

Fishery Management Report No. 10-01

**Fishery Management Plan for State-Waters Pacific
Cod Season in Kodiak Registration Area, 2010**

by

Nicholas H. Sagalkin

January 2010

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

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SEASON IN KODIAK REGISTRATION AREA, 2010**

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ABSTRACT

The Kodiak Area state-waters Pacific cod *Gadus macrocephalus* season is scheduled to open 7 days after the closure of the federal Central Gulf of Alaska Pacific cod season. The only legal gear types for the state-waters season are pot, mechanical jigging machines, and hand troll gear. Gear limits are 60 pots (buoy tags required) or 5 jigging machines. The guideline harvest level (GHL) for the state-waters season is 13.5 million pounds. The GHL is split evenly between vessels using pot and jig gear (50%); however, vessels over 58 feet using pot gear are capped at 25% of the total GHL prior to September 1st. Managing the fishery close to the GHL is dependent upon the amount of communication between the Alaska Department of Fish and Game (ADF&G) and the fishing fleet. In the absence of information, ADF&G makes conservative estimates of season length. This plan summarizes the regulations, reporting requirements, and anticipated inseason management actions necessary to prosecute the state-waters Pacific cod season in Kodiak Area.

Key words: Pacific cod, *Gadus macrocephalus*, Kodiak Area, harvest strategy, regulations, jigging machine, pot, Kodiak Area, guideline harvest level

INTRODUCTION

AREA DESCRIPTION

The Kodiak groundfish registration area consists of all waters south of the latitude of Cape Douglas (58° 51.10' N lat.), north of 55° 30' N lat., west of the longitude of Cape Fairfield (149° W long.), and east of the longitude of Kilokak Rocks (156° 20.22' W long.; Figure 1).

OVERVIEW

There are two Pacific cod *Gadus macrocephalus* fisheries that occur inside state waters of Kodiak Area. During the federal Central Gulf of Alaska (CGOA) Pacific cod fishery (Area 620 and 630), the state opens a concurrent “parallel” season inside state waters. The parallel Pacific cod season is separate from the state-waters Pacific cod season that occurs after the closure of the federal CGOA Pacific cod fishery. More information regarding the federal Pacific cod can be obtained from National Marine Fisheries Service (NMFS; <http://www.fakr.noaa.gov>).

In 1996, the Alaska Board of Fisheries (BOF) adopted state-waters Pacific cod season management plans in five groundfish areas: Prince William Sound, Cook Inlet, Kodiak, Chignik, and the South Alaska Peninsula (Sagalkin et al. 2009). Legal gear types during the state-waters season are limited to pot gear, mechanical jigging machines, and hand troll gear types. The Kodiak Area Pacific cod management plan is contained in 5 AAC 28.467 on pages 45–47 of the 2009-2010 Statewide Commercial Groundfish Fishing Regulations.

STATE-WATERS PACIFIC COD SEASON

The Kodiak Area state-waters Pacific cod season will open 7 days after the closure of the CGOA federal Pacific cod season. The Kodiak Area state-waters Pacific cod season is exclusive registration (5 AAC 28.406). A vessel validly registered for the state-waters Pacific cod season in the Kodiak Area may not be used to take Pacific cod in any other state-waters exclusive or superexclusive Pacific cod registration area. Exclusive area designations may be relaxed in the Kodiak Area after October 30 if a significant portion of the GHL remains unharvested.

- Operators must possess a 2010 CFEC interim use permit card for the appropriate gear type for miscellaneous finfish.

- State-waters Pacific cod registrations may be obtained at the ADF&G offices in Kodiak and Dutch Harbor, or via FAX to the Kodiak office (907) 486-1824. Please note that a Westward Region Parallel Groundfish Registration is a separate registration.
- Vessel operators may not use pot and jig gear at the same time (5 AAC 28.467 (e) (3)). However, operators may change gear registration by written request, in person, or by FAX to the Kodiak ADF&G office.
- Vessel operators may operate both hand troll and mechanical jigging machine gear at the same time. Separate fish tickets are required for each gear type at the time of landing.
- The GHL is allocated 50% for jig gear and 50% for pot gear. If the jig gear GHL is not harvested before September 1, the season may be opened to pot and jig gear by emergency order (5 AAC 28.467 (c) (2)).
- Harvest by vessels over 58 feet is capped at 25% of the total GHL until September 1 (5 AAC 28.467 (c) (4)).
- If a significant portion of the state-waters season GHL remains to be harvested after September 1, the limits on the number of pots and mechanical jigging machine gear may be lifted (5 AAC 28.467 (g) (1)).
- No more than 60 groundfish pots may be operated from a vessel, unless the pot limit has been rescinded by emergency order on or after September 1st. Buoy tags are required when the 60 pot limit is in effect. Tags are available from the Kodiak office and Dutch Harbor office (5 AAC 28.467 (e) (3) and 5 AAC 28.050 (f)).
- No more than 5 hand troll lines or mechanical jigging machines may be operated from a vessel unless the jigging machine limit has been rescinded on or after September 1 (5 AAC 28.467 (e) (3)).
- Tenders for Pacific cod must obtain a tender registration prior to their operation in the state-waters season. Tenders may also actively fish with either gear type. In this scenario, tenders must register to fish and register to tender. Separate fish tickets must be filled out for all fish landed by the tender vessel and accepted as deliveries from other vessels (5 AAC 28.033).
- Vessels may be registered to use jig gear in the state-waters Pacific cod season and simultaneously register for Dungeness or Tanner crab when the fisheries are open.
- Vessels may not be registered to use pot gear in the state-waters Pacific cod season and also fish for Tanner crab (5 AAC 35.053).

VOLUNTEER CATCH REPORTING

ADF&G encourages fishery participants to provide volunteer catch reports to increase the amount of information to manage this fishery. In recent years, the pot fleet has harvested the quota quickly.

ADF&G will primarily manage the Kodiak Area state-waters Pacific cod season 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 try to provide permit holders sufficient time to configure gear for storage or to place gear

onboard the vessel before a closure; however, the potential exists for a short advance-notice closure. Managing the fishery close to the GHL is dependent upon the amount of communication between ADF&G and the fishing fleet. In the absence of information, ADF&G makes conservative estimates of season length.

Catch reports will be taken using satellite dispatch system and e-mail. **The ADF&G office uses Matrix¹ dispatch services; the office dispatch number is 7894.** Vessel operators will be issued a reporting worksheet during registration to participate in inseason reporting. Operators will be asked during the registration process which method they will use to submit daily reports.

Reports will initially be taken daily from 8:00 to 8:30 AM.

Current fishery status will also be available on the ADF&G recorded message phone at 486-5176. 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.

2010 GUIDELINE HARVEST LEVEL

The guideline harvest level for the state-waters Pacific cod season is determined annually as a percentage of the Acceptable Biological Catch (ABC) for the CGOA. The ABC is submitted annually by the Plan Team for the Groundfish Fisheries of the Gulf of Alaska to the North Pacific Fishery Management Council (NPFMC). Additional information on the annual ABC derivation can be found in the Stock Assessment and Fishery Evaluation (SAFE) report published annually by NMFS (NMFS 2009).

The percentage of the ABC for the CGOA that is allocated to the Kodiak Area state-waters Pacific cod season is 12.5% (5 AAC 28.467 Kodiak Area Pacific Cod Management Plan (e)(1) and (e)(2)). The 2010 GHL for the Kodiak Area state-waters Pacific cod fishery is 13.5 million pounds.

BYCATCH

- Lingcod may be retained from July 1 to December 31 with a maximum bycatch of 5% of Pacific cod catch by weight, unless modified by a subsequent news release. Retained lingcod must be at least 35" from tip of the snout to tip of the tail, or 28" from the front of the dorsal fin to the tip of the tail. Lingcod must not be mutilated or altered in such a manner that prevents determination of the minimum size.
- Skates may be retained as bycatch up to 20% of Pacific cod catch by weight.
- Black rockfish may be retained up to 5% of Pacific cod catch by weight in the Kodiak Area. Jig vessels may register for incidental black rockfish harvest. Vessels registered for incidental harvest must register for a section, and may retain up to 1,000 pounds of black rockfish per trip in the Northeast, Afognak, Eastside, and Southeast districts, not to exceed 2,000 pounds in a five day period. The black rockfish trip limit in the Southwest, Westside, and Mainland districts is 2,500 pounds, not to exceed 5,000 pounds in a five day period.
- Dark rockfish may be retained as bycatch up to 20% of Pacific cod catch by weight.

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

- Bycatch of octopus may be retained as bycatch up to 20% of the Pacific cod catch by weight and the octopus bycatch would be landed on the miscellaneous finfish card.
- The state adopts the NMFS bycatch percentages for all other groundfish species in state waters. Permissible bycatch percentages vary under the federal system, so it is advisable to check with NMFS management for the status of all species except black and dark rockfish and lingcod (contacts listed in Appendix A1).

INSEASON ANNOUNCEMENTS

The state-waters Pacific cod season will be managed inseason from information gathered from volunteer daily catch reports, weekly processor reports, dockside sampling information, and fish ticket data. All inseason management actions pertaining to regulatory changes in the state-waters season will be published in news releases and emergency orders. Weekly harvest updates will be available each Monday during the state-waters season. News releases, weekly catch updates, and emergency orders are

- ◆ available in the shellfish and groundfish management office, ADF&G office building 2nd floor, 211 Mission Road, Kodiak.
- ◆ distributed to a list of recipients maintained by management staff in Kodiak via FAX, e-mail, and standard mail.
- ◆ posted on the ADF&G website at:
http://www.cf.adfg.state.ak.us/region4/finfish/grndfish/grndhom4_kod.php

LEGAL GEAR

Lawful gear types are defined under 5 AAC 28.050 Lawful Gear For Groundfish and contain the following:

All commercial groundfish pot buoys must be marked with the permanent ADF&G vessel license plate number of the vessel operating the gear (5 AAC 28.050). This number must include leading zeros as applicable.

Tunnel eye openings of groundfish pots must have a perimeter 36 inches or less. This opening may be achieved for pots with larger tunnel eye openings by placing rigid excluder bars across the tunnel eye opening.

Some additional gear regulations are referenced in the following table:

Table 1.–Some gear regulations for the Kodiak state-waters Pacific cod state season.

Gear	Gear	Regulations
Pot	60 pots	5 AAC 39.105 Types of Legal Gear (11) pots
	Escape Mechanism	5 AAC 39.145 (1) (2) Escape Mechanisms for Shellfish and Bottomfish Pots
	buoy tags	5 AAC 28.467 Kodiak Pacific cod Management Plan
Jig	5 mechanical jigging machines	5 AAC 39.105 Types of Legal Gear (25) mechanical jigging machine
	5 lines per machine	5 AAC 28.467 (3) Kodiak Pacific cod Management Plan
	30 hooks per line	5 AAC 28.430 Lawful Gear for Kodiak Area

Some confusion exists over the regulation for Kodiak Area Lawful Gear (5 AAC 28.430 (f)), which allows mechanical jigging machines to have either 30 hooks per line or a single continuous line with not more than 150 hooks. When fishing with a single continuous line, the line may only be a circular loop of line that is fished in the water column.

BUOY TAGS

Each pot used to fish for Pacific cod in Kodiak Area state-waters season is required to be tagged with an ADF&G supplied buoy tag (5 AAC 28.050). Buoy tags are available prior to the fishing season in Kodiak and Dutch Harbor offices. Each tag should be placed on the main buoy or trailer buoy. If tags are lost, replacement tags are available at the offices listed above. If pot limits are relaxed on September 1, the requirement for buoy tags is eliminated.

POT STORAGE

Groundfish pots may be stored with all bait and bait containers removed and doors secured fully open on rectangular pots and with the doors not secured closed for pyramid and conical pots in water 25 fathoms or less (5 AAC 28.432 Groundfish Pot Storage Requirements for Kodiak Area).

Vessels that participate in the parallel Pacific cod ‘A’ season prior to the opening of the Kodiak state-waters Pacific cod season may leave their pots unbaited, doors open, and deeper than 25 fathoms for the 7 days between seasons. No more than 60 pots may be in operation at the time of the state-waters Pacific cod season opening and those 60 pots must have a buoy tag attached. Gear in excess of the 60-pot limit may be in shallow water storage (less than 25 fathoms) or on the vessel for seven days after the opening of the state-waters season. After the seven-day period beyond the state-waters season opening, no more than 60 pots may be in the water or on the vessel.

LANDING REQUIREMENTS

The landing requirements are specified in 5 AAC 28.471 (1) and (2) Landing Requirements for Kodiak Area. After 48 hours from the time of closure of the state-waters Pacific cod season, vessels that have participated in the fishery may not have Pacific cod onboard unless cod has been designated as bycatch for another fishery and the amount onboard does not exceed the bycatch percentage limit. If the vessel has been delayed due to extraordinary circumstances beyond the control of the vessel operator, and the vessel has contacted ADF&G, allowances may be made for additional time on a case by case basis. Vessels requesting additional time to arrive at their delivery location must have departed the fishing grounds immediately after the closure and proceeded directly to their port of delivery or processing location. At the time of closure all gear must comply with applicable state and federal storage requirements (5 AAC 28.432).

REFERENCES CITED

- NMFS. 2009. Stock Assessment and Fishery Evaluation (SAFE) Report for the Groundfish Resources of the GOA Region, 2009. NPFMC Plan Team for the Groundfish Fisheries of the GOA. National Marine Fisheries Service. Alaska Regional Office, Juneau.
- Sagalkin, N. H., P. Converse, K. Phillips, and S. El Mejjati. 2009. Annual management report for the groundfish fisheries in the Kodiak, Chignik, and South Alaska Peninsula Management Areas, 2008. Alaska Department of Fish and Game, Fishery Management Report No. 09-55, Anchorage.

FIGURE

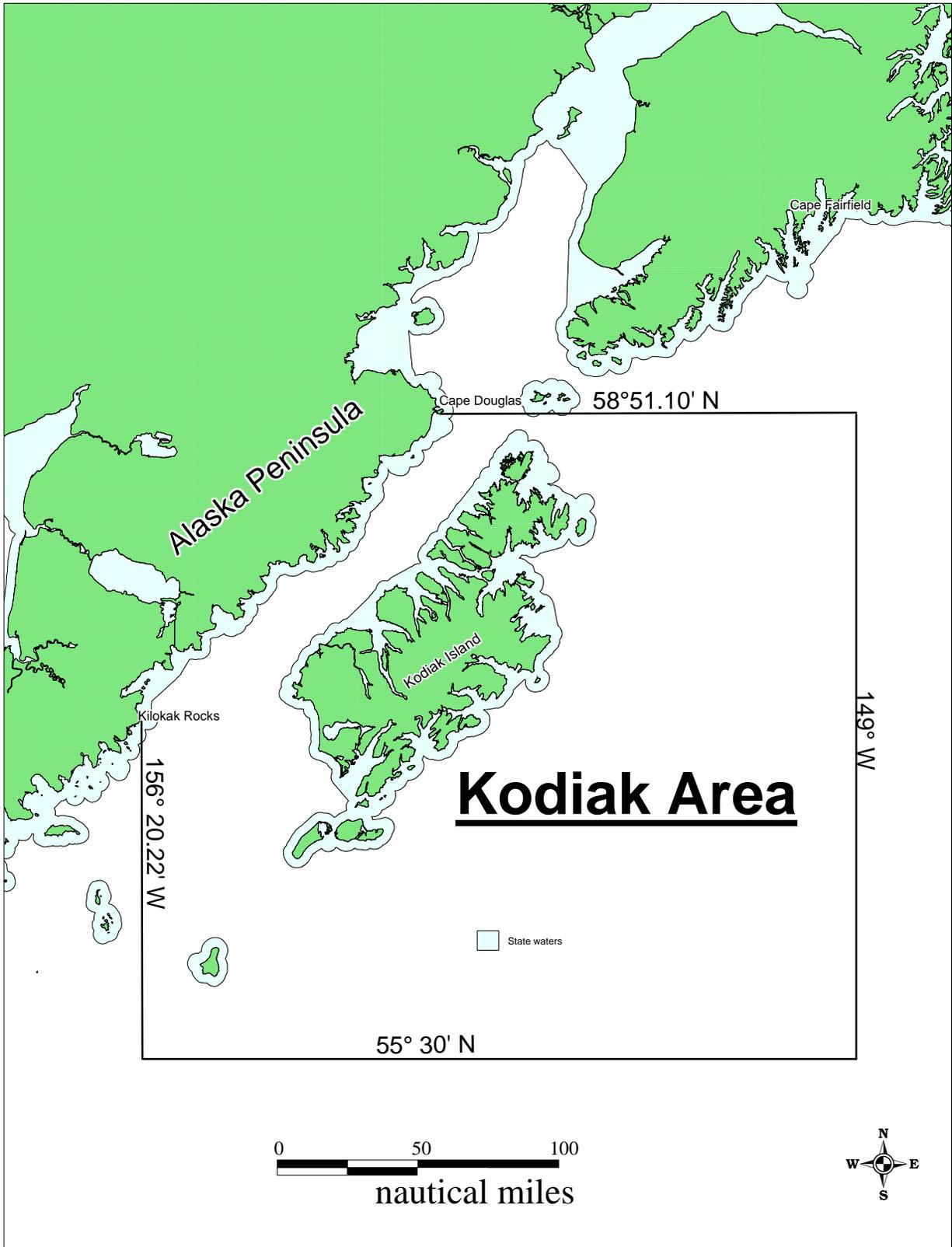


Figure 1.—Kodiak Area for state-waters Pacific cod.

APPENDIX A. LISTING OF CONTACT PERSONS

Alaska Department of Fish and Game web site: <http://www.cf.adfg.state.ak.us/region4/rgn4home.php>

Kodiak ADF&G
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Kodiak, Alaska 99615
(907) 486-1840
FAX : (907) 486-1824

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Division of Alaska Wildlife Troopers

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2921 A Mill Bay Road
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FAX: (907) 486-5480

National Marine Fisheries Service

web site: <http://www.fakr.noaa.gov/>

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