

Fishery Management Report No. 05-66

**Fishery Management Plan for the Commercial
Tanner Crab Fishery in the Kodiak District of
Registration Area J, 2006**

by

Nicholas H. Sagalkin

December 2005

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



Symbols and Abbreviations

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

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

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ABSTRACT

Five sections (including the Semidi Overlap Section) of the Kodiak District are scheduled to open for a commercial Tanner crab *Chionoecetes bairdi* fishery on January 15, 2006. The opening date may be delayed due to severe weather under criteria established in regulation. The Kodiak District Tanner crab fishery is a limited entry fishery regulated by the Commercial Fisheries Entry Commission (CFEC). Guideline harvest levels (GHLs) are established by section: 550,000 pounds for the Northeast Section, 1,300,000 pounds for the Eastside Section, 100,000 pounds for the Southeast Section, and 150,000 pounds for the Southwest Section. The Semidi Island Overlap Section is exploratory and does not have a GHL. The total Kodiak District GHL is 2.1 million pounds, and vessels are limited to 30 pots.

Key words: Tanner crab, *Chionoecetes bairdi*, Kodiak District, harvest strategy, regulations

INTRODUCTION

AREA DESCRIPTION

The Kodiak Tanner crab *Chionoecetes bairdi* District includes the waters of Registration Area J south of the latitude of Cape Douglas (58° 51.10' N lat.), west of the longitude of Cape Fairfield (148° 50.25' W long.) and east of the longitude of Cape Kumlik (157° 27' W long.). The district is subdivided into eight sections: Northeast, Eastside, Southeast, Southwest, Semidi Island Overlap, Westside, North Mainland, and South Mainland (Figure 1). Sections are described in 5 AAC 35.505 DESCRIPTION OF REGISTRATION AREA J DISTRICTS on pages 138-139 of the 2005-2006 Commercial King and Tanner Crab Fishing Regulations.

OVERVIEW

The Kodiak District Tanner crab *C. bairdi* commercial fishery began in 1967. Commercial harvest peaked in the 1977/78 season when over 33 million pounds were harvested from the district (Table 1).

In the late 1980s, the Alaska Department of Fish and Game (ADF&G) began a trawl survey, to obtain relative abundance estimates and predict future recruitment trends of Tanner crabs around Kodiak. Prior to this time, pot surveys were used for stock assessment.

Declines in the harvestable surplus of Tanner crabs in the Kodiak District through the 1980s led to decreased quotas and closures of some sections to commercial fishing. By 1995, commercial fisheries were closed in all Kodiak sections due to reduced stock abundance. Closures continued through the 1990s, even though some increases in stock size were noted late in the decade.

The Alaska Board of Fisheries (BOF) adopted a comprehensive harvest strategy in 1999 for management of Tanner crabs in the Kodiak District. Under this strategy, a commercial Tanner crab fishery may occur when 1) pre-season trawl survey abundance estimates meet or exceed established thresholds; 2) two or more sections, excluding the South Mainland and Semidi Island Overlap Sections, are opened; 3) the guideline harvest level (GHL) in an open section is at least 100,000 pounds; and 4) abundance is sufficient to provide a total district harvest of at least 400,000 pounds (Urban et al. 1999). Minor revisions to the management regulations of the Tanner crab fishery occurred at the 2001 and 2005 BOF meetings.

In October 2002, the Commercial Fisheries Entry Commission (CFEC) adopted a petition to limit entry into the Kodiak District Tanner crab fishery. A qualifying moratorium was established with an effective date of January 1, 2003. Fisheries subsequent to the moratorium date were not counted as qualifying years in the limited entry process. CFEC developed a point

system to reduce the number of moratorium fishing permits to 180. CFEC has not completed the review process for all of the applications. Applicants may be able to purchase an interim use permit card for the 2006 season. (Appendix A).

RECENT FISHERIES

2002 Fishery

The Northeast and Eastside Sections met the required criteria for a commercial Tanner crab opening in 2002. The total Kodiak District GHL was 500,000 pounds with 300,000 pounds available in the Northeast Section and 200,000 pounds in the Eastside Section. The harvest totaled 361,166 pounds from 279 landings by 211 permit holders onboard a total of 180 unique vessels (Table 2). The 2002 fishery was prosecuted very quickly in most of the fishing area. The Eastside Section was open for 14 hours of fishing. Permit holders were given enough notice of the closure to remove baited gear prior to the closure. Inshore portions of the Northeast Section closed after 60 hours of fishing with the remainder of the section open for an additional 300 hours.

2003 Fishery

The Northeast and Eastside Sections met the required criteria for a commercial Tanner crab opening in 2003. This was the first fishery that occurred under the CFEC qualification moratorium. Only permit holders that landed Tanner crab in either 1993, 1994, 2001, or 2002, moratorium qualifying year, were allowed to participate.

The total district GHL was 510,000 pounds with 170,000 pounds available in the Northeast Section and 340,000 pounds available in the Eastside Section. The total harvest was 511,324 pounds from 313 landings by 79 permit holders on 72 unique vessels (Table 2).

The fishery was prosecuted slower than the 2002 fishery. This was largely the result of fewer vessels participating. In the Eastside Section, Ugak Bay was closed after 46 hours of fishing with the remainder of the section open for 146 additional hours of fishing.

2004 Fishery

The Northeast, Eastside, and Southeast Sections met the required criteria for a commercial opening in 2004. This was the second year that the Kodiak Tanner crab fishery occurred under the CFEC qualification moratorium.

The total district GHL was 795,000 pounds with 245,000 pounds available in the Northeast Section, 450,000 pounds in the offshore portion of the Eastside Section (Ugak and Kiliuda Bays in the Eastside Section did not open), and 100,000 pounds in the Southeast Section. The Southeast Section had not opened since 1994. The total harvest was 566,218 pounds from 252 landings by 81 permit holders on 78 unique vessels (Table 2).

The fishery in the Northeast Section was prosecuted faster than the previous year, while the fishery in the Eastside section was prosecuted slower. The Northeast Section closed by emergency order on February 1, 2004. The GHL in the Eastside Section was not fully attained and closed by regulation on March 31. Inside waters of the Southeast Section closed by emergency order mid-January, but outside waters closed by regulation on March 31.

2005 Fishery

The Northeast, Eastside, Southeast, and Southwest Sections met the required criteria for a commercial opening in 2005. This was the first year that the Kodiak Tanner crab fishery occurred under the CFEC limited entry.

The total district GHL was 1,750,000 pounds with 550,000 pounds available in the Northeast Section, 650,000 pounds in the offshore portion of the Eastside Section, 100,000 pounds in the Southeast Section, and 450,000 pounds in the Southwest Section. Total harvest from the 2005 Kodiak District fishery was 1,804,533 pounds from 289 landings made by 81 permit holders on 86 unique vessels. A price dispute resulted in no effort from January 15 through February 1. The Southwest Section closed by emergency order at 1:00 PM on March 17. The Northeast Section closed by emergency order at NOON on March 27, and the Southeast and Eastside Sections closed by regulation at NOON on March 31.

2006 GUIDELINE HARVEST LEVELS

GHs are established by section in the 2006 Kodiak District commercial Tanner crab season:

| <i>Section</i> | <i>2006 Guideline Harvest Level (pounds)</i> |
|------------------------------|--|
| Northeast | 550,000 |
| Eastside | 1,300,000 |
| Southeast | 100,000 |
| Southwest | 150,000 |
| Total Kodiak District | 2,100,000 |

NOTABLE REGULATIONS AND RECENT CHANGES

Some of the regulations regarding Tanner crab fishing that have changed as a result of BOF actions in 1999, 2002, and 2005 are as follows:

- **The Kodiak District is a superexclusive registration district for Tanner crabs, 5 AAC 35.506 AREA J REGISTRATION (a).** A vessel validly registered for a superexclusive registration area may not be used to take Tanner crab in any other registration area during that registration year, 5 AAC 35.005 (c). A vessel is considered registered for the Kodiak District Tanner crab fishery once the vessel has had a tank inspection, 5 AAC 35.020 (e & f); a valid registration does not require actual fishery participation or landing.
 - A vessel operator or permit holder that registers for the 2006 Kodiak District Tanner crab fishery may not operate any other Tanner crab vessel registered for any other superexclusive registration area within the same registration year, 5 AAC 35.020 (h). The Tanner crab registration year is August 1-July 31, 5 AAC 35.020 (c).
- **Vessels must be registered for a specific section in the Kodiak District 5 AAC 35.506 AREA J REGISTRATION (h).** A vessel operator may only be registered to fish one section at a time. Participants will be required to specify on their registration the section they will begin fishing in the 2006 fishery. Permit holders may change this section registration at any time by contacting ADF&G by phone, FAX, or in person, prior to changing sections.
- **Three important changes for the 2006 season include:** (1) based on the GH, the pot limit will be 30 pots for the 2006 season, (2) the department may extend daily fishing periods if effort declines in the district and substantial GH remains, and (3) there are new regulations pertaining to the Semidi Island Overlap Section.

For additional information on these and other Tanner crab regulations, contact the ADF&G office in Kodiak and refer to the shellfish regulations (available at ADF&G offices or at our website: <http://www.state.ak.us/adfg/>).

FISHING PERIODS

Pot gear may only be operated from 8:00 AM to 5:59 PM. Operation of gear, which includes setting or retrieving pots, is prohibited from 6:00 PM to 7:59 AM. **Based on the department's assessment of effort in the district, manageability, and harvest rate, daily fishing periods may be increased by emergency order. Fishing periods will likely NOT increase until late in the season when effort has substantially decreased.**

POT LIMITS AND BUOY TAGS

Kodiak District pot limits are based upon the GHL:

| <u>Guideline Harvest Level Range</u> | <u>Pot limit</u> |
|--|---------------------------|
| Less than 2,000,000 pounds | 20 pots per vessel |
| 2,000,000 to less than 4,000,000 pounds | 30 pots per vessel |
| 4,000,000 to less than 5,000,000 pounds | 40 pots per vessel |
| 5,000,000 pounds or greater | 50 pots per vessel |

The pot limit for the 2006 Kodiak District fishery will be 30 pots per vessel. To ensure compliance with pot limit regulations, the main or trailer buoy on each pot must display one fishery-specific identification tag issued by the department for the current year. More information on buoy tags can be found under 5 AAC 35.526 TANNER CRAB POT MARKING REQUIREMENTS FOR REGISTRATION AREA J on page 148 of the shellfish regulations.

Tags will be available for purchase beginning in mid-December at a cost of \$1.50 per tag. A valid 2006 Tanner crab CFEC permit card is required to purchase tags. Participants from areas outside the city of Kodiak can purchase tags via U.S. Mail until December 31. No tags will be mailed after this date; contact ADF&G in Kodiak for details (907) 486-1840.

If tags are lost, replacement tags are available. The vessel owner, operator, or agent must complete an affidavit form describing how the tags were lost and supply the unique number(s) of each lost tag.

Pots with lost tags must be secured open with the bait removed until replacement tags are obtained. Vessels must contact Alaska State Troopers, Division of Wildlife Protection (Appendix A) to inform them of the situation.

GEAR

Gear for the commercial Tanner crab fishery is limited to pots no more than 10 feet long by 10 feet wide by 42 inches high with rigid tunnel eye openings that are less than five inches in height. Tunnel eye opening perimeters must be individually more than 36 inches. Ring nets **are not** a legal gear type in the Kodiak District. The specific language regarding legal pot dimensions can be found under 5 AAC 35.050 LAWFUL GEAR FOR TANNER CRAB on page 123 of the shellfish regulations.

Escape mesh or escape ring requirements are included in the regulations for legal Tanner gear. Each pot used to take Tanner crab must have at least one third of one vertical surface of the pot composed of not less than 7-1/4 inch stretched mesh webbing or have no less than four circular escape rings which have an inside diameter of at least five inches. If using rings, they must be installed on the vertical plane of the pot to allow for escapement of undersized crabs. The rings are not required to be placed near the bottom of the pot as they are in some Bering Sea fisheries. However, ADF&G recommends placing rings within one mesh of the bottom of the pot to optimize escapement of undersized crabs. The specific language on escape device requirements can be found under 5 AAC 35.525 LAWFUL GEAR FOR REGISTRATION AREA J on page 147 of the shellfish regulations.

All pots must be equipped with a biodegradable escape mechanism as described in 5 AAC 39.145 ESCAPE MECHANISM FOR SHELLFISH AND BOTTOMFISH POTS on page 57 of the shellfish regulations. An opening 18 inches or greater in length that is placed within six inches of the bottom of the pot must be laced, sewn, or secured together by a single length of untreated, 100 percent cotton twine no larger than 30 thread.

Buoys attached to pots must comply with 5 AAC 35.051 TANNER CRAB GEAR MARKING REQUIREMENTS listed on page 123 and 5 AAC 35.526 TANNER CRAB GEAR MARKING REQUIREMENTS AREA J on page 148 of the shellfish regulations. The buoy that contains the ADF&G number marking may not be marked with additional numbers; however, symbols and letters are acceptable on the buoy with the ADF&G number. Trailer or other buoys used to mark ownership or string sequence may be marked with any desired numbers, symbols, or letters.

The use of converted pots as ‘storage boxes’ to store crabs in the water for vessels registered as dry tanked vessels is not permitted unless crab storage devices are attached to the vessel at all time.

Operation of Other Pot Gear, Pot Storage, and Landing Requirements

There is a 14-day stand down period for the operation of pot gear before the commercial Tanner crab fishery opening in the Kodiak District. No person or vessel that will participate in the commercial Tanner crab fishery may operate commercial, subsistence, sport, or personal use pots for any species within the district during that 14-day period.

Legally outfitted pots with buoy tags attached *may be* placed into shallow water storage during the 14-day stand down period. However, vessels may not retrieve gear already in legal storage to put tags on gear during the 14-day stand down period. In addition, vessels **will not** be allowed to retrieve gear before the fishery opening, after the tank inspection, due to enforcement concerns. There would be no way to distinguish a vessel retrieving gear from storage and a vessel fishing before the opening. Only after the fishery opens will vessels be allowed to retrieve pots from storage. At the time of registration (tank inspection), all gear onboard and in the water must have buoy tags affixed to be in compliance.

Up to 30 cone or pyramid pots may be stored for 30 days before the season in waters of 25 fathoms or less with all bait and bait containers removed and doors not secured closed. Pots other than cone or pyramid, may be stored longer than 30 days before the season in waters less than 25 fathoms if bait and bait containers are removed and doors are secured open. No vessel may have more than the specified pot limit onboard or in wet storage in the registration district (all waters from Cape Douglas to Kilokak Rocks) while the vessel is validly registered. The regulatory

language concerning pot storage can be found at 5 AAC 35.527 TANNER CRAB POT STORAGE REQUIREMENTS FOR AREA J on page 149 of the shellfish regulations.

After the closure of the Tanner crab season, vessels wishing to participate in the Pacific cod fishery must either place pots into shallow-water storage or on land and register with ADF&G for the Pacific cod fishery. Additional stipulations on the operation of other pot gear within the Kodiak District can be found under 5 AAC 35.053 OPERATION OF OTHER POT GEAR on page 124 of shellfish regulations.

Delivery requirements, post-closure pot storage requirements, and re-registration requirements vary depending on the type of area closure and the amount of notice given. The following is a summary of closure scenarios, subsequent pot-storage options, delivery requirements, and re-registration requirements contained in 5 AAC 35.030, 5 AAC 35.031, 5 AAC 35.052, 5 AAC 35.527, and 5 AAC 35.556:

Closure of an entire section with 6 or more hours notice of the closure given. Vessel operators within a section that is closed are required to deliver all catch from the section within 24 hours of the closure. Unbaited gear with doors secured open may be stored in waters deeper than 25 fathoms for 72 hours following the closure. After 72 hours, all gear remaining in the closed section must be removed or stored in waters shallower than 25 fathoms. Gear may remain in shallow water storage for up to 30 days after the closure of the entire Kodiak District. While in transit from the closed area, vessel operators may contact ADF&G and re-register for an open section. This will permit vessels to legally place baited gear, once validly registered, in the waters of the open section provided the 24 hour delivery deadline is met.

Closure of an entire section with less than 6 hours advance notice of the closure given. Vessel operators within a section that is closed are required to proceed directly to port at the time of the closure and deliver within 24 hours. Vessel operators may not place gear in storage, retrieve pots from storage, or place gear in an open section until they have completed their delivery of crabs from the closed section. Vessel operators are required to immediately return to the fishing grounds after their delivery to ‘rail dump’ all crab from baited gear left on the grounds. Vessel operators with baited gear may only store baited pots in waters deeper than 25 fathoms for 72 hours following the closure. Vessel operators may re-register for an open section after completing their delivery and removing any baited gear from the grounds. A tank inspection will be required before vessels may register for an open section.

Partial closure of a fishing section with 6 or more hours notice of the closure given. Vessel operators within the section, regardless of their location within the section, are required to deliver all crabs from the section within 24 hours of the closure. Any changes to the delivery requirement would be provided in a news release at the time of the closure announcement. Vessel operators may store pots in waters deeper than 25 fathoms for 72 hours in the closed waters of the section. Vessel operators may place, or simultaneously have, baited gear in the open waters of the same section before delivery provided the 24 hour delivery deadline is met.

Partial closure of a fishing section with less than 6 hours notice of the closure given. This scenario is highly unlikely. Should this type of closure occur the landing, pot storage, and re-registration requirements would be provided in a news release.

Closure of the entire Kodiak District with 6 or more hours notice of the closure given. Vessel operators are required to deliver all crabs within 24 hours of the closure. Vessel operators may

store pots with bait and bait containers removed and doors secured open in waters deeper than 25 fathoms for up to 7 days following the closure. Cone and pyramid pots may be stored with bait and bait containers removed and doors not secured closed in waters shallower than 25 fathoms for 30 days after the closure; rectangular pots may be stored longer.

Closure of the entire Kodiak District with less than 6 hours notice of the closure given. Vessel operators are required to deliver within 24 hours. After the closure, vessel operators may not place gear in or remove gear from storage until they have completed their delivery of crabs. Baited gear may be stored in waters deeper than 25 fathoms for 72 hours following the closure. Vessel operators are required to immediately return to the fishing grounds after their delivery to ‘rail dump’ any baited gear left on the grounds. Cone and pyramid pots may be stored with bait and bait containers removed and doors not secured closed in waters shallower than 25 fathoms for 30 days after the closure; rectangular pots may be stored longer.

Vessel operators wishing to deliver to ports outside the district are required to contact the ADF&G office in Kodiak before leaving the district. Vessels delivering outside the district must provide the estimated number of crabs onboard the vessel at the time of the closure, location of port and processing facility, and estimated time of arrival. Additional requirements exist for catcher-processors and vessels mechanically disabled. Vessels legitimately delayed due to circumstances of weather will be addressed on a case by case basis. The specific regulation is 5 AAC 35.031 TANNER CRAB LANDING REQUIREMENTS and is on page 121 of the shellfish regulations.

REGISTRATION, CFEC VESSEL SIZE RESTRICTIONS, TENDERS, AND TANK INSPECTIONS

Vessel operators must have a 2006 permit card (TB9BK or TB9AK) for District K Tanner crab and a current 2006 commercial vessel license. Vessels that do not qualify for a CFEC permit may not participate in the Kodiak District Tanner crab fishery; the fishery is no longer “open access”. Permits and vessel licenses can be obtained from the CFEC in Juneau. Vessel operators must register for a single section in the Kodiak District. Vessel operators may change their section registration by contacting the department.

CFEC adopted two vessel size categories for the issuance of permits in the Kodiak District Tanner crab fishery. Persons eligible to receive a permit will receive either a permit for vessels with an overall length of less than 60 feet or a permit for vessels of 60 to 120 feet in overall length. The type of card issued is dependent on what size vessel was used during the qualifying years of 1993, 1994, 2001, and 2002. Persons receiving a permit for ‘large vessels’ of 60 to 120 feet can use their permit on vessels smaller than 60 feet. A ‘large vessel’ permit card cannot be used on a vessel greater than 120 feet in overall length. Persons receiving a permit for ‘small vessels’ under 60 feet in overall length cannot make landings on a vessel 60 feet or longer in overall length.

Tender vessels must register with ADF&G before beginning tendering operations. Tender vessels may not have a pot-hauling block or other Tanner crab gear onboard nor may they be used to harvest Tanner crab.

Tank inspections are required for vessels with a circulating sea water system to confirm that no crabs are onboard the vessel prior to the fishery opening. Circulating sea water systems include on-deck containers with water circulated by pumps, hoses, or other means. Gear will also be

inspected at the time of tank inspection to ensure it is in compliance with all gear regulations. Tanks will be inspected beginning at NOON on January 14 unless the fishery is delayed for severe weather (*see Fishery Opening Delay Due to Severe Weather*). Arrangements will be made to accommodate vessel inspections in Old Harbor. Upon successful completion of the tank inspection and gear inspection process, a 2006 shellfish registration will be issued to the vessel. A copy of this registration must remain onboard the vessel while fishing. This registration becomes invalid 24 hours after the closure of the fishery. Vessels must invalidate their registration before participating in other fisheries if the Tanner fishery remains open.

SIZE LIMIT

The legal minimum size of Tanner crabs that can be harvested in the Kodiak District is 5.5 inches (140 millimeters) carapace width (CW). Only legal-size male Tanner crabs can be retained; all other crabs incidentally captured must be immediately returned to the water unharmed. This includes subsistence king crab, as they cannot be legally taken in a commercial Tanner crab fishery.

VOLUNTEER CATCH REPORTING

ADF&G will manage the Kodiak District commercial Tanner crab fishery from inseason catch reports provided by permit holders. Inseason management will allow for real-time fishery decisions and the ability to consider changes in effort, fleet behavior, and weather. ADF&G will make every effort to allow sufficient time for permit holders to configure gear for storage or to place gear onboard before a closure; however, the potential exists for a short advance-notice closure.

Each registering vessel will be issued a 2006 reporting code and worksheet. Catch reports will be taken over marine VHF channel 10, telephone, satellite dispatch system, and e-mail. **The ADF&G office uses Matrix¹ dispatch services; the office number is 7410.** Vessel operators will be issued a reporting worksheet during tag sales and/or tank inspection to participate in inseason reporting. Operators will be asked during the registration process which method they will use to submit daily reports.

Contents of the daily catch report will contain confidential codes for the section in which the vessel operator is fishing, statistical area, number of pot lifts, and number of crabs retained for each 10-hour fishing period. Reports will initially be taken at 6:30 PM. After most of the inside waters have closed, the department will change the reporting schedule to 9:00 AM.

ADF&G will update the fleet on SSB 4.125 MHz with the fishery status each morning at 8:30 AM. Any closure announcement or change in the reporting schedule will be made on this frequency. Current fishery status will also be available on the ADF&G recorded message phone at 486-4559. Messages on the recorded message phone will be updated daily after the 8:30 AM update. Updates, changes to the reporting schedule, and closure announcements will be distributed via e-mail, FAX, and passed along to all participating processors.

¹Use of trade names does not constitute an endorsement from ADF&G.

SEMIDI ISLAND OVERLAP SECTION

- Vessels wishing to fish in the Semidi Island Overlap Section must register with ADF&G.
- Vessels registered for the Semidi Island Overlap Section may not fish outside the Semidi Island Overlap Section, unless they invalidate their Semidi Island Overlap Section registration through ADF&G.
- **Vessels registered for the Semidi Island Overlap Section have a mandatory reporting requirement.** The vessel operator must either provide daily catch reports via radio, phone, satellite dispatch system or e-mail of the vessel's catch, catch locations, and effort, or maintain logbooks that include the vessel's catch, catch locations and effort to be turned into ADF&G upon return to port.
- The **Semidi Island Overlap Section of the Kodiak District has a limit of no more than 70 aggregate pots** that may be operated from a validly registered Tanner crab vessel. Vessel operators may use their 30 Kodiak District pots and tags. The additional 40 pots must have the unique Semidi Island Overlap Section tags attached, and cannot be used in the Kodiak District. Semidi Island Overlap Section tags may be purchased from ADF&G in Kodiak after December 12, 2005. Participants from areas outside the cities of Kodiak, Sand Point, or Chignik can purchase tags via U.S. Mail until December 31. No tags will be mailed after this date. Tags will be sold by department representatives in Sand Point and Chignik after January 10th.
- Landing requirements for the Semidi Island Overlap Section.
 - Vessels fishing in the Northeast, Eastside, Southeast, or Southwest Section of the Kodiak District, switching to the Semidi Island Overlap Section, prior to the closure of those sections, will not be required to deliver before changing registration; however, vessels will be required to give an accurate estimate of pounds onboard prior to registering for the Semidi Island Overlap Section.
 - Vessels fishing in the Semidi Island Overlap Section switching to other sections of the Kodiak District, prior to the closure of the Semidi Island Overlap Section, will not be required to deliver before changing registrations; however, vessels will be required to give an accurate estimate of pounds onboard prior to registering for other sections of the Kodiak District.
 - If the Semidi Island Overlap Section is closed, vessels fishing in the section may be required to deliver before registering for another section. If delivery is not required, vessel operators will be required to give an accurate estimate of pounds onboard prior to registering for another section of the Kodiak District.
 - Vessels wishing to fish in the Semidi Island Overlap Section after the remainder of the Kodiak District closes may be required to deliver before registering for the Semidi Island Overlap Section. If delivery is not required, vessel operators will be required to give an accurate estimate of pounds onboard prior to registering for the Semidi Island Overlap Section.

INSEASON FISHERY MANAGEMENT

ADF&G may manage bays and offshore areas separately, closing one portion of a section while allowing continued harvest in other locations within the same section. This type of management has been utilized in the previous three seasons. The department will manage so that harvest within bays or localized areas does not exceed available harvest based on department survey results. This may require a quick closure in the inside waters of Alitak Bay, Chiniak Bay, or South Sitkalidak Strait and other inshore bays.

Given the distribution of Tanner crab estimated by the survey in the inside portion of the Southeast Section, the Northeast Section, and Eastside Section, partial closures are likely to occur after very little fishing time (possibly within the first full day of fishing). These types of closures have been used to curtail excessive removals of legal-sized Tanner crab in localized areas.

As in previous fisheries, much of the estimated legal biomass is offshore. Fishery performance as measured by catch per unit effort (CPUE) of legal crabs, undersized, and female crabs will be closely monitored. As the stocks within these management sections are still rebuilding, closures may occur before the total GHF is achieved if CPUE indicates the number of legal-sized animals has been substantially depleted or if excessive handling of sublegal and female crabs is occurring.

FISHERY OPENING DELAY DUE TO SEVERE WEATHER

The entire Kodiak District Tanner crab fishery will be delayed for 24 hours if gale force winds (35 knots or higher from any direction) are forecast to occur in the Northeast, Eastside, or Southeast Sections. The regulation was revised in 2005 to reflect changes in the National Weather Service (NWS) forecast format. The regulatory language can be found on page 143-144 of the shellfish regulation book under 5 AAC 35.510 FISHING SEASONS FOR REGISTRATION AREA J(a).

Under this regulation, if the NWS forecast issued at 4:00 AM on January 14 contains gale force winds (35 knots or higher from any direction) for the current day and night plus the following day and night in area 3B (132), the fishery opening will be delayed in all sections for 24 hours.

| <u>Section</u> | <u>NWS Area</u> |
|----------------|-----------------|
| Northeast | 3B (132) |
| Eastside | 3B (132) |
| Southeast | 3B (132) |

If the following morning's 4:00 AM forecast contains gale warnings, the tank inspections and fishery opening would be delayed another 24 hours. The season opening may be delayed on a 24-hour rolling basis until January 24. If the fishery has not opened by the 24, tank inspections would occur at NOON that day and the fishery would open on January 25 at NOON, regardless of any gale force warnings in the NWS forecast.

REFERENCE CITED

Urban, D., D. Pengilly, D. Jackson, and I. Vining. 1999. A Tanner crab harvest strategy for Kodiak, Chignik, and the South Peninsula Districts. A Report to the Board of Fisheries. Alaska Department of Fish and Game, Division of Commercial Fisheries, Westward Region, Regional Information Report 4K99-21, Kodiak.

TABLES AND FIGURES

Table 1.—Tanner crab commercial catch, effort, and value for the Kodiak District, 1967-2005.

| Year | Number | | | | Pots Lifted | CPUE | Average Weight | Price Per Pound |
|----------------------|---------|----------|------------|------------|-----------------------|------|-------------------|--------------------|
| | Vessels | Landings | Crabs | Pounds | | | | |
| 1967 | NA | 83 | NA | 110,961 | NA | NA | NA | \$0.07 |
| 1968 | NA | 817 | NA | 2,560,687 | NA | NA | NA | \$0.10 |
| 1969 | 85 | 955 | NA | 6,827,312 | 72,748 | 43 | NA | \$0.11 |
| 1969/70 | 67 | 833 | 3,237,244 | 8,416,782 | 78,266 | 42 | 2.6 | \$0.11 |
| 1970/71 | 82 | 453 | 2,686,067 | 6,744,163 | 60,967 | 44 | 2.5 | \$0.11 |
| 1971/72 | 46 | 505 | 3,878,618 | 9,475,902 | 65,907 | 59 | 2.4 | \$0.13 |
| 1972/73 | 105 | 1,466 | 13,609,688 | 30,699,777 | 188,158 | 72 | 2.3 | \$0.17 |
| 1973/74 | 123 | 1,741 | 11,857,573 | 29,820,899 | 217,523 | 55 | 2.5 | \$0.20 |
| 1974/75 | 74 | 471 | 5,459,940 | 13,649,966 | 73,826 | 74 | 2.5 | \$0.17 |
| 1975/76 | 104 | 1,168 | 10,748,958 | 27,336,909 | 199,304 | 54 | 2.5 | \$0.20 |
| 1976/77 | 102 | 998 | 7,830,727 | 20,720,079 | 164,213 | 48 | 2.6 | \$0.33 |
| 1977/78 | 148 | 1,483 | 12,401,243 | 33,281,472 | 251,621 | 49 | 2.6 | \$0.43 |
| 1978/79 | 218 | 1,225 | 10,702,829 | 29,173,807 | 275,455 | 38 | 2.7 | \$0.55 |
| 1979/80 | 211 | 1,385 | 6,813,128 | 18,623,875 | 282,946 | 24 | 2.7 | \$0.55 |
| 1980/81 | 188 | 771 | 4,398,631 | 11,748,629 | 174,351 | 25 | 2.7 | \$0.65 |
| 1981/82 | 221 | 950 | 5,413,467 | 13,756,159 | 230,403 | 24 | 2.5 | \$1.65 |
| 1982/83 | 348 | 1,439 | 7,744,812 | 18,927,061 | 377,562 | 21 | 2.4 | \$1.25 |
| 1983/84 | 303 | 1,229 | 5,891,968 | 14,478,066 | 303,764 | 19 | 2.5 | \$1.20 |
| 1984/85 | 214 | 710 | 4,567,037 | 12,024,553 | 176,830 | 26 | 2.6 | \$1.50 |
| 1985/86 | 233 | 601 | 3,457,930 | 8,996,151 | 160,808 | 21 | 2.6 | \$1.90 |
| 1986/87 | 189 | 503 | 1,830,365 | 4,833,473 | 110,963 | 16 | 2.6 | \$2.62 |
| 1987/88 | 176 | 557 | 1,614,874 | 3,888,906 | 101,488 | 16 | 2.4 | \$2.40 |
| 1988/89 | 171 | 567 | 2,106,320 | 5,208,999 | 86,556 | 24 | 2.5 | \$3.05 |
| 1989/90 | 233 | 548 | 1,435,477 | 3,456,314 | 97,333 | 15 | 2.4 | \$2.40 |
| 1990/91 | 137 | 448 | 764,107 | 1,917,713 | 54,110 | 14 | 2.5 | \$1.59 |
| 1991/92 | 143 | 434 | 982,391 | 2,400,213 | 47,384 | 20 | 2.4 | \$2.22 |
| 1992/93 | 140 | 353 | 518,982 | 1,318,446 | 43,528 | 12 | 2.5 | \$2.10 |
| 1993/94 | 129 | 378 | 510,681 | 1,252,342 | 41,527 | 12 | 2.5 | \$2.25 |
| 1994/95 to 1999/2000 | | | | | NO COMMERCIAL FISHERY | | | |
| 2001 | 144 | 219 | 193,138 | 510,407 | 7,233 | 27 | 2.6 | \$2.30 |
| 2002 | 181 | 276 | 146,665 | 361,818 | 10,446 | 14 | 2.5 | \$2.21 |
| 2003 | 72 | 319 | 215,594 | 511,324 | 11,108 | 14 | 2.4 | \$2.20 |
| 2004 | 66 | 252 | 254,990 | 566,218 | 15,550 | 15 | 2.0 | \$2.35 |
| 2005 | 86 | 349 | 784,580 | 1,804,533 | 21,339 | 37 | 2.3 | \$1.70 |
| 5-year Avg. | 110 | 283 | 318,993 | 750,860 | 13,135 | 21 | 2.36 | 2.15 |

NA = not available

Table 2.—Catch and effort by section for the Kodiak District Tanner crab fishery, 2002-2005.

| Section | No. of Vessels | GHL (pounds) | Pounds Harvested | Pots Lifted | CPUE | Average Weight (lbs.) |
|-------------|------------------|--------------|------------------------|-------------|------|-----------------------|
| 2002 | | | | | | |
| Northeast | 104 | 300,000 | 127,818 | 6,005 | 10 | 2.2 |
| Eastside | 88 | 200,000 | 233,348 | 4,441 | 20 | 2.6 |
| Total | 180 ^a | 500,000 | 361,166 | 10,446 | 14 | 2.4 |
| 2003 | | | | | | |
| Northeast | 43 | 170,000 | 177,371 | 5,316 | 15 | 2.1 |
| Eastside | 38 | 340,000 | 333,953 | 5,792 | 14 | 2.5 |
| Total | 72 ^a | 510,000 | 511,324 | 11,108 | 14 | 2.4 |
| 2004 | | | | | | |
| Northeast | 43 | 245,000 | 259,572 | 6,300 | 19 | 2.2 |
| Eastside | 20 | 450,000 | 219,980 | 6,841 | 14 | 2.3 |
| Southeast | 15 | 100,000 | 86,666 | 2,409 | 16 | 2.2 |
| Total | 78 ^a | 795,000 | 566,218 | 15,550 | 16 | 2.2 |
| 2005 | | | | | | |
| Northeast | 43 | 550,000 | 468,245 | 6,876 | 68 | 2.2 |
| Eastside | 23 | 650,000 | 664,576 | 8,607 | 77 | 2.3 |
| Southeast | 9 | 100,000 | 92,398 | 1,711 | 54 | 2.3 |
| Southwest | 23 | 450,000 | 574,944 | 4,021 | 143 | 2.4 |
| Total | 98 ^a | 1,750,000 | 1,800,163 ^b | 21,215 | 86 | 2.3 |

^aSome vessels participated in more than one section.

^bAn additional 4,370 pounds were harvested from the Semidi Overlap Section.

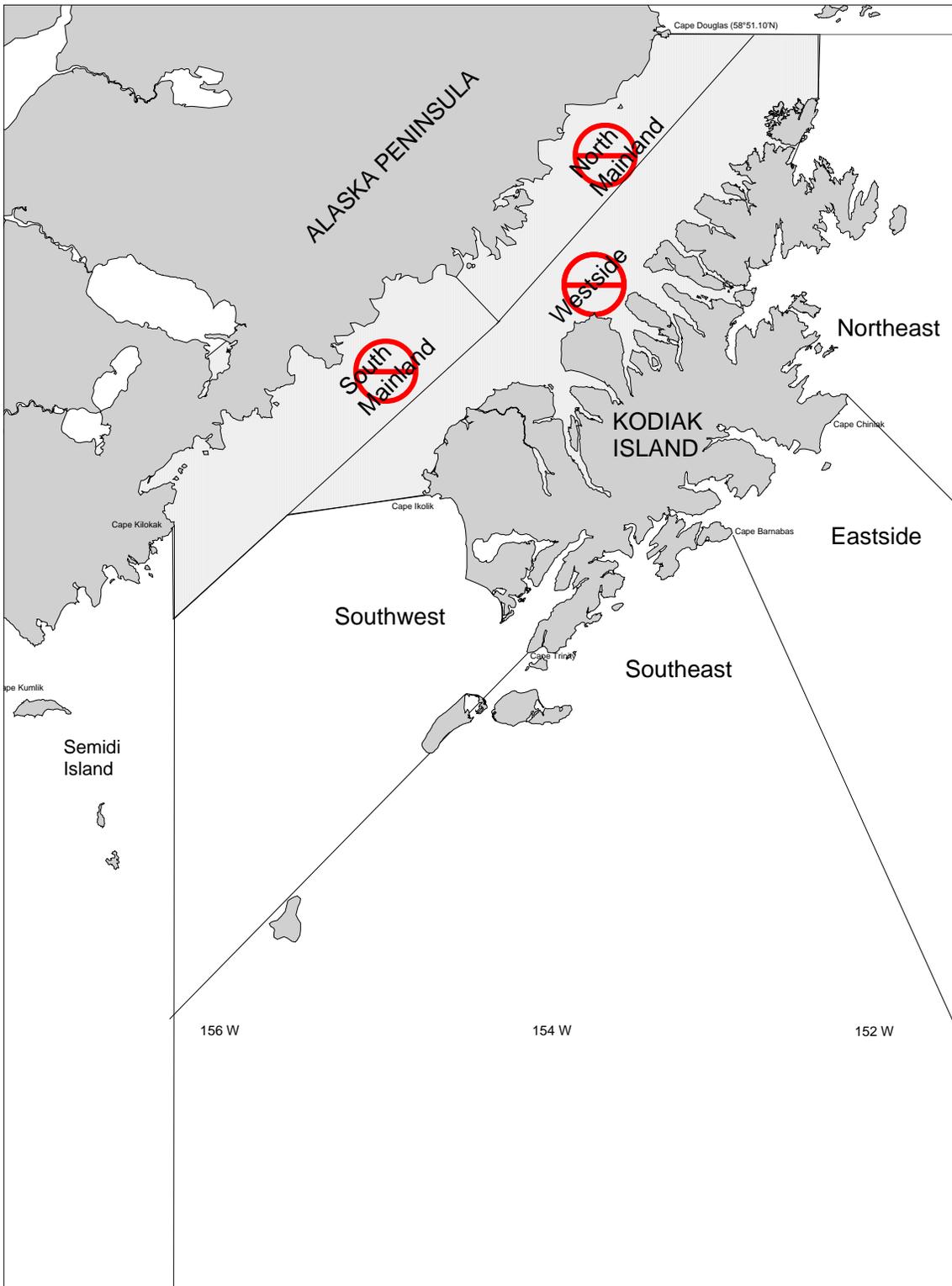


Figure 1.—Kodiak Tanner crab District and Sections, 2006.

**APPENDIX A. CONTACT PERSONS, AGENCIES, AND PHONE
NUMBERS**

Appendix A1.—Listing of contact persons, by agency and location.

Alaska Department of Fish and Game

web site: <http://www.cf.adfg.state.ak.us/region4/>

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Kally Spalinger Kodiak, Chignik, Alaska Peninsula Shellfish Biologist
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Lori Ryser Admin. Clerk III
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Division of Fish and Wildlife Protection

web site: <http://www.dps.state.ak.us/fwp/>

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Sven Skille Trooper
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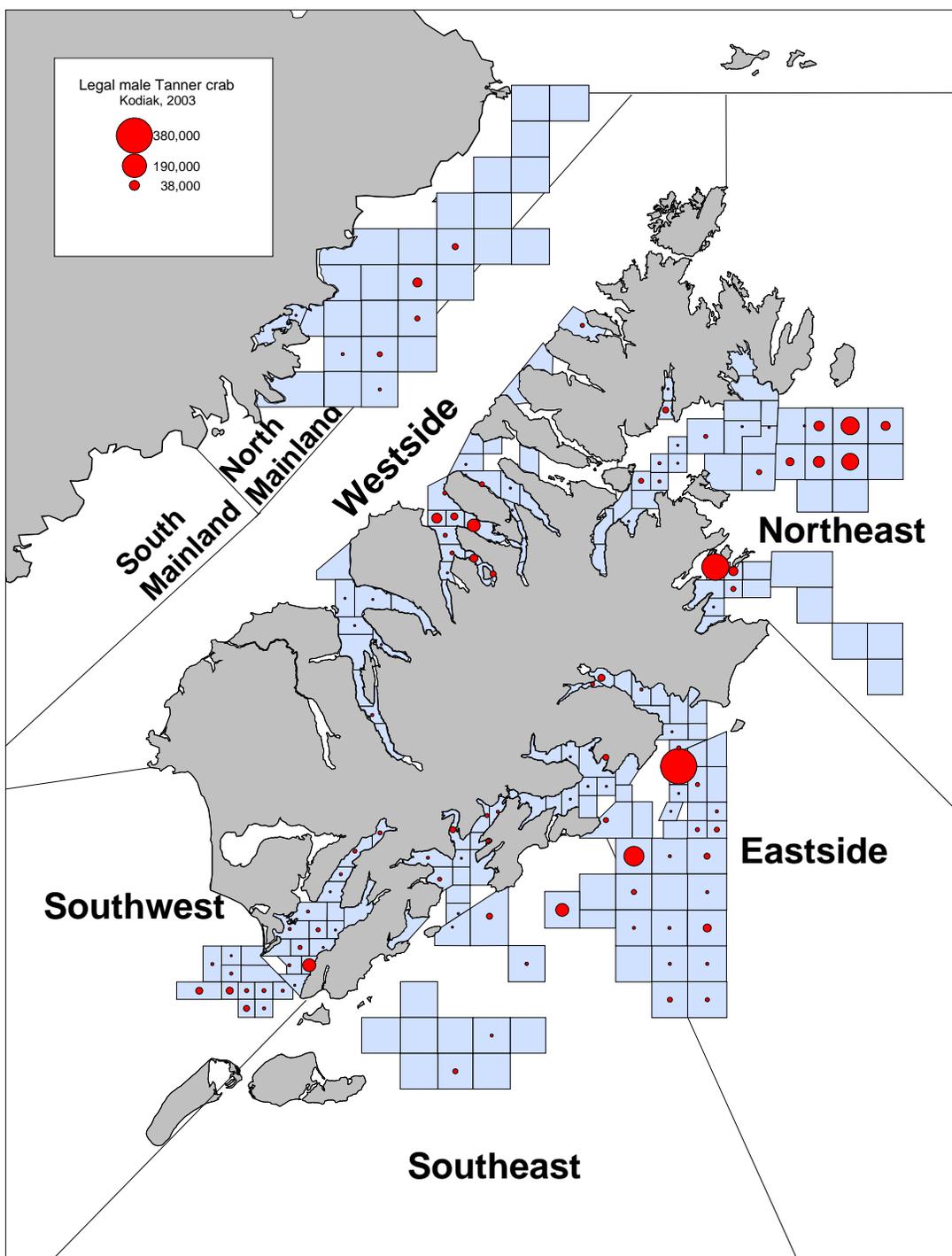
Commercial Fisheries Entry Commission

web site: <http://www.cfec.state.ak.us/>

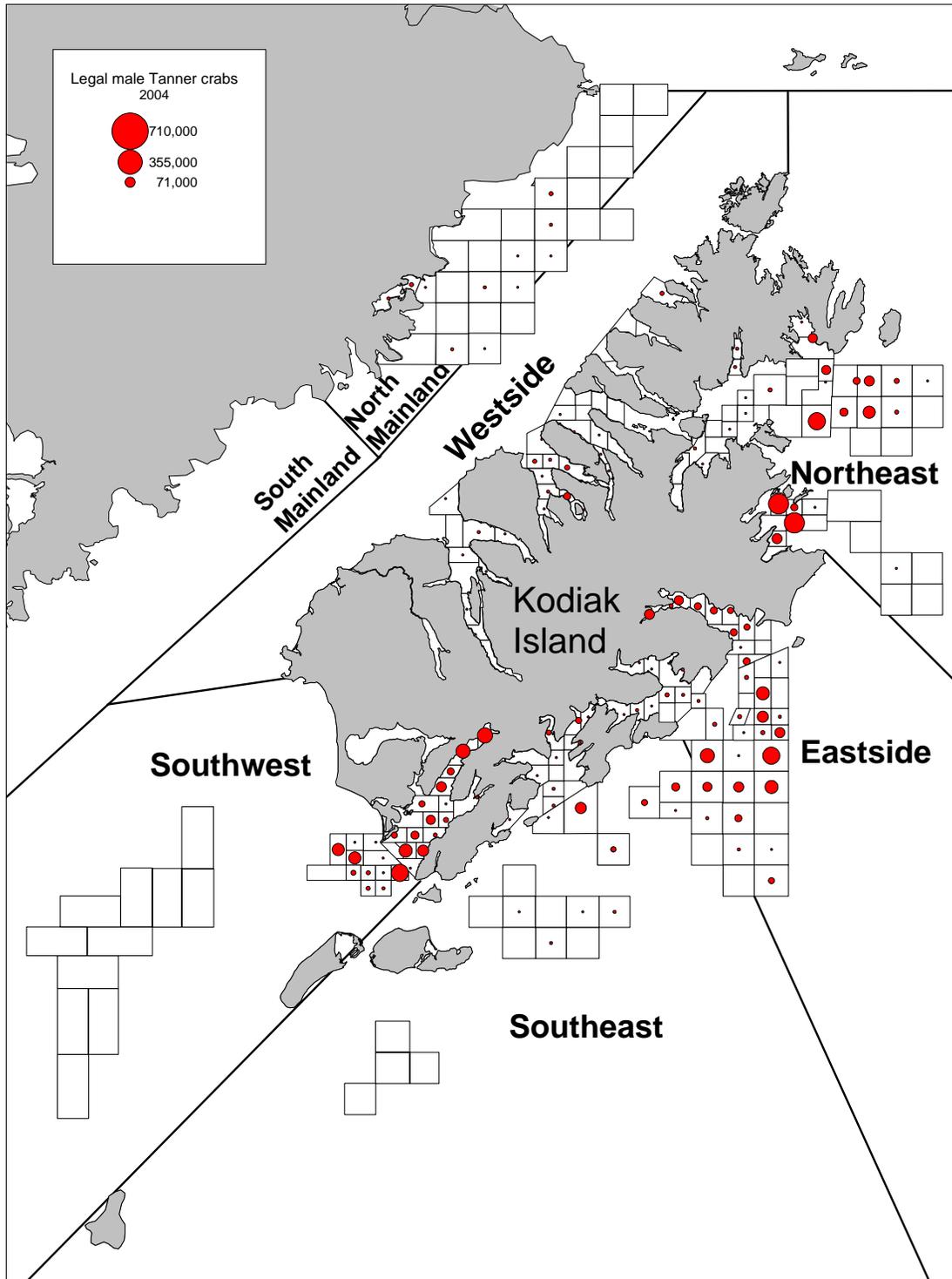
8800 Glacier Highway
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Susan Haymes CFEC staff
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APPENDIX B. SURVEY RESULTS 2003-2004



Appendix B1.—Population estimates of legal male Tanner crabs in the Kodiak District from the 2003 trawl survey.



Appendix B2.—Population estimates of legal male Tanner crabs in the Kodiak District from the 2004 trawl survey.