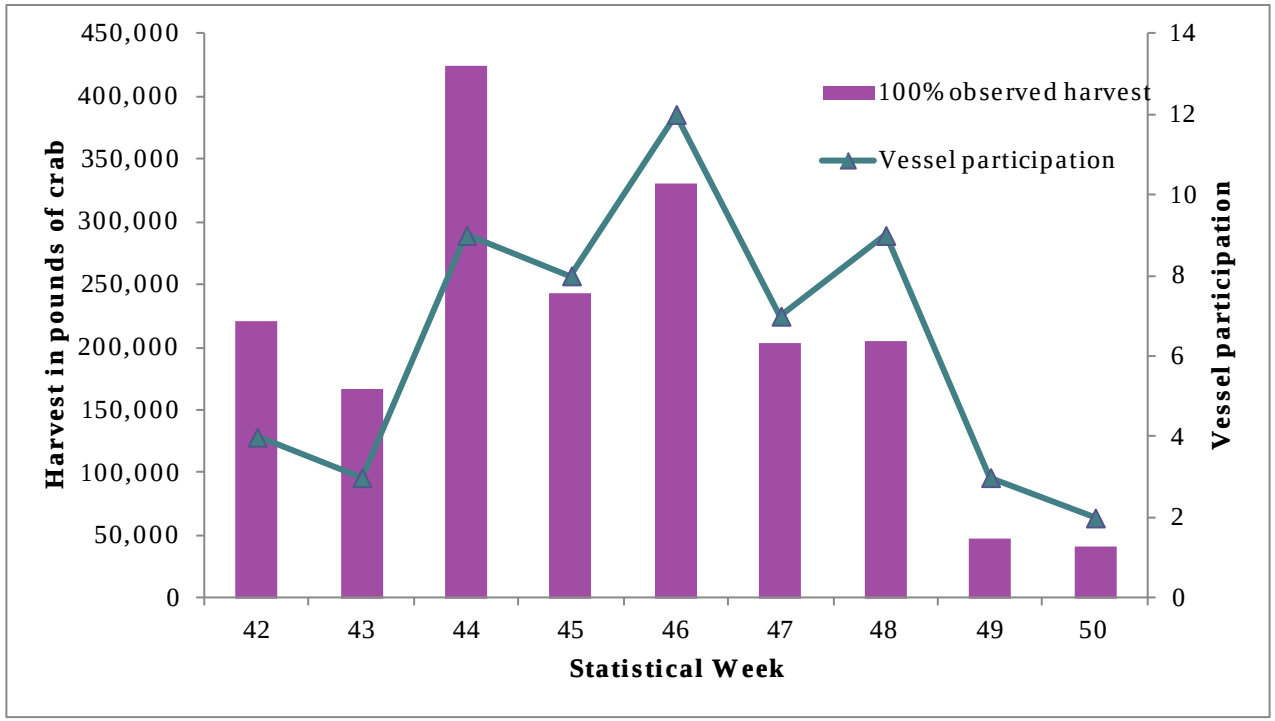


Figure 4-3.–Saint Matthew Island blue king crab fishery harvest and total vessel participation by statistical week between October 17, 2011 and December 11, 2012.

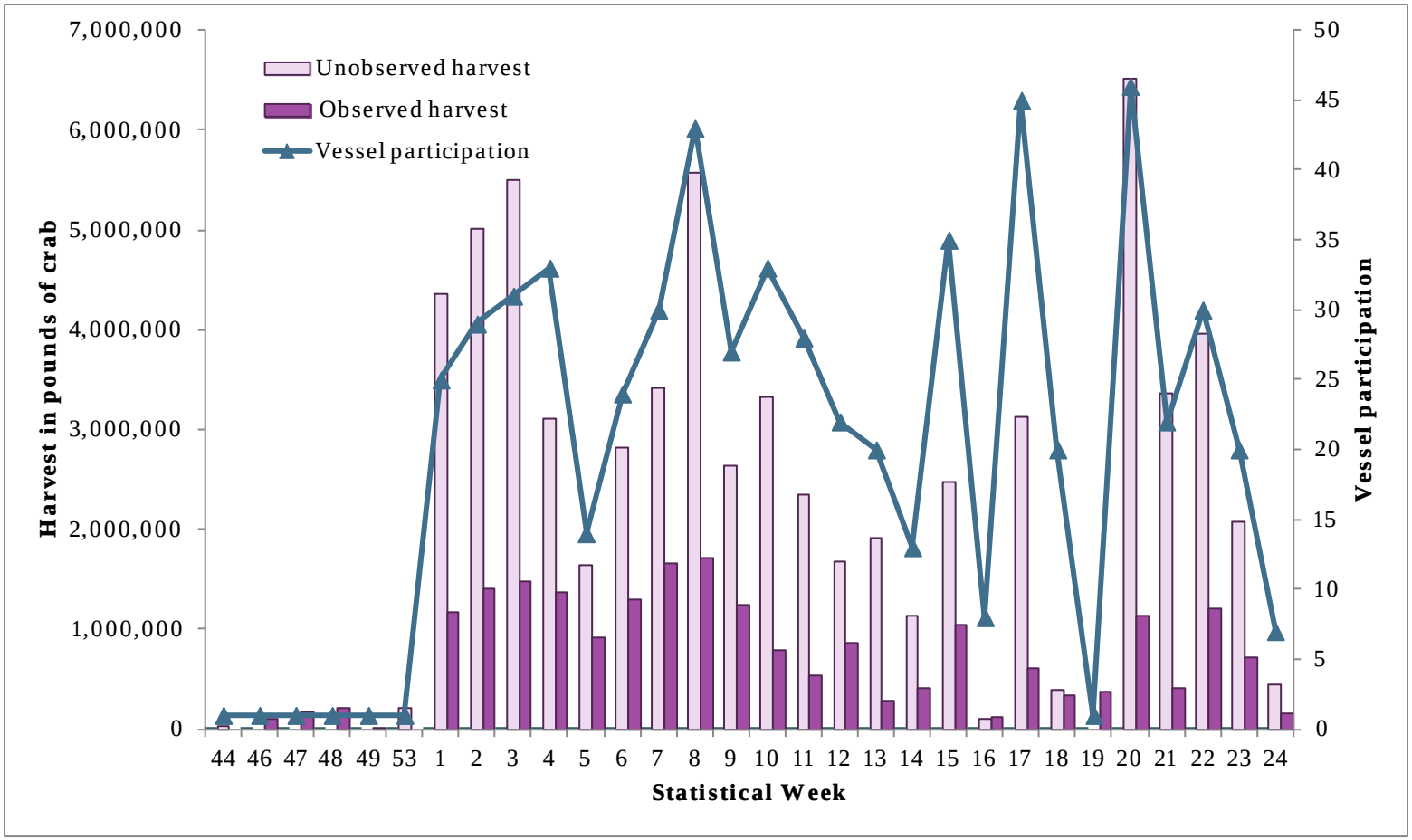


Figure 4-4.–Bering Sea snow crab fishery comparison of observed harvest to unobserved harvest, and total vessel participation by statistical week between November 21, 2011 and April 16, 2012.