Annual Management Report for Groundfish Fisheries in the Bering Sea-Aleutian Islands Management Area, 2020

by

Asia Beder

and

Janis Shaishnikoff

November 2021

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.

centimeter dciliter dl Code gram g all commonly accepted hectare hecta	Weights and measures (metric)		General		Mathematics, statistics	
gram gram gram hectare hectar	, ,	cm	Alaska Administrative		all standard mathematical	
bectare ha abbreviations e.g., Mr., Mrs., allernate hypothesis H _A kilogram kg AM, PM, etc. base of natural logarithm e kilometer km all commonly accepted liter cath, per unit effort CPUE liter L professional titles e.g., Dr., Ph.D., coefficient of variation CV meter m R.N., etc. commonder testastistics CF, γ2°, etc millither mL at east E (multiple) CO weights and measures (English) north north N correlation coefficient Correlation coefficient weights and measures (English) month N correlation coefficient R fot of the per second ft²/s south S (simple) r fotothe for second ft² west W covariance cov gallon ggal copyright © degree (angular) ° inch mi copprorate suffixes: (multiple) r	deciliter	dL	Code	AAC	signs, symbols and	
hectare ha kilogram kg kilometr km all commonly accepted liter L professional titles c.g., Dr., Ph.D., coefficient of variation CPUE coefficient of variation CV coefficient CV coefficient of variation CV coefficient Citient Coefficient CV coefficient Citient Coefficient CV coefficient Coefficient Coefficient Coefficient Coefficient Coefficient Coefficient Coefficient	gram	g	all commonly accepted		abbreviations	
kilogram kg AM, PM, etc. base of natural logarithm e kilometer km all commonly accepted catch per unit effort CPUE liter L professional titles e.g., Dr., Ph.D., coefficient of variation CV milliliter mL at @ conficient of variation CV milliliter mL at e.g., Dr., Ph.D., coefficient of variation CV milliliter mL at e.g., Dr., Ph.D., conficient of variation CV milliliter mL at e.g. E. (multiple) CT millimeter mm compass directions: e.g. E. (multiple) CT weights and measures (English) north N correlation coefficient correlation coefficient compand (multiple) R C (simple) r eo cofficient overlation correlation coefficient compand degree (simple) correlation coefficient correlation coefficient correlation coefficient correlatio	_	-	• •	e.g., Mr., Mrs.,	alternate hypothesis	H_A
Rine	kilogram	kg		AM, PM, etc.	base of natural logarithm	
Inter L professional titles e.g., Dr., Ph.D., R.N., etc. coefficient of variation CV annual common test statistics CV, 2, ct. common test statistics CF, t, 2, ct. common test statistics CT millimeter mm ceast E (multiple) R CT Weights and measures (English) north N correlation coefficient creat CT Got ff west W correlation coefficient correlation coefficient creat foot ff west W (simple) r foot ff west W covariance cov foot ff west W covariance cov gallon in Corporation Cop. expected value E mult comporate suffixes: Cop. greater than cy and > quart quart proporation Dr. Line proporation	e	-	all commonly accepted		2	CPUE
millimeter mL at compass directions: reast E confidence interval correlation coefficient CI Weights and measures (English) coast E (multiple) π cubic feet per second f ¹ / ₂ so south S (simple) r foot ft west W covariance cov gallon in corporate suffixes: degree (angular) α cov mile min Company Co. expected value E nautical mile min Company Co. expected value E nautical mile min Company Co. expected value E pound lb Limited Ltd. harvest per unit effort HPLE quart pd District of Columbia D.C. less than or equal to E quart pd District of Columbia D.C. less than or equal to E degrees Celsius d (for example) e.g. logarithm (natural) In	liter	L	professional titles	e.g., Dr., Ph.D.,	-	CV
millimeter mL at compass directions: reast E confidence interval correlation coefficient CI Weights and measures (English) coast E (multiple) π cubic feet per second f ¹ / ₂ so south S (simple) r foot ft west W covariance cov gallon in corporate suffixes: degree (angular) α cov mile min Company Co. expected value E nautical mile min Company Co. expected value E nautical mile min Company Co. expected value E pound lb Limited Ltd. harvest per unit effort HPLE quart pd District of Columbia D.C. less than or equal to E quart pd District of Columbia D.C. less than or equal to E degrees Celsius d (for example) e.g. logarithm (natural) In	meter	m		R.N., etc.	common test statistics	(F, t, χ^2 , etc.
Weights and measures (English) cubic feet per second ft²/s south S (multiple) R foot gallon gal copyright © degree (angular) ° foot gallon gal copyright © degree (angular) ° inch in copyright © degree (angular) ° inch mi Company Co. expected value E mile mi Company Co. expected value E ounce oz Incorporated Inc. greater than or equal to ≥ quart qt D.Limited Ltd. harvest per unit effort HPUE quart qt D.Limited Ltd. harvest per unit effort HPUE quart qt District of Columbia D.C. less than quart qt District of Columbia D.C. less than degrees Clsius d (for example) e.g. logarithm (hartural) In			at	(a)	confidence interval	
Cast E (multiple) R cubic feet per second ft²/s south S (simple) r foot ft west W covariance cov gallon ggl copyright © degree (angular) ° inch in copyright © degree sof freedom df mile mi Company Co. expected value E nulcal mile mi Company Co. expected value E ounce oz Incorporated Inc. greater than or equal to > ounce oz Incorporated Inc. greater than or equal to > quart qt D.E. Limited Ltd. harvest per unit effort HPU quart qt D.E. Limited Ltd. harvest per unit effort HPU quart qt D.E. Limited Ltd. harvest per unit effort HPU quart yd et alii (and o	millimeter	mm	compass directions:		correlation coefficient	
Weights and measures (English) north N correlation coefficient cubic feet per second ft²/s south S (simple) r foot ft west W covariance cov gallon gal copyright © degree (angular) ° inch in corporate suffixes: degrees of freedom df mile mi Company Co. expected value E nautical mile nmi Company Co. expected value E ounce oz Inc. greater than > ounce oz Incorporated Inc. greater than or equal to ≥ pound lb Limited Ltd. harvest per unit effort HPUE quart qt District of Columbia D.C. less than yard et ali (and others) et al. less than Time and temperature degrees Celsius exempli gratia etc.			east	E		R
cubic feet per second ft bot south foot S (simple) r foot ft west W covariance cov gallon gal copyright © degree (angular) ° inch in corporate suffixes: degrees of freedom df nulle mi Company Co. expected value E ounce oz Incorporated Inc. greater than or equal to ≥ ounce oz Incimited Ltd. harvest per unit effort HPUE quart qt District of Columbia D.C. less than <	Weights and measures (English)		north	N		
fot gallon fl west W covariance cov gallon gal copyright © degree (angular) ° inch in copporate suffixes: degree (angular) ° mile mi Company Co. expected value E mulcal mile nmi Corporation Corp. greater than or equal to ≥ pound lb Limited Ltd. harvest per unit effort HPUE quart qt District of Columbia D.C. less than or equal to ≤ yard yat et alii (and others) et al. less than or equal to ≤ for exemple gratia et cetera (and so forth) etc. logarithm (base 10) logarithm (base 10) log degrees Celsius °C Federal Information eg. eg. logarithm (base 10) log log degrees Fahrenheit °F Code FIC not significant NS log log log log	0 (0)	ft^3/s	south	S		r
gallon inch in corporate suffixes: degrees of freedom df mine corporate suffixes: appearance of the corporate suffixes in autical mile on mine corporate ounce oz Incorporated line. greater than or equal to ≥ pound quart qt District of Columbia D.C. less than or equal to ≥ quart quart qt District of Columbia D.C. less than or equal to ≥ et all. less than or equal to ≥ exempli gratia of corporation by a point minute (angular) in logarithm (base 10) logarithm (base 1	*		west	W	`	
inch in corporate suffixes: mile mile mi Company Co. expected value E company Counce oz Incorporated Inc. greater than or equal to \$\gequip \text{quart} \text{qt} \text{pound} \text{pound} \text{limited} \text{Lid.} \text{harvest per unit effort} \text{ HPUE} \text{quart} \text{qt} \text{District of Columbia} \text{D.C.} \text{less than or equal to} \$\gequip \text{quart} \text{qt} \text{pound} \text{qt} \text{di (and others)} \text{et al.} \text{less than or equal to} \$\gequip \text{qt} \text{qt} \text{qt} \text{qt} \text{qt} \text{qt} \text{di (and others)} \text{et al.} \text{less than or equal to} \$\gequip \text{qt} qt			copyright	©		
mile mi Company Co. expected value E contact	2	_	1.0			df
nautical mile				Co.	•	
ounce oz Incorporated Inc. greater than or equal to ≥ pound lb Limited Ltd. harvest per unit effort HPUE quart qt District of Columbia D.C. less than or equal to ≤ yard yd et alii (and others) et al. less than or equal to ≤ yard yd et alii (and others) et al. less than or equal to ≤ yard yd et alii (and others) et al. less than or equal to ≤ yard yd et alii (and others) et al. less than or equal to ≤ yard yd et alii (and others) et al. less than or equal to ≤ degress and temperature d (for example) e.g. logarithm (base 10)				Corp.		
pound quart lb Limited quart Ltd. harvest per unit effort HPUE quart yard qt District of Columbia D.C. less than <						>
quart qt District of Columbia et alit (and others) D.C. less than yard yd et alit (and others) et al. less than or equal to ≤ Time and temperature et cetera (and so forth) et cl. logarithm (natural) ln day d (for example) e.g. logarithm (specify base) log₂ etc. degrees Celsius °C Federal Information minute (angular) NS degrees Fahrenheit °F Code FIC not significant NS degrees kelvin K id est (that is) i.e. null hypothesis Ho hour h latitude or longitude lat or long percent % minute min monetary symbols s. ¢ probability of a type I error (rejection of the null hypothesis when true) α Physics and chemistry figures): first three letters letters Jan,,Dec probability of a type II error (rejection of the null α all atomic symbols all tomic symbols tettra W			Limited	Ltd.		
yard yd yd et alii (and others) et cetara (and so forth) et c. logarithm (natural) In Time and temperature day d (for example) e.g. logarithm (specify base) log₂ etc. degrees Celsius degrees Fahrenheit degrees Fahrenheit degrees kelvin K id est (that is) loc. not significant NS degrees kelvin N id latitude or longitude minute minute min monetary symbols second s (U.S.) \$, ¢ probability of a type I error (rejection of the null hypothesis when true) Physics and chemistry I figures): first three all atomic symbols alternating current AC registered trademark ampere A trademark ampere calorie cal United States of lorsepower hph America (noun) hydrogen ion activity hpH U.S.C. Volts V i sil (and others) et cal. logarithm (natural) In logarithm (natural) logarith nimute	*		District of Columbia	D.C.	1	
et cetera (and so forth) etc. logarithm (natural) In Time and temperature exempli gratia c.g. logarithm (base 10) log day d (for example) e.g. logarithm (base 10) log degrees Celsius °C Federal Information minute (angular) ' degrees Fahrenheit °F Code FIC not significant NS degrees kelvin k id est (that is) i.e. null hypothesis Ho hour h latitude or longitude lat or long percent % minute min monetary symbols lat or long percent % second s (U.S.) \$, ¢ probability probability second s (U.S.) \$, ¢ probability of a type I error (rejection of the null hypothesis when true) α Physics and chemistry figures): first three Jan,,Dee probability of a type II error (acceptance of the null hypothesis when false) β all etomic symbol		-	et alii (and others)	et al.		
Time and temperature exempli gratia logarithm (base 10) log arithm (base 10) log a	yazu	, .	` /	etc.	•	
day d (for example) e.g. logarithm (specify base) log₂ etc. degrees Celsius °C Federal Information minute (angular) ' degrees Fahrenheit °F Code FIC not significant NS degrees kelvin K id est (that is) i.e. null hypothesis Ho hour h latitude or longitude lat or long percent % minute min monetary symbols probability P second s (U.S.) \$, ¢ probability of a type I error (rejection of the null A Physics and chemistry letters Jan,,Dec probability of a type II error (rejection of the null α all atomic symbols letters Jan,,Dec probability of a type II error (rejection of the null α all ternating current AC registered trademark ® (acceptance of the null ampere A trademark TM hypothesis when false) β calorie cal United States second (angular) " hertz Hz	Time and temperature				ě (, ,	
degrees Celsius °C Federal Information minute (angular) I degrees Fahrenheit °F Code FIC not significant NS degrees kelvin K id est (that is) i.e. null hypothesis Ho hour h latitude or longitude lat or long percent % minute min monetary symbols probability probability P second s (U.S.) \$, ¢ probability q P Physics and chemistry figures): first three hypothesis when true) α α P all atomic symbols letters Jan,,Dec probability of a type I error (rejection of the null η <t< td=""><td>•</td><td>d</td><td>1 0</td><td>e.g.</td><td></td><td>_</td></t<>	•	d	1 0	e.g.		_
degrees Fahrenheit °F Code FIC not significant NS degrees kelvin K id est (that is) i.e. null hypothesis Ho hour h latitude or longitude lat or long percent % minute min monthactury symbols probability P second s (U.S.) \$, ¢ probability of a type I error (rejection of the null hypothesis when true) α Physics and chemistry figures): first three letters Jan,,Dec probability of a type II error (rejection of the null hypothesis when true) α all atomic symbols letters Jan,,Dec probability of a type II error (rejection of the null hypothesis when true) α all trademark attraction current AC registered trademark for IIII attraction in the null hypothesis when full hypothesis when	3		Federal Information	C		
degrees kelvin K id est (that is) i.e. null hypothesis Ho hour h latitude or longitude lat or long percent % minute min monetary symbols probability P second s (U.S.) \$, \$ probability of a type I error (rejection of the null Physics and chemistry figures): first three letters Jan,,Dec probability of a type II error (rejection of the null α all atomic symbols AC registered trademark figures): first three letters Jan,,Dec probability of a type II error (rejection of the null α alternating current AC registered trademark figures): first three letters [acceptance of the null β ampere A trademark figures): first three letters [acceptance of the null β ampere A trademark figures): first three letters [acceptance of the null β ampere A trademark figures): first three letters [acceptance of the null β alternating current DC (adjective) U.S. standard deviation standard error SE horsepower hp <td>2</td> <td></td> <td>Code</td> <td>FIC</td> <td>\ U /</td> <td>NS</td>	2		Code	FIC	\ U /	NS
hourhlatitude or longitude minutelat or long monetary symbolspercent probability%seconds(U.S.) months (tables and figures): first three letterss, ¢probability of a type I error (rejection of the null hypothesis when true)αPhysics and chemistry all atomic symbols alternating currentACregistered trademark trademark®(acceptance of the null hypothesis when false)βampere calorieAtrademarkTMhypothesis when false)βcalorie direct currentDC(adjective)U.S.standard deviationSDhertz horsepowerHzUnited States ofstandard deviationSDhorsepower hydrogen ion activity (negative log of) parts per millionpHU.S. StateUnited States Codepopulation sampleVarvarppt, % woltsU.S. stateuse two-letter abbreviations (e.g., AK, WA)varvoltsV	2	K	id est (that is)	i.e.	0	H_0
minute min monetary symbols probability P second s (U.S.) \$, ¢ probability of a type I error (rejection of the null hypothesis when true) α Physics and chemistry figures): first three letters Jan,,Dec probability of a type II error hypothesis when true) α all atomic symbols alternating current AC registered trademark et rademark ® (acceptance of the null hypothesis when false) β ampere A trademark TM hypothesis when false) β calorie cal United States second (angular) " direct current DC (adjective) U.S. standard deviation SD hertz Hz United States of standard error SE horsepower hp America (noun) USA variance hydrogen ion activity (negative log of) pH U.S. state Use two-letter abbreviations (e.g., AK, WA) sample var parts per million ppt, % (e.g., AK, WA) (e.g., AK, WA) V V	C	h	latitude or longitude	lat or long	* 1	-
second s (U.S.) \$, ¢ probability of a type I error months (tables and months) (tables and figures): first three all atomic symbols alternating current AC registered trademark				C	•	
months (tables and (rejection of the null hypothesis when true) α Physics and chemistry all atomic symbols figures): first three letters Jan,,Dec probability of a type II error hypothesis when false) β alternating current AC registered trademark ® (acceptance of the null hypothesis when false) β ampere A trademark TM hypothesis when false) β calorie cal United States second (angular) " direct current DC (adjective) U.S. standard deviation SD hertz Hz United States of variance SE horsepower hp America (noun) USA variance hydrogen ion activity pH U.S. state use two-letter abbreviations (e.g., AK, WA) var parts per million ppt, % (e.g., AK, WA) (e.g., AK, WA) V			(U.S.)	\$, ¢	1 2	
Physics and chemistry all atomic symbols figures): first three letters Jan,,Dec hypothesis when true) probability of a type II error probability of a type I			months (tables and			
all atomic symbols letters Jan,,Dec probability of a type II error alternating current AC registered trademark ® (acceptance of the null ampere A trademark ™ hypothesis when false) β calorie cal United States second (angular) " direct current DC (adjective) U.S. standard deviation SD hertz Hz United States of standard error SE horsepower hp America (noun) USA variance hydrogen ion activity pH U.S.C. United States population Var (negative log of) Code sample var parts per million ppm U.S. state use two-letter abbreviations abbreviations parts per thousand ppt, % (e.g., AK, WA) (e.g., AK, WA) V	Physics and chemistry		figures): first three		` 3	α
alternating current AC registered trademark ® (acceptance of the null hypothesis when false) β ampere A trademark TM hypothesis when false) β calorie cal United States second (angular) " direct current DC (adjective) U.S. standard deviation SD hertz Hz United States of standard error SE horsepower hp America (noun) USA variance hydrogen ion activity pH U.S.C. United States population Var (negative log of) Code sample var parts per million ppm U.S. state use two-letter abbreviations abbreviations parts per thousand ppt, % (e.g., AK, WA) (e.g., AK, WA) V			letters	Jan,,Dec	,	
ampere A trademark $\stackrel{TM}{\longrightarrow}$ hypothesis when false) β calorie calorie cal United States second (angular) " direct current DC (adjective) U.S. standard deviation SD hertz Hz United States of standard error SE horsepower hp America (noun) USA variance hydrogen ion activity pH U.S.C. United States population Var (negative log of) U.S. state use two-letter abbreviations ppt, $\%$ $\%$ Volts	•	AC	registered trademark	®	1 2 21	
calorie calorie cal United States second (angular) " direct current DC (adjective) U.S. standard deviation SD hertz Hz United States of standard error SE horsepower hp America (noun) USA variance hydrogen ion activity pH U.S.C. United States (negative log of) Code sample var parts per million ppm U.S. state use two-letter parts per thousand ppt, %% volts V	~	A	trademark	TM	` 1	β
direct current DC (adjective) U.S. standard deviation SD hertz Hz United States of standard error SE horsepower hp America (noun) USA variance hydrogen ion activity pH U.S.C. United States population Var (negative log of) U.S. state use two-letter abbreviations ppt, \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1		United States		* *	
hertz Hz United States of standard error SE horsepower hp America (noun) USA variance hydrogen ion activity pH U.S.C. United States population Var (negative log of) Code sample var parts per million ppm U.S. state use two-letter parts per thousand ppt, 60 (e.g., AK, WA) volts V			(adjective)	U.S.	()	SD
horsepower hp America (noun) USA variance hydrogen ion activity pH U.S.C. United States population Var (negative log of) Code sample var parts per million ppm U.S. state use two-letter parts per thousand ppt, %% (e.g., AK, WA) volts V		Hz	United States of			SE
hydrogen ion activity pH U.S.C. United States population Var (negative log of) Code sample var parts per million ppm U.S. state use two-letter abbreviations ppt, 60 (e.g., AK, WA) volts			America (noun)	USA		
(negative log of) parts per million ppm U.S. state use two-letter abbreviations parts per thousand ppt, % (e.g., AK, WA) volts	•		U.S.C.	United States	population	Var
parts per million ppm U.S. state use two-letter abbreviations parts per thousand ppt, wolts V		1		Code	1 1	
parts per thousand ppt, abbreviations (e.g., AK, WA) volts V	` ` ` ` ` ` ` ` `	ppm	U.S. state	use two-letter	1	
volts (e.g., AK, WA)	1 1					
volts V				(e.g., AK, WA)		
	volts					
	watts	W				

FISHERY MANAGEMENT REPORT NO. 21-33

ANNUAL MANAGEMENT REPORT FOR GROUNDFISH FISHERIES IN THE BERING SEA-ALEUTIAN ISLANDS MANAGEMENT AREA, 2020

by
Asia Beder

Alaska Department of Fish and Game, Division of Commercial Fisheries, Dutch Harbor and
Janis Shaishnikoff

Alaska Department of Fish and Game, Division of Commercial Fisheries, Dutch Harbor

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

November 2021

This report was compiled from data collection funded through Alaska Fisheries Information Network (AKFIN), Task II: Groundfish/Shellfish Fisheries Data collection and Analysis in Alaska, NOAA Cooperative Agreement NA18NMF4370300.

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.

Product names used in this publication are included for completeness and do not constitute product endorsement. The Alaska Department of Fish and Game does not endorse or recommend any specific company or their products.

Asia Beder, Alaska Department of Fish and Game, Division of Commercial Fisheries PO Box 920587, Dutch Harbor, AK 99692, USA and

Janis Shaishnikoff Alaska Department of Fish and Game, Division of Commercial Fisheries, PO Box 920587, Dutch Harbor, AK 99692, USA

This document should be cited as follows:

Beder, A., and J. Shaishnikoff. 2021. Annual management report for groundfish fisheries in the Bering Sea-Aleutian Islands Management Area, 2020. Alaska Department of Fish and Game, Fishery Management Report No. 21-33, Anchorage.

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility please write:

ADF&G ADA Coordinator, P.O. Box 115526, Juneau, AK 99811-5526 U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, MS 2042, Arlington, VA 22203 Office of Equal Opportunity, U.S. Department of the Interior, 1849 C Street NW MS 5230, Washington DC 20240

The department's ADA Coordinator can be reached via phone at the following numbers: (VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648, (Juneau TDD) 907-465-3646, or (FAX) 907-465-6078

For information on alternative formats and questions on this publication, please contact: ADF&G Division of Sport Fish, Research and Technical Services, 333 Raspberry Road, Anchorage AK 99518 (907) 267-2375

TABLE OF CONTENTS

ra	ge
LIST OF TABLES	ii
LIST OF FIGURES	ii
LIST OF APPENDICES	ii
ABSTRACT	1
INTRODUCTION	1
SECTION I: ALEUTIAN ISLANDS GROUNDFISH FISHERIES	2
ALEUTIAN ISLANDS SABLEFISH	2
Background	
ALEUTIAN ISLANDS BLACK ROCKFISH	3
Background	
ALEUTIAN ISLANDS DARK ROCKFISH	3
ALEUTIAN ISLANDS SUBDISTRICT STATE-WATERS PACIFIC COD	4
Background	
SECTION II: BERING SEA GROUNDFISH FISHERIES	6
DUTCH HARBOR SUBDISTRICT STATE-WATERS PACIFIC COD	6
Background	
2020 Pot Gear Fishery	
2020 Jig Gear FisheryGROUNDFISH HARVEST FROM PARALLEL SEASONS IN THE BERING SEA-ALEUTIAN ISLANDS AREA	
REFERENCES CITED	8
TABLES AND FIGURES	9
APPENDIX A. ALEUTIAN ISLANDS SUBDISTRICT STATE-WATERS PACIFIC COD FISHERY MANAGEMENT PLAN REGULATIONS BY SEASON	
APPENDIX B. DUTCH HARBOR SUBDISTRICT STATE-WATERS PACIFIC COD FISHERY MANAGEMENT PLAN REGULATIONS BY SEASON	

LIST OF TABLES

Table	Page
1.	Aleutian Islands state-waters sablefish fishery guideline harvest level, harvest, effort, value, and season dates. 1995–2020
2.	Aleutian Islands state-waters sablefish fishery harvest by gear type, 1995–2020.
3.	Aleutian Islands state-waters black rockfish fishery guideline harvest level, by section and subsection for the 2020 season
4.	Aleutian Islands state-waters black rockfish fishery guideline harvest level, harvest, effort, and value, 1994–2020.
5.	Aleutian Islands Subdistrict state-waters Pacific cod fishery harvest, effort, and value, 2006–202014
6.	Aleutian Islands Subdistrict state-waters Pacific cod fishery harvest by gear type, 2006–202016
7.	Aleutian Islands Subdistrict state-waters Pacific cod season dates and duration, 2006–2020
8.	Dutch Harbor Subdistrict state-waters Pacific cod fishery harvest, effort, and value, 2014–202019
9.	Dutch Harbor Subdistrict state-waters Pacific cod season length and dates, 2014–202020
10.	Dutch Harbor Subdistrict state-waters Pacific cod jig fishery harvest, effort, value, and season dates, 2019–2020
11.	Top 25 species harvested by weight in pounds, as reported on groundfish fish tickets, in the Bering Sea-Aleutian Islands Area parallel fishery, 2020.
12.	Bering Sea-Aleutian Islands Area number of vessels and landings, harvest by gear type, and at-sea discards, for Pacific cod, walleye pollock, and Pacific Ocean perch during the parallel fishery, 1995–2020
	LIST OF FIGURES
Figure	Page
1.	Bering Sea-Aleutian Islands Area for groundfish management
2.	Aleutian Islands state-waters sablefish fishery management area
3.	Aleutian Islands state-waters black rockfish management area
4.	Management boundaries for the Aleutian Islands state-waters black rockfish fishery29
5.	Aleutian Islands Subdistrict state-waters Pacific cod fishery management area30
6.	Dutch Harbor Subdistrict state-waters Pacific cod fishery management area
	LIST OF APPENDICES
Apper	ndix Page
А.	Aleutian Islands Subdistrict state-waters Pacific cod fishery management plan regulatory modifications
	by season.
B.	by season

ABSTRACT

This report summarizes harvest, effort, and management of commercial state-waters and parallel groundfish fisheries managed by the Alaska Department of Fish and Game (ADF&G) in the Bering Sea-Aleutian Islands Area (BSAI). State-waters groundfish fisheries included in this report are sablefish *Anoplopoma fimbria*, black rockfish *Sebastes melanops*, dark rockfish *Sebastes ciliatus*, Pacific cod *Gadus macrocephalus*, and key parallel fisheries. For parallel fisheries in the BSAI, ADF&G adopts most seasons, bycatch limits, and allowable gear types in the adjacent exclusive economic zone (EEZ) established by the National Marine Fisheries Service.

Keywords:

Bering Sea-Aleutian Islands Area, Bering Sea District, Aleutian Islands District, Dutch Harbor Subdistrict, BSAI, sablefish, *Anoplopoma fimbria*, black rockfish, *Sebastes melanops*, parallel season, Exclusive Economic Zone, EEZ, National Marine Fisheries Service, NMFS, Pacific cod, *Gadus macrocephalus*, dark rockfish, *Sebastes ciliatus*

INTRODUCTION

Commercial groundfish fisheries within state waters (0–3 nmi) are managed by the Alaska Department of Fish and Game (ADF&G) under regulations developed by the Alaska Board of Fisheries (BOF). Commercial groundfish fisheries in the exclusive economic zone (EEZ; 3–200 nmi) off Alaska are managed by National Marine Fisheries Service (NMFS) under guidelines developed by the North Pacific Fishery Management Council (NPFMC) and the Magnuson–Stevens Fishery Conservation and Management Act (MSA; DOC 2007).

Many commercially important groundfish species occur in both state waters and the EEZ. Each year, ADF&G issues an emergency order that establishes parallel groundfish seasons in state waters, adopting federal regulations except when superseded by state regulations, including season dates, gear types, bycatch limits, and inseason management actions in adjacent EEZ fisheries managed by NMFS. Harvest in a parallel fishery is accounted for under federal catch limits. ADF&G and NMFS additionally coordinate state and federal closed waters for Steller sea lion and coral garden protection areas.

The Bering Sea-Aleutian Islands Area (BSAI) includes all state waters of the Bering Sea and waters of the North Pacific Ocean adjacent to the Aleutian Islands west of 170°W long. The BSAI is further divided into districts: the Bering Sea and Aleutian Islands Districts (Figure 1). Each statewaters groundfish fishery has unique fishery management boundaries described in this report. ADF&G actively manages 4 state-waters groundfish fisheries in the BSAI: Aleutian Islands sablefish *Anoplopoma fimbria*, Aleutian Islands black rockfish *Sebastes melanops*, Aleutian Islands Subdistrict Pacific cod *Gadus macrocephalus*, and Dutch Harbor Subdistrict Pacific cod *G. macrocephalus*.

Groundfish harvests in this report are based on the ADF&G fish ticket database as of January 2021. Fishery average prices in this report are based on dock prices. For more detailed information on fishery value and prices, refer to the ADF&G commercial operator's annual report (COAR 2020).

SECTION I: ALEUTIAN ISLANDS GROUNDFISH FISHERIES

ALEUTIAN ISLANDS SABLEFISH

The Aleutian Islands state-waters sablefish fishery includes state waters of the Aleutian Islands District of the BSAI and the Western District of the South Alaska Peninsula Area south of the latitude of Cape Sarichef (54°36′N lat) and west of the longitude of Scotch Cap Light (164°44′W long; Figure 2).

BACKGROUND

The federal individual fishing quota (IFQ) program for sablefish was established in 1995. The Alaska Department of Law determined harvest of sablefish in state waters could not be limited to IFQ holders; therefore, state-waters sablefish fisheries were established in areas where historical harvest of sablefish was sufficient to allow for a manageable fishery. All vessels harvesting sablefish in state waters must be registered with ADF&G, including those vessels harvesting IFQ or Community Development Quota (CDQ) sablefish. All harvest taken from state waters accrues to the guideline harvest level (GHL), regardless of whether harvest is accounted for in a federal fishery.

ADF&G annually reviews the NMFS sablefish stock assessment and sets the Aleutian Islands state-waters sablefish GHL at approximately 5% of the combined federal BSAI total allowable catch (TAC; Table 1). Season dates for the state waters fishery coincide with the federal IFQ season to allow for sablefish harvest inside state waters during the entire IFQ season (Table 1). Longline, pot, jig, and hand troll are legal gear types. Since 1995, vessels using longline gear account for the majority of the harvest except in 2020 when boats mostly fished with pot gear (Table 2). Federal regulation changes allowing for retention of halibut in pot gear in the BSAI, whale interactions, and slinky pots becoming more prevalent could all be possible factors in pot gear becoming the main gear type in the state-waters fishery in 2020. While trawl is not a legal gear type, bycatch in trawl fisheries has accounted for a portion of the fishery harvest since 1995.

The GHL was annually achieved from 1996 through 2002 but has not been fully harvested since 2003. Total fishery value peaked in 2011 at \$0.98 million (Table 1). For more history on regulation changes and fishery effort for the Aleutian Islands sablefish fishery, refer to the 2017 BSAI annual management report (Beder and Shaishnikoff 2018).

2020 FISHERY

The 2020 Aleutian Islands state-waters sablefish GHL was 429,800 pounds, an increase of 10% from the 2019 GHL (Table 1). Season dates were concurrent with the IFQ season: March 14 through November 15. Fishery harvest was 397,624 pounds taken by 20 vessels, including incidental catch by trawl vessels (Table 1); vessels longlining harvested 49,831 pounds and pot vessels harvested 342,615 pounds. Incidental catch by trawl vessels accounted for 5,178 pounds during the 2020 fishery (Table 2). Participants in federal IFQ/CDQ fisheries accounted for 98% of

the harvest. Average exvessel price was \$1.42 per pound for an estimated exvessel value of \$394,553 (Table 1).

ALEUTIAN ISLANDS BLACK ROCKFISH

The Aleutian Islands black rockfish fishery includes state waters of the Aleutian Islands District of the BSAI and the Western District of the South Alaska Peninsula Area south of the latitude of Cape Sarichef (54°36′N lat) and west of the longitude of Scotch Cap Light (164°44′W long; Figure 3). The fishery is further divided into the Akutan, Unalaska, and Western sections, with the Akutan and Unalaska sections further divided into subsections (Figure 4).

BACKGROUND

In 1998, the NPFMC passed Amendment 46 to the Gulf of Alaska (GOA) groundfish Fishery Management Plan (FMP), removing black rockfish from the GOA FMP, and thereby delegating management in the GOA EEZ to the State of Alaska. Black rockfish in the BSAI EEZ remain under federal management. The Aleutian Islands black rockfish fishery occurs in state waters south of Cape Sarichef and west of Scotch Cap Light. Federal waters of the Pacific Ocean between Scotch Cap Light and 170°W long are also managed by ADF&G as a bycatch fishery. Starting in 2000, the Akutan and Unalaska sections were divided into subsections, each with a separate GHL to distribute fishing effort (Figure 4, Table 3). Subsection GHL apportionments are based on potential black rockfish habitat as determined by the amount of coastline. The waters from the south end of Green Bight to Talus Point have been closed since 2000 due to concerns of localized depletion.

The Aleutian Islands black rockfish fishery opens January 1 and closes December 31, unless closed earlier by emergency order. Fish harvesters may use mechanical jig or hand troll gear with a limit of 5 mechanical jigging machines per vessel. Fish harvesters are required to register with ADF&G prior to fishing and must complete a logbook for directed black rockfish fishing activity.

Very little directed effort for black rockfish has occurred in recent years, with one or fewer vessels targeting black rockfish each year (Table 4). For more history on regulation changes and fishing effort for the Aleutian Islands black rockfish fishery, refer to the 2017 BSAI groundfish annual management report (Beder and Shaishnikoff 2018).

2020 FISHERY

The GHL in 2020 was 90,000 pounds; 35,000 pounds were available in both the Akutan and Unalaska sections and 20,000 pounds were available in the Western Section (Table 3). The waters from the south end of Green Bight to Talus Point remained closed for the 2020 fishery.

The 2020 Aleutian Islands black rockfish fishery opened on January 1 and closed on December 31. No directed harvest occurred. Fish harvesters may retain up to 20% black rockfish as bycatch from other directed state-waters and federal groundfish fisheries. Eleven vessels incidentally harvested black rockfish in 2020 for a total of 111 pounds (Table 4).

ALEUTIAN ISLANDS DARK ROCKFISH

In 2009, Amendment 73 was added to the BSAI groundfish FMP and Amendment 77 was added to the GOA groundfish FMP (NOAA 2008), which removed dark rockfish from the federal FMPs,

thereby extending the State of Alaska's authority for dark rockfish in the EEZ of both the BSAI and GOA. In the BSAI, there is no directed dark rockfish fishery. Bycatch of dark rockfish is limited to 20% of the directed target species onboard a vessel. Dark rockfish incidental harvest in 2020 totaled 20,188 pounds, primarily from trawl groundfish catch in the BSAI federal waters.

ALEUTIAN ISLANDS SUBDISTRICT STATE-WATERS PACIFIC COD

The Aleutian Islands Subdistrict (AIS) state-waters Pacific cod fishery includes state waters of the Aleutian Islands Subdistrict west of 170°W long, with an inner Adak section comprised of state waters between 175°W long and 178°W long (Figure 5).

BACKGROUND

Prior to 2006, Pacific cod harvest in the Aleutian Islands District was exclusively managed under parallel rules. In February 2006, the BOF approved regulations for a state-waters Pacific cod fishery in the AIS west of 170°W long (Figure 5). The *Aleutian Islands Subdistrict Pacific Cod Management Plan* (5 AAC 28.647) was adopted by emergency petition to provide the community of Adak with economic opportunities. Regulatory changes to the AIS state-waters Pacific cod fishery from 2006 through 2020 are provided in Appendix A.

In 2019, the AIS state-waters Pacific cod GHL was established at 31% of the federal Aleutian Islands subarea allowable biological catch (ABC), with a step-up prevision increasing the GHL by 4% each year the GHL is achieved, up to a maximum of 39%. Additionally, if the GHL is not achieved for 2 consecutive years, the GHL will decrease by 4% each year down to a minimum of 15% of the federal Aleutian Islands ABC. The AIS state-waters Pacific cod 2020 GHL was set at 35% of the federal Aleutian Islands ABC; however, since 2016, a maximum regulatory GHL of 15,000,000 pounds is established for this fishery; therefore, the 2020 GHL was less than the full 35%. From 2006 to 2020, AIS state-waters Pacific cod GHLs ranged from 10.5 million pounds to 20.8 million pounds (Table 5). Since its inception, the AIS Pacific cod fishery has been generally underutilized, with the GHL being fully achieved during 5 of the past 14 years (2007, 2008, 2018, 2019, and 2020). During years when the GHL was not achieved, approximately 50% of the GHL remained unharvested. Years when the GHL was fully harvested correspond to periods when a shore-based processor was operational in Adak. Vessels using longline, trawl, pot, and jig gear have historically been eligible to participate in the fishery. Participation has fluctuated over time with only trawl or pot gear vessels participating 4 of the last 5 years (Table 6). The number of vessels, along with vessel size for each gear type, has varied since 2006 with a general shift toward under 60-foot overall length (OAL) pot gear vessels in recent years.

Prior to 2016, the AIS state-waters Pacific cod GHL was divided across 2 seasons: "A" season (before June 10) and "B" season (after June 10). Since 2016, the AIS state-waters Pacific cod has been managed as one season. Prior to 2020, the AIS state-waters Pacific cod fishery was a nonexclusive registration area for all gear types. In December 2019, the BOF approved regulations for the AIS to be an exclusive registration area for all gear types. This regulation became effective during the 2020 season.

2020 FISHERY

The AIS state-waters Pacific cod 2020 GHL was 15,000,000 pounds (Table 5). The state-waters season opened on January 1 in the Adak Section to vessels 60 feet or less OAL using trawl, pot,

and jig gear, and vessels 58 feet or less OAL using longline gear (Tables 6 and 7). All state waters west of 170°W long opened on February 20 at 12:00 PM to trawl vessels 100 feet or less OAL, pot vessels 125 feet or less OAL, and jig and longline vessels 58 feet or less OAL. New regulations changing season dates were adopted during the January 2020 BOF meeting and became effective on February 28, 2020. These new regulations closed the state-waters fishery for trawl vessels over 60 feet OAL and pot vessels over 100 feet OAL on February 27 at 11:59 PM Alaska time. All state waters west of 170°W long reopened for trawl vessels 100 feet or less OAL and pot vessels 125 feet or less OAL on March 15 at 12:00 PM Alaska time. The fishery closed on March 23 with a total harvest of 14,907,703 pounds (Tables 5, 6, and 7). A total of 15 vessels, 7 pot vessels, 6 trawl vessels, and 2 longline vessels participated in the 2020 AIS fishery (Table 6). Nine of the 15 vessels were under 60 feet OAL. Daily CPUE is confidential.

SECTION II: BERING SEA GROUNDFISH FISHERIES

DUTCH HARBOR SUBDISTRICT STATE-WATERS PACIFIC COD

The 2020 Dutch Harbor Subdistrict (DHS) includes state waters of the Aleutian Islands District east of 170°W long and the state waters of the Bering Sea District that are west of 162°30.00′W long, east of 170°W long, and south of 55°30′N lat, with closed waters south of 53°06.11′N lat (Figure 6).

BACKGROUND

The DHS state-waters Pacific cod fishery for pot gear was established by the BOF in October 2013 and opened for the first time in 2014 under regulations in the *Dutch Harbor Subdistrict Pacific Cod Management Plan* (5 AAC 28.648). The DHS state-waters Pacific cod fishery for jig gear was established by the BOF in October 2018 and opened for the first time in 2019. Regulatory changes to the DHS state-waters Pacific cod fisheries are provided in Appendix B.

The DHS state-waters Pacific cod season for pot gear opens 7 days after closure of the BSAI federal/parallel Pacific cod A season for catcher vessels less than 60 feet OAL using longline and pot gear. Vessels participating in the DHS state-waters Pacific cod pot season are limited to a maximum of 58 feet OAL and may operate no more than 60 pots. The DHS state-waters Pacific cod fishery is an exclusive registration area for pot gear.

In 2019, the BOF set the GHL at 8% and included a step-up prevision increasing the DHS statewaters Pacific cod GHL by 1% each year the GHL is achieved to a maximum of 15% of the federal Bering Sea subarea ABC. The 2020 DHS state-waters Pacific cod GHL for pot gear is 9% of the federal Bering Sea subarea ABC. From 2014 to 2020, DHS state-waters Pacific cod GHLs for pot gear ranged from 17.8 million pounds to 36 million pounds (Table 8). The GHL has been achieved every year. Vessel participation has ranged from 14 to 40 vessels, with the highest participation occurring in 2020 (Table 8).

The DHS state-waters Pacific cod season for jig gear opens May 1 with a regulatory GHL of 100,000 pounds. Vessels participating in the DHS state-waters Pacific cod jig season are limited to a maximum of 58 feet OAL and may operate no more than 5 jigging machines. The DHS state-waters Pacific cod fishery is a nonexclusive registration area for jig gear.

2020 POT GEAR FISHERY

The 2020 DHS state-waters Pacific cod season for pot gear opened on January 26 with a GHL of 30,927,000 pounds (Tables 8 and 9). The fishery closed on March 12 with a total harvest of 30,081,227 pounds. Forty vessels participated in the 47-day fishery. Harvest was distributed throughout most of the registration area, with 61% coming from waters around Unimak Island and 20% around Unalaska, Akutan, and Akun Islands. Fleetwide daily harvest ranged from approximately 82 thousand to 1.4 million pounds, with a daily average harvest of 828,906 pounds.

Daily CPUE ranged from 139 to 199 pounds per pot, with a daily average CPUE of 167 pounds per pot.

About 845,000 pounds of the GHL remained after the initial closure of the season. Interest from vessels in the fall warranted a small reopening after the federal B season closed. The 2020 DHS state-waters Pacific cod season for pot gear reopened on September 17 and closed again on September 29 (Table 9). Five vessels participated in the 13-day fishery bringing the total harvest for the 2020 season to 30,928,649 pounds (Table 8). Fleetwide daily harvest ranged from approximately 24,000 to 117,000 pounds, with a daily average harvest of 64,000 pounds. Daily CPUE ranged from 96 to 181 pounds of cod per pot, with a daily average CPUE of 136 pounds of cod per pot. Fish harvesters were initially paid an average exvessel price of \$0.43 per pound for an estimated fishery exvessel value of \$13.07 million for the 2020 pot gear season.

2020 JIG GEAR FISHERY

The 2020 DHS state-waters Pacific cod season for jig gear opened on May 1 with a GHL of 100,000 pounds (Table 9). The fishery closed on December 31; harvest is confidential. One vessel participated in the 245-day fishery.

GROUNDFISH HARVEST FROM PARALLEL SEASONS IN THE BERING SEA-ALEUTIAN ISLANDS AREA

Each year, by emergency order, ADF&G establishes parallel groundfish seasons that mirror federal fisheries managed by NMFS. ADF&G generally adopts seasons, closed waters, bycatch limits, and legal gear types of the adjacent federal waters, unless superseded by state regulations.

Steller sea lion protection measures during a parallel season reflect NMFS closure areas, except in state waters between 175°W long and 178°W long during a parallel Pacific cod season, in which the Steller sea lion protection measures reflect those in place prior to 2011 (5 AAC 28.087(b)(3)).

Several species are harvested during the BSAI parallel fisheries; however, Pacific cod, walleye pollock *Gadus chalcogrammus*, and Pacific Ocean perch *Sebastes alutus* dominated parallel harvest by volume in 2020 (Table 11). During 2020, parallel harvest was 6.2 million pounds for Pacific cod, 16 million pounds for walleye pollock, and 1.2 million pounds for Pacific Ocean perch (Table 12).

REFERENCES CITED

- Beder, A., and J. Shaishnikoff. 2018. Annual management report for groundfish fisheries in the Bering Sea-Aleutian Islands Management Area, 2017. Alaska Department of Fish and Game, Fishery Management Report No. 18-18, Anchorage.
- COAR (Commercial Operator's Annual Report). 2020. Statewide COAR Production by Area. Alaska Department of Fish and Game, Juneau. https://www.adfg.alaska.gov/index.cfm?adfg=fishlicense.coar_production_byarea.
- 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.
- NOAA (National Oceanic and Atmospheric Administration). 2008. Fisheries of the Exclusive Economic Zone off Alaska; revised management authority for dark rockfish in the Bering Sea and Aleutian Islands Management Area and the Gulf of Alaska. Federal Register 73(251):80307–80312.

TABLES AND FIGURES

Table 1.—Aleutian Islands state-waters sablefish fishery guideline harvest level (GHL), harvest, effort, value, and season dates, 1995–2020.

					Average price	Fishery	Season	dates	Season
Year	GHL ^a	Harvesta	Vessels	Landings	per pound ^b	value ^c	Opened	Closed	duration ^d
1995	400,000	269,220	35	59	\$2.96	\$0.50	03/15/95	11/15/95	246
1996	280,000	401,463	35	67	\$2.54	\$0.64	03/15/96	07/26/96	134
1997	270,000	317,562	37	75	\$3.55	\$0.71	03/15/97	07/20/97	128
1998	270,000	254,578	38	101	\$2.18	\$0.35	03/15/98	11/15/98	246
1999	250,000	279,778	24	38	\$2.69	\$0.47	03/15/99	08/16/99	155
2000	400,000	446,560	28	59	\$3.04	\$0.86	03/15/00	07/15/00	123
2001	425,000	464,241	31	99	\$2.85	\$0.79	05/15/01	08/08/01	86
2002	460,000	477,970	24	59	\$2.95	\$0.88	05/15/02	07/16/02	63
2003	630,000	473,426	40	104	\$3.58	\$0.92	05/15/03	11/15/03	185
2004	660,000	323,969	28	76	\$2.69	\$0.47	05/15/04	11/15/04	185
2005	550,000	203,498	27	72	\$2.79	\$0.27	05/15/05	11/15/05	185
2006	640,000	177,935	16	54	\$3.55	\$0.42	05/15/06	11/15/06	185
2007	638,000	269,282	25	59	\$3.49	\$0.62	05/15/07	11/15/07	185
2008	584,000	156,293	20	48	\$3.90	\$0.41	05/15/08	11/15/08	185
2009	542,000	279,510	24	65	\$4.90	\$0.85	05/15/09	11/15/09	185
2010	535,000	209,063	25	60	\$5.89	\$0.79	05/15/10	11/15/10	185
2011	523,000	200,635	26	73	\$7.65	\$0.98	05/15/11	11/15/11	185
2012	472,000	222,775	26	86	\$5.94	\$0.84	05/15/12	11/15/12	185
2013	442,000	222,379	16	47	\$4.42	\$0.62	05/15/13	11/07/13	177
2014	347,000	161,022	13	37	\$5.33	\$0.54	03/08/14	11/07/14	245
2015	346,000	153,823	15	44	\$5.81	\$0.56	03/14/15	11/07/15	239
2016	298,503	78,710	15	38	\$4.77	\$0.25	03/19/16	11/07/16	234
2017	331,682	119,913	23	58	\$4.44	\$0.39	03/11/17	11/07/17	242
2018	381,000	34,897	25	47	\$3.28	\$0.07	03/24/18	11/07/18	229
2019	385,400	110,272	23	55	\$3.00	\$0.21	03/15/19	11/14/19	245
2020	429,800	397,624	20	56	\$1.42	\$0.39	03/14/20	11/15/20	247

Note: GHL = guideline harvest level; fishery value not exact due to differences in pricing and grading of landed catch at the dock.

^a In whole fish pounds; 2006 to present does not include discards at sea.

^b Price per pound of landed weight; 2006 to present only includes fish sold for human consumption.

^c Fishery value based on landed weight, in millions of dollars; 2006 to present includes human consumption and fish meal.

d In days.

Table 2.—Aleutian Islands state-waters sablefish fishery harvest by gear type, 1995–2020.

Year	Longline	Trawla	Pot	Total
1995	227,917	41,303	0	269,220
1996	401,429	26	8	401,463
1997	312,506	20	5,036	317,562
1998	252,398	2,180	0	254,578
1999	272,240	6,268	1,270	279,778
2000	446,112	0	448	446,560
2001	439,612	210	24,419	464,241
2002	456,632	1,126	20,212	477,970
2003	428,315	270	44,842	473,426
2004	273,807	129	50,033	323,969
2005	182,348	58	21,092	203,498
2006	128,764	1,207	47,964	177,935
2007	189,708	4,251	75,323	269,282
2008	123,705	0	32,589	156,293
2009	271,776	CF	CF	279,510
2010	202,075	CF	CF	209,063
2011	164,604	0	36,031	200,635
2012	215,069	CF	CF	222,775
2013	208,981	CF	CF	222,379
2014	159,514	CF	CF	161,022
2015	153,822	CF	0	153,823
2016	53,524	CF	CF	78,710
2017	48,185	CF	CF	119,912
2018	29,784	CF	CF	34,897
2019	83,129	CF	CF	107,556
2020	49,831	5,178	342,615	397,624

Note: Harvest shown in whole fish pounds; CF = confidential.

^a Trawl is not a legal gear type. Sablefish harvested as bycatch to other fisheries.

Table 3.–Aleutian Islands state-waters black rockfish fishery guideline harvest level (GHL), by section and subsection for the 2020 season.

Section	Subsection	GHL (pounds) ^a
Akutan	Akutan Island	10,000
	Akun Island	10,000
	Rootok Island	5,600
	Tigalda Island	9,400
	Total	35,000
Unalaska	Unalaska Bay/Wislow	3,000
	Cape Kalekta/Unalga Island	3,600
	West Unalaska	12,850
	South Unalaska	12,300
	Beaver Inlet/Sedanka Island	3,250
	Total	35,000
Western	No subsections	20,000

^a In whole fish pounds.

Table 4.—Aleutian Islands state-waters black rockfish fishery guideline harvest level (GHL), harvest, effort, and value, 1994–2020.

					Average price	Fishery
Year	GHLa	Harvesta	Vessels	Landings	per pound ^b	value ^c
1994 ^{d,e}	100,000	0	0	0	\$0	\$0
1995 ^{d,e}	100,000	CF	10	CF	CF	CF
1996 ^{d,e}	100,000	CF	12	CF	CF	CF
1997 ^{d,e}	100,000	102,746	8	18	\$0.34	\$35,000
1998 ^e	100,000	CF	5	31	CF	CF
1999 ^e	90,000	20,889	6	41	\$0.35	\$7,200
2000	90,000	CF	2	5	CF	CF
2001	90,000	CF	4	11	CF	CF
2002	90,000	CF	6	27	CF	CF
2003	90,000	2,308	5	8	CF	CF
2004	90,000	1,639	10	28	CF	CF
2005	90,000	6,014	7	19	\$0.36	\$1,319
2006	90,000	CF	2	2	CF	CF
2007	90,000	CF	4	7	CF	CF
2008	90,000	CF	4	5	CF	CF
2009	90,000	CF	2	2	CF	CF
2010	90,000	2,088	4	4	\$0	\$0
2011	90,000	3,926	6	7	CF	CF
2012	90,000	11,712	5	6	CF	CF
2013	90,000	CF	2	2	CF	CF
2014	90,000	1,985	4	6	CF	CF
2015	90,000	2,365	3	4	CF	CF
2016	90,000	377	5	6	\$0	\$0
2017	90,000	3,153	7	8	\$0	\$0
2018	90,000	CF	2	3	CF	CF
2019	90,000	823	6	6	\$0	\$0
2020	90,000	111	11	19	\$0	\$0

Note: GHL = guideline harvest level; CF = confidential.

^a In whole fish pounds. Harvest includes all fishery removals including discards at sea and personal use.

^b Price per pound landed weight.

^c Fishery value based on landed weight.

^d Totals include black and dusky rockfish. In the early years of the fishery, dusky rockfish may have been misidentified as black rockfish; therefore, harvest totals include both species.

^e Due to reporting changes, these data are historical and cannot be replicated.

Table 5.-Aleutian Islands Subdistrict state-waters Pacific cod fishery harvest, effort, and value, 2006-2020.

						Average price	Fishery
Year	Season	Initial GHL ^a	Harvest a	Vessels	Landings	per pound b	value c
2006	A season	8,981,540	8,502,781	26	68	\$0.23	\$1.3
	B season	3,849,232 ^d	351,414	5	19	\$0.38	\$1.4
	TOTAL	12,830,772	8,854,195	30 °	87	\$0.31	\$2.7
2007	A season	8,148,202	8,229,931	27	97	\$0.45	\$3.6
	B season	3,492,086 ^f	3,409,070	12	106	\$0.52	\$1.7
	TOTAL	11,640,288	11,639,001	39	203	\$0.49	\$5.3
2008	A season	8,148,202	7,477,507	30	116	\$0.63	\$4.5
	B season	$3,492,086^{\mathrm{g}}$	4,241,692	18	77	\$0.57	\$1.8
	TOTAL	11,640,288	11,719,199	45 °	193	\$0.61	\$6.3
2009	A season	8,425,981	5,537,886	22	50	NA	NA
	B season	3,611,135 g	CF	5	47	CF	CF
	TOTAL	12,037,116	CF	27	97	CF	CF
2010	A season	8,055,608	7,959,515	16	84	\$0.25	\$1.6
	B season	$3,452,404^{\mathrm{g}}$	826,170	3	4	\$0.32	\$1.1
	TOTAL	11,508,012	8,785,685	16 °	88	\$0.29	\$2.7
2011	A season	10,879,701	CF	3	4	CF	CF
	B season	$4,662,729^{\mathrm{g}}$	CF	4	16	CF	CF
	TOTAL	15,542,430	595,289	6 °	20	CF	CF
2012	A season	14,537,132	11,462,339	21	201	\$0.31	\$3.6
	B season	6,230,200 g	878,688	7	25	CF	CF
	TOTAL	20,767,332	12,341,027	26 °	226	CF	CF
2013	A season	14,213,056	CF	12	150	CF	CF
	B season	$6,091,310^{\mathrm{g}}$	CF	1	1	CF	CF
	TOTAL	20,304,366	10,563,646	13	151	CF	CF
2014	A season	12,504,712	CF	8	133	CF	CF
	B season	5,359,162 g	0	0	0	\$0.00	\$0.0
	TOTAL	17,863,874	CF	8	133	CF	CF
2015	A season	12,620,583	CF	2	8	CF	CF
	B season	5,408,821 ^g	0	0	0	\$0.00	\$0.0
	TOTAL	18,029,404	CF	2	8	CF	CF

-continued-

Table 5.—Page 2 of 2.

Year	Season	Initial GHL ^a	Harvest ^a	Vessels	Landings	Average price per pound b	Fishery value ^c
2016	h	10,476,259	CF	6	39	CF	CF
2017	h	12,797,703	CF	3	84	CF	CF
2018	h	12,798,000	CF	13	132	CF	CF
2019	h	14,078,500	13,664,555	18	155	\$0.38	\$5.08
2020	h	15,000,000	14,907,703	15	187	\$0.35	\$5.12

Note: CF = confidential.

^a In whole fish pounds.

^b Price per pound of landed weight.

^c Fishery value based on landed weight, in millions of dollars.

^d ADF&G made 3.5 million pounds of the GHL available to National Marine Fisheries Service effective on September 1.

^e Some vessels participated in both seasons.

^f Overage from the A season was deducted from the B season GHL; initial GHL shown.

g A season GHL was not fully harvested, and remaining A season GHL rolled over into B season GHL; initial GHL shown.

^h In 2016, regulation changed to only one season for Aleutian Island Subdistrict state-waters Pacific cod.

Table 6.-Aleutian Islands Subdistrict state-waters Pacific cod fishery harvest by gear type, 2006–2020.

Year	Season	Longline ^a	Trawl ^a	Pot ^a	Jig ^a	Totala
2006	A season	CF	7,053,035	CF	0	8,502,781
	B season	76,462	0	274,952	0	351,414
2007	A season	0	6,998,224	1,231,707	0	8,229,931
	B season	CF	0	2,383,163	CF	3,409,070
2008	A season	CF	6,130,304	CF	0	7,477,507
	B season	362,410	0	3,786,710	92,572	4,241,692
2009	A season	CF	1,295,595	3,879,737	CF	5,537,886
	B season	CF	0	0	CF	CF
2010	A season	0	4,899,783	3,059,731	0	7,959,515
	B season	CF	0	CF	0	826,170
2011	A season	0	CF	CF	0	CF
	B season	CF	0	CF	0	CF
2012	A season	CF	5,983,213	CF	0	11,462,339
	B season	274,856	0	555,369	48,462	878,688
2013	A season	0	CF	CF	0	CF
	B season	CF	0	0	0	CF
2014	A season	0	CF	CF	0	CF
	B season	0	0	0	0	0
2015	A season	0	CF	0	0	CF
	B season	0	0	0	0	0
2016	b	0	CF	0	0	CF
2017	b	0	0	CF	0	CF
2018	b	0	CF	CF	0	CF
2019	ь	0	CF	CF	0	13,664,555
2020	ь	CF	CF	11,650,833	0	14,907,703

Note: CF = confidential.

^a In whole fish pounds.

b In 2016, regulation changed to only one season for Aleutian Island Subdistrict state-waters Pacific cod.

Table 7.—Aleutian Islands Subdistrict state-waters Pacific cod season dates and duration, 2006–2020.

			Seasor	n dates	Season	
Year	Season	Location	Opened	Closed	durationa	
2006	A season	West of 170°W long	03/15/06	03/24/06	10	
	B season	West of 170°W long	06/10/06	09/01/06	84	
2007	A season	West of 170°W long	03/16/07	03/23/07	8	
	B season	West of 170°W long	06/10/07	09/01/07	84	
		West of 170°W long	10/01/07	12/03/07	64	
2008	A season	West of 170°W long	03/10/08	03/18/08	9	
	B season	West of 170°W long	06/10/08	07/09/08	30	
2009	A season	West of 170°W long	03/25/09	04/01/09	8	
		West of 170°W long	04/07/09	06/09/09	64	
	B season	West of 170°W long	06/10/09	09/01/09	84	
2010	A season	West of 170°W long	03/16/10	06/04/10	81	
	B season	West of 170°W long	06/10/10	09/01/10	84	
		West of 170°W long	11/15/10	12/31/10	47	
2011	A season	West of 170°W long	03/30/11	04/01/11	3	
		West of 170°W long	04/05/11	06/09/11	66	
	B season	West of 170°W long	06/10/11	09/01/11	84	
		West of 170°W long	10/25/11	12/31/11	68	
2012	A season	175° to 178°W long	01/01/12	06/09/12	161	
		West of 170°W long	03/04/12	04/01/12	29	
		West of 170°W long	04/15/12	06/09/12	56	
	B season	West of 170°W long	06/10/12	09/01/12	84	
2013	A season	175° to 178°W long	01/01/13	06/09/13	160	
		West of 170°W long	03/15/13	04/01/13	18	
	B season	West of 170°W long	06/10/13	09/01/13	84	
2014	A season	175° to 178°W long	01/01/14	06/09/14	160	
		West of 170°W long	03/15/14	06/09/14	87	
	B season	West of 170°W long	06/10/14	12/31/14	205	
2015	A season	175° to 178°W long	01/01/15	06/09/15	160	
		West of 170°W long	03/03/15	06/09/15	99	
	B season	West of 170°W long	06/10/15	12/31/15	205	

-continued-

Table 7.—Page 2 of 2.

			Season	n dates	Season
Year	Season	Location	Opened	Closed	duration ^a
2016	b	175° to 178°W long	01/01/16	12/31/16	366
		West of 170°W long	03/13/16	12/31/16	294
2017	b	175° to 178°W long	01/01/17	12/31/17	365
		West of 170°W long	02/27/17	12/31/17	308
2018	b	175° to 178°W long	01/01/18	03/23/18	82
		West of 170°W long	03/08/18	03/23/18	16
2019	b	175° to 178°W long	01/01/19	03/17/19	76
		West of 170°W long	03/15/19	03/17/19	3
2020	b	175° to 178°W long	01/01/20	03/23/20	83
		West of 170°W long	02/20/20	02/27/20	8°
		West of 170°W long	02/28/20	03/23/20	25^{d}
		West of 170°W long	03/15/20	03/23/20	9e

a In days.

^b In 2016, regulation changed to only one season for Aleutian Island Subdistrict state-waters Pacific cod.

Open to longline gear no more than 58 feet, jig gear no more than 60 feet, pot gear no more than 125 feet, and trawl gear no more than 100 feet overall length until February 27th at 11:59 PM Alaska time

d Open to longline gear no more than 58 feet, jig gear no more than 60 feet, pot gear no more than 100 feet, and trawl gear no more than 60 feet overall length

^e Open to longline gear no more than 58 feet, jig gear no more than 60 feet, pot gear no more than 125 feet, and trawl gear no more than 100 feet overall length.

Table 8.-Dutch Harbor Subdistrict state-waters Pacific cod fishery harvest, effort, and value, 2014-2020.

Year	GHL ^a	Harvest ^a	Vessels	Landings	Average price per pound ^b	Fishery value ^c
2014	17,863,874	17,666,510	16	205	\$0.29	\$5.01
2015	18,029,404	17,636,103	14	183	\$0.28	\$4.76
2016	35,979,072	35,519,920	24	421	\$0.26	\$9.85
2017	33,721,562	33,247,414	24	349	\$0.31	\$10.07
2018	28,360,000	29,055,603	32	286	\$0.41	\$11.82
2019	31,922,600	32,345,033	37	431	\$0.45	\$14.18
2020	30,927,000	30,928,649	40	569	\$0.43	\$13.07

Note: GHL = guideline harvest level.

^a In whole fish pounds.

b Price per pound of landed weight of fish sold for human consumption.

^c Fishery value based on landed weight, in millions of dollars.

20

Table 9.—Dutch Harbor Subdistrict state-waters Pacific cod season length and dates, 2014–2020.

		Seaso	Season	
Year	Location	Opened	Closed	durationa
2014	East of 167°W long, west of 164°W long and south of 55° 30'N lat	02/11/2014	09/01/2014	203
2015	East of 167°W long, west of 164°W long and south of 55° 30'N lat	02/09/2015	03/31/2015	51
2016	East of 170°W long, south of 55° 30'N lat, except waters south of 53° 06.11'N lat.	02/12/2016	04/22/2016	71
2017	East of 170°W long, south of 55° 30'N lat, except waters south of 53° 06.11'N lat.	02/09/2017	04/08/2017	59
2018	East of 170°W long, south of 55° 30'N lat, except waters south of 53° 06.11'N lat.	01/30/2018	03/01/2018	31
2019	East of 170°W long, west of 162° 30'W long, south of 55° 30'N lat, except waters south of 53° 06.11'N lat.	01/19/2019	02/24/2019	37
2020	East of 170°W long, west of 162° 30'W long, south of 55° 30'N lat, except waters south of 53° 06.11'N lat. (First opening)	01/26/2020	03/12/2020	47
	East of 170°W long, west of 162° 30'W long, south of 55° 30'N lat, except waters south of 53° 06.11'N lat. (Second opening ^b)	09/17/2020	09/29/2020	13

a In days.

b In 2020, about 845,000 pounds of the GHL remained after the initial closure of the season. Interest from vessels in the fall warranted a small reopening after the federal B season closed.

 $Table\ 10.-Dutch\ Harbor\ Subdistrict\ state-waters\ Pacific\ cod\ jig\ fishery\ harvest,\ effort,\ value,\ and\ season\ dates,\ 2019-2020$

'					Average price	Fishery	Season dates		Season
Year	GHLa	Harvesta	Vessels	Landings	per pound ^b	value ^c	Opened	Closed	durationd
2019	100,000	CF	1	5	CF	CF	05/01/19	06/06/19	37
2020	100,000	CF	1	4	CF	CF	05/01/20	12/31/20	245

Note: GHL = guideline harvest level; CF = confidential.

^a In whole fish pounds

b Price per pound of landed weight.

^c Fishery value based on landed weight, in millions of dollars.

d In days

Table 11.—Top 25 species harvested by weight in pounds, as reported on groundfish fish tickets, in the Bering Sea-Aleutian Islands Area parallel fishery, 2020.

Species	Harvest a, b	At-sea discards ^a
Pollock	15,963,553	25
Pacific cod	6,208,046	3,127
Pacific Ocean perch	1,235,061	114,180
Yellowfin sole	815,360	44,917
Atka mackerel	496,057	69,735
Sablefish (Blackcod)	394,228	21,987
North Pacific octopus	221,257	6,134
Skate, other	41,939	55,594
Arrowtooth flounder	39,525	34,823
Rock sole	34,678	15,872
Flathead sole	21,145	3,605
Kamchatka flounder	16,472	29,911
Sharpchin and northern rockfish	15,806	26,029
Other flatfish	12,706	137,612
Jellyfish	11,875	42,993
Sculpin, general	10,941	60,966
Other rockfish	10,227	12,941
Alaskan skate	7,913	1,191
Shortraker and rougheye rockfish	6,122	20,711
Chum salmon	6,036	0
Majestic squid	2,962	1,465
Herring, food	753	95
Chinook salmon	317	0
Salmon shark	151	577
Prowfish	147	1,780

^a In whole fish pounds.

b Discards at sea not included.

Table 12.—Bering Sea-Aleutian Islands Area number of vessels and landings, harvest by gear type, and at-sea discards, for Pacific cod, walleye pollock, and Pacific Ocean perch during the parallel fishery, 1995–2020.

			Harvest ^{a, b}							
Year	Vessels	Landings	Trawl	Longline	Pot	Jig/hand troll	Total	discardsa		
Pacific o	cod									
1995	146	1,030	12,240,195	1,990,938	5,486,619	773,895	20,491,646	47,630		
1996	157	956	5,760,550	444,538	11,540,368	407,811	18,153,267	104,680		
1997	104	378	809,297	1,465,696	2,064,358	208,326	4,547,676	15,988		
1998	110	400	3,975,738	4,128,807	3,624,994	210,316	11,939,854	75		
1999	129	500	8,963,780	1,444,465	7,105,630	281,754	17,795,629	4,978		
2000	161	573	5,369,957	3,604,038	6,523,840	102,903	15,600,739	16,654		
2001	129	403	7,035,831	3,973,338	3,145,956	172,405	14,327,530	8,468		
2002	111	369	13,768,587	481,119	1,887,114	351,404	16,488,224	3,493		
2003	111	450	13,456,640	841,821	4,928,807	144,477	19,371,745	13,358		
2004	117	568	12,247,656	1,841,934	4,616,764	461,553	19,167,907	33,153		
2005	92	381	4,056,390	2,526,537	3,116,586	233,947	9,933,460	11,595		
2006	107	349	2,470,193	1,238,093	2,998,600	141,285	6,848,171	51,423		
2007	109	337	3,924,415	1,401,829	1,507,579	180,322	7,014,145	23,405		
2008	108	372	2,526,207	2,542,514	4,582,253	327,512	9,978,486	19,875		
2009	81	224	1,659,521	690,143	3,697,654	27,693	6,075,011	12,266		
2010	80	308	3,247,752	2,106,124	4,949,276	736,802	11,039,954	12,990		
2011	81	278	311,666	1,500,220	2,333,841	946,814	5,092,541	15,856		
2012	63	204	163,562	2,413,244	1,577,736	186,731	4,341,273	4,994		
2013	57	188	92,961	2,660,883	605,520	23,983	3,383,347	24,039		
2014	34	231	106,441	7,865,970	1,186,530	1,324	9,160,264	19,505		
2015	67	258	2,630,870	4,065,759	1,672,730	61,735	8,431,094	25,682		
2016	57	159	2,220,049	1,820,888	3,014,448	62,247	7,117,632	26,705		
2017	71	185	656,555	2.443,576	4,281,339	10,326	7,391,796	33,983		
2018	89	247	792,778	5,508,744	4,143,572	96,388	10,541,482	33,824		
2019	104	377	557,730	3,485,349	5,529,318	185,109	9,757,506	32,892		
2020	78	258	315,761	3,499,703	2,375,052	17,531	6,208,047	3,127		

-continued-

Table 11.—Page 2 of 3.

	Harvest ^{a, b}							At-sea
Year	Vessels	Landings	Trawl	Longline	Pot	Jig/hand troll	Total	discardsa
Walleye	pollock							
1995	37	59	28,180,359	0	170	0	28,180,529	232,153
1996	40	63	20,753,566	0	96,368	0	20,849,933	468,102
1997	31	61	18,539,560	0	0	2,165	18,541,725	197,347
1998	47	92	13,385,826	6,114	1,274	0	13,393,213	154,466
1999	18	32	1,466,815	CF	CF	0	1,467,967	41,944
2000	34	50	3,647,819	5,824	2,792	0	3,656,434	5,145
2001	47	71	5,460,805	27,481	781	0	5,489,068	51,487
2002	28	49	11,172,229	CF	CF	0	11,172,548	68,374
2003	38	85	10,940,817	CF	CF	0	10,943,496	2,869
2004	50	138	20,138,475	9,402	120	0	20,147,997	61,923
2005	28	51	5,306,986	CF	CF	0	5,308,435	1,068
2006	37	54	2,904,468	CF	CF	0	2,914,527	23,032
2007	38	90	6,228,344	CF	CF	0	6,228,704	41,568
2008	31	58	5,852,028	CF	CF	0	5,859,027	256
2009	30	65	16,958,999	CF	CF	0	16,959,350	8,432
2010	28	72	9,264,496	3,037	0	0	9,267,534	1,161
2011	31	56	7,492,409	27,972	45	0	7,520,426	10,055
2012	39	68	2,351,121	39,114	93	752	2,391,080	19,099
2013	25	47	5,846,951	9,827	7	0	5,856,785	14,717
2014	23	56	3,005,535	30,811	687	0	3,037,033	14,803
2015	41	158	14,783,901	13,954	4,304	0	14,802,159	15,431
2016	41	108	5,884,127	9	2,156	0	5,886,292	332
2017	38	108	4,429,159	0	1,096	0	4,430,255	279
2018	51	138	11,754,067	7,535	2,820	0	11,764,422	2,666
2019	54	115	12,564,226	1,189	655	0	12,566,070	3,419
2020	69	323	15,937,523	22,097	3,932	0	15,963,552	25

-continued-

Table 11.—Page 3 of 3.

				At-sea				
Year	Vessels	Landings	Trawl	Longline	Pot	Jig/hand troll	Total	discardsa
Pacific O	cean perch							
1995	10	16	10,226	0	0	0	10,226	23,657
1996	17	25	13,225	0	0	0	13,225	55,559
1997	9	12	2,213	CF	CF	0	5,907	4,625
1998	18	30	85,704	0	0	0	85,704	9,409
1999	4	5	CF	CF	CF	0	23,442	20,640
2000	3	3	CF	CF	0	0	420	4,310
2001	4	6	4,989	0	0	0	4,989	2,093
2002	10	10	3,291	0	0	0	3,291	3,375
2003	18	42	18,375	0	0	0	18,375	1,002
2004	25	65	3,246	0	0	0	3,246	5,310
2005	9	25	56,004	0	0	0	56,004	1,494
2006	13	22	42,245	CF	CF	0	42,251	2,258
2007	33	78	265,499	CF	CF	0	265,533	25,696
2008	17	35	145,478	0	0	0	145,478	24,820
2009	15	33	8,895	0	0	0	8,895	1,804
2010	12	34	19,641	CF	0	0	19,763	3,521
2011	13	25	112,492	38	0	0	112,530	143
2012	20	44	2,210,431	0	0	0	2,210,431	33,032
2013	7	25	1,522,527	1,600	0	0	1,524,127	36,936
2014	5	21	489,916	1,697	0	0	491,613	21,875
2015	19	63	1,078,867	923	0	0	1,079,790	36,043
2016	11	23	903,502	0	0	20	903,522	18,728
2017	11	24	1,108,021	0	1	0	1,108,022	26,073
2018	19	33	145,821	10	9	0	145,840	194,480
2019	22	37	372,933	570	99	0	373,602	129,665
2020	20	40	1,235,058	2	1	0	1,235,061	114,180

^a In whole fish pounds.

^b Discards at sea not included.

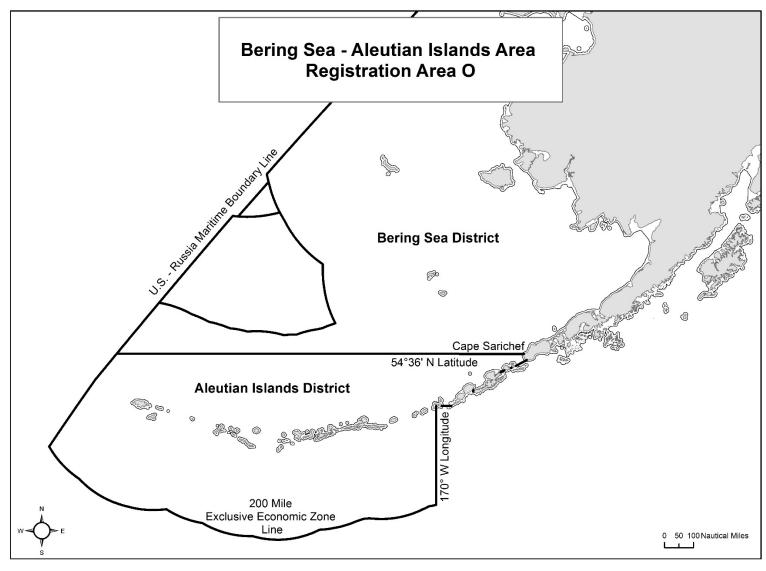


Figure 1.—Bering Sea-Aleutian Islands Area for groundfish fishery management.

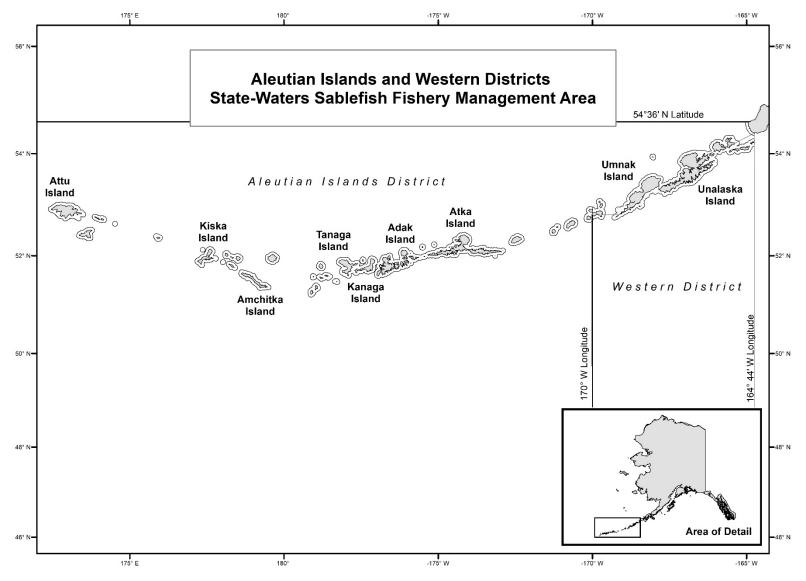


Figure 2.—Aleutian Islands state-waters sablefish fishery management area.

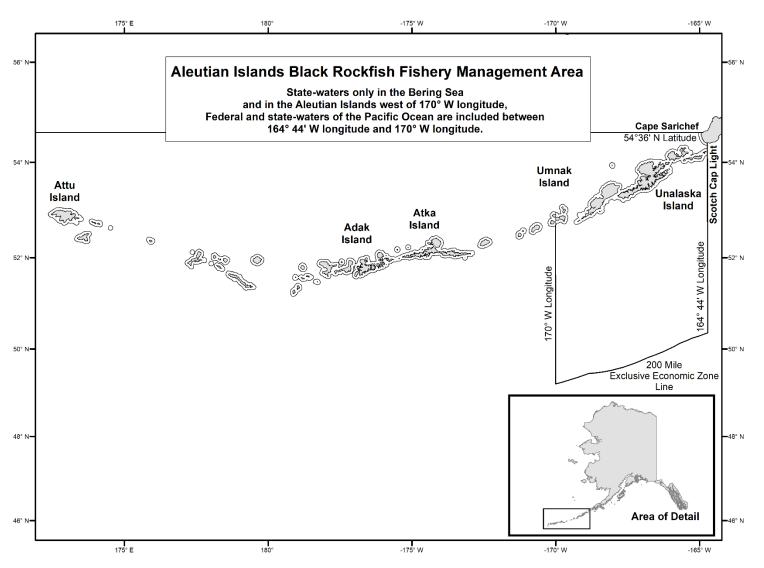


Figure 3.—Aleutian Islands state-waters black rockfish fishery management area.

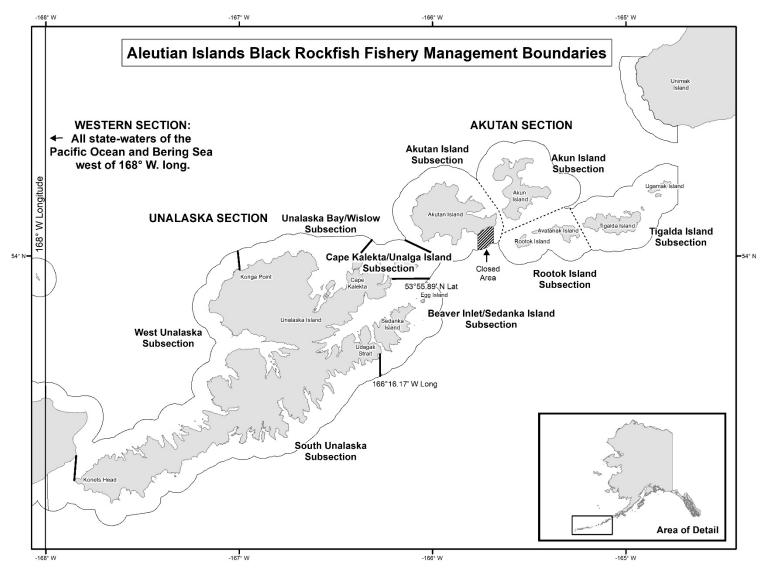


Figure 4.-Management boundaries for the Aleutian Islands state-waters black rockfish fishery.

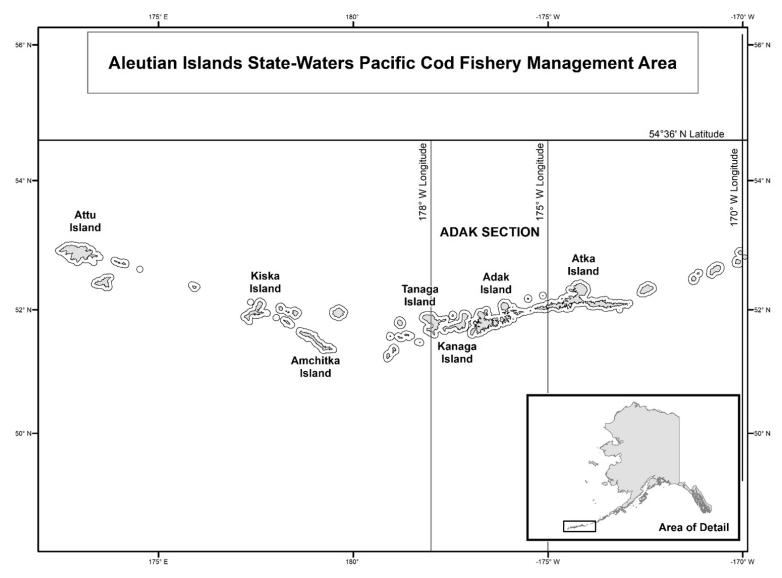


Figure 5.—Aleutian Islands Subdistrict state-waters Pacific cod fishery management area.

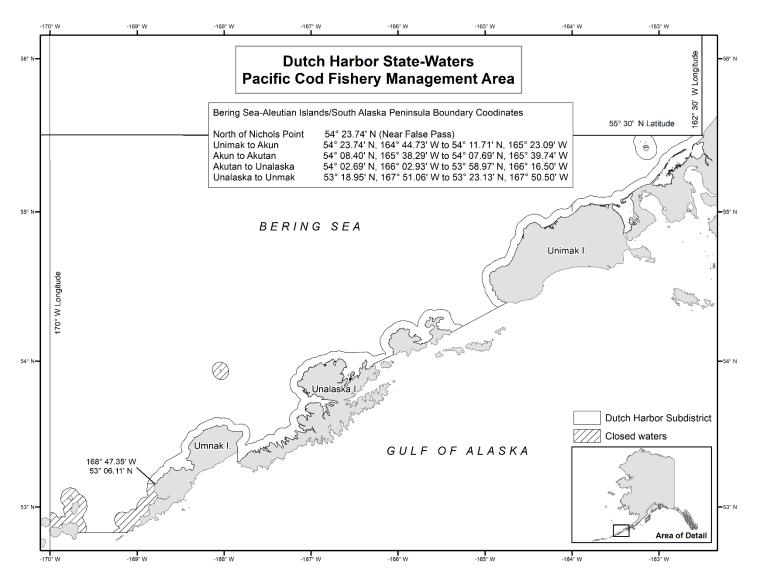


Figure 6.—Dutch Harbor Subdistrict state-waters Pacific cod fishery management area.

APPENDIX A. ALEUTIAN ISLANDS SUBDISTRICT STATE-WATERS PACIFIC COD FISHERY MANAGEMENT PLAN REGULATIONS BY SEASON

Appendix A.-Aleutian Islands Subdistrict (AIS) state-waters Pacific cod fishery management plan regulatory modifications by season.

2006

- GHL established at 3% of federal Bering Sea-Aleutian Islands Area (BSAI) allowable biological catch (ABC)
- No more than 70% of guideline harvest level (GHL) may be available before or after June 10
- Season opened on or after March 15, at the conclusion of the parallel catcher-vessel trawl A season
- Gear types: non-pelagic trawl, longline, jig, pot, and hand troll
- Adak vessel length and gear restriction zones in place (trawl and longline gear could not be used from May 1–Sep 15, unless operating in the 60 ft and under vessel size limitation zones near Adak Island)
- Daily vessel harvest limit of 150,000 pounds vessel trip limit of 300,000 pounds
- Mandatory Pacific cod retention, with proceeds from overage forfeited to state
- Daily vessel reporting
- Management plan sunset provision for Dec 31, 2007
- Closed areas: National Marine Fisheries Service (NMFS) Steller sea lion areas, Aleutian Islands Habitat Conservation Area, coral gardens
- Provision for allowing unharvested state-waters Pacific cod to be utilized by NMFS

2007

- Vessel length limits: pot 125 ft or less, trawl 100 ft or less, longline and jig 58 ft or less
- Adak vessel length and gear restriction zones repealed from state-waters fishery management plan
- Vessel trip limit reduced to 150,000 pounds
- Prior to June 10 defined as A season and after June 10 as B season
- Season opening and closure dates: state-waters A season opens 4 days after closure of federal catcher-vessel trawl A season, closure of state-waters season during federal BSAI catcher-vessel trawl B season on April 1, and closure of state-waters season during federal BSAI catcher-vessel pot season for vessels 60 feet or greater overall length (OAL) on September 1
- Regulation allowing unharvested state-waters Pacific cod to be utilized by NMFS repealed
- Management plan sunset provision repealed

2008

• No regulatory changes for the 2008 season

2009

Vessel length for B season limited to less than 60 feet OAL for all gear types

2010

Pot vessels less than 125 feet allowed to participate in the B season after August 1

2011

• No regulatory changes for the 2011 season

2012

- State-waters between 175°W long and 178°W long open January 1 and remain open until GHL is reached or June 9, whichever occurs first
 - When only waters between 175°W long and 178°W long are open, vessels using nonpelagic trawl, pot, and jig gear are limited to 60 feet or less OAL and vessels using longline gear are limited to 58 feet or less OAL
 - All state waters of the Aleutian Islands District west of 170°W long open 4 days after the parallel BSAI Pacific cod catcher-vessel trawl fishery closes, or on March 15, whichever occurs first
- Steller sea lion closure for federal/parallel fishery modified
 - o With the exception of within 3 nmi of Kanaga Island/Ship Rock (51°46.70′N, 177°20.72′W), statewaters season continued to use those in place prior to 2011

2013

No regulatory changes for the 2013 season

-continued-

Appendix A.-Page 2 of 2.

2014

- Clarification of rollover provisions between A and B season
- Clarification of bycatch provisions
- Clarification to registration requirements during concurrent state and federal Pacific cod seasons
- Update of Steller sea lion and essential fish habitat closed area references

2015

• No regulatory changes for the 2015 season

2016

- Fishery changed to just one season
- GHL established at 27% of federal AI ABC; step up provision of 4% for each year that the GHL is achieved up to a max of 39% of Aleutian Islands (AI) ABC; 15-million-pound cap on GHL

2017

• No regulatory changes for the 2017 season

2018

• No regulatory changes for the 2018 season

2019

• GHL established at 31% of federal AI ABC; step up provision of 4% for each year that the GHL is achieved up to a max of 39% of AI ABC; step down provision of 4% based on inability to achieve GHL for two consecutive years down to a minimum of 15% of AI ABC; 15-million-pound cap on GHL

2020

- The 2019 GHL was achieved, so the 2020 GHL increased to 35% of the federal AI ABC. However, a maximum regulatory GHL is established for this fishery, therefore the 2020 GHL was 15,000,000 pounds.
- Effective January 18, 2020, the AIS fishery became an exclusive registration area for all gear types.
- Effective February 28, 2020, state-waters season opens:
 - Adak section January 1 for longline gear no more than 58 feet OAL and no more than 60 feet for nonpelagic trawl, mechanical jig, and pot gear
 - All waters of the AIS open 4 days after the BSAI parallel "A" season for the catcher-vessel greater than or equal to 60 feet OAL pot gear fishery is closed for longline gear no more than 58 feet OAL, nonpelagic trawl and mechanical jigging machines no more than 60 feet OAL, and pot gear no more than 100 feet OAL
 - All waters of the AIS open 12:00 PM March 15 for nonpelagic trawl gear no more than 100 feet
 OAL and pot gear no more than 125 feet OAL

Note: Regulatory changes are shown according to the first season they went into effect.

APPENDIX B. DUTCH HARBOR SUBDISTRICT STATE-WATERS PACIFIC COD FISHERY MANAGEMENT PLAN REGULATIONS BY SEASON

Appendix B.-Dutch Harbor Subdistrict state-waters Pacific cod fishery management plan regulatory modifications by season.

2014

- GHL established at 3% of federal Bering Sea-Aleutian Islands Area (BSAI) allowable biological catch (ABC)
- Season opens at 12:00 PM 7 days following the closure of the federal BSAI hook-and-line/pot catcher vessel less than 60 feet in overall length sector
- Gear types: pots; no more than 60 pots may be operated from a vessel
- Vessel may not be longer than 58 feet in overall length
- Mandatory Pacific cod retention
- Daily vessel reporting
- Closed areas: National Marine Fisheries Service (NMFS) Steller sea lion areas, Aleutian Islands Habitat Conservation Area, coral gardens

2015

No regulatory changes for the 2015 season

2016

- NMFS separated the BSAI Pacific cod ABC into 2 areas starting in 2014. The state-waters guideline harvest level (GHL) increased from 3% to 6.4% and was only deducted from the federal Bering Sea (BS) ABC
- Expanded western fishing boundary to 170°W long

2017

• No regulatory changes for the 2017 season

2018

• No regulatory changes for the 2018 season

2019

- Expanded eastern boundary to 162°30′W long
- GHL increased to 8% of the federal BS ABC; step up provision of 1% each year when the GHL is achieved to a max of 15% of BS ABC
- Established nonexclusive season for mechanical jigging gear; GHL of 100,000 pounds; season opens May 1; no more than 5 jigging machines may be operated from a vessel

2020

• 2019 GHL for pot gear was achieved, 2020 GHL increased to 9% of the federal BS ABC

Note: Regulatory changes are shown according to the first season they went into effect.