

Technical Paper No. 333

**Subsistence Harvests of Pacific Halibut in Alaska,
2006**

by

James A. Fall,

David Koster,

and

Michael Turek

December 2007

Alaska Department of Fish and Game

Division of Subsistence



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

TECHNICAL PAPER NO. 333

SUBSISTENCE HARVESTS OF PACIFIC HALIBUT IN ALASKA, 2006

by

James A. Fall

Alaska Department of Fish and Game, Division of Subsistence, Anchorage

David Koster

Alaska Department of Fish and Game, Division of Subsistence, Anchorage

and

Michael Turek

Alaska Department of Fish and Game, Division of Subsistence, Juneau

Alaska Department of Fish and Game
Division of Subsistence
PO Box 115526, Juneau, Alaska 99811-5526

December 2007

Preparation of this report was supported through NOAA Award No. NANMF4370314, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service.

The Division of Subsistence Technical Paper Series was established in 1979 and represents the most complete collection of information about customary and traditional uses of fish and wildlife resources in Alaska. The papers cover all regions of the state. Some papers were written in response to specific fish and game management issues. Others provide detailed, basic information on the subsistence uses of particular communities which pertain to a large number of scientific and policy questions. Technical Paper Series reports are available through the Alaska State Library and on the Internet: <http://www.subsistence.adfg.state.ak.us/>

*James A. Fall and David Koster
Alaska Department of Fish and Game, Division of Subsistence,
333 Raspberry Road, Anchorage, Alaska 99518, USA*

*and
Michael Turek
Alaska Department of Fish and Game, Division of Subsistence,
P.O. Box 115526, Juneau, Alaska 99811-5526, USA*

This document should be cited as:

Fall, James A., David Koster, and Michael Turek. 2007. Subsistence harvests of Pacific halibut in Alaska, 2006. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 333, Juneau.

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, 4040 N. Fairfax Drive, Suite 300 Webb, Arlington VA 22203

Office of Equal Opportunity, U.S. Department of the Interior, 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 Subsistence, Website: <http://www.subsistence.adfg.state.ak.us/>

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	iii
LIST OF FIGURES.....	iii
APPENDIX TABLES.....	iv
LIST OF ACRONYMS USED IN THE REPORT.....	v
ACKNOWLEDGMENTS.....	vi
ABSTRACT.....	vii
SUBSISTENCE HARVESTS OF PACIFIC HALIBUT IN ALASKA, 2006.....	vii
EXECUTIVE SUMMARY.....	viii
CHAPTER 1: BACKGROUND AND METHODS.....	1
BACKGROUND.....	1
PROJECT OBJECTIVES.....	2
DATA COLLECTION METHODS.....	2
Public Outreach.....	2
Mailed Household Survey.....	2
Community Visits.....	4
In-season Harvest Monitoring in St. Paul.....	5
In-season Harvest Monitoring in Sitka and Kodiak.....	6
SAMPLE ACHIEVEMENT.....	6
DATA ANALYSIS.....	7
Data Entry.....	7
Analysis: Development of Harvest Estimates.....	7
Supplemental Mailing and In-Season Study.....	10
Products.....	11
CHAPTER 2: FINDINGS.....	13
SUBSISTENCE HALIBUT HARVESTS IN 2006.....	13
Estimated Number of Subsistence Halibut Fishers.....	13
Estimated Alaska Subsistence Halibut Harvests in 2006 by SHARC Type and Regulatory Area.....	14
Estimated Alaska Subsistence Halibut Harvests in 2006 by Harvest Location.....	15
Subsistence Halibut Harvests by Place of Residence.....	18
Subsistence Harvests by Gear Type.....	18
Number of Hooks Fished with Setline Gear.....	19
Sport Harvests of Halibut by SHARC Holders.....	19
Estimated Average Net Weights of Subsistence and Sport-Caught Halibut.....	20
ROCKFISH HARVESTS.....	21
LINGCOD HARVESTS.....	22

TABLE OF CONTENTS (Continued)

	Page
CHAPTER 3: DISCUSSION	23
COMPARISONS WITH OTHER HARVEST ESTIMATES	23
COMMUNITY CASE STUDIES.....	24
Sitka (Regulatory Area 2C)	24
Petersburg (Regulatory Area 2C).....	25
Cordova (Regulatory Area 3A).....	27
Port Graham (Regulatory Area 3A).....	28
Kodiak City and Road System (Regulatory Area 3A)	29
Sand Point (Regulatory Area 3B)	30
Unalaska/Dutch Harbor (Regulatory Area 4A).....	32
Toksook Bay (Regulatory Area 4E).....	33
Tununak (Regulatory Area 4E).....	34
COMPARISONS WITH NONSUBSISTENCE HARVESTS IN 2006.....	35
CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS	37
SUMMARY AND CONCLUSIONS	37
RECOMMENDATIONS.....	39
REFERENCES CITED	41
REPORT TABLES.....	43
REPORT FIGURES	67
APPENDIX A: LIST OF ELIGIBLE TRIBES AND RURAL COMMUNITIES (FROM FEDERAL REGISTER).....	99
APPENDIX B: LETTER SENT TO TRIBES ABOUT THE PROJECT.....	103
APPENDIX C: NEWSPAPER NOTICE	107
APPENDIX D: SURVEY FORM	109
APPENDIX E: SURVEY INSTRUCTIONS	111
APPENDIX F: RESPONSES TO FREQUENTLY ASKED QUESTIONS	113
APPENDIX G: APPENDIX TABLES.....	117
APPENDIX H: PROJECT FINDINGS SUMMARY.....	149

LIST OF TABLES

Table	Page
1. Population of rural communities eligible to participate in the Alaska subsistence halibut fishery, 2000 and 2006.	44
2. Project chronology, 2006 study year.	47
3. Sample achievement, Alaska subsistence halibut survey for 2006 by eligible Alaska tribe, eligible Alaska rural community, and place of residence of SHARC holders.	48
4. Estimated Alaska subsistence harvests of halibut, sport halibut harvests by SHARC holders, and incidental harvests of lingcod and rockfish by SHARC type and regulatory area of the tribe or rural community of registration by the SHARC holder, 2006.	53
5. Age of subsistence halibut registration certificate holders by SHARC type, 2006.	54
6. Estimated Alaska subsistence harvests of halibut by halibut regulatory area, and subarea fished and by gear type, and estimated sport harvests by SHARC holders, 2006.	55
7. Alaska subsistence halibut harvests in 2003, 2004, 2005, and 2006 by geographic area fished.	56
8. Number of hooks usually fished, setline (stationary) gear, Alaska subsistence halibut fishery, 2006.	57
9. Average net weight of subsistence and sport harvested halibut, 2006, by regulatory area fished.	58
10. Estimated harvests of lingcod and rockfish by SHARC holders while subsistence fishing for halibut, by regulatory area and geographic subarea fish, 2006.	59
11. Estimated harvests of halibut by gear type and participation in subsistence and sport fisheries, selected Alaska communities, 2003, 2004, 2005, and 2006.	60
12. Estimated harvests of halibut for home use, Sitka.	61
13. Estimated harvests of halibut for home use, Petersburg.	61
14. Estimated harvests of halibut for home use, Cordova.	61
15. Estimated harvests of halibut for home use, Port Graham.	62
16. Estimated harvests of halibut for home use, Kodiak Road System.	62
17. Halibut removals in Alaska by regulatory area, 2006.	63
18. Comparison of selected SHARC results, 2003, 2004, 2005 and 2006 study years.	64

LIST OF FIGURES

Figure	Page
1. Regulatory areas for the Pacific halibut fishery.	68
2. Number of surveys returned and return rates for subsistence halibut surveys by SHARC type, 2006.	69
3. Subsistence halibut harvest survey return rates, communities and tribes with more than 100 SHARCs issued, 2006.	70
4. Return rate by place of residence, 2006.	71
5. Number of survey responses by response category, 2006.	72
6. Number of SHARCs issued and estimated number of subsistence halibut fishers in Alaska by SHARC type, 2003, 2004, 2005, and 2006.	73
7. Age of subsistence halibut registration certificate holders by SHARC Type, 2006.	74
8. Estimated number of subsistence halibut fishers, 2003, 2004, 2005, and 2006 by regulatory area of tribe or rural community.	75
9. Estimated number of subsistence halibut fishers by place of residence (selected communities), 2003, 2004, 2005, and 2006.	76
10. Estimated subsistence harvest of halibut in Alaska, 2006, by regulatory area of tribe and rural community, in pounds net weight.	77
11. Estimated Alaska subsistence halibut harvests in pounds net weight by SHARC type, 2003, 2004, 2005, and 2006.	78
12. Percentage of tribal subsistence halibut harvest by tribe, 2006.	79
13. Percentage of rural community subsistence halibut harvest by community, 2006.	80
14. Percentage of subsistence halibut harvest by regulatory area fished, 2006.	81
15. Alaska subsistence halibut harvests by geographic area, 2006.	82
16. Percentage of Alaska subsistence halibut harvest by geographic area, 2006.	83

LIST OF FIGURES (Continued)

Figure	Page
17. Estimated subsistence halibut harvests, pounds net weight, by regulatory area fished, 2003, 2004, 2005, and 2006.	84
18. Change in Alaska subsistence halibut harvests from 2005 to 2006 by regulatory area fished.	85
19. Change in Alaska subsistence halibut harvests from 2003 to 2006 by regulatory area fished.	86
20. Average subsistence harvest of halibut per fisher in Alaska, 2006, by regulatory area, in pounds net weight.	87
21. Average subsistence harvest of halibut per fisher in Alaska, 2006, by regulatory area, in number of fish.	88
22. Alaska subsistence halibut harvests by place of residence, 2006.	89
23. Percentage of subsistence halibut harvest by gear type by regulatory area, 2006.	90
24. Number of hooks usually fished, percentage of fishers using setline (stationary) gear, Alaska subsistence halibut fishery, 2006.	91
25. Estimated incidental harvest of rockfish in the Alaska subsistence halibut fishery, 2003, 2004, 2005, and 2006 by regulatory area fished.	92
26. Percentage of incidental harvest of rockfish by regulatory area fished, 2006.	93
27. Estimated incidental harvest of lingcod in the Alaska subsistence halibut fishery, 2003, 2004, 2005 and 2006, by regulatory area fished.	94
28. Percentage of incidental harvest of lingcod by regulatory area fished, 2006.	95
29. Estimated harvests of halibut for home use, Port Graham.	96
30. Halibut removals, Alaska, 2006.	97
31. Halibut removals in Alaska by regulatory area and removal category, 2006.	98

APPENDIX TABLES

Appendix Table	Page
1. Results from returned surveys by eligible Alaska Tribe, eligible Alaska rural community, and place of residence, 2006.	118
2. Reported harvests of halibut in number of fish by return category, eligible Alaska Tribe, eligible Alaska rural community, and community of residence, 2005.	124
3. Estimated Alaska subsistence harvests of halibut by eligible Alaska Tribe and eligible Alaska Rural community, by gear type and regulatory area in number of fish and pounds net weight, 2006.	130
4. Estimated subsistence and sport harvests of halibut and harvests of lingcod and rockfish by place of residence, 2006.	134
5. Estimated subsistence harvests of halibut by gear type and place of residence, 2006.	138
6. Estimated number of SHARC holders who either subsistence or sport fished for halibut by place of residence, 2006.	142
7. Estimated subsistence harvests of halibut and sport harvests of halibut, pounds net weight, and incidental harvests of lingcod and rockfish by eligible Alaska Tribe and eligible Alaska rural community SHARC holders, 2006.	146

LIST OF ACRONYMS USED IN THE REPORT

ADF&G	Alaska Department of Fish and Game
ANHSC	Alaska Native Harbor Seal Commission
ANSHWG	Alaska Native Subsistence Halibut Working Group
BOF	Alaska Board of Fisheries
CDQ	Community Development Quota
CPDB	Community Profile Database (of the Division of Subsistence)
CSIS	Community Subsistence Information System (of the Division of Subsistence)
EVOS	<i>Exxon Valdez</i> Oil Spill
IPHC	International Pacific Halibut Commission
LAMP	Local area management plan
NMFS	National Marine Fisheries Service
NPFMC	North Pacific Fishery Management Council
RAM	Restricted Access Management Office, NMFS
PID/DAV	Permanent identification cards issued to Alaska residents over 60 years of age (PID) and sport fishing licenses issued to disabled veterans (DAV)
SHARC	Subsistence Halibut Registration Certificate
STA	Sitka Tribe of Alaska
SWHS	Alaska Sport Fishing Statewide Harvest Survey

ACKNOWLEDGMENTS

First and foremost, we thank the thousands of individuals who took the time to voluntarily respond to the mailed survey form. This report would not be possible without their cooperation.

Jay Ginter of the National Marine Fisheries Service (NMFS), as the lead subsistence halibut regulatory contact, facilitated the grant that funded this project and also provided other project support. Staff within the Restricted Access Management program of NMFS (RAM) administered the subsistence halibut registration certificate (SHARC) program and helped provide information to the public about the research. We thank Tracy Buck, Marie Beierly, Allen Butner, Amberly Lail, Clydina Bailey, Tamara Bledsoe, Toni Fratzke, and Jessica Gharrett. Five other RAM staff also contributed significantly to program development and administration, but are no longer with the NMFS, Alaska Region: Phil Smith, Kathleen Coleman, Mindy Jones, Troy Ryder, and Robin Martin.

We gratefully acknowledge the input and support of the Alaska Native Subsistence Halibut Working Group. We also thank the many tribal governments that granted approvals for the several survey projects with which the subsistence halibut research was coordinated, and the local research assistants who helped with these projects. Especially, we thank the Sitka Tribe of Alaska (Ms.Robi Craig), the Hydaburg Cooperative Association (Anthony Christianson), and the Angoon Cooperative Association (Juanita Silva) for assisting with administering surveys in their communities. Matt Kookesh of the Southeast Alaska Inter-Tribal Fish and Wildlife Commission was responsible for conducting interviews with SHARC holders in Ketchikan and Saxman. Staff of the Central Bering Sea Fishermen's Association who helped with project outreach, reviewed SHARC lists, and administered the in-season harvester interview project included Rena Kudrin, Phillip Lestenkof, Nadesda Lynnette Philemonoff, and Raymond Melovidov. Special thanks are also extended to tribal administrator Cecelia White of the Nunakauyak Traditional Council her helpful support in administering surveys in Toksook Bay.

In addition to the co-authors of this report, other Division of Subsistence staff who assisted with research, data management, and report preparation included Heather Bishop, Nicole Cummings, Rada Nordstrand, Chloe Dunlap, River Ramuglia, Mike Turek, Mathew Brock, Nancy Ratner, Davin Holen, Lisa Scarbrough, Ron Stanek, Ted Krieg, Tracie Krauthoefer, Sverre Pedersen, and Bridget Easley. Ana Lewis and Peggy Lewerenz provided project administrative support. Nonpermanent employees Dana Brockman and Tonya Lee conducted the in-season harvest monitoring project in Kodiak that provided some of the information on that community included in this report.

Heather Gilroy and Gregg Williams (staff to the International Pacific Halibut Commission) provided background information and comments on a draft of this report. Several of the above-mentioned ADF&G and NMFS staff also offered comments and suggestions on the preliminary draft, as did Elizabeth Andrews and Scott Meyer of ADF&G. The authors of this report are of course responsible for any errors or deficiencies that the report may still contain.

ABSTRACT

SUBSISTENCE HARVESTS OF PACIFIC HALIBUT IN ALASKA, 2006

This report describes the results of the fourth annual study to estimate the subsistence halibut harvest in Alaska since the National Marine Fisheries Service adopted rules governing subsistence halibut fishing in 2003. Data were collected through a voluntary mail-out survey of all holders of subsistence halibut registration certificates (SHARC). The survey response rate was 59% (8,426 surveyed of 14,206 SHARC holders.). An estimated 5,909 individuals participated in the subsistence fishery for halibut in 2006, compared to 5,621 in 2005; 5,984 in 2004; and 4,942 in 2003. The estimated harvest in 2006 was 54,089 halibut, comprising 1,125,312 pounds (+/- 2.9%) net weight. This compares to a harvest estimate of 55,875 fish comprising 1,178,222 pounds (+/-3.0%) in 2005; 52,412 fish comprising 1,193,162 pounds (+/- 1.5%) in 2004; and 43,926 halibut comprising 1,041,330 pounds (+/- 3.9%) in 2003. Of the total subsistence halibut harvest in 2006, 70% was harvested with setline gear and 30% with hand-operated gear. As in 2003, 2004, and 2005, the largest portion of the Alaska subsistence halibut harvest in 2006 occurred in Regulatory Area 2C (Southeast Alaska), 52%, followed by Area 3A (Southcentral Alaska), 34%. Subsistence harvests represent about 1.5% of the total halibut removals in Alaska in 2006. The harvest estimates based on the surveys for 2003, 2004, 2005, and 2006 serve as a basis for understanding the overall harvest, annual variability in catch, and whether any increase in harvest may be associated with implementation of the new regulations. Although the 2006 harvest estimate is about the same as the 2005 and 2004 estimates and somewhat higher than the 2003 estimate, there are no certain trends in the fishery based on these four study years. The report recommends that research be continued for at least one more year, so that at least five years of data under the current set of regulations can be evaluated.

EXECUTIVE SUMMARY

This report presents findings of a study designed to estimate the subsistence harvest of Pacific halibut *Hippoglossus stenolepis* in Alaska in 2006. The Division of Subsistence of the Alaska Department of Fish and Game conducted the study through NOAA Award No. NA04NMF4370314 from the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, the National Marine Fisheries Service (NMFS). In May 2003, NMFS published federal regulations implementing a subsistence halibut fishery in Alaska for qualified individuals who are residents of 117 rural communities or members of 123 Alaska Native tribes with traditional uses of halibut. The year 2006 was the fourth in which subsistence halibut fishing took place under these regulations. Subsistence fishers are required to obtain a subsistence halibut registration certificate (SHARC) from NMFS before fishing. At the end of 2006, 14,206 individuals held SHARCs, compared to 14,306 by the end of 2005 (a decrease of 1% from 2005 to 2006); 13,813 by the end of 2004 (an increase of 3% from 2004 to 2006); and 11,635 by the end of 2003 (a 22% increase from 2003 to 2006).

Harvest information was collected by means of a mail-out survey. The one-page survey form was mailed to all SHARC holders in early 2007, with two follow-up mailings. Household visits supplemented the mailings in selected communities. In total, 8,426 surveys were returned, a response rate of 59%. Participation in the survey was voluntary.

According to the study findings, an estimated 5,909 individuals participated in the subsistence halibut fishery in 2006, compared to an estimated 5,621 in 2005; 5,984 in 2004; and 4,942 in 2003. The estimated harvest in 2006 was 54,089 halibut (+/- 2.8%) comprising 1,125,312 pounds (+/- 2.9%) net weight. ("Net weight" is 75% of "round" or live weight; the estimated harvest was 1,500,416 pounds round weight.) This compares to a harvest estimate of 55,875 fish (+/- 3.0%) comprising 1,178,222 pounds (+/- 3.0%) net weight in 2005; 52,412 fish (+/- 1.6%) comprising 1,193,162 pounds (+/- 1.5%) in 2004; and 43,926 halibut comprising 1,041,330 pounds net weight (+/- 3.9%) in 2003. The 2006 harvest was about 4% lower than the estimated harvest for 2005. The 2005 harvest was about 1% lower than the estimated harvest for 2004, whereas the 2004 harvest estimate was 15% higher than the 2003 harvest estimate. The 2006 estimated harvest was 8% higher than the estimate for 2003.

Of the total subsistence halibut harvest in 2006, 782,532 pounds (70%) were harvested with setline (stationary) gear (longlines or skates) and 342,779 pounds (30%) were harvested with hand-operated gear (rod and reel or handline). This was similar to the harvest by gear type in 2005 (70% setline and 30% hand-operated gear), 2004 (74% setline and 26% hand-operated gear), and 2003 (72% setline and 28% hand-operated gear). Of those subsistence fishers using setline gear in 2006, the most (38%) usually fished with 30 hooks, the maximum number allowed by regulation in all areas except Areas 4C, 4D, and 4E (where regulations establish no hook limit).

Subsistence fishers also harvested an estimated 16,945 rockfish *Sebastes* spp. and 3,486 lingcod *Ophiodon elongatus* in 2006 while fishing for halibut. In 2005, subsistence halibut fishers harvested an estimated 12,395 rockfish and 2,355 lingcod. In 2004, subsistence halibut fishers harvested 19,001 rockfish and 4,407 lingcod. In 2003, subsistence halibut fishers had an estimated incidental harvest of 14,870 rockfish and 3,298 lingcod.

Based upon fishing locations, the largest portion of the Alaska subsistence halibut harvest in 2006 occurred in Regulatory Area 2C (Southeast Alaska), 52% (580,117 pounds); followed by:

- Area 3A (Southcentral Alaska), 34% (379,258 pounds);
- Area 4E (East Bering Sea Coast), 6% (70,743 pounds);
- Area 3B (Alaska Peninsula), 4% (48,547 pounds);
- Area 4A (Eastern Aleutian Islands), 2% (27,062 pounds);
- Area 4C (Pribilof Islands), less than 1% (8,529 pounds);
- Area 4D (Central Bering Sea), less than 1% (8,297 pounds); and
- Area 4B (Western Aleutian Islands), less than 1% (2,761 pounds).

In 2005, 2004, and 2003 as well, Area 2C and Area 3A accounted for over 85% of the subsistence halibut harvests. The proportion of the statewide subsistence halibut harvest occurring in Area 2C declined to 52% in 2006 and 51% in 2005, compared to 57% in 2004 and 60% in 2003. Correspondingly, the portion occurring in Area 3A increased to 34% in 2006, 36% in 2005, and 34% in 2004, compared to 27% in 2003.

Preliminary data from the International Pacific Halibut Commission combined with the findings of this study indicate that 78.622 million pounds (net weight) of halibut were removed from Alaskan waters in 2006. Of this total, the subsistence harvest accounted for 1.5%. Commercial harvests took 70.1% of the halibut, followed by bycatch in other commercial fisheries (14.5%), sport harvests (11.7%), and wastage in the commercial fishery (2.2%).

This report describes the results of the fourth annual study to estimate the subsistence halibut harvest in Alaska since NMFS adopted rules governing subsistence halibut fishing in May 2003. The harvest estimates based on the SHARC surveys for the 2003, 2004, 2005, and 2006 fishing seasons serve as a basis for understanding the overall harvest, annual variability in catch, and whether any increase in harvest may be associated with implementation of the new regulations. Demonstrating changes in the magnitude of the Alaska subsistence halibut harvest resulting from the new regulations using the results of the SHARC surveys for 2003 through 2006 is problematic, however, because of the limitations of earlier harvest estimates at the statewide level. The subsistence harvest estimates for 2003, 2004, 2005, and 2006 for some of the larger communities, such as Sitka, Petersburg, and Kodiak, which account for the majority of the harvest, are similar to harvest estimates based on household surveys prior to the new regulations. The higher overall harvest estimates for 2006, 2005, and 2004 compared to 2003 may be due to more thorough registration of subsistence fishers, hence better harvest documentation. Additional years of harvest data will be necessary for shedding light on these and other factors that shape the subsistence halibut harvest in Alaska.

The report concludes that 1.13 million net pounds is a sound estimate of the Alaska subsistence halibut harvest in 2006. The estimate is based upon a scientific sampling of SHARC holders and a relatively high response rate. The total estimated harvest falls below the 1.5 million net pounds estimated for the subsistence harvest when the current regulations were developed by the North Pacific Fishery Management Council (see www.fakr.noaa.gov/frules/70fr16742.pdf, page 16748). Although the 2006 harvest estimate is about the same as the 2004 and 2005 estimates and somewhat higher than the 2003 estimate, there are no certain trends in the harvest based on these four study years. The report recommends that research be continued for at least one more year, so that at least five years of data under the current set of regulations governing gear, participation requirements, and daily harvest limits can be evaluated.

CHAPTER 1: BACKGROUND AND METHODS

BACKGROUND

The primary goal of this project was to estimate the subsistence harvest of Pacific halibut *Hippoglossus stenolepis* in Alaska in 2006 through a survey mailed to registered subsistence halibut fishers and supplemented by a limited number of face-to-face interviews in selected communities. This was the fourth year for which the research was conducted. (See Fall et al. 2004 for the results for 2003, Fall et al. 2005 for the results for 2004, and Fall et al. 2006 for the results for 2005.) The Division of Subsistence of the Alaska Department of Fish and Game (ADF&G) administered the project through a grant from the National Marine Fisheries Service (NMFS) (Award Number NA04NMF4370314).

In Alaska's coastal areas, subsistence halibut fisheries are local, noncommercial, customary and traditional food fisheries, as noted by Wolfe (2002) and described in *Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for a Regulatory Amendment for Defining a Halibut Subsistence Fishery Category* (an "EA/RIR/IRFA") by North Pacific Fishery Management Council (NPFMC), ADF&G, International Pacific Halibut Commission (IPHC), and NMFS, August 11, 2000 (NMFS 2000; see also NMFS 2003). The EA/RIR/IRFA summarizes information about the subsistence halibut fishery in Alaska. This background information is not repeated here but provided the basis for the NPFMC's recommendation for subsistence halibut fishing regulations in Alaska. Figure 1 illustrates halibut regulatory areas in Alaska.

In April 2003, the National Marine Fisheries Service, Alaska Region, published federal regulations implementing a subsistence halibut fishery for qualified individuals in the waters in and off Alaska (68 FR 18145, April 15, 2003) (see www.fakr.noaa.gov/frules/fr18145.pdf). In total, residents of 117 rural communities¹ and members of 123 Alaska Native tribes are eligible to participate in the fishery.² (See Appendix A for a list of eligible tribes and communities as they appear in the Federal Register.) Subsistence halibut fishers are required to obtain a Subsistence Halibut Registration Certificate (SHARC) from the Restricted Access Management Program (RAM) office of NMFS prior to fishing. These federal regulations (50 CFR Part 300.65(h)(4)) authorize periodic surveys of holders of SHARCs to estimate annual subsistence harvests and related catch and effort information. The regulation states that, "Responding to a subsistence halibut harvest survey will be voluntary."³

Table 1 provides population estimates for the eligible rural communities for 2000 based on the federal decennial census. The total population of these communities in 2000 was 82,572, of which 38,977 were Alaska Natives. In addition, the nonrural places of Juneau and Ketchikan in

¹ In December 2004, the NPFMC adopted a recommendation to the Secretary of Commerce to add Naukati Bay to the list of eligible rural communities. Regulations implementing this change had not been approved as of the preparation of this report.

² Note that the Northern Pacific Halibut Act of 1982, under which the Alaska subsistence halibut fishery regulations are authorized, provides for fair and equitable allocations of halibut among U.S. fishers, but does not establish priorities for those allocations (see www.fakr.noaa.gov/frules/70fr16742.pdf, page 16747).

³ The subsistence rules were amended in 2005 by regulations published in the Federal Register at 70 FR 16742, April 1, 2005. Among other things, this amendment provides for obtaining Community Harvest Permits, Ceremonial Permits, and Educational Permits.

2000 had Alaska Native populations of 5,084 and 2,689, respectively (U.S. Census Bureau 2001), most of whom were eligible to participate in the subsistence halibut program through their tribal membership. Also, an unknown number of eligible tribal members lived in other nonrural places such as Anchorage and the Kenai Peninsula Borough. As also shown in Table 1, estimates published by the State of Alaska for 2006 report a total population of 80,516 for eligible rural communities. Updated population estimates by ethnicity are not available.

PROJECT OBJECTIVES

The primary goal of the project was to estimate the subsistence harvest of halibut in Alaska in the calendar year 2006. Objectives included:

1. An estimate of the subsistence harvest of halibut in Alaska in 2006 by community, tribe, gear type, and IPHC regulatory area, along with an estimate of the number of individuals who subsistence fished for halibut in 2006.
2. An estimate of the harvest of halibut by SHARC holders while sport fishing in 2006.
3. An estimate of the number of lingcod *Ophiodon elongatus* and rockfish *Sebastes* spp. taken by subsistence fishers while subsistence fishing for halibut in 2006.

DATA COLLECTION METHODS

Public Outreach

In mid December 2006, the Division of Subsistence sent a letter to all eligible tribes informing them about the fourth year of the research. This communication also included a copy of the short summary of the findings for 2005. (Appendix B is a copy of the letter sent to all eligible tribes.) Each tribe also received a copy of the full final report for 2005. In January 2007, announcements were made through the media (local newspapers and radio stations) about the upcoming mailing of halibut survey forms to SHARC holders. Appendix C is a copy of an announcement that ran in the following Alaska newspapers in late January 2007: Kodiak Daily Mirror, Bristol Bay Times (Dillingham), the Dutch Harbor Fisherman, the Tundra Drums (Bethel), the Cordova Times, the Sitka Sentinel, the Ketchikan Daily News, the Petersburg Pilot, the Wrangell Sentinel, the Chilkat Valley News (Haines), the Juneau Empire, and the Capital City Weekly. Information was also available on the NMFS web site for subsistence halibut fishing in Alaska (<http://www.fakr.noaa.gov/ram/subsistence/halibut.htm>).

Mailed Household Survey

As noted, this was the fourth year of a harvest assessment program for the subsistence halibut fishery in Alaska. Because the subsistence halibut regulations only came into effect in 2003, the first several years of collecting harvest data should be viewed as exploratory. Especially in the first study year, in which the new subsistence regulation only came into effect in May, it was expected that harvest estimates for some communities and tribes would be incomplete, based upon relatively low response rates or incomplete registration of halibut fishers with NMFS. Subsequent study years have built upon the lessons learned in the first years of the project and have benefited from outreach efforts to improve response rates. (See recommendations in Chapter 4.)

As recommended by Wolfe (2002), the methodology was based upon the registration system for all subsistence halibut fishers, which requires fishers to obtain a SHARC before fishing. Of the

14,206 individuals who held a valid SHARC for any portion of 2006 as of December 31, 2006, 13,372 were surveyed with a mailed, retrospective recall form covering a 12-month harvest period in calendar year 2006.⁴ Because an in-season harvest monitoring program took place in St. Paul, no surveys were mailed to residents of that community. Also, SHARC holders who participated in an in-season harvest monitoring project in Kodiak and Sitka were not mailed surveys (see below). Households in Nanwalek and Port Graham were interviewed as part of a rockfish project and no surveys were mailed to residents of these communities.

The survey instrument was virtually identical to the form used for the 2003, 2004, and 2005 study years. It is based on recommendations by Wolfe (2002:Appendix A), with slight modifications such as study year and return address. (See Appendix D in this report for a copy of the 2006 survey instrument.) Wolfe (2002:15-18) provided justification for the kinds of data to be collected, which included name and address of the fisher; halibut harvests in numbers and pounds round (whole) weight by gear type in 2006; number of hooks usually set; and harvests of lingcod and rockfish taken while subsistence fishing for halibut. In 2003, a question addressing the water body fished (primary location) while subsistence fishing was added at the recommendation of NMFS staff. This question was retained for 2004, 2005, and 2006, and another was added in 2004 to record the location of sport halibut fishing by SHARC holders. The form was designed to reduce the potential double counting of halibut taken with rod and reel gear in both the subsistence survey and the Statewide Harvest Survey conducted by the Department of Fish and Game, Division of Sport Fish (Wolfe 2002:19) by asking respondents to distinguish between their subsistence and sport harvests with this gear type.

A short explanatory letter with instructions on the back for completing the form was included in the mailings (Appendix E). The form was designed so that it could be directly mailed to the Division of Subsistence, postage paid.

Presently, under IPHC regulations, Community Development Quota (CDQ) fishers may retain halibut under 32 inches (“shorts”) while commercial CDQ fishing in Areas 4D and 4E only. These regulations require the CDQ organization to report this harvest to the IPHC. To avoid double counting, subsistence fishers were instructed not to include these fish on their subsistence halibut survey forms.

During a meeting of the Alaska Native Subsistence Halibut Working Group (ANSHWG) on October 9, 2003, before the mail-out survey for the first study year, community representatives expressed concern that not all fishers would know what fish are to be included under the category “rockfish” for the incidental harvest question on the survey form. This could lead to an overestimation of this harvest if fishers reported fish such as Pacific cod or sculpins in response to this question. The instructions mailed with the survey provided guidance on this question.⁵

⁴ SHARCs issued to non-tribal residents of eligible rural communities are valid for two years. Therefore, SHARCs issued beginning in May 2003 began to expire starting in May 2005 and had to be renewed. Some SHARC holders did not renew and therefore were not eligible to participate in the subsistence halibut fishery for all of 2006. See also the section on data analysis, below.

⁵ The principal investigators for this study are aware that more than 30 species of rockfish inhabit Alaska waters. (See Alaska Administrative Code 5 AAC 39.975 for definitions of management assemblages of rockfishes.) The goal of this study was to keep the questions about incidental harvests simple. As discussed in the recommendations section (see Chapter 4), if more precise harvest data for various rockfish are needed for particular areas, future research should be designed and funded to address these data needs.

Table 2 provides a chronology of key activities during the project. Table 3 provides a summary of response rates by mailing, SHARC type, and place of residence. The first mailing to 13,372 SHARC holders occurred on February 16, 2007. The second mailing to 8,179 SHARC holders occurred on March 19, 2007. The third mailing to 6,666 SHARC holders took place on April 18, 2007.

The Division of Subsistence set up a dedicated e-mail address that recipients of the mailed survey could use if they had questions about how to respond. Also, the RAM Program set up a toll-free number (1-800-304-4846) to provide information about the subsistence halibut program, including the harvest assessment program. Both the e-mail address and 1-800 phone number appeared on the survey form. A set of “frequently asked questions” and responses was developed by ADF&G and NMFS staff members to guide staff responses to phone calls and e-mail inquiries about how to fill out the survey form (Appendix F).

Community Visits

Because the response rate to the mailed survey varied by community and tribe in the first three study years, the mailings were again supplemented in selected communities with face-to-face household surveys conducted by Division of Subsistence staff or local research assistants. The latter were hired through subcontracts with tribes or Alaska Native regional organizations. Because of the large number of eligible communities and tribes, it was not possible to conduct face-to-face surveys in most communities.

Through a contract with the Alaska Native Harbor Seal Commission (ANHSC), the Division of Subsistence and the ANHSC conduct annual household surveys in approximately 60 communities to collect harbor seal and sea lion harvest data from Alaska Native subsistence hunters. For the 2006 study year, most of these interviews took place in February, March, and April 2007. In many of the study communities (especially in Southeast Alaska), only known marine mammal hunters were interviewed, but in others (primarily the smaller communities), the goal was to interview all Alaska Native households.⁶ In most communities, local assistants hired to conduct the marine mammal interviews were asked to remind people they were interviewing to return the halibut survey form. In most cases, these individuals had received the mailed forms before these community visits took place.

In 2007, Division of Subsistence researchers conducted systematic household interviews in Chenega Bay, Port Graham, Nanwalek, and Sitka to record traditional knowledge and subsistence harvest information about rockfish, through a project funded by the North Pacific Research Board. The subsistence halibut harvest form for 2006 was administered as part of these interviews. Division researcher Davin Holen conducted these interviews in Chenega Bay in March 2007. Division researcher Ron Stanek administered the halibut surveys in Nanwalek in mid March 2007, assisted by Nick Tanape Sr. Stanek also administered the surveys in Port Graham in March, assisted by Sabrina Malchoff. Cooperative agreements with the Nanwalek Tribal Council and the Port Graham Tribal Council supported this work. Division of Subsistence researchers who worked on the project in Sitka included Nancy Ratner, Mike Turek, and Mathew Brock (Turek 2007).

⁶ For a description of this project, including a complete list of study communities and sampling goals, see Wolfe et al. 2005.

A continuing goal of the project was to contact subsistence halibut fishers in person in selected communities with relatively high numbers of SHARC holders for which good response rates were especially important. As in the 2005 study year, this included Toksook Bay, Sitka, Hydaburg, Ketchikan, and Saxman. For 2006, household surveys were also administered in Angoon, as recommended in the final report for 2005. Cooperative agreements with Sitka Tribe of Alaska, the Angoon Cooperative Association, and the Hydaburg Cooperative Association supported interviewing in Sitka, Angoon, and Hydaburg, respectively. Through another cooperative agreement, the Southeast Alaska Inter-Tribal Fish and Wildlife Commission conducted outreach and interviews in Ketchikan and Saxman. In each community, the surveys were administered face-to-face or by phone.

As noted in the final report for 2003 (Fall et al. 2004:8), in Toksook Bay, the number of SHARCs issued (532 were valid in 2006 [Table 3]) approximates the community's total population. Meetings with community leaders in early 2004 determined that there were at the time about 90 to 100 active halibut fishers in Toksook Bay, but only about a third to one-half fished in a particular year. Therefore, as for 2003, 2004, and 2005, a Division of Subsistence staff member, Sverre Pedersen, visited the community, in April 2007. With the assistance of local tribal officials and review of findings for 2005, Pedersen identified and interviewed most of the subsistence halibut fishers in Toksook Bay. He also called SHARC holders in Tununak and Hooper Bay to encourage returns of mailed surveys.

In-season Harvest Monitoring in St. Paul

In January 2005, principal investigator James Fall met with several representatives of the St. Paul tribal government while attending the annual meeting of the International Pacific Halibut Commission in Victoria, British Columbia. These tribal representatives were very concerned about the very low response rate to the 2003 mail-out survey by SHARC holders from St. Paul (17%; see Figure 3 in Fall et al. 2004:61), and supported actions that would improve the response rate and result in a reliable estimate of the subsistence halibut harvest for 2004. Subsequently, in March 2005, Fall and division information management coordinator Bridget Easley developed an informal agreement with the Central Bering Sea Fishermen's Association (CBSFA) for outreach and evaluation of the survey results. This informal agreement was renewed for the 2005 study year. In March 2006, staff at the CBSFA reviewed the list of St. Paul SHARC holders. They identified individuals who had left the community. They then divided the remaining names on the list into two groups: those who are active subsistence or commercial halibut fishers, and those who do not actively participate in either fishery (131 SHARC holders for 2005). This list was used during analysis of the survey results for St. Paul. In addition, CBSFA staff posted flyers urging return of the mailed survey, ran an announcement about the survey on the local radio station, and were otherwise available to answer questions about the survey and the subsistence halibut program.

Later in 2006, the Division of Subsistence and the CBSFA entered into a formal agreement to conduct a pilot in-season harvest monitoring program for subsistence halibut fishing in St. Paul for 2006. The CBSFA developed a list of subsistence halibut fishers and hired a staff person to distribute and collect harvest calendars bi-weekly during June, July, and August 2006. An additional form was distributed and collected to record any late season harvests. Most subsistence fishers participated in the project, although collection of in-season harvest data in September was incomplete and had to be supplemented by recall. CBSFA reviewed sample achievement and preliminary results.

Because of the in-season project, no surveys were mailed to SHARC holders with St. Paul mailing addresses. St. Paul tribal SHARC holders living in other communities were mailed surveys. SHARC holders not identified by CBSFA staff as subsistence fishers were classified as returned surveys (staff administered) that did not fish.

In-season Harvest Monitoring in Sitka and Kodiak

In October 2005, when the grant award between NMFS and the Division of Subsistence of ADF&G was amended, funding was included to plan and implement a pilot project to collect subsistence halibut harvest data in season in Kodiak and Sitka in 2006. In June 2006, random samples of SHARC holders in these two communities were contacted and asked to keep records of their subsistence and sport halibut harvests. In July and August, Division staff contacted project participants biweekly to collect the harvest data. In September, project participants received a calendar to record any harvest that took place through December. These were returned by mail. A separate report, projected to be completed in late 2007 or early 2008, will provide a full discussion of the in-season project methods and findings. In-season project results for participating SHARC holders were incorporated into the harvest estimates for Kodiak and Sitka presented in this report as “staff administered” surveys. No in-season project participants received the mailed survey.

SAMPLE ACHIEVEMENT

Table 3 reports sample achievement by tribe, rural community, and community of residence. Overall, 8,426 surveys were returned by 14,206 SHARC holders, a response rate of 59% (Figure 2). For residents of the 117 eligible rural communities who did not register as tribal members, 5,127 of 7,083 surveys were returned (72%). As shown in Figure 3, in 2006 there were 12 communities with more than 100 nontribal SHARC holders, accounting in total for 85% of all nontribal SHARCs issued in rural communities. Return rates were 65% or more in all 12 of these communities, and were 70% or more in nine of them.

Of the 7,123 individual tribal members who held SHARCs in 2006, 3,299 (46%) returned surveys. As shown in Figure 3, there were 16 tribes with more than 100 members who obtained SHARCs. Return rates for these 16 tribes varied widely, from 95% in Hydaburg (where a contract between the Division of Subsistence and Hydaburg Cooperative Association [the tribal governing body] facilitated survey returns) to 26% in Toksook Bay. In total, these 16 tribes accounted for 72% of all tribal SHARCs.

Figure 4 illustrates survey response rates by place of residence of SHARC holders for the 23 communities with 100 or more SHARC holders in 2006. These communities accounted for 83% of all SHARCs and 86% of all returned surveys.

Figure 5 shows the survey return rate by response category (see also Table 3). After the first mailing, 4,909 surveys were returned, for a response rate of 35%. Responses to the second mailing added 1,305 surveys, a total response rate of 44% up to that point. Responses to the third and final mailing added 690 surveys, for a total response to the mail-out of 6,904 surveys, 49% of the 14,206 SHARC holders, and 52% of the 13,372 surveys initially mailed. In addition, surveys administered by staff, either ADF&G personnel or representatives of tribal organizations working with ADF&G, added 1,522 surveys. Most of these were in Angoon, Hydaburg, Ketchikan, Sitka, Nanwalek, Port Graham, St. Paul, and Toksook Bay. This brought the total response to 8,426 surveys, 59% of all individuals who held SHARCs in 2006.

The overall response rate for the survey for 2006 declined slightly compared to 2005, from 60% to 59%. The return rate for 2003, the first year of the survey, was 65%, and the return rate for 2004, the second year of the survey, was 62%. The number of returned surveys increased over the first three years of the project, from 7,593 in 2003, to 8,524 in 2004, and 8,565 in 2005, reflecting the larger number of SHARC holders in 2004 and 2005 and the larger number of staff administered surveys in 2005. The total number of surveys dropped slightly in 2006, to 8,426.⁷ The response rate by mail declined from 62% in 2003 to 59% in 2004, 55% in 2005, and 52% in 2006. However, the number of surveys returned as “undeliverable” increased from 208 in 2003 (Fall et al. 2004:45), to 617 in 2004 (Fall et al. 2005:48), 613 in 2005 (Fall et al. 2006), and 1,194 in 2006 (Table 3). Subtracting “undeliverables” from the mail-out totals gives a response rate by mail of 57% in 2006, compared to 62% in 2004, 63% in 2003, and 57% in 2005. More surveys were administered in person or through phoning in 2006 (1,522) compared to 2005 (755 surveys), 2004 (355 surveys), or 2003 (392 surveys). The interviewing in Angoon, Nanwalek, and Port Graham, and the in-season monitoring projects in St. Paul, Sitka, and Kodiak, accounted for most of this increase.

DATA ANALYSIS

Data Entry

All returned survey forms were reviewed for completeness prior to data entry. Responses were coded following standardized codebook conventions used by Division of Subsistence. Staff within the Information Management Section of the division set up database structures within an MS SQL Server at ADF&G in Anchorage to hold the survey data. The database structures included rules, constraints, and referential integrity to insure that data were entered completely and accurately. Data entry screens were available on a secure Internet site. Daily incremental backups of the database occurred, and transaction logs were backed up hourly. Full backups of the database occurred twice weekly. This ensured that no more than one hour of data entry would be lost in the unlikely event of a catastrophic failure.

Survey responses were manually entered twice, and survey forms were electronically scanned. All data were compared programmatically for inconsistent data entry. Double data entry ensured a more accurate transfer of information from the coded survey forms into the database, and is a standard practice with data processing for the Division of Subsistence. Data did not pass to the processing phase until inconsistencies between the twice-entered data set were eliminated. The scanned survey forms also facilitated efficient data correction and editing.

Information was processed and analyzed using MS SQL programming. Initial processing included the performance of standardized logic checks of the data. Logic checks are often needed in complex data sets where rules, constraints, and referential integrity do not capture all of the possible inconsistencies that may appear.

Analysis: Development of Harvest Estimates

Analysis included review of raw data frequencies, cross tabulations, table generation, and estimates of population parameters. Missing information was dealt with situationally. The Division of Subsistence has standard practices for dealing with missing information, such as minimal value substitution or use of an average response for similarly characterized households

⁷ See Table 18 in Chapter 4 for sample sizes and fractions and selected study findings for the four study years.

or communities. Typically, missing data are an uncommon, randomly occurring phenomenon in household surveys conducted by the division, as was the case in this project.

In general, estimates of harvests, levels of participation, and other findings were calculated based upon the application of weighted means (Cochran 1977). These calculations are standard methods for extrapolating sampled data. In this study, each tribe and rural community was a separate stratum for purposes of estimating total harvests. In most cases, the mean for returned SHARC surveys was applied to the total number of SHARCs issued for the tribe or community to calculate the estimated harvest. (See Appendix Table 1 in Appendix G for the reported harvests for each tribe and community.) The formula for standard expansion of community harvests is:

$$H_t = \sum H_i$$

where $H_i = h_i W_i$

and $W_i = \frac{N_i}{n_i}$ (Harvest weight factor per strata i)

H_t = the total harvest (numbers of fish or pounds),

H_i = the total harvest for tribe or community i

W_i = the weight factor for tribe or community i,

h_i = the total harvest reported in returned surveys for tribe or community,

n_i = the number of returned surveys in each tribe or community, and

S_i = the number of SHARCs issued for tribe or community.

There were five exceptions. As discussed above, in 2006, 532 SHARCs were held by members of the Native Village of Toksook Bay, most of whom do not fish for halibut. Expanding the reported harvest based on in-person interviews and mailed survey returns (138 returns, or 26% of all SHARCs issued [Table 3]) would result in a large overestimate of the subsistence halibut harvest for the community. Therefore, the reported harvest is the estimated harvest for Toksook Bay.

Second, as discussed above, CBSFA staff in St. Paul divided the list of SHARC holders living in that community into two strata: potential subsistence halibut fishers (33 SHARC holders) and others (201 SHARC holders). All SHARC holders in the second category were classified as “staff administered surveys, did not fish.” Of the potential fisher category, 27 of 33 participated in the in-season harvest monitoring project. Survey results for respondents in this stratum were used to estimate harvests for the six non-participants in this strata. One participant in the in-season project was a member of the Native Village of Atka. There were 12 other St. Paul tribal SHARC holders living outside the community of St. Paul. Attempts were made through the

mail-out survey to contact these SHARC holders, but none responded and all were treated as potential fishers.

Third, 177 SHARCs were held by eligible tribal members living outside of Alaska. Only 31% of the mailed surveys were returned from this group, and only four of these returned surveys indicated any subsistence fishing activity. Rather than assign the mean value for their tribe (which would likely result in an overestimate of the harvest), all non-returned surveys for SHARC holders with out-of-state addresses were coded as “did not fish.”

Fourth, rural community SHARC holders were divided into two categories based upon the expiration date of their SHARC. SHARCs having an expiration date falling within the study period and that were not renewed were treated as separate strata from other SHARCs for the purpose of generating harvest estimates. This was done to account for potential bias and resulting overestimation of harvest for SHARCs that only fished for part of the year. During 2006, 626 rural community SHARCs expired; of those 263 (42%) participated in the survey.

Fifth, as in 2005, the response rate for tribal SHARC holders of the Village of Kanatak was very low (1 of 11; 9%). Therefore, an expanded harvest estimate was not calculated for this tribe; the reported harvest by the single respondent serves as the harvest estimate for the Village of Kanatak.

The RAM division issued six community harvest permits to tribes in Area 2C that were valid in 2006. Holders of these permits reported no subsistence halibut harvests to RAM. No educational or ceremonial permits were issued for 2006. If harvests under any of these permits had occurred, the totals would have been added to the estimates for the tribe of the permit holder because they are not reported by individuals in their response to the SHARC mailed survey.

It should also be noted that not every individual who obtained a SHARC as a tribal member resided in the community where his or her tribe’s headquarters is located. Therefore, the sum of harvest estimates for tribal SHARC holders and rural resident SHARC holders does not necessarily equal the halibut harvest for particular communities. Rather, an additional analysis was necessary to estimate harvests by community of residence that assigned tribal SHARC holders to a community based on their mailing addresses. Appendix Tables 4, 5, and 6 report study results by place of residence of the SHARC holders.

The standard deviation (SD) (or Variance [V], which is the SD squared) of the harvest was calculated with the raw, unexpanded data. The Standard Error (SE), or SD of the mean, was also calculated for each community or tribe. This was used to calculate the *relative precision of the mean*, or the likelihood an unknown value falls within a certain distance from the mean. In this study, the relative precision of the mean is shown in the tables as a confidence interval (CI), expressed as a percent. Once the standard error was calculated, the CI was determined by multiplying the SE by a constant that reflected the level of significance desired, based on a normal distribution. The constant for 95% confidence intervals is 1.96. Though there are numerous ways to express the formula below, it contains the components of a SD, V, and SE.

Relative Precision of the Mean (CI%):

$$C.I.\%(\pm) = \frac{t_{\alpha/2} \times \frac{s}{\sqrt{n}} \times \sqrt{\frac{N-n}{N-1}}}{\bar{x}}$$

Where $s = \sqrt{\frac{\sum_{i=1}^t \sum (x - \bar{x}_i)^2}{n_i - 1}}$ (Sample standard deviation)

s = sample standard deviation

n = total sample size

N = total population size

n_i = tribal or community sample size

N_i = tribal or community population size

$t_{\alpha/2}$ = Student's t statistic for alpha level ($\alpha=.95$) with $n-1$ degrees of freedom.

Project staff explored the possibility of non-response bias for returned mail out surveys and its effect on harvest estimates. However, it was determined that responses to the survey, including harvest levels and involvement in the fishery, were not significantly different between any of the response categories (responses to the first mail out, the second mailout, the third mailout, and staff administered surveys) (see Appendix Table 2).

As noted above, survey respondents provided harvest estimates in pounds round (whole, live) weight. For ease of comparison with estimates of halibut removals in other fisheries, we have converted these estimates to pounds net (dressed, head off) weight, where (0.75) (round weight) = net weight.⁸

Supplemental Mailing and In-Season Study

In 2005, the grant agreement between ADF&G and NMFS was amended to add funds to support a supplemental survey mailing to 1,108 SHARC holders in Sitka and Kodiak who had responded to the mailed survey in 2005 and had reported fishing for halibut in 2004. The primary goal of the supplemental mailing was to collect additional background information about subsistence halibut fishing that was necessary to design an in-season harvest assessment program for 2006.

⁸ The factor of 0.75 for converting halibut round weight to net weight is the standard used by the International Pacific Halibut Commission and the Division of Sport Fish of ADF&G. Division of Subsistence studies, as reported in the Technical Paper Series and the Community Subsistence Information System (ADF&G 2007) (formerly the Community Profile Database [Scott et al. 2001]), generally use a factor of 0.72 for converting halibut round weights to net weights, based on Crapo et al. (1993:7), who report that on average, the weight of a dressed halibut with the head removed is 72% of the round weight, with a range of 68% to 80%. In Division of Subsistence reports, "net" weight (dressed, head off) is usually referred to as "usable weight."

Respondents were asked to indicate the months in which they fished for halibut in 2004 and their harvests in each month; name the locations at which they landed (brought to shore) halibut in 2004; explain how they distinguished between sport fishing and subsistence fishing for halibut; and evaluate their understanding of the subsistence halibut regulations. Survey findings are reported in Appendix I of Fall et al. 2006. Chapter 2 includes a short discussion of reasons provided by supplemental survey respondents for distinguishing between subsistence and sport-caught halibut.

As noted earlier, the grant agreement between ADF&G and NMFS was also amended to fund an in-season harvest monitoring program for the subsistence halibut fisheries in Sitka and Kodiak in 2006. This study was implemented in May 2006. Findings will be reported in a separate report to be completed in early 2008.

Products

The public review draft of this final report was completed in November 2007 and circulated for review and comments. The draft report was also posted at the Division of Subsistence web site. A presentation of the study findings and recommendations took place at the December 2007 meetings of the ANSHWG and the NPFMC in Anchorage, Alaska. The final report was revised in consideration of comments and suggestions received from reviewers of the public review draft and those received during the NPFMC and ANSHWG meetings. In addition to the final report, a short findings summary was prepared (Appendix H). The summary was sent to tribal government representatives and other interested individuals and groups. This report and the project summary were posted on the Division of Subsistence web site and the RAM website in PDF format for downloading and printing by the public.

CHAPTER 2: FINDINGS

SUBSISTENCE HALIBUT HARVESTS IN 2006

Estimated Number of Subsistence Halibut Fishers

Of the 14,206 individuals who were holders of SHARCs in 2006 (obtained in 2003, 2004, 2005, or 2006), an estimated 5,909 (42%) participated in the subsistence halibut fishery in 2006 (Table 4, Figure 6). Of the 7,123 individuals who had obtained SHARCs as members of an eligible tribe, an estimated 2,329 participated in the fishery (33%). Of the 7,083 individuals who had obtained SHARCs as residents of qualifying rural communities, an estimated 3,580 (51%) participated in the subsistence fishery for halibut in 2006. In 2005, 5,621 of 14,306 SHARC holders fished in the subsistence halibut fishery (39%) including 2,035 of 6,437 tribal SHARC holders (32%) and 3,349 of 7,869 non-tribal rural SHARC holders (43%). In 2004, 5,984 of 13,813 SHARC holders participated in the fishery (43%), including 2,157 of 6,533 tribal SHARC holders (33%) and 3,827 of 7,280 non-tribal rural SHARC holders (53%). In 2003, 4,924 of 11,635 SHARC holders participated in the subsistence fishery (42%), including 1,836 of 5,578 tribal SHARC holders (33%) and 3,106 of 6,057 non-tribal rural SHARC holders (51%) (Figure 6).

In 2006, as in 2003 through 2005, demography may account for the difference in the rate of participation in the subsistence halibut fishery between tribal SHARC holders and rural SHARC holders. As shown in Table 5 and illustrated in Figure 7, in 2006, 17% of tribal SHARC holders were younger than 20 years of age, compared to 7% of rural SHARC holders. This may reflect a policy on the part of some eligible tribes to register all or most tribal members, including younger people who were less likely to participate in the subsistence fishery than adults. For example, 532 members of the Native Village of Toksook Bay held SHARCs in 2006; of these, 40% were younger than 20 years of age (Table 5). Excluding Toksook Bay from the statewide tribal SHARC totals does not substantially alter the contrast in the younger age cohorts between tribal and rural resident SHARC holders (Table 5).

As illustrated in Figure 8 (see also Table 4), the largest number of Alaska subsistence halibut fishers in 2006 were from tribes and rural communities in Regulatory Area 2C (Southeast Alaska), 3,298 (56%). There were 1,729 subsistence halibut fishers (29%) from tribes and communities in Regulatory Area 3A (Southcentral Alaska), 371 (6%) from Regulatory Area 4E (East Bering Sea Coast) tribes and communities, and 306 (5%) from Area 3B (Alaska Peninsula) tribes and communities. Additionally, there were 205 (3%) halibut fishers who were members of tribes and residents of communities in the four other regulatory areas. As also shown in Figure 8, the distribution of subsistence fishers by regulatory area in 2006 was similar to that of 2003, 2004, and 2005. Compared to 2005, the estimated number of halibut fishers from tribes and rural communities in Areas 2C and 3A was about the same in 2006. The estimated number of fishers increased by 29% in Area 3B (from 237 to 306), primarily due to increases in participation at Sand Point. The estimated number of subsistence halibut fishers increased by 22% (from 305 to 371) in Area 4E, mostly due to increased participation at Toksook Bay.

Alaska Native tribes with the most subsistence halibut fishers in 2006 included the Central Council of Tlingit and Haida Indians (204 subsistence halibut fishers), the Sitka Tribe of Alaska (149), the Ketchikan Indian Corporation (145), the Native Village of Toksook Bay (112), the Shoonaq' Tribe of Kodiak (112), the Metlakatla Indian Community (105), the Qagan Tayagungin Tribe of Sand Point Village (96), the Hoonah Indian Association (85), the Native

Village of Kipnuk (68), the Klawock Cooperative Association (66), the Angoon Community Association (55), and the Hydaburg Cooperative Association (55). Of the SHARC holders who registered as residents of eligible rural communities, the most subsistence fishers lived in Kodiak (824), followed by Sitka (759), Petersburg (370), Cordova (216), Haines (203), Wrangell (188), and Craig (169). Appendix Table 3 provides details for each tribe and community regarding participation in the subsistence fishery and subsistence halibut harvests in 2006.

As noted above, not every tribal SHARC holder lives in his or her tribe's headquarters community. After assigning tribal members to a community based on their place of residence, an estimate of participation in the subsistence halibut fishery in 2006 by community can be obtained. Appendix Table 4 provides study findings based on place of residence. Communities with 100 or more resident SHARC holders who participated in the subsistence halibut fishery in 2006 were Kodiak (961), Sitka (915), Petersburg (426), Cordova (248), Craig (244), Wrangell (242), Haines (229), Ketchikan (208), Hoonah (139), Klawock (137), Sand Point (133), Metlakatla (118), and Toksook Bay (113). Of the 13 Alaska communities with 100 or more subsistence halibut fishers in 2006, most had about the same or slightly fewer fishers than in 2005. Participation by Kodiak residents increased each of the first four years of the fishery. Notable increases in participation from 2005 to 2006 occurred in Toksook Bay (61 subsistence halibut fishers in 2005, 113 in 2006; 85% increase) and Sand Point (100 fishers in 2005, 133 in 2006; 33% increase) (Figure 9). (See Chapter 3 for further discussion of Kodiak, Sand Point, and Toksook Bay as case study communities.) Seven non-Alaska resident tribal SHARC holders subsistence-fished for halibut in Alaska in 2006, compared to 0 in 2005, 24 in 2004, and 5 in 2003.

Estimated Alaska Subsistence Halibut Harvests in 2006 by SHARC Type and Regulatory Area

Table 4 reports estimated Alaska subsistence halibut harvests for 2006 by SHARC type, regulatory area, and gear type. The total estimated subsistence halibut harvest in Alaska in 2006 was 54,089 fish (+/- 3%) for 1,125,312 pounds (+/- 3%) net weight.⁹ As estimated in pounds net weight, 53% of the subsistence halibut harvest (591,786 pounds [+/- 4%]) was taken by fishers registered with tribes or rural communities in Regulatory Area 2C (Fig. 10). (Note that because some SHARC holders may fish in a regulatory area different from the location of their tribal headquarters or rural community of registration, the area totals in Table 4 do not precisely represent harvest locations. See the section on harvests by location, below.) Fishers from Area 3A tribes and rural communities harvested 361,731 pounds (+/- 4%) (32% of the state total). For Regulatory Area 4E,¹⁰ the estimated harvest for tribal and rural SHARC holders was 71,219 pounds (+/- 20%) (6%). Harvests totaled 54,088 pounds (+/- 14%) (5%) for communities and

⁹ This approximates 1,500,416 pounds round (live or whole) weight. See footnote 7 in Chapter 1 for an explanation of the factor used to convert round weight to net weight (net weight = 75% of round weight).

¹⁰ Community Development Quota (CDQ) organizations operating exclusively in Areas 4D and 4E may retain sublegal halibut (less than 32 inches) from their commercial catches for home use. In 2006, a total of 19,710 pounds net weight of halibut was retained by 3 organizations: Coastal Villages Regional Fund (13,467 pounds), Bristol Bay Economic Development Corporation (2,836 pounds), and Norton Sound Economic Development Corporation (3,407 pounds) (Williams 2007). The IPHC includes these fish within the "personal use" removal category, a category that also includes subsistence harvests (Gilroy 2005:64). See also the section in Chapter 3, "Comparisons with Nonsubsistence Harvests."

tribes of Regulatory Area 3B. For tribal and rural SHARC holders in Area 4A, the estimated harvest was 27,562 pounds (+/- 19%) (2%). Tribes and communities in the remaining three regulatory areas (4B, 4C, and 4D) harvested 18,926 pounds (about 2%).

The estimated subsistence harvest of 1,125,312 pounds of halibut in 2006 represents a decrease of 4.5% compared the estimated harvest of 1,178,222 pounds in 2005 (Figure 11). Harvests by tribal SHARC holders increased by 2.8%, from 496,792 pounds in 2005 to 510,740 pounds in 2006. Tribal SHARC holders harvested 45% of the Alaska subsistence halibut harvest in 2006, compared to 42% in 2005. Subsistence halibut harvests by non-tribal, rural resident SHARC holders decreased by 9.8%, from 681,430 pounds in 2005 to 614,572 pounds in 2006. This group accounted for 55% of the statewide subsistence halibut harvests in 2006, compared to 58% in 2005.

Members of 74 Alaska tribes harvested subsistence halibut in 2006. In three others, SHARC holders fished but had no harvest. In 24 others, tribal members obtained SHARCs, but no one fished. No one in the remaining 22 eligible tribes held a valid SHARC in 2006. All of these tribes were in Regulatory Area 4E (East Bering Sea Coast). As shown in Figure 12, members of the 13 tribes with harvests of 10,000 pounds or more accounted for 62% of the total subsistence halibut harvest by tribal SHARC holders in 2006. These 13 tribes accounted for 58% of the tribal SHARCs (4,119 of 7,123). Members of the other 61 tribes with harvests accounted for about 38% of the total harvest by tribal members.

Residents of 58 eligible rural communities harvested subsistence halibut in 2005.¹¹ In four others, SHARC holders fished unsuccessfully. In 20 others, individuals obtained SHARCs but no one fished. No one in the remaining 35 eligible rural communities held a valid SHARC as a non-tribal member in 2006. Most of these communities (29) were in Regulatory Area 4E (East Bering Sea Coast).¹² As shown in Figure 13, 12 rural communities with harvests of over 10,000 pounds accounted for 83% of the subsistence halibut harvest by the holders of rural (non-tribal) SHARCs in 2006. These communities accounted for 84% of the rural SHARCs. Residents of the other 46 communities with harvests accounted for 17% of the total harvest by rural SHARC holders.

As also shown in Figure 13, rural SHARC holders from two communities accounted for 48% the total harvest by this group: Kodiak (28%) and Sitka (20%). Adding Petersburg, the next highest rural community harvest at 8%, the top three rural communities accounted for over half (55%) of the rural community (non-tribal) subsistence halibut harvest in Alaska in 2006.

Estimated Alaska Subsistence Halibut Harvests in 2006 by Harvest Location

Survey respondents were asked to report the “water body, bay, or sound [that they] usually fished” for subsistence halibut in 2006. Multiple responses were permitted. In Table 6, estimated subsistence halibut harvests are reported for the eight Alaska halibut regulatory areas and 21 subdivisions within these areas. It should be noted that regulatory area totals in Table 6 differ slightly from those reported in Table 4 because not all SHARC holders fished within the regulatory area in which their tribal headquarters or residence is located.

¹¹ In this tally, Chiniak, listed separately in tables in this report, is counted as part of Kodiak, as it is for eligibility.

¹² Note that residents of these communities may have obtained SHARCs as tribal members.

Subsistence halibut harvests in Regulatory Area 2C (Southeast Alaska) accounted for 52% of the Alaska subsistence halibut harvest in 2006 (580,117 pounds net weight) (Figure 14; Table 6). Also, three of the four geographic subareas with the largest subsistence halibut harvests in 2006 were in Area 2C: southern Southeast Alaska (307,921 pounds net weight; 27% of the state total); the Sitka Local Area Management Plan (LAMP) area (147,526 pounds; 13%), and northern Southeast Alaska other than the Sitka LAMP area (124,670 pounds; 11%), as shown in Figure 15 and Figure 16.¹³ Regulatory Area 3A (Southcentral Alaska) ranked second, with 34% of the state's total subsistence halibut harvest (379,258 pounds net weight). Waters bordering the Kodiak Island road system (including Chiniak Bay) ranked third among subareas, with a subsistence halibut harvest of 140,388 pounds (12% of the state total), followed by the remainder of the Kodiak Island area, which ranked fifth (111,752 pounds; 10%). Harvests within Cook Inlet waters of Area 3A accounted for 5% of the state total (59,965 pounds), those within Prince William Sound added 47,965 pounds (4% of the statewide total), and the Yakutat Area added 19,187 pounds (2%). Among regulatory areas, Area 4E (Bering Sea Coast) ranked third with 6% (70,743 pounds). Combined, Bristol Bay and the Yukon/Kuskokwim Delta areas with Area 4E accounted for all of this area's harvest, with no reported harvests from Norton Sound. Area 3B (Alaska Peninsula including the Chignik Area) ranked fourth with 4% of the Alaska total (48,547 pounds). In descending order, subsistence halibut harvests in the other regulatory areas in 2006 were as follows: Area 4A (eastern Aleutian Islands), 27,062 pounds (2%); Area 4C (Pribilof Islands), 8,527 pounds (less than 1%); Area 4D (St. Lawrence Island), 8,297 pounds (less than 1%); and Area 4B the western Aleutian Islands, 2,761 pounds (less than 1%).

Figure 17 reports estimated harvests in pounds net weight by location fished at the regulatory area level in 2003, 2004, 2005, and 2006. Table 7 compares estimated subsistence halibut harvests by regulatory area and geographic area in 2006 with those estimated for 2005, 2004, and 2003. As noted previously, for the state overall, the estimated harvest in pounds decreased by about 4% in 2006 from 2005 (Figure 18). However, the estimated harvest in 2006 was about 8% higher than the estimate for 2003, the first year of the subsistence halibut harvest monitoring program (Figure 19).

Estimated subsistence halibut harvests increased in five regulatory areas in 2006 compared to 2005 (Figure 17; Figure 18; Table 7). The largest proportional increase was in Area 4B (Western Aleutian Islands), where estimated harvests increased 104%, from 1,351 pounds in 2005 to 2,761 pounds in 2006. The 2006 estimate was also notably higher than the 2004 estimate (916 pounds), but was very similar to the estimate of 2,582 pounds for 2003 (7% higher) (Figure 17; Figure 19; Table 7). Estimated harvests in Area 4C (Pribilof Islands) increased 11%, from 7,716 pounds in 2005 to 8,527 pounds in 2006. Estimated subsistence halibut harvests in the Pribilof Islands in 2006 were not markedly different from those of 2004 (9,734 pounds), but were 63% lower than the 22,881 pounds estimated for 2003 (Figure 19). However, as noted in the report for the 2004 study year (Fall et al. 2005:15), an improved response rate to the survey has likely resulted in better harvest estimates for St. Paul, the largest community in Area 4C. In

¹³ For this study, "northern Southeast Alaska" includes those waters of Regulatory Area 2C north of Frederick Sound, including waters surrounding Baranof Island and excluding the Sitka LAMP area. For a description of the Sitka LAMP area, see FR 68 18156, April 15, 2003, § 300.65(d)(1). The remaining waters of Area 2C are referred to as "southern Southeast Alaska" in this report.

retrospect, the harvest estimate for Area 3C for 2003 appears too high, the result of a small sample size with an overrepresentation of active fishers.

Estimated subsistence harvests of halibut increased by 42% in Area 4D (Central Bering Sea) (from 5,848 pounds in 2005 to 8,297 pounds in 2006). The 2006 estimate was lower than that for 2004 (10,923 pounds), but 89% higher than 2003 (4,380 pounds). In Area 4E (East Bering Sea Coast), the estimated harvest of 70,743 pounds was a 31% increase over the 54,119 pounds estimated for 2005 (Figure 17; Figure 18; Table 7). The 2005 harvest in this area was notably higher than the estimate for 2004 (28,501 pounds) but approximately the same as the estimate for 2003 (53,775 pounds). More thorough harvest reporting in several western Alaska communities may account for the change in harvest estimates from 2004 to 2005. The 2006 estimate was 32% above the 2003 estimate (Figure 17; Figure 19; Table 7). Increased harvest effort in Toksook Bay accounts for much of this increase (see Chapter 3).

There was a small increase of 5% in Area 3B (Alaska Peninsula) harvests from 2005 (46,225 pounds) to 2006 (48,547 pounds) (Figure 17; Figure 18; Table 7). In Area 3B, the 2006 estimated harvest was notably higher than that for 2004 (33,519 pounds) and 2003 (27,477 pounds) (Table 7; Figure 17; Figure 19). Improved participation in the SHARC program likely accounts for some of the increase in the estimated harvests in Area 3B (see discussion of Sand Point in Chapter 3).

Estimated subsistence halibut harvests in other three regulatory areas were lower in 2006 compared to 2005 (Table 7; Figure 17; Figure 18). Estimated harvests in Area 4A (Eastern Aleutian Islands) dropped by 24% in 2006 (27,062 pounds) from 2005 (35,615 pounds). However, the 2006 estimate was similar to that for 2004 (28,877 pounds) and was 28% above the estimate for 2003 (21,197 pounds) (Table 7; Figure 17; Figure 19).

In terms of total pounds, the largest increase in estimated harvests over the first three years of the project took place in Area 3A (Southcentral Alaska), where the 2005 harvest of 429,275 pounds was 6% higher than the estimate for 2004 (403,610 pounds) and 50% higher than the estimate for 2003 (285,500 pounds) (Table 7). The estimated harvest for 2006 (379,258 pounds) declined by 12% compared to 2005, but remained 33% higher than the estimate for 2003 (Figure 17; Figure 18). As a consequence, Area 3A accounted for 34% of the statewide subsistence halibut harvest in 2006, 36% in 2005, and 34% in 2004, compared to 27% in 2003 (Table 7). In Area 3A, subsistence halibut harvests increased in the Kodiak Island road system area (increase of 4%) and the remainder of Kodiak Island (increase of 1%) from 2005 to 2006. Decreases in harvests occurred in Cook Inlet (down 24%), Prince William Sound (down 30%), and the Yakutat area (down 48%) (Table 7).

As in the first three years of the project, Area 2C (Southeast Alaska) accounted for the most subsistence halibut harvests in 2006 (580,117 pounds), but this harvest represents a decrease of 3% compared to 2005 (Table 7; Figure 17; Figure 18) and 7% compared to 2003 (Figure 19). The percentage of the total statewide subsistence halibut harvest that took place in Area 2C in 2006 was 52%, similar to 2005 (51%), but a decline compared to 57% in 2004 and 60% in 2003. Harvests decreased in two subareas within Area 2C in 2006 compared to 2005, with an 8% decrease in northern Southeast Alaska subarea (excluding the Sitka LAMP) and a 6% decrease in the southern southeast subarea. Estimated subsistence halibut harvests in the Sitka LAMP area were 10% higher in 2006 compared to 2005, but 15% lower in 2006 compared to 2003 (Table 7).

The reasons for these changes in Area 2C are likely complex and beyond the scope of this report.¹⁴

Figure 20 illustrates the average subsistence halibut harvest in pounds net weight for those SHARC holders who subsistence fished in 2006. Figure 21 illustrates the average harvest per fisher in number of halibut. For the state overall, the average subsistence halibut fisher harvested 190 pounds net weight or about 9.2 halibut in 2006. Average harvests per fisher at the regulatory area level ranged from 170 pounds net weight in Area 3B to 377 pounds per fisher in Area 4D. In 2003, subsistence fishers on average harvested 8.9 halibut (211 pounds) (Fall et al. 2004:12-13); in 2004 the average harvests were 8.8 halibut and 199 pounds (Fall et al. 2005:15); and in 2005, the average harvests were 9.9 halibut and 210 pounds (Fall et al. 2006: 17).

Subsistence Halibut Harvests by Place of Residence

As shown in Figure 22, there were 31 Alaska communities whose residents had combined estimated subsistence halibut harvests of approximately 7,500 pounds or more net weight (over 10,000 pounds round weight) in 2006. In this figure, community totals include harvests of all SHARC holders living in the community, regardless of type of SHARC (tribal or rural) or tribal affiliation.¹⁵ Residents of these communities accounted for 87% of the total Alaska subsistence halibut harvest in 2006. Residents of Kodiak (Kodiak includes Kodiak city and other portions of the Kodiak Island Borough connected to it by roads) ranked first with 18% of the total Alaska harvest, and Sitka ranked second with about 15%. With 12,003 and 8,833 residents, respectively, these two communities included about 27% of the population of rural communities eligible to participate in the subsistence fishery. There were 66 other Alaska communities with at least one resident who participated in the subsistence halibut fishery in 2006. The total harvest for these other communities represented 13% of the state total.

For 2006, 177 SHARC holders provided out of state addresses from 123 communities in 29 states and territories.¹⁶ Seattle was the non-Alaska community with the most SHARC holders, with 13. Seven non-Alaska residents SHARC holders subsistence fished for halibut in 2006, reporting a harvest of 72 fish and 2,436 pounds net weight (0.2% of the state total) (see Appendix Table 4). No non-Alaska resident SHARC holders subsistence fished for halibut in 2005. In 2004, 24 non-Alaska residents reported subsistence fishing for halibut in Alaska, with an estimated total harvest of 169 fish and 4,845 pounds net weight (about 0.4% of state total). In 2003, five non-Alaska residents participated in the Alaska subsistence halibut fishery, harvesting five fish.

Subsistence Harvests by Gear Type

Table 6 and Figure 23 report the estimated subsistence harvests of halibut in Alaska in 2006 by gear type and regulatory area fished. In total, 782,532 pounds (70%) of halibut (net weight)

¹⁴ Further discussion of differences between harvest estimates for 2003, 2004, 2005, and 2006 appears in Chapter 3 and Chapter 4. However, more thorough discussion of harvest trends in the Alaska subsistence halibut fishery should await availability of data for 2007, the fifth year of harvests under the new regulations.

¹⁵ Note that nonrural places, such as Anchorage, Juneau, Ketchikan, and Valdez, appear in Figure 22 and in Appendix Tables A-4, A-5, and A-6, because members of eligible Alaska Native tribes may participate in the fishery regardless of where they live.

¹⁶ Note that members of eligible tribes may obtain SHARCs regardless of their place of residence.

were harvested using setline (stationary) gear (longlines or skates) and 342,779 pounds (30%) were harvested using handlines or lines attached to a rod or pole (hand-operated gear). There were notable differences between regulatory areas (Table 6, Figure 23). Harvests using setline gear predominated in Area 4D (Central Bering Sea) (93% of the total subsistence harvest), 2C (Southeast Alaska) (83%), 3A (Southcentral Alaska) (65%), and 4B (Western Aleutian Islands) (79%). In contrast, hand-operated gear accounted for most of the subsistence halibut harvests in Area 4E (East Bering Sea Coast) (88%) and 4A (Eastern Aleutian Islands) (72%). Harvests were about equally divided across the two gear types in Area 3B (Alaska Peninsula) (48% setline gear and 52% hand operated gear) and in Area 4C (Pribilof Islands) (48% setline gear, 52% hand operated gear). In 2005 also, 70% of the total Alaska subsistence harvest was taken with setline gear and 30% with hand-operated gear (Fall et al. 2006: 18). In 2004, 74% of the Alaska subsistence halibut harvest was taken with setline gear and 26% with hand operated gear (Fall et al. 2005:16). In 2003, 72% was taken with setline gear and 28% with hand operated gear (Fall et al. 2004:13).

Number of Hooks Fished with Setline Gear

Respondents who fished with setline (stationary) gear (longline or skate) were asked to report how many hooks they “usually set.” The findings by regulatory area are reported in Table 8. For the fishery overall, most setline fishers (38%) used 30 hooks, the maximum number allowed by regulation in Areas 2C, 3A, 3B, 4A, and 4B (there is no hook limit in Areas 4C, 4D, and 4E) (Figure 24). The next most frequently reported number was 20 hooks, usually used by 20% of the fishers who used setline gear. Twenty-five hooks (8%) ranked third, followed by 10 hooks (8%) and 15 hooks (8%). This pattern is similar to that recorded for 2005, when 42% of setline fishers used 30 or more hooks and 20% used 20 hooks (Fall et al. 2006:18-19); 2004, when 44% of setline fishers used 30 hooks and 19% used 20 hooks (Fall et al. 2005:16), and 2003, when 43% of setline fishers used 30 hooks and 20% used 20 hooks (Fall et al. 2004:13).

Thirty was the most frequently used number of hooks with setline gear in six of the eight regulatory areas (Table 8): 2C (Southeast Alaska), 38%; 3A (Southcentral Alaska), 40%; 3B (Alaska Peninsula), 43%; 4A (Eastern Aleutian Islands), 55%; Area 4C (Pribilof Islands), 50%; and 4E (East Bering Sea Coast), 33%. In Area 4B (Western Aleutians), 42% of fishers who used set hook gear used one hook and 20% used 20 hooks. In Area 4D (Central Bering Sea), 71% used 20 hooks, followed by 14% using 30 hooks.

Sport Harvests of Halibut by SHARC Holders

Survey respondents were asked to report the number of halibut and pounds of halibut they harvested “while sport fishing during 2006.” They were instructed not to include fish they included as part of their subsistence harvests as sport caught. The goal of this question was to avoid double-counting harvested halibut in this survey and in the statewide survey of sport fishers administered by ADF&G’s Division of Sport Fish. Answering this question required respondents to classify their hand-operated gear (hook and line, and rod and reel) harvests as either subsistence or sport; these gear types are legal gear for both sport fishing and subsistence fishing. Fish reported in the survey as “sport harvests” are not included in the estimated subsistence harvests discussed above. If SHARC holders also received the sport fish survey for 2006, they would be expected to report the same number of halibut as sport-caught as in their response in the SHARC survey and not include any halibut they reported as subsistence harvests, even if taken with rod and reel or handheld line with two or less hooks. Note that the study

findings do not represent the total recreational halibut harvest by residents of eligible communities and tribes in 2006, because individuals from these tribes and communities who did not obtain SHARCs could have sport fished.

As shown in Table 4 and Table 6, the estimated total sport halibut harvest by holders of SHARCs in 2006 was 11,219 fish and 223,639 pounds net weight. Of the total harvest, most was taken by SHARC holders from Area 2C (Southeast Alaska) (112,907 pounds; 50%) and Area 3A (southcentral Alaska) (93,685 pounds; 42%) (Table 4). By area fished, most of the sport halibut harvest by SHARC holders occurred in Area 2C (109,649 pounds; 49%) and Area 3A (99,602 pounds; 45%) (Table 6). In total, an estimated 2,894 SHARC holders (20%) reported that they sport fished for halibut in 2006. A very large majority of these fishers fished in either Area 2C (1,731; 60%) or Area 3A (1,025; 35%) (Table 6). (See Appendix Table 7 for estimated sport halibut harvests by tribe and non-tribal rural community SHARC holders.)¹⁷

Estimated Average Net Weights of Subsistence and Sport-Caught Halibut

Table 9 reports the average net weight of subsistence and sport-caught halibut by SHARC holders in 2006, based upon estimates provided by survey respondents. For the state, the estimated average net weight of subsistence caught halibut was 20.8 pounds and the average net weight of sport-harvested halibut by SHARC holders was 19.9 pounds. For all halibut harvested by SHARC holders in 2006, the average net weight per harvested halibut was 20.7 pounds. Between regulatory areas, there was a range of average weights per halibut. The halibut harvested by the communities of Area 4D (Saint Lawrence Island), averaged 35.7 pounds net weight per fish, almost double the statewide average. In Area 4E, halibut averaged 10.8 pounds net weight, about half of the statewide average. In 2005, the estimated average weight of halibut harvested in the subsistence fishery was 21.1 pounds, the average halibut taken by SHARC holders while sport fishing weighed 20.8 pounds, and the average of all halibut was 21.0 pounds (Fall et al. 2006:20). In 2004, the statewide average for subsistence-harvested halibut was estimated at 22.8 pounds, the average sport-harvested halibut by SHARC holders was 20.0 pounds, and the average for all halibut was 22.2 pounds (Fall et al. 2005:17). In 2003, the statewide average for subsistence-harvested halibut was 23.7 pounds, the average sport-harvested halibut by SHARC holders was 22.8 pounds, and the average for all halibut was 23.5 pounds (Fall et al. 2004:14).

¹⁷ The mail-out survey did not investigate the criteria by which survey respondents classified their rod and reel (hook and line attached to a rod or pole) halibut harvests as subsistence or sport. However, a supplemental mailing to 1,098 SHARC holders from Kodiak and Sitka who fished for halibut in 2004 asked respondents to provide reasons for classifying their halibut harvests as sport or subsistence. For a discussion of the findings, see Fall et al. 2006:19-20, 123-138. In short, the primary factor (for 69% of respondents) was the gear used to harvest the fish: respondents viewed rod and reel as “sport gear” and setline gear as “subsistence gear.” Another factor, reported by 12%, concerned the composition of the fishing group. If the SHARC holders had fished with relatives or friends who did not possess a SHARC, they classified their fishing as recreational. Harvest amounts were also a consideration: harvests of one or two halibut with a rod and reel were considered “sport” by some respondents, but if they harvested more than two fish with rod and reel in one day, they classified the harvest as subsistence. Finally, about 19% of the respondents gave reasons related to the use of the fish or cultural and lifestyle explanations.

ROCKFISH HARVESTS

Survey respondents were asked to estimate the number of rockfish they harvested while subsistence fishing for halibut in 2006. Harvest data at the species level were not collected as part of this survey.

Note that these survey results do not represent an estimate for the total subsistence rockfish harvest by SHARC holders in 2006 because they might have harvested rockfish while fishing for species other than halibut, and other fishers in the communities who did not obtain SHARCs might have harvested rockfish. The Division of Subsistence Community Subsistence Information System (CSIS) (ADF&G 2006)¹⁸ includes estimates of rockfish harvests for communities in which comprehensive household surveys have been administered.

It should also be noted that the label “bycatch” for these harvests is misleading.¹⁹ Rockfish are used for subsistence purposes in rural communities throughout their range in Alaska (ADF&G 2006). It is highly likely that rockfish harvested incidentally in the subsistence halibut fishery are utilized as a subsistence food. It is highly unlikely that many incidentally caught rockfish are discarded in this subsistence fishery.

As shown in Table 10, the statewide estimated rockfish incidental harvest in the subsistence halibut fishery in 2006 was 16,945 fish by 1,529 fishers (11% of all SHARC holders, and 26% of all SHARC holders who subsistence fished for halibut in 2006). This is an average of about 2.9 rockfish per fisher for all subsistence halibut fishers and about 11.1 rockfish per fisher for those who had a rockfish harvest. Most of the subsistence halibut fishers who caught rockfish fished in Area 2C (Southeast Alaska) (1,069 fishers; 70%) and Area 3A (376 fishers; 25%). In Area 2C, about 32% of subsistence halibut fishers incidentally harvested rockfish, as did 21% in Area 3A (Southcentral Alaska). (See Appendix Table 7 for estimated rockfish harvests by tribe and by non-tribal rural community SHARC holders.)

As illustrated in Figure 25 and Figure 26, most of the incidental rockfish harvest in 2006 was harvested in Area 2C: 11,486 rockfish, 68% of the statewide total. Area 3A accounted for the second-highest total: 3,977 rockfish, 24% of the total. Harvests were relatively small by SHARC holders fishing in other regulatory areas, who combined harvested 1,482 rockfish, about 9% of the statewide total. Compared to 2005, when 12,395 rockfish were harvested, the incidental rockfish harvest in the subsistence halibut fishery in 2006 was up by 37%. The 2006 estimated rockfish harvest was lower than the estimate for 2004 (19,001 rockfish) but higher than 2003, when 14,870 rockfish were harvested in the subsistence halibut fishery.

¹⁸ This was formerly the Community Profile Database (Scott et al. 2001).

¹⁹ The Magnuson-Stevens Fishery Conservation and Management Act (Section 3) defines “bycatch” as “fish harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch and release fishery management program.” Federal regulations (50 CFR 679.2) define bycatch or bycatch species as fish caught and released while targeting another species or caught and released while targeting the same species; under 50 CFR 600.10 discard means to release or return fish to the sea, whether or not such fish are brought fully on board a fishing vessel. In all cases, bycatch means to discard fish and excludes retaining fish for use. The federal definition of “incidental catch” or “incidental species” is “fish caught and retained while targeting on some other species, but does not include discard of fish that were returned to the sea” (50 CFR 679.2).

Table 10 also reports the estimated incidental rockfish harvest in 2006 by SHARC holders by location of harvests within geographic subareas. Most of the harvest occurred in southern Southeast Alaska (5,517 fish), the Sitka LAMP area (4,038 rockfish), northern Southeast Alaska (1,927 rockfish), the Kodiak Island Road System (1,826 rockfish), and other Kodiak Island (826 rockfish). Incidental rockfish harvests totaled 719 fish in Prince William Sound and 330 rockfish in Cook Inlet. In Lower Alaska Peninsula waters, there was an incidental harvest of 669 rockfish.

LINGCOD HARVESTS

Survey respondents were asked to estimate the number of lingcod they harvested while subsistence fishing for halibut in 2006. Note that these survey results do not provide an estimate of the total subsistence lingcod harvest by SHARC holders in 2006 because they might have harvested lingcod while fishing for species other than halibut. Also, other fishers in the communities who did not hold SHARCs might have fished for or harvested lingcod, so that these incidental harvests represent only a portion of the total 2006 subsistence harvest. The Division of Subsistence Community Subsistence Information System (ADF&G 2006) includes estimates of lingcod harvests for communities in which comprehensive household surveys have been administered.

It should also be noted that the label “bycatch” for these harvests might be misleading.²⁰ Lingcod are used for subsistence purposes throughout their range in rural Alaska (ADF&G 2006). It is highly likely that lingcod harvested incidentally in the subsistence halibut fishery are utilized as a subsistence food. It is very unlikely that many lingcod caught in this subsistence fishery are discarded.

The statewide estimated incidental lingcod harvest in the subsistence halibut fishery in 2006 was 3,486 fish by 927 fishers (Table 10). This is an average of about 0.6 lingcod per fisher for all subsistence halibut fishers and 3.8 lingcod per fisher for those who had a lingcod harvest. Of all SHARC holders who subsistence fished for halibut in 2006, 16% harvested at least one lingcod while halibut fishing. Most of the subsistence halibut fishers who harvested lingcod fished in Area 2C (Southeast Alaska) (626; 68%) and Area 3A (Southcentral Alaska) (240; 26%). (See Appendix Table 7 for estimated lingcod harvests by tribe and by non-tribal rural community SHARC holders.)

As illustrated in Figure 27 and Figure 28, most of the incidental lingcod were harvested in Area 2C: 2,057 lingcod, 59%. Area 3A fishing locations accounted for the second-highest total: 949 lingcod, 27%. In 2005, 2004, and 2003, an estimated 2,355, 4,407 and 3,298 lingcod, respectively, were harvested in the subsistence halibut fishery. The 2006 estimated harvest represents an increase of 48% in the incidental lingcod harvest compared to 2005, a decrease of 21% compared to 2004, and a 6% increase compared to 2003.

Table 10 also reports the incidental harvest of lingcod in 2006 by SHARC holders while they were subsistence fishing for halibut by geographic subarea. Most of this harvest occurred in Area 2C (southeast Alaska): the Sitka LAMP area (998 lingcod), southern Southeast Alaska (849 lingcod), and the Kodiak Island road system (265 lingcod). Incidental lingcod harvests totaled 229 lingcod in the Yakutat Area, 228 in Cook Inlet, and 210 lingcod in northern Southeast Alaska waters outside the Sitka LAMP. Harvests totaled less than 200 lingcod in each of the other geographic subareas.

²⁰ See footnote 19 for definitions of bycatch and incidental catch.

CHAPTER 3: DISCUSSION

COMPARISONS WITH OTHER HARVEST ESTIMATES

As discussed in the report for the first year of the SHARC survey pertaining to fishing in 2003 (Fall et al. 2004:19-22), comparing the statewide harvest estimate for the Alaska subsistence halibut fishery based on the SHARC survey with estimates for previous years is difficult for several reasons. As noted in Chapter One, regulations that allow subsistence halibut fishing in Alaska waters using traditional gear such as longlines with more than two hooks, and that removed the restrictive daily harvest limit of two fish, have only been in place since May 2003. Also, 2003 through 2006 were the first four years for which a study was implemented to develop a comprehensive estimate of subsistence halibut harvests in Alaska.

Although the Division of Subsistence of ADF&G has conducted systematic household surveys in many of the rural Alaska communities with traditional uses of halibut, these studies pertain to different harvest years. There are many communities, especially in western Alaska, where such surveys have not been conducted. Division of Subsistence studies have attempted to estimate the total halibut harvest for home use in communities, including harvests conducted under sport fishing rules and harvests removed from commercial fisheries for home use. Typically, these studies collected harvests by gear type, such as rod and reel or “other gear.” Therefore, it is not possible to separate the “sport harvest” from the “subsistence harvest” for past harvest years, especially in the larger rural communities with a diverse population.

In contrast, the statewide estimates of subsistence halibut harvests for 2003, 2004, 2005, and 2006 based on the SHARC mailout survey include only subsistence harvests by individuals who obtained SHARCs. The estimates do not include total harvests accomplished under sport fishing regulations or halibut removed by commercial fishers for their households’ use or for noncommercial sharing. Thus they are only partial estimates of the total harvest of halibut for home use by rural Alaska residents and are not directly comparable to previous estimates from Division of Subsistence studies.

The report for the first year of this study included a detailed discussion of previous efforts to develop an estimate of subsistence halibut harvests at the regional and statewide level. The report suggested that the 2003 SHARC survey estimates were not markedly different from estimates based on Division of Subsistence household survey data as reported in the Community Subsistence Information System (ADF&G 2006). We will not repeat that full discussion here.²¹

²¹ For example for 2000, the IPHC estimated 439,000 pounds net weight for Alaska “personal use” (noncommercial, non-recreational) harvests (*in* Wolfe 2001). The IPHC estimate is based upon a methodology described by Trumble (1999). The IPHC method assumed that 50% of Alaska Native rod and reel halibut harvests as reported in ADF&G household surveys are “sport” and 50% “personal use,” and that 75% of the non-Native rod and reel harvests are “sport” and 25% “personal use” (Trumble 1999:62). No justification for these assumptions is provided, and changing these sport to personal use ratios can result in a very different estimate for the “personal use” halibut harvest. In a report to the Alaska Board of Fisheries in May 2001, using the same data source as the IPHC, Wolfe (2001) estimated that the subsistence halibut harvest in Alaska “probably ranges between 400,000 and 1,000,000 pounds (round weight) annually,” based on harvest data in the Division of Subsistence Community Profile Database (Scott et al. 2001). This is an estimated harvest of 300,000 to 750,000 pounds net weight. See Fall et al. 2004: 19-21 for discussion of Wolfe’s methods. In the original analysis for the subsistence halibut

However the report also concluded that because of the limitations associated with the previous subsistence harvest estimates at the statewide level, until a time series is developed based upon the SHARC survey results, discussion of harvest trends in the subsistence halibut fishery will remain speculative. A brief discussion comparing the study findings for 2006 with those for 2005, 2004, and 2003 appears in Chapter 4. More detailed comparisons of the findings will appear in the report planned for the fifth year of this study.

COMMUNITY CASE STUDIES

To evaluate the subsistence halibut harvest estimate for 2006, comparisons can be made with previous harvest estimates for particular communities where Division of Subsistence household harvest surveys have been administered. These comparisons are subject to several limitations, including different sampling methods, uncertainty in the separation of subsistence and recreational harvests, and the potential effects of the subsistence regulatory changes beginning in 2003. The following communities were selected as case studies to represent communities of similar size and geographic location. In this evaluation, an emphasis is placed on larger communities, since, as discussed in Chapter 2, a small number of large communities accounted for most of the statewide subsistence halibut harvest in 2003, 2004, 2005, and 2006. The quality of the harvest estimates for these places largely determines the reliability of the statewide estimate and the performance of the harvest assessment program. Also, as noted in Chapter 1, not all tribal SHARC holders live in the community where their tribal headquarters is located. The following comparisons are based upon place of residence of the SHARC holder to be consistent with earlier division studies. Table 11 reports selected study findings for the case study communities discussed below for 2003, 2004, 2005, and 2006. Appendix Tables 4, 5, and 6 report study results for 2006 for all communities based upon residence of SHARC holders.

Sitka (Regulatory Area 2C)

Sitka had a population of 8,835 people in 2000, 2,178 of whom were Alaska Native (U.S. Census Bureau 2001). In 2006, the estimated population of Sitka was 8,833 (ADLWD 2007). Sitka was the second largest rural community eligible to participate in the subsistence halibut fishery in 2006, and had the most SHARCs issued, 1,895 (Table 11) (about 13% of the Alaska total). Of these, 1,429 were issued to non-tribal residents of Sitka, and 466 to tribal members. Members of the Sitka Tribe of Alaska (STA) obtained 460 SHARCs; some STA members live in communities other than Sitka. Members of other Alaska tribes also live in Sitka. Developing a reliable subsistence halibut harvest estimate for Sitka is essential for the success of the subsistence harvest assessment program. It is important to note that Sitka residents' response rates to the survey have been high in the 4 years of the project: 75% in 2003, 72% in 2004, 68% in 2005, and 69% in 2006.

Based on Division of Subsistence research, there are two estimates of halibut harvests for home use for Sitka prior to the authorization of subsistence halibut fishing by the NPFMC in May 2003 (Table 12). For 1987, the estimated total halibut harvest was 193,335 pounds (+/- 22%) (net weight); or 180,982 pounds if fish removed from commercial harvests are deleted. This noncommercial total only includes harvests reported by surveyed persons as taken with rod and reel; data on any harvests using "other methods" such as longlines (not then allowed in the

program, the NPFMC estimated the Alaska subsistence halibut harvest at 1.5 million pounds net weight (68 FR 18145, April 15, 2003, EA/RIR (NMFS 2003).

subsistence fishery) were not collected. An estimated 1,252 Sitka households had at least one member who fished for halibut in 1987. For 1996, the total estimated harvest was 165,772 pounds net weight (+/- 28%), 149,244 pounds with commercial removals deleted. In 1996, an estimated 943 Sitka households had at least one member who fished for halibut.

For 2006, the estimated subsistence harvest of halibut by tribal SHARC holders who live in Sitka (most, but not all, of whom are members of the STA) and other residents of Sitka (1,895 SHARC holders) was 163,372 pounds net weight (6,691 fish). This was the second highest of any community (Kodiak ranked first), and accounted for 15% of the statewide total subsistence halibut harvest. Of Sitka's total subsistence halibut harvest, 145,542 pounds (89%) was taken with setline gear, and 17,830 pounds (11%) was taken with hand-operated gear. Adding sport harvests by Sitka SHARC holders (23,032 pounds) increases the estimate to 186,404 pounds net weight. Nine hundred fifteen SHARC holders from Sitka subsistence fished for halibut in 2006. Of these, 809 used setline gear and 297 used hand-operated gear. Also, 395 SHARC holders from Sitka sport-fished for halibut in 2006. The total number of SHARC holders living in Sitka who fished for halibut in either the subsistence or recreational fishery in 2006 was 1,036 (Table 11).

Estimated subsistence and sport halibut harvests by Sitka SHARC holders in 2006 were similar to estimates for 2003, 2004, and 2005 (Table 11). A total of 1,639 Sitka residents had SHARCs in 2003 and as did 1,871 in 2004 and 1,974 in 2005. Subsistence harvests were 174,880 pounds net weight in 2003 compared to 166,474 pounds in 2004 (a decline of 5%), 146,319 pounds in 2005 (a decline of 16%), and 163,372 pounds in 2006 (7% lower than 2003). The change was less in terms of number of halibut harvested: 6,621 in 2003, 6,583 in 2004, 6,062 in 2005, and 6,691 in 2006. Adding sport harvests of halibut by SHARC holders to subsistence harvest totals results in similar harvest estimates for Sitka for the four years of the study: 207,288 pounds for 2003, 192,303 pounds in 2004, 202,232 pounds for 2005, and 186,404 pounds in 2006. More Sitka residents participated in the subsistence halibut fishery in 2006 (915) compared to 2003 (821 SHARC holders) or 2005 (814 SHARC holders), and about the same number participated in 2004 (904 SHARC holders); 1,036 participated in either subsistence or sport fishing for halibut in 2006 compared to 956 SHARC holders in 2003 and 1,026 SHARC holders in 2004, and 987 SHARC holders in 2005.²²

In summary, this comparison of harvest estimates from face-to-face comprehensive household surveys and the SHARC survey, although it has limitations because of the different survey and sampling methods used, suggests that the 2003, 2004, 2005, and 2006 subsistence halibut harvest estimates for Sitka based on the SHARC survey returns appear reasonable. They are generally in line with the anonymous, face-to-face household surveys results from 1987 and 1996.

Petersburg (Regulatory Area 2C)

In 2000, Petersburg had a population of 3,224, including 388 Alaska Natives (U.S. Census Bureau 2001). In 2006, the estimated population had dropped to 3,129 (ADLWD 2007). Before

²² Following a recommendation from the first study year (Fall et al. 2004:31), data from the Division of Sport Fish, ADF&G, Sport Fishing Statewide Harvest Survey (SWHS) about sport halibut harvests by Sitka residents were analyzed for additional background on halibut fishing in the community and discussed in the report for the 2004 study year (Fall et al. 2005:23-24). An updated analysis was not prepared for this report, but will appear in the report planned for the 2007 study year.

the authorization of subsistence halibut fishing under federal regulations in May 2003, there were two estimates for halibut harvests by Petersburg residents based on household surveys conducted by the Division of Subsistence of ADF&G, pertaining to 1987 and 2000 (Table 13). In the 1987 study, a random sample of 49 of the 1,123 households in Petersburg were interviewed (4%). In that year, Petersburg residents harvested an estimated 119,176 pounds of halibut (net weight) (+/-51%); of this, 11,728 pounds were removed from commercial harvests, giving a noncommercial harvest of 107,448 pounds. As with Sitka, the 1987 study in Petersburg only collected noncommercial harvest data for halibut taken with rod and reel. Of the 1,123 households in Petersburg, 54% had at least one member that fished for halibut noncommercially, for a minimum of 604 halibut fishers in the community in 1987 (Scott et al. 2001). In 2000, Petersburg residents harvested an estimated 55,974 pounds net weight of halibut (+/-39%). Of this, 6,951 pounds were removed from commercial harvests, for a noncommercial harvest of 49,023 pounds, all of which was taken with rod and reel. In 2000, 468 Petersburg households had at least one member who fished for halibut for home use.

For 2006, the estimated subsistence harvest of halibut by Petersburg residents with SHARCs (1,082 SHARC holders) was 53,682 pounds net weight (Table 11). In 2005, 1,197 SHARC holders in Petersburg harvested 61,372 pounds of halibut in the subsistence fishery; in 2004, 1,187 SHARC holders harvested 71,784 pounds of halibut in the subsistence fishery; and in 2003, 1,047 Petersburg SHARC holders harvested 55,718 pounds. Of the total 2006 subsistence halibut harvest, 35,608 pounds (66%) was harvested with setline gear and 18,075 pounds (34%) was harvested with hand operated gear. In 2005, 72% of the subsistence halibut harvest by Petersburg SHARC holders was harvested with setline gear and 28% with hand operated gear. In both 2003 and 2004, about 75% of Petersburg's subsistence halibut harvest was taken with setline gear and 25% with hand operated gear.

In 2006, Petersburg SHARC holders also harvested 17,351 pounds of halibut they classified as sport harvested. This gives a total halibut harvest by Petersburg SHARC holders of 71,033 pounds in 2006. In 2005, the sport harvest of halibut by Petersburg SHARC holders was 23,289 pounds for a total harvest of 84,661 pounds of halibut. In 2004, the sport harvest of halibut by Petersburg SHARC holders was 26,408 pounds for a total harvest of 98,192 pounds of halibut. In 2003, the sport harvest was 19,611 pounds, giving a total halibut harvest of 75,329 pounds (Table 11).

In 2006, 426 Petersburg SHARC holders harvested halibut in the subsistence fishery (300 used setline gear and 222 used hand operated gear). This compares to 436 fishers in 2005 (338 used setline gear and 175 used hand operated gear); 482 fishers in 2004 (322 used set line gear, 206 used hand operated gear); and 415 subsistence halibut fishers in 2003 (330 used setline gear, 138 used hand operated gear). In 2006, 246 Petersburg SHARC holders sport fished for halibut, as did 312 in 2005, 351 in 2004, and 268 in 2003. A total of 529 Petersburg SHARC holders either subsistence or sport fished for halibut in 2006; the estimated total halibut fishers among Petersburg SHARC holders was 569 in 2005, 617 in 2004, and 523 in 2003 (Table 11).

Given that some Petersburg residents without SHARC cards likely sport fished for halibut, the 2003, 2004, 2005, and 2006 estimates of noncommercial halibut harvests in the community based on the SHARC survey appear consistent with the 1987 estimate based on household interviews, but are slightly higher than the estimate for 2000. Note that in 2000, when regulations restricted subsistence fishing to handlines or rod and reel using no more than two hooks, no Petersburg households reported taking halibut for home use with any gear other than rod and

reel, while 330 used setline gear in 2003, 322 did so in 2004, 338 did so in 2005, and 300 did so in 2006 (Table 11, Table 13).

Cordova (Regulatory Area 3A)

In 2000, Cordova had a population of 2,454 people, including 368 Alaska Natives (U.S. Census Bureau 2001). Cordova's estimated population in 2006 was 2,211 (ADLWD 2007). Before 2003, there were six Division of Subsistence household surveys that estimated home-use halibut harvests for previous years (Table 14). After subtracting fish removed from commercial harvests for home use, estimated noncommercial halibut harvests by Cordova residents ranged from 25,609 pounds (+/-33%) net weight in 1991 to 120,221 pounds (+/- 62%) in 1988, with an average over the six study years of 57,285 pounds. The estimated number of Cordova households with at least one member fishing noncommercially for halibut ranged from 228 in 1985 to 401 in 1992, with a mean of 325 households (ADF&G 2006).

Subsistence halibut harvest estimates and participation estimates for Cordova residents for 2003 were lower than might be expected from previous research (Fall et al. 2004:24-25). In 2003, 358 residents of Cordova obtained SHARCs (Table 11). Of these, 102 subsistence-fished (68 with setline gear, 40 with hand operated gear), 144 reported that they sport fished for halibut, and 194 fished for halibut either under the new subsistence provisions or in the sport fishery. The estimated subsistence harvest was 15,498 pounds net weight (7,613 pounds [49%] with setline gear, 7,885 pounds [51%] with hand operated gear), with an additional 11,534 pounds taken by SHARC holders while sport fishing. The total of 27,032 pounds was about 47% of the average for previous study years.

Based on these comparisons, the final report for 2003 suggested that the SHARC survey had underestimated the amount of halibut harvested by Cordova residents for home use, perhaps because not all subsistence fishers in Cordova obtained SHARCs in 2003. The results of the survey for 2004 supported this conclusion (Fall et al. 2005:25-26). A total of 526 Cordova residents had obtained SHARCs by the end of 2004 (an increase of 47%) (Table 11). An estimated 262 Cordova SHARC holders subsistence fished for halibut in 2004, up 157% from 2003. Of these, 174 fished with setline gear (up 156%) and 97 used hand-operated gear. The estimated subsistence halibut harvest by Cordova residents in 2004 was 40,640 pounds net weight, an increase of 163% over 2003. Sport harvests by Cordova SHARC holders (174 of whom sport fished for halibut in 2004) added 12,149 pounds to the community harvest for 2004, for a total of 52,789 pounds of halibut by 325 fishers. This total was an increase of 95% over 2003, and was about 92% of the average for the six survey years prior to 2003 (and exceeded the total for three of those six years). Given that some Cordova residents likely obtained halibut for home use exclusively in the sport fishery without obtaining SHARCs, the SHARC survey estimate for 2004 appeared consistent with earlier estimates of subsistence halibut harvests in Cordova.

Findings for Cordova for 2005 were much like those for 2004 and supported the conclusions of the 2004 final report. As shown in Table 11, 602 Cordova residents held SHARCs in 2005, continuing the growth that had occurred in 2004, but at a slower pace. Subsistence halibut harvests totaled 47,141 pounds, up about 16% from 40,640 pounds in 2004. In 2004, 73% of the total was harvested with setline gear, as was 74% in 2005. In 2005, 281 Cordova residents participated in the subsistence halibut fishery, compared to 262 in 2004. Cordova SHARC holders harvested 10,519 pounds of halibut while sport fishing in 2005, for a total harvest for

home use of 57,660 pounds. This total was similar to the estimate for 2004 (a combined total of 52,789 pounds in the subsistence and sport fishery) and approximated the mean harvest of 57,285 pounds estimated in the six harvest survey study years.

The estimated subsistence halibut harvest for Cordova in 2006 was 29,027 pounds, a decline from 2004 (40,640 pounds) and 2005 (47,141 pounds) but still about double the 2003 estimated harvest (15,498 pounds) (Table 11). The reason for this decline is uncertain. The estimated sport halibut harvest by Cordova SHARC holders in 2006 was 7,020 pounds, lower than any of the first three years of the harvest monitoring program. In total, Cordova SHARC holders harvested an estimated 36,047 pounds of halibut in 2006. This total was substantially lower than the estimates for 2004 (52,789 pounds) and 2005 (57,660) pounds, but was higher than that for 2003 (27,032 pounds) (Table 11). The 2006 estimate was higher than survey estimates for 1985 and 1991, but lower than the average for the six years for which survey data are available (Table 14).

About the same number of Cordova residents held SHARCs in 2006 (607) as in 2005 (602). In 2006, fewer Cordova SHARC holders participated in the subsistence halibut fishery (248), the sport halibut fishery (152), or in any noncommercial halibut fishing (301) than in either 2004 or 2005, although estimated participation in the halibut fishery exceeded that for 2003 (Table 11).

Port Graham (Regulatory Area 3A)

Located in lower Cook Inlet, Port Graham had a population of 171 in 2000, including 151 Alaska Natives (U.S. Census Bureau 2001). Port Graham's population in 2006 was estimated at 136 (ADLWD 2007). It is included here as a case example to represent the small, predominantly Alaska Native communities in Regulatory Areas 3A and 3B that depend heavily on subsistence harvests of fish and wildlife resources. There are estimates of subsistence halibut harvests by Port Graham residents based on household surveys for seven study years (Table 15). Excluding 1989, the year of the *Exxon Valdez* Oil Spill, Port Graham's halibut harvests ranged from 4,451 pounds (+/-14%) net weight in 1993 to 11,232 pounds (+/-14%) in 1992, with a six-year average of 7,591 pounds (net weight) (Figure 29). Again excluding 1989, an average of 38 Port Graham households had at least one member who subsistence fished for halibut in the study years in the late 1980s and 1990s.

At the close of 2006, a total of 50 Port Graham residents held a SHARC. (Recall that this total does not include Port Graham tribal members who do not live in Port Graham.) In 2006, an estimated 30 Port Graham residents subsistence fished for halibut, with nine using setline gear and 24 using hand operated gear. Also, two said they sport-fished for halibut in 2005. In 2005, 18 Port Graham SHARC holders subsistence fished for halibut, with eight using setline gear and 18 using hand operated gear. Nine Port Graham SHARC holders sport fished for halibut in 2005. In 2004, 42 Port Graham SHARC holders subsistence fished for halibut, with 15 using setline gear and 31 using hand operated gear; 11 said they sport fished for halibut. In 2003, 35 Port Graham SHARC holders subsistence fished for halibut (ten used setline gear, 28 used hand operated gear), and three said they sport fished for halibut (Table 11). The findings for 2003, 2004, and 2006 were consistent with levels of participation in the halibut fishery that could be expected from the previous studies in Port Graham, but the estimated participation level in 2005 was lower.

The subsistence halibut harvest estimate for Port Graham in 2006 was 6,194 pounds (Table 11). Of this, 2,397 pounds (39%) were harvested with setline gear and 3,797 pounds (61%) with

hand-operated gear. In the previous three years of the harvest monitoring program, estimated subsistence halibut harvests were higher in Port Graham than in 2006. In 2005, Port Graham SHARC holders harvested an estimated 11,127 pounds of halibut, with 7,938 pounds taken with setline gear and 3,190 pounds with hand operated gear. In 2004, Port Graham's estimated subsistence halibut harvest was 9,181 pounds net weight with 4,425 pounds (48%) harvested with setline gear and 4,755 pounds (52%) with hand-operated gear. In 2003, the estimated halibut harvest was 11,454 pounds net weight, with 4,398 pounds (38%) harvested with setline gear and 7,056 pounds (62%) with hand operated gear. No Port Graham SHARC holders reported sport harvests of halibut for 2006. Adding halibut taken while sport fishing gave community total of 11,615 pounds of halibut for Port Graham for 2005, 10,031 pounds for 2004, and 11,610 pounds of halibut harvested in 2003 (Table 11).

While halibut harvest estimates for Port Graham for 2003, 2004, and 2005 were similar to the previous highest estimate (11,232 pounds in 1992) (Table 11), they exceeded the average of previous study years of 7,591 pounds. These findings were not unexpected: Port Graham has traditionally used setlines with multiple hooks to harvest halibut as well as hand-operated gear (Stanek 1985:67-69,151). With regulations in place beginning in May 2003 consistent with traditional harvest methods, residents of Port Graham and other communities with similar traditions have fished with setline gear and hand operated gear, and reported subsistence halibut harvests that are probably similar to historic levels.²³ As noted, the estimate for 2006 of 6,194 pounds was lower than those for the previous three years, and was lower than the average of the survey estimates for 1987 through 1997 (Table 15). The reasons for this decline are uncertain, but a drop in the community's population may account in part for the lower harvest in 2006.

Kodiak City and Road System (Regulatory Area 3A)

"Kodiak" in this report includes the city of Kodiak (population 6,334 in 2000, including 829 Alaska Natives) and those portions of the Kodiak Island Borough connected to Kodiak city by road. This area had a population of 12,973 people in 2000, including 1,697 Alaska Natives (U.S. Census Bureau 2001). The estimated population in 2006 was 12,703 (ADLWD 2007). This is the largest rural community eligible to participate in the Alaska subsistence halibut fishery.

Based on Division of Subsistence household surveys, estimates of halibut harvests for home use are available for the entire Kodiak road system population for 1982 and 1991 (ADF&G 2006). Estimates for Kodiak city residents alone are available for 1992 and 1993, but these can be used to develop a projected total for the entire road system population (Table 16). Excluding fish removed from commercial catches for home use, halibut harvests by Kodiak road system residents ranged from 247,283 pounds usable weight (+/-30%) in 1991 to 511,254 pounds (+/-33%) in 1993. The average for the four available study years was 366,682 pounds; of this, 338,476 pounds (92%) was taken with rod and reel, most likely consistent with sport fishing regulations. On average for the four study years, 1,306 Kodiak road system households had at least one member who fished for halibut for home use.

²³ A cautionary note for Port Graham for 2005 concerned sample size. Only 16 of 52 SHARC holders responded to the 2005 survey (31%) (Fall et al. 2006:52). Further outreach in this community was necessary to improve the response rate and build confidence in the harvest estimates. As noted in Chapter 1, this outreach occurred in 2007 for the 2006 study year, and a response rate of 66% was achieved.

Kodiak residents had obtained 1,716 SHARCs by the close of 2006, down slightly from 1,741 SHARCs by the close of 2005, but up from 1,561 SHARCS at the end of 2004 and 1,320 SHARCs at the end of 2003 (Table 11). In 2006, 961 Kodiak SHARC holders subsistence fished for halibut; most (684; 71%) used set line gear. This compares to an estimated 871 subsistence halibut fishers in Kodiak in 2005, 650 of whom (75%) used setline gear; 802 subsistence halibut fishers in Kodiak in 2004, 554 (69%) of whom used setline gear; and 646 subsistence halibut fishers in 2003, 438 of whom (68%) used setline gear. In 2006, 562 Kodiak SHARC holders sport fished for halibut, and 1,092 fished for halibut under either subsistence or sport fishing rules. This compares to 2005 when 669 Kodiak SHARC holders sport fished for halibut and 1,116 were involved in any noncommercial halibut fishing; 2004, when 581 Kodiak SHARC holders sport fished for halibut, and 971 fished for halibut under either subsistence or sport regulations, and 2003, when 498 Kodiak SHARC holders sport fished for halibut, and 858 either subsistence or sport fished for halibut (Table 11). Given the likelihood that many Kodiak residents continued to fish for halibut under sport fishing regulations in 2003, 2004, 2005, and 2006 without obtaining SHARCs, the estimated level of participation in the subsistence fishery based on the SHARC survey appears reasonable when compared to the earlier household survey results.

The estimated subsistence harvest of halibut in 2006 for Kodiak road system area residents was 205,822 pounds net weight, very similar to the 210,828 pounds estimated for 2005 and up from 187,214 pounds for 2004 and 153,254 pounds estimated for 2003 (Table 11). In 2006, Kodiak subsistence fishers harvested 142,326 pounds of halibut with setline gear (69%) and 63,496 pounds (29%) with hand operated gear. This compares to 146,781 pounds (70%) harvest with setline gear and 64,047 pounds (30%) with hand operated gear in 2005; 131,719 pounds (70%) harvested with setline gear and 55,605 pounds (30%) with hand operated gear in 2004; and 101,575 pounds taken in 2003 with setline gear (66%) and 51,678 pounds (34%) with hand-operated gear. In addition, Kodiak road system SHARC holders harvested an estimated 64,320 pounds net weight of halibut in 2006 they classified as sport-caught, down from 82,455 pounds in 2005, 73,181 pounds in 2004, and 68,170 pounds in 2003. In total, Kodiak SHARC holders harvested 270,142 pounds of halibut in 2006, compared to 293,283 pounds in 2005, 260,395 pounds in 2004, and 221,424 pounds net weight in 2003 (Table 11). Not surprisingly, the totals for all four years are lower than those based on household surveys for previous years (except that the 2004, 2005, and 2006 SHARC survey estimates are higher than the household survey estimate for 1991) because, as just noted, many Kodiak road system residents who fish for halibut likely have not obtained SHARCs and continue to harvest halibut under sport fishing rules. Overall, the 2003, 2004, 2005, and 2006 subsistence harvest estimates for Kodiak appear reasonable, but they should be further evaluated using ADF&G Division of Sport Fish Statewide Harvest Survey data and with additional years of subsistence harvest survey data.

Sand Point (Regulatory Area 3B)

In 2000, the population of Sand Point was 952, with an Alaska Native population of 421 (U.S. Census Bureau 2001). The population estimate for 2006 was 890 (ADLWD 2006). Prior to 2003, there was one estimate of halibut harvests for home use by Sand Point residents based on Division of Subsistence, ADF&G, household surveys, pertaining to 1992 (Fall et al. 1993). The estimated total harvest was 13,981 pounds net weight. Of this, 6,240 pounds were removed from commercial harvests, 6,934 pounds were taken with subsistence methods (setline or jigging with a hand-held line) and 807 pounds were harvested with rod and reel. The total harvest with

noncommercial methods was 7,741 pounds. Of the 204 permanent households in the community, 122 harvested halibut for home use; 65 used “subsistence methods,” 16 fished with rod and reel, and the rest only obtained halibut for home use from their commercial harvests.

At the end of 2003, 73 residents of Sand Point had obtained SHARCs. The estimated subsistence halibut harvest for 2003 was 4,819 pounds net weight. Of this, 3,409 pounds were harvested with setline gear and 1,410 pounds with hand operated gear. Twenty-one Sand Point residents subsistence fished for halibut in 2003. In addition, 11 Sand Point SHARC holders harvested an estimated 410 pounds of halibut while sport fishing, for a total estimated harvest of 5,229 pounds of halibut (Table 11). These are lower harvests and levels of participation than might be expected based on the 1992 survey findings.

By December 31, 2004, 351 Sand Point residents had obtained SHARCs, a very substantial increase over 2003. The estimated total subsistence halibut harvest was 11,355 pounds net weight. Of this total, 4,360 pounds were harvested with setline gear (38%) and 6,996 pounds (61%) with hand operated gear. In total, an estimated 109 Sand Point SHARC holders subsistence fished for halibut in 2004, about five times the estimate for 2003. Also, 50 Sand Point SHARC holders sport-fished for halibut, with an estimated total harvest of 1,384 pounds. In total, 121 Sand Point SHARC holders fished for halibut for home use in 2004 with a total harvest of 12,739 pounds net weight (Table 11). This is more than double the 2003 estimate, and similar to the total community estimate for 1992 (which included halibut removed from commercial harvests). It is likely that the higher estimate for 2004 does not indicate an increased harvest by Sand Point residents over 2003, but rather a more complete estimate due to much larger number of participants in the SHARC program.

A total of 321 Sand Point residents held SHARCs in 2005. The estimated subsistence harvest of halibut increased to 21,901 pounds, with 12,201 pounds (56%) taken with setline gear and 9,700 pounds (44%) caught with hand operated gear. One hundred Sand Point residents subsistence fished for halibut in 2005. In addition, 23 sport-fished for halibut, adding 1,281 pounds to the total halibut harvest for home use of 23,182 pounds (Table 11). The increase in the total halibut harvest and especially in the increase in setline harvests suggested that Sand Point residents were increasingly participating in the opportunities provided by the subsistence halibut fishery.

In 2006, the number of Sand Point residents with SHARCs increased to 365. The estimated number of subsistence halibut fishers also increased, to 133 (from 100 in 2005 and 109 in 2004). The estimated number of Sand Point SHARC holders subsistence fishing with setlines increased notably in 2006, to 59, compared to 35 in 2005 and 25 in 2004; the number fishing with hand operated gear rose slightly, to 87 in 2006 from 77 in 2005 and 74 in 2004. The estimated subsistence halibut harvest by Sand Point residents in 2006 was 20,214, similar to the estimate for 2005 of 21,901. In 2006, 37% (7,406 pounds) of the subsistence halibut were harvested with setline gear and 63% (12,809 pounds) with hand operated gear. In addition, an estimated 29 Sand Point SHARC holders sport fished for halibut in 2006, with an estimated harvest of 6,300 pounds, up substantially from 1,281 pounds of sport-harvested halibut in 2005 and 1,384 pounds in 2004. As a result of the higher estimated sport harvests of halibut by Sand Point SHARC holders in 2006, the total estimated harvest increased to 26,514 pounds, from 23,182 pounds in 2005 and 12,739 pounds in 2004 (Table 11).

Unalaska/Dutch Harbor (Regulatory Area 4A)

The city of Unalaska (which includes Dutch Harbor) had a population of 4,283 in 2000, including 397 Alaska Natives (U.S. Census Bureau 2001). The estimated population in 2006 was 3,940 (ADLWD 2007). The Division of Subsistence conducted a household harvest survey in Unalaska/Dutch Harbor for 1994. The estimated total halibut harvest was 97,601 pounds net weight (3,049 fish) (+/-34%), excluding 10,606 pounds (331 fish) removed from commercial catches for home use. Of the 700 households in the community, an estimated 391 (56%) had at least one member who fished for halibut in 1994. Most of the noncommercial harvest, 88,142 pounds (90%), was taken with rod and reel (ADF&G 2006).

By the close of 2003, only 92 residents of Unalaska and Dutch Harbor had obtained SHARCs (Table 11). Notably, only 14 members of the Qawalangin Tribe of Unalaska registered to subsistence fish for halibut in 2003. For the community overall and for the tribe, this was far fewer registrants than might have been predicted from the 1994 survey results. By the end of 2004, 131 Unalaska/Dutch Harbor residents had obtained SHARCs, as had 25 Qawalangin Tribe members. In 2005, 150 community members held SHARCs, as did 31 Qawalangin Tribe members. While a notable increase over 2003, this total continued to appear lower than expected. The total increased to 171 SHARC holders in 2006, including 43 Qawalangin Tribe members.

In 2006, 81 Unalaska/Dutch Harbor residents participated in the subsistence halibut fishery and 50 sport-fished; 101 participated in either fishery. In comparison, in 2005, 88 community members participated in the subsistence halibut fishery and 28 sport-fished; 97 participated in either fishery. In 2004, 81 community members subsistence fished for halibut and 34 sport-fished; 93 participated in either fishery. In 2003, 50 Unalaska/Dutch Harbor SHARC holders subsistence fished for halibut, 33 sport-fished, and 70 fished in either fishery (Table 11).

In 2006, the estimated subsistence halibut harvest in Unalaska/Dutch Harbor was 16,331 pounds. This total was divided between harvests with setline gear (7,526 pounds; 46%) and hand operated gear (8,805; 54%) (Table 11). The estimated sport harvest of halibut by Unalaska SHARC holders in 2006 was 3,768 pounds, giving a total harvest for home use by SHARC holders of 20,100 pounds. In 2005, the estimated subsistence harvest of halibut for Unalaska/Dutch Harbor residents with SHARCs was 18,108 pounds net weight, with most (9,573 pounds; 53%) taken with setline gear and the balance with hand operated gear. In addition, in 2005 Unalaska/Dutch Harbor SHARC holders harvested 2,439 pounds of halibut while sport fishing, for a total halibut harvest of 20,547 pounds. In 2004, the estimated subsistence harvest of halibut for Unalaska/Dutch Harbor residents with SHARCs was 15,530 pounds net weight, with most (9,557 pounds; 62%) taken with setline gear and the balance with hand operated gear. In addition, Unalaska/Dutch Harbor SHARC holders harvested 2,165 pounds of halibut while sport fishing in 2004, for a total halibut harvest of 17,695 pounds. The estimated subsistence harvest for Unalaska and Dutch Harbor residents with SHARCs for 2003 was 10,860 pounds net weight, and these SHARC holders harvested an additional 5,519 pounds of halibut while sport fishing, for a total noncommercial harvest of 16,379 pounds.

The 2006 total halibut harvest by Unalaska/Dutch Harbor residents represented just 21% of the harvest estimate for 1994. Similarly, the 2005 total halibut harvest was 21% of the harvest estimate for 1994, the 2004 total halibut harvest was 18% of the 1994 harvest estimate, and the 2003 estimate was 17% of the 1994 estimate. There are at least five possible explanations for these differences. One, halibut harvests in Unalaska may have declined since 1994, although an

actual level of decline of this magnitude appears unlikely. Second, the SHARC survey may have underestimated the subsistence halibut harvest if many fishers have not obtained a SHARC. A third possible explanation is that the 1994 survey might have overestimated the halibut harvest. A fourth potential explanation is that many halibut fishers in Unalaska perhaps prefer to harvest halibut under sport fishing regulations and therefore did not obtain a SHARC. A fifth possibility that may account for a decline in subsistence halibut harvests is stock abundance. The IPHC has noted a decline in abundance in Area 4A since 1994 (Gregg Williams, IPHC, personal communication, 2005). A combination of all five factors could be responsible for the unexpectedly low subsistence halibut harvest estimated for Unalaska from the SHARC surveys in all four study years. Further outreach in Unalaska is clearly appropriate, as well as additional research to better understand patterns of halibut fishing in the community.

Toksook Bay (Regulatory Area 4E)

As discussed in Chapter Two, 534 Toksook Bay tribal members (and 529 community residents) (population 532 in 2000 and 598 in 2006; U.S. Census Bureau 2001, ADLWD 2007) obtained SHARCs in 2003. The number of community members with SHARCs was 533 in 2006. The Division of Subsistence has not conducted a household harvest survey in this community. Wolfe (2002) estimated a subsistence halibut harvest of 12,600 pounds net weight (16,800 pounds round weight) for this community for 2000, based upon the per capita estimate for the neighboring community of Tununak from 1986. As also discussed in Chapter 1, with the assistance of the tribal government in Toksook Bay, Division of Subsistence staff evaluated the list of SHARC holders in the community, estimated the total number of subsistence halibut fishers, and conducted interviews with likely fishers. Based upon this collaboration with the tribal government, it is highly likely that most community residents who subsistence fished for halibut in 2003, 2004, 2005, and 2006 provided harvest data through the SHARC survey. Therefore, harvest estimates for Toksook Bay represent the harvests reported by respondents to the survey, and are not expanded to the total number of SHARC holders in the community.

The estimated harvest for Toksook Bay for 2003 was 24,500 pounds net weight by 54 fishers (Table 11). In the assessment by project staff, this was considered a reliable subsistence harvest estimate for the community. It should be noted that Toksook Bay is a member of the Coastal Villages Regional Fund (CVRF) CDQ organization. The majority of the 5,034 pounds of sublegal halibut retained for home use by members of this CDQ organization in 2003 was landed at Toksook Bay and Mekoryuk (Williams 2004:59-60).

For 2004, 56 Toksook Bay SHARC holders reported a harvest of 6,596 pounds of halibut, with most of this (5,737 pounds) harvested with hand operated gear (Table 11). This suggests a substantial decline in subsistence halibut harvests compared to 2003. As in 2003, a majority (69% of 7,120 pounds net weight) of the sublegal halibut retained for home use by the CVRF was landed at Toksook Bay and Mekoryuk (Williams 2005), but this cannot account for the decline in subsistence harvests.

In 2005, subsistence harvests by Toksook Bay residents rebounded to 14,870 pounds; adding 98 pounds of sport-caught halibut gives a community total of 14,968 pounds (Table 11). Almost all (14,269 pounds; 96%) of the subsistence harvest was taken with hand-operated gear. Sixty-one Toksook Bay residents participated in the subsistence halibut fishery in 2005.

The estimated subsistence halibut harvest by Toksook Bay residents increased substantially in 2006, to 36,481 pounds, all harvested with subsistence gear and most (34,149 pounds; 94%)

caught with hand-operated gear (Table 11). In 2006, the estimated number of participants in the subsistence fishery also increased, to 113 SHARC holders; the previous highest estimate was 61 subsistence halibut fishers in 2005. During interviews in the community in April 2007, halibut fishers in Toksook Bay reported that subsistence fishing had been very productive in 2006; halibut were abundant and there was a corresponding increase in subsistence fishing effort. This may account for the large increase in the estimated harvest in 2006. Also, in 2006, over 67% of the 19,710 pounds of sublegal halibut retained for home use in the CVRF CDQ fishery were landed at Toksook Bay and Mekoryuk (Williams 2007). Division staff conducting interviews with SHARC holders in Toksook Bay reminded respondents to not include CDQ sublegal halibut in their subsistence estimates for the SHARC survey.

Tununak (Regulatory Area 4E)

Tununak had a population of 325 in 2000, 315 of whom were Alaska Native (U.S. Census Bureau 2001). The population for 2006 was 333 (ADLWD 2006). The Division of Subsistence conducted a comprehensive household harvest survey in Tununak in 1986, which provides the only estimate of subsistence halibut harvests for the community prior to the adoption of the new subsistence regulations. The harvest estimate was 1,532 fish and 30,643 pounds net (dressed) weight, with a 95% confidence limit of +/-26%. The harvest per capita was 93 pounds net weight (ADF&G 2006).

No residents of Tununak obtained SHARCs in 2003²⁴, and the Traditional Elders' Council in Tununak did not approve Division of Subsistence plans to conduct interviews with potential subsistence halibut fishers for 2003. Therefore, there was no subsistence halibut harvest estimate for this community for 2003. By the close of 2004, however, 70 residents of Tununak had obtained SHARCs (Table 11). Because only nine SHARC holders responded to the mailout survey (13%), harvest estimates for Tununak for 2004 were based on a very low sampling fraction. The estimated total subsistence halibut harvest was 1,954 pounds net weight by 31 fishers, 878 pounds harvested with set line gear and 1,076 pounds with hand operated gear. No Tununak SHARC holders reported any sport fishing activity.

As noted in Chapter One, the tribal government supported Division of Subsistence interviewing of subsistence halibut fishers in Tununak for the 2005 study year. Thirty-three of 70 SHARC holders were interviewed (47%). As in Toksook Bay, reported harvests were not expanded for Tununak because most known halibut fishers were interviewed. The total subsistence harvest of halibut was 2,661 pounds by 20 fishers. Most of the harvest (88%) was taken with hand-operated gear. There were no sport harvests of halibut in Tununak in 2005.

In 2006, 70 Tununak residents held SHARCs. No interviewing took place in the community, but SHARC holders were attempted to be contacted by phone. Sample achievement was low (10 of 70 SHARC holders; 14%). Based on this limited sample, the estimated subsistence halibut harvest at Tununak in 2006 was 4,032 pounds by 33 subsistence fishers. Almost all of this harvest (3,808 pounds; 94%) was with hand-operated gear.

Compared to the results of the 1986 survey, the harvest estimates for Tununak for 2004 through 2006 appear low. The reasons for this difference are uncertain. Several additional years of

²⁴ One tribal member obtained a SHARC, but this person was not a resident of Tununak.

harvest data collection plus continuing outreach and community support will be necessary to understand subsistence halibut harvest trends in this community.

COMPARISONS WITH NONSUBSISTENCE HARVESTS IN 2006

As reported in Table 17, the preliminary estimated total halibut removal in Alaskan waters in 2006 was 78,622,022 pounds (net weight) based on data compiled the IPHC (Gilroy personal communication 2007, Williams 2007) and this study. In this total, the removal of 19,710 pounds of sublegal halibut for personal use by CDQ organizations in Areas 4D and 4E has been added to the subsistence harvest category. Commercial harvests accounted for 70.1% of halibut removals in Alaska in 2006 (Figure 30). Bycatch of halibut in various other commercial fisheries ranked second, with 14.5% of the statewide removals. Sport harvests ranked third, with 11.7%. Wastage in commercial fisheries added 2.2% to the total halibut removals. Finally, the subsistence fishery accounted for 1.5% of the total removals of halibut in Alaska waters in 2006.

Halibut harvests by fishery in 2006 at the regulatory area level did not differ substantially from the statewide pattern (Table 17, Figure 31). In all regulatory areas, commercial harvests accounted for 53% or more of the total pounds net weight of halibut removals. In Area 2C (Southeast Alaska) and Area 3A (Southcentral Alaska), sport fisheries took 20.6% and 17.0%, respectively, of the halibut harvest in 2006, but sport fisheries were smaller than the subsistence harvests in Area 3B and Area 4. Commercial bycatch accounted for 44.7% of halibut removals in Area 4. As a percentage of the total removal, subsistence halibut harvests were largest in Area 2C at 3.9% of the total (although they were less than a quarter of the sport harvest and about 5.5% of the commercial harvest) and in Area 3A at 1.1%.

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

SUMMARY AND CONCLUSIONS

New federal regulations governing subsistence halibut fishing in Alaska went into effect in May 2003. The 2006 calendar year was the fourth for which a program was implemented to estimate the subsistence harvest of halibut under these regulations. By several measures, the program was a success. In 2006, 14,206 members of Alaska Native tribes with traditional uses of halibut and residents of eligible rural communities held subsistence halibut registration cards (SHARCs) from NMFS, an increase of 22% over the number of SHARCs that had been issued by the end of 2003. Of all SHARC holders, 8,426 (59%) voluntarily provided information about their subsistence halibut fishing activities in 2006 by responding to the survey. This compares to a response rate of 60% (8,565 respondents of 14,306 SHARC holders) for the 2005 study year; 62% for the 2004 study year (8,524 respondents of 13,813 SHARC holders); and 65% for the 2003 study year (7,593 respondents of 11,625 SHARC holders) (Table 18).

Based on these survey returns, an estimated 5,909 individuals participated in the Alaska subsistence halibut fishery in 2006. This is an increase of 5% from the estimated 5,621 individuals who subsistence fished for halibut in Alaska in 2005 and is 20% higher than the estimated 4,942 SHARC holders who fished in 2003. The estimated subsistence harvest of halibut in Alaska in 2006 is 54,089 fish and 1,125,312 pounds (+/-2.9%) (net weight). In comparison, the 2005 estimated subsistence halibut harvest was 55,875 fish and 1,178,222 pounds (+/-3.0%) (net weight); the 2004 estimated subsistence harvest was 52,412 halibut and 1,193,162 net pounds (+/- 1.5%), and 43,926 halibut for 1,041,330 pounds (+/- 4%) were harvested in the subsistence fishery in 2003. As measured in pounds, the 2006 subsistence halibut harvest was about 4% lower than the harvest in 2005 and 8% higher than the 2003 estimated harvest (Table 18). The total estimated harvests for 2003, 2004, 2005, and 2006 all fell below the 1.5 million net pounds estimated for the Alaska subsistence halibut harvest when the current regulations were developed by the North Pacific Fishery Management Council (see www.fakr.noaa.gov/frules/70fr16742.pdf, page 16748; NMFS 2003). The larger estimated harvest in 2004 compared to 2003 corresponded to the greater number of individuals who held SHARCs through December 2004 and a proportional increase in the number of individuals who subsistence fished for halibut. The leveling off of the harvest in 2006 and 2005 compared to 2004 is consistent with the small increase in individuals who held SHARCs for at least a portion of 2005 and 2006. Average harvests per fisher were slightly higher in 2005 (9.9 halibut per fisher for 210 pounds) compared to the first two years of the study: 8.8 halibut per fisher for 199 pounds in 2004 and 8.9 halibut per fisher in for 211 pounds in 2003. In 2006, the average subsistence fisher harvested 9.2 halibut and 190 pounds (Table 18).

After the first four years of the harvest assessment program, it is not possible to determine if the overall increase in statewide harvest estimates in 2004, 2005, and 2006 compared to 2003 was the result of an actual increase in the subsistence halibut harvest, a reflection of normal year-to-year variations, a consequence of more complete participation of subsistence fishers in the SHARC program, the product of different sample sizes and the nature of the respondent pool, or the result of increasing trust on the part of subsistence fishers in the survey. As the community case studies demonstrate, a number of factors appear to have caused the differences in harvest estimates over the four study years, and these differ by community. Some are methodological

(St. Paul for example), while other factors are probably linked to more thorough and accurate documentation of harvests (Cordova, Sand Point) rather than a true increase.

In 2006, most subsistence halibut were harvested with setline (stationary) gear (70%) and the rest with hand operated gear (30%). Similarly, in 2005, 70% of the subsistence halibut were harvested with setline (stationary) gear; in 2004, 74% of the subsistence halibut were harvested with setline (stationary) gear; and in 2003, setlines accounted for 72% of the harvest.

The largest portion of the Alaska subsistence halibut harvest in 2006 occurred in Regulatory Area 2C (Southeast Alaska), 52% (580,117 pounds); followed by Area 3A (Southcentral Alaska), 34% (379,258 pounds); Area 4E (East Bering Sea Coast), 6% (70,743 pounds); Area 3B (Alaska Peninsula), 4% (48,547 pounds); Area 4A (Eastern Aleutian Islands), 2% (27,062 pounds); Area 4C (Pribilof Islands), less than 1% (8,529 pounds); Area 4D (Central Bering Sea), less than 1% (8,297 pounds); and Area 4B (Western Aleutian Islands), less than 1% (2,761 pounds). In 2005, 2004, and 2003 also, Area 2C (Southeast Alaska) and Area 3A (Southcentral Alaska) accounted for most of the subsistence harvests. The proportion of the statewide subsistence halibut harvest occurring in Area 2C (Southeast Alaska) has declined from 60% in 2003 and 57% in 2004 to 51% in 2005 and 52% in 2006. Correspondingly, the portion occurring in Area 3A (Southcentral Alaska) increased from 27% in 2003 to 34% in 2004, 36% in 2005, and 34% in 2006. Subsistence harvests accounted for 1.5% of the total halibut removals in Alaska waters in 2006, compared to 1.5% in 2005, 1.5 % in 2004, and 1.3% in 2003.

Subsistence halibut fishers had an estimated incidental harvest of 16,945 rockfish in 2006. This is an increase of 37% from the estimate of 12,395 rockfish for 2005, a decline of 11% from the estimated harvest of 19,001 rockfish in 2004, and an increase of 14% from the 14,870 rockfish harvested in the fishery in 2003 (Table 18). There were 1,529 SHARC holders who harvested rockfish while subsistence halibut fishing in 2006, compared to 1,544 in 2005, 1,616 in 2004, and 1,239 in 2003. Most of the incidental rockfish harvests in 2006 occurred in Area 2C (68%), as they had in 2005 (63%), 2004 (68%), and 2003 (67%).

In 2006, subsistence halibut fishers harvested an estimated 3,486 lingcod in the subsistence halibut fishery. This is an increase of 48% from the estimate of 2,355 lingcod harvested in the subsistence halibut fishery in 2005; a decline of 21% from the estimate of 4,407 lingcod harvested in the subsistence halibut fishery in 2004; and an increase of 6% from the 2003 estimate of 3,298 lingcod. In total, 927 SHARC holders harvested lingcod while subsistence halibut fishing in 2006. This is 8% higher than the 862 SHARC holders who had an incidental harvest of lingcod in 2005; 3% lower than the 953 SHARC holders who had an incidental harvest of lingcod in 2004 and 33% higher than the estimate of 699 SHARC holders in 2003 (Table 18). As with rockfish, most of the incidental lingcod harvest took place in Area 2C in 2006 (59%), 2005 (56%), 2004 (56%) and 2003 (51%).

As discussed above, comparisons of the 2003, 2004, 2005, and 2006 harvest estimates with those from previous research by the Division of Subsistence are complicated by different research methods, but such comparisons are still instructive. Subsistence harvest estimates for most of the larger communities (combining tribal and rural SHARC holders) such as Sitka, Petersburg, and Kodiak for 2003, 2004, 2005, and 2006 are similar to earlier estimates based on household surveys. This is significant in that these communities account for a very large percentage of the total harvest. We conclude that the first four years of the survey of SHARC holders produced sound estimates of subsistence harvests of halibut in Alaska based on a scientific sample and a

relatively high response rate. The estimates can be further evaluated in the future as the new subsistence regulations become more completely implemented and additional years of harvest data are collected. Continued documentation of the subsistence harvests is also necessary for any meaningful discussion of trends in the fishery.

RECOMMENDATIONS

We conclude this report with the following recommendations based on experiences during the first four years of this project. These suggestions are similar to those that were offered at the conclusion of the first, second, and third years' reports (Fall et al. 2004:30-31; Fall et al. 2005:34-36; Fall et al. 2006:37-38).

1. The harvest assessment program for the Alaska subsistence halibut fishery should continue for at least one more year to document harvests occurring in 2007, using methods similar to those employed for 2003, 2004, 2005, and 2006.²⁵ This five-year effort will continue the development of a time series for assessment of harvest trends as well as for assessment of the information collected for the first years of the fishery. As discussed above, the methods used for 2003, 2004, 2005, and 2006 (a short, mailed survey with three mailings, supplemented by community outreach, interviewing in selected communities, and partnerships with tribal governments), were successful and should be retained to facilitate comparisons across study years. A recommendation in the final report for the third year of the program was that "implementation of a program to collect harvest data in-season in selected communities should be considered on a trial basis to help supplement and evaluate the data collected through the mailed survey" (Fall et al. 2006:37). As noted in Chapter 1, the Division of Subsistence conducted an in-season harvest monitoring project for the subsistence halibut fishery in Sitka and Kodiak in 2006 with funding provided by NMFS. Findings will be presented in a separate report to be completed in early 2008.
2. Outreach is needed in several communities, including Unalaska/Dutch Harbor, Tununak, and Sand Point, based on relatively low response rates or unexpectedly low numbers of SHARCs issued. Contracts with tribal governments or local hiring in Sitka, Angoon, Hydaburg, Saxman, and Ketchikan should be renewed for the fifth year to build upon the successful work in those communities in the first four years of the program. Collaboration with the Central Bering Sea Fishermen's Association should also continue in order to develop a reliable harvest estimate for St. Paul.
3. Further community outreach should continue in Area 4E (East Bering Sea Coast). There are many communities in this very large geographic area but relatively few SHARCs were issued. For the 2006 study year (as discussed in Chapter One), the focus of this outreach was on those communities that are known to have relatively large traditional harvests of halibut. Harvests in many other communities in this area are likely to be small. Although a major outreach effort including most of these other communities would be expensive and unnecessary, communications with tribal governments could

²⁵ Through award number NA07NMF4370170, the Division of Subsistence, ADF&G received funding in late 2007 from NOAA to conduct a fifth year of surveys to document subsistence harvests that occurred 2007.

result in more enrollments in the SHARC program and more confidence in the survey results.

4. Regulations were adopted by NMFS in late 2004 creating a community harvester program for subsistence halibut fishing. It is essential to continue to integrate this program into the SHARC harvest assessment program. This may entail further cooperative work with tribal governments.
5. If rockfish or lingcod incidental harvests in the halibut subsistence fishery continue to be of interest to managers in some areas, more specific data collection tools need to be developed to collect harvest data at the species level for rockfish in particular communities. This should only be done in selected areas of concern given the additional costs to data collection and analysis that this will entail (see Wolfe 2002 for more discussion of collection of rockfish harvest data through the SHARC survey). Such research should only occur through partnerships with local communities and tribes, and should include a combination of participant observation, key respondent interviewing, and survey methods.²⁶
6. Further evaluation of sport fish harvest data, achieved through the mailed Statewide Harvest Survey administered by the Division of Sport Fish of ADF&G, should take place for the larger rural communities participating in the subsistence halibut fishery for at least several years. (Analysis of these data for Sitka was conducted as a pilot effort for 2004. See Fall et al. 2005:22-24.) As discussed in Chapter 2 and Chapter 3, many SHARC holders also reported that they sport fished for halibut in 2003, 2004, 2005, and 2006. It will be important to try to determine if a shift in harvest from the “sport” category to the subsistence category is occurring, in order to evaluate trends in the subsistence fishery and the effect of the new subsistence halibut regulations on fishing patterns. Also, as also noted in Chapter 3, comparisons of community harvest estimates from previous research require consideration of sport harvests as well as harvests under the new subsistence regulations. Such comparisons are also important for evaluating the subsistence harvest assessment program and the performance of the new subsistence regulations.
7. Consideration should be given to funding and implementing ethnographic investigations in key halibut fishing communities to evaluate the effects of the new subsistence fishing regulations on fishing patterns. These studies would entail more detailed interviewing of fishers regarding any changes in gear choice, fishing effort, harvest amounts, incidental harvests of rockfish or lingcod, or other fishing activities that have resulted from the regulatory changes. These interviews could also investigate traditional knowledge about local halibut stocks (as well as local stocks of rockfish and lingcod) that might prove useful to management agencies, communities, and tribes for future management of the subsistence, sport, and commercial halibut fisheries in Alaska.
8. Results of the five years of survey data and the in-season project should be evaluated to design a sustainable harvest monitoring program for the Alaska subsistence halibut fishery, to begin with the 2008 harvest year.

²⁶ In 2006, the Division of Subsistence, ADF&G, received funding from the North Pacific Research Board to conduct research on subsistence rockfish fishing in Sitka (southeast Alaska), Chenega Bay (Prince William Sound), and Nanwalek and Port Graham (lower Cook Inlet). Findings of this research will be available in 2008.

REFERENCES CITED

- ADF&G (Alaska Department of Fish and Game). 2007. Community Subsistence Information System. Division of Subsistence, Juneau.
- ADLWD (Alaska Department of Labor and Workforce Development). 2007. Population estimates for 2005 <http://www.labor.state.ak.us/research/pop/estimates> accessed September 2007.
- Cochran, W. G. 1977. Sampling techniques. third edition. John Wiley & Sons, New York.
- Crapo, Chuck, Brian Paust, and Jerry Babbitt. 1993. Recoveries and yields from Pacific fish and shellfish. Alaska Sea Grant College Program, Marine Advisory Bulletin No. 37, Fairbanks.
- Fall, James A., David B. Andersen, Louis Brown, Michael Coffing, Gretchen Jennings, Craig Mishler, Amy Paige, Charles J. Utermohle, and Vicki Vanek. 1993. Noncommercial harvests and uses of wild resources in Sand Point, Alaska, 1992. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 226, Juneau.
- Fall, James A., Madel Kerlin, Bridget Easley, and Robert J. Walker. 2004. Subsistence harvests of Pacific halibut in Alaska, 2003. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 288, Juneau.
- Fall, James A., Mykel George, and Bridget Easley. 2005. Subsistence harvests of Pacific halibut in Alaska, 2004. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 304, Juneau.
- Fall, James A., David Koster, and Brian Davis. 2006. Subsistence harvests of Pacific halibut in Alaska, 2005. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 320, Juneau.
- Gilroy, Heather. 2005. The Pacific halibut fishery, 2004. International Pacific Halibut Commission 2005 Annual Management Bluebook, pages 5 – 18.
- _____. 2007. Personal communication regarding Pacific halibut removals in Alaska in 2006. International Pacific Halibut Commission.
- NMFS (National Marine Fisheries Service). 2000. Environmental assessment/regulatory impact review/initial regulatory flexibility analysis for a regulatory amendment for defining a halibut subsistence fishery category (EA/RIR/RFA). North Pacific Fishery Management Council, Alaska Department of Fish and Game, International Pacific Halibut Commission, and National Marine Fisheries Service. Anchorage, August 11, 2000.
- _____. 2003. Environmental assessment of a regulatory amendment to define a halibut subsistence fishery category in convention waters. April 2, 2003. www.fakr.noaa.gov/analyses/subsistence/halibut0403.pdf
- Scott, Cheryl, Louis A. Brown, Gretchen B. Jennings, and Charles J. Utermohle. 2001. Community profile database for Access 2000. Version 3.12. Alaska Department of Fish and Game, Division of Subsistence, Juneau.
- Stanek, Ronald. 1985. Patterns of wild resource use in English Bay and Port Graham, Alaska. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 104, Juneau.
- Trumble, Robert J. 1999. 1998 Estimates of personal use halibut. International Pacific Halibut Commission. Report of Assessment and Research Activities 1998: 61-64.
- Turek, Michael. 2007. Alaska rockfish (genus Sebastes): subsistence harvests and local knowledge of Alaska Rockfish. Project 645. Semiannual Progress Report to the North Pacific Research Board (<http://www.nprb.org>). Alaska Department of Fish and Game, Division of Subsistence, Juneau.
- United States Census Bureau. 2001. Profiles of general demographic characteristics, 2000 census of population and housing: Alaska. U.S. Department of Commerce. Washington, D.C.
- Williams, Gregg H. 2004. Retention of sublegal halibut in the areas 4D/4E CDQ fishery: 2003 harvests. International Pacific Halibut Commission. Report of Assessment and Research Activities 2003: pp. 59-60.
- _____. 2005. Retention of sublegal halibut in the areas 4D/4E CDQ fishery: 2004 harvests. International Pacific Halibut Commission Report of Assessment and Research Activities 2004: 59-60.

REFERENCES CITED (Continued)

- _____. 2007. Retention of sublegal halibut in the areas 4D/4E CDQ fishery: 2006 harvests. International Pacific Halibut Commission. Report of Assessment and Research Activities 2006: pp. 59-60.
- Wolfe, Robert J. 2001. Subsistence halibut fishing in Alaska – harvest patterns. Presentation to the Alaska Board of Fisheries, May 2001 (RC 8). Alaska Department of Fish and Game, Division of Subsistence.
- _____. 2002. Subsistence halibut harvest assessment methodologies. Report prepared for the National Marine Fisheries Service, Sustainable Fisheries Division. Robert J. Wolfe and Associates. San Marcos, CA.
- Wolfe, Robert, J., James A. Fall, and Ronald T. Stanek. 2005. The subsistence harvest of harbor seals and sea lions by Alaska Natives in 2004. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 303, Juneau.

REPORT TABLES

Table 1.—Population of rural communities eligible to participate in the Alaska subsistence halibut fishery, 2000 and 2006.

Community ¹	Regulatory Area	Population: 2000		Population: 2006
		Total	Alaska Native	
ANGOON	2C	572	419	482
COFFMAN COVE	2C	199	12	162
CRAIG	2C	1,397	432	1,105
EDNA BAY	2C	49	2	41
ELFIN COVE	2C	32	0	25
GUSTAVUS	2C	429	32	441
HAINES	2C	1,811	332	1,492
HOLLIS	2C	139	13	156
HOONAH	2C	860	597	829
HYDABURG	2C	382	342	352
HYDER	2C	97	4	92
KAKE	2C	710	530	536
KASAAN	2C	39	19	59
KLAWOCK	2C	854	496	776
KLUKWAN	2C	139	123	112
METLAKATLA	2C	1,375	1,125	1,323
MEYERS CHUCK	2C	21	2	11
PELICAN	2C	163	42	106
PETERSBURG	2C	3,224	388	3,129
POINT BAKER	2C	35	3	16
PORT ALEXANDER	2C	81	11	64
PORT PROTECTION	2C	63	7	59
SAXMAN	2C	431	302	422
SITKA	2C	8,835	2,178	8,833
SKAGWAY	2C	862	44	854
TENAKEE SPRINGS	2C	104	5	109
THORNE BAY	2C	552	27	482
WHALE PASS	2C	58	2	61
WRANGELL	2C	2,308	550	1,911
Regulatory Area 2C Subtotals ⁵		25,821	8,039	24,040
AKHIOK	3A	80	75	44
CHENEGA BAY	3A	86	67	69
CORDOVA	3A	2,454	368	2,211
KARLUK	3A	27	26	27
KODIAK ²	3A	12,973	1,697	12,703
LARSEN BAY	3A	115	91	90
NANWALEK	3A	177	165	228
OLD HARBOR	3A	237	203	192
OUZINKIE	3A	225	197	193
PORT GRAHAM	3A	171	151	136
PORT LIONS	3A	253	163	211
SELDOVIA	3A	286	66	379
TATITLEK	3A	107	91	117
YAKUTAT	3A	680	375	609
Regulatory Area 3A Subtotals		17,871	3,735	17,209

-continued-

Table 1.—Page 2 of 3.

Community ¹	Regulatory Area	Population: 2000		Population: 2006
		Total	Alaska Native	
CHIGNIK	3B	79	48	85
CHIGNIK LAGOON	3B	103	85	70
CHIGNIK LAKE	3B	145	127	120
COLD BAY	3B	88	15	87
FALSE PASS	3B	64	42	54
IVANOF BAY	3B	22	21	0
KING COVE	3B	792	379	807
NELSON LAGOON	3B	83	68	63
PERRYVILLE	3B	107	105	120
SAND POINT	3B	952	421	890
Regulatory Area 3B Subtotals		2,435	1,311	2,296
AKUTAN	4A	713	117	741
NIKOLSKI	4A	39	27	31
UNALASKA	4A	4,283	397	3,940
Regulatory Area 4A Subtotals		5,035	541	4,712
ADAK	4B	316	118	146
ATKA	4B	92	84	73
Regulatory Area 4B Subtotals		408	202	219
ST GEORGE ISLAND	4C	152	140	120
ST PAUL ISLAND	4C	532	460	460
Regulatory Area 4C Subtotals		684	600	580
GAMBELL	4D	649	622	643
SAVOONGA	4D	643	614	712
DIOMEDE	4D	146	137	110
Regulatory Area 4D Subtotals		1,438	1,373	1,465
ALAKANUK	4E	652	638	663
ALEKNAGIK	4E	221	187	241
BREVIG MISSION	4E	276	254	324
BETHEL	4E	5,471	3,719	5,812
CHEFORNAK	4E	394	386	460
CHEVAK	4E	765	734	908
CLARK'S POINT	4E	75	69	69
COUNCIL ANVSA ³	4E	0	0	
DILLINGHAM	4E	2,466	1,503	2,397
EEK	4E	280	271	287
EGEGIK	4E	116	89	76
ELIM	4E	313	297	294
EMMONAK	4E	767	720	757
GOLOVIN	4E	144	133	154
GOODNEWS BAY	4E	230	216	242
HOOPER BAY	4E	1,014	971	1,157
KING SALMON	4E	442	133	409

-continued-

Table 1.–Page 3 of 3.

Community ¹	Regulatory Area	Population: 2000		Population: 2006
		Total	Alaska Native	
KIPNUK	4E	644	631	668
KONGIGANAK	4E	359	349	411
KOTLIK	4E	591	568	611
KOYUK	4E	297	280	368
KWIGILLINGOK	4E	338	331	378
LEVELOCK	4E	122	116	61
MANOKOTAK	4E	399	378	423
MEKORYUK	4E	210	203	217
NAKNEK	4E	678	319	577
NAPAKIAK	4E	353	341	370
NAPASKIAK	4E	390	383	464
NEWTOK	4E	321	311	323
NIGHTMUTE	4E	208	197	237
NOME	4E	3,505	2,057	3,540
OSCARVILLE	4E	61	61	64
PILOT POINT	4E	100	86	66
PLATINUM	4E	41	38	38
PORT HEIDEN	4E	119	93	79
QUINHAGAK	4E	555	540	648
SCAMMON BAY	4E	465	453	520
SAINT MICHAEL	4E	368	343	446
SHAKTOOLIK	4E	230	218	214
SHELDON POINT	4E	164	154	156
SHISHMAREF	4E	562	531	615
SOLOMON ANVSA	4E	4	3	2
SOUTH NAKNEK	4E	137	115	74
STEBBINS	4E	547	518	612
TELLER	4E	268	248	258
TOGIAK	4E	809	750	783
TOKSOOK BAY	4E	532	519	598
TUNTUTULIAK	4E	370	366	407
TUNUNAK	4E	325	315	333
TWIN HILLS	4E	69	65	77
UGASHIK	4E	11	9	17
UNALAKLEET	4E	747	655	727
WALES	4E	152	137	139
WHITE MOUNTAIN	4E	203	175	224
Regulatory Area 4E Subtotals		28,880	23,176	29,995
Grand Total		82,572	38,977	80,516

Source: U.S. Census Bureau 2001; Alaska Department of Labor and Workforce Development population estimates for 2006 (<http://www.labor.state.ak.us/research/pop/estimates> on September 18, 2007)

¹ Alaska Native Village statistical Area populations were used whenever no city or census designated place (CDP) populations were present in the census.

² Total population for Kodiak Island road system area; includes Kodiak City, Kodiak Station, Chiniak, and other areas on the road system.

³ There is no census table for a Council CDP or municipality. The Council ANVSA table indicated that all 40 housing units were vacant.

⁴ No Alaska Native Population data are available for 2006.

⁵ Non-tribal residents of Naukati Bay were not eligible for SHARCs in 2004. The NPFMC in late 2004 recommended that Naukati Bay be added to the eligible list, but regulatory action had not occurred by late 2006. Naukati Bay had a population of 135, including 13 Alaska Natives, in 2000, and a total population of 129 in 2006.

Table 2.–Project chronology, 2006 study year.

Date	Event/Action
June 2, 2006	Amendment 2 to Award No. NA04NMF4370314 finalized between NMFS and ADF&G to support the research for study year 2006
December 21, 2006	Mailing of letter to tribes concerning mailout of surveys for the second year of the project
Mid January 2007	Running of newspaper ads
February 16, 2007	First mailing of survey forms
Mid March 2007	Survey administration, Nanwalek and Port Graham
March 19, 2007	Second mailing of survey forms
March 26 to 30, 2007	Survey administration, Chenega Bay
April 16 to April 27, 2007	Survey administration in Toksook Bay;
Throughout April 2007	Phone calls to SHARC holders in selected western Alaska communities
April through June 2007	Administration of surveys in Sitka, Hydaburg, Angoon, and Ketchikan
April 18, 2007	Third mailing of survey forms
April 23, 2007	Submission of semi-annual report on project progress to NMFS
June to August 2007	St. Paul inseason harvest data collection
June to September 2007	In-season harvest data collection, Sitka and Kodiak
October 31, 2007	Submission of semi-annual report on project progress to NMFS
November 16, 2007	Release of public review draft of final report
December 4, 2007	Presentation of study findings, ANSHWG, Anchorage
December 5, 2007	Presentation of study findings, NPFMC, Anchorage
December 20, 2007	Completion of revised, final report

Table 3.—Sample achievement, Alaska subsistence halibut survey for 2006 by eligible Alaska tribe, eligible Alaska rural community, and place of residence of SHARC holders.

Tribal Name	Regulatory Areas	First Mailing			Second Mailing			Third Mailing			Totals					
		Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	SHARCs Issued	Returned by Mail	Returned through Staff	Response	Response Rate	Undeliverable
ANGOON COMMUNITY ASSOCIATION	2C	141	30	2	112	10	0	103	7	1	141	47	65	112	79.4%	3
AUKUAN TRADITIONAL COUNCIL	2C	2														
CENTRAL COUNCIL TLINGIT AND HAIDA INDIAN TRIBES	2C	722	177	93	466	48	26	389	34	21	725	259	18	277	38.2%	140
CHILKAT INDIAN VILLAGE	2C	42	15	3	26	9	1	18	3	1	42	27	0	27	64.3%	5
CHILKOOT INDIAN ASSOCIATION	2C	51	16	5	32	7	2	23	4	1	52	27	0	27	51.9%	8
CRAIG COMMUNITY ASSOCIATION	2C	59	18	2	40	6	2	34	3	1	59	27	0	27	45.8%	5
DOUGLAS INDIAN ASSOCIATION	2C	25	4	0	17	2	0	15	7	0	25	13	0	13	52.0%	4
HOONAH INDIAN ASSOCIATION	2C	217	57	9	156	29	3	127	11	5	217	97	0	97	44.7%	17
HYDABURG COOPERATIVE ASSOCIATION	2C	192	2	0	165	4	0	144	1	1	193	7	177	184	95.3%	11
KETCHIKAN INDIAN CORPORATION	2C	887	160	109	613	40	23	527	20	14	887	220	178	398	44.9%	148
KLAWOCK COOPERATIVE ASSOCIATION	2C	175	42	4	133	17	2	112	5	0	175	64	0	64	36.6%	6
METLAKATLA INDIAN COMMUNITY, ANNETTE ISLAND RESERVE	2C	403	58	4	343	37	4	307	30	2	403	125	2	127	31.5%	12
ORGANIZED VILLAGE OF KAKE	2C	130	43	15	74	13	0	68	11	1	130	67	0	67	51.5%	16
ORGANIZED VILLAGE OF KASAAN	2C	11	3	0	9	1	0	7	2	2	11	6	0	6	54.5%	2
ORGANIZED VILLAGE OF SAXMAN	2C	63	14	2	48	1	1	46	1	1	63	16	23	39	61.9%	4
PETERSBURG INDIAN ASSOCIATION	2C	125	43	6	81	21	1	64	6	2	125	70	1	71	56.8%	9
SITKA TRIBE OF ALASKA	2C	428	108	36	280	34	5	258	22	16	460	164	98	262	57.0%	57
SKAGWAY VILLAGE	2C	2														
WRANGELL COOPERATIVE ASSOCIATION	2C	113	52	7	56	14	2	43	9	0	113	75	0	75	66.4%	9
2C Totals		3788	842	304	2654	295	72	2287	176	71	3825	1313	562	1875	49.02%	447
KENAITZE INDIAN TRIBE	3A	78	31	4	48	9	1	39	8	0	80	48	1	49	61.3%	5
LESSNOI VILLAGE (WOODY ISLAND)	3A	251	62	42	157	17	14	125	7	7	259	86	8	94	36.3%	63
NATIVE VILLAGE OF AFOGNAK	3A	22	8	5	8	2	0	10	1	0	27	11	5	16	59.3%	5
NATIVE VILLAGE OF AKHOK	3A	25	2	0	23	2	2	21	1	1	25	5	0	5	20.0%	1
NATIVE VILLAGE OF CHENEGA	3A	25	6	1	18	1	1	20	2	0	30	9	3	12	40.0%	2
NATIVE VILLAGE OF EYAK	3A	76	23	4	50	15	2	37	6	0	76	44	0	44	57.9%	6
NATIVE VILLAGE OF KARLUK	3A	5														
NATIVE VILLAGE OF LARSEN BAY	3A	38	17	4	16	2	0	20	0	1	45	19	6	25	55.6%	5
NATIVE VILLAGE OF NANWALEK	3A	1	0	0	1	0	0	1	2	0	29	2	25	27	93.1%	0
NATIVE VILLAGE OF OUZINKIE	3A	45	12	6	27	5	1	20	2	1	45	19	0	19	42.2%	8
NATIVE VILLAGE OF PORT GRAHAM	3A	7	1	1	5	0	1	4	0	0	46	1	24	25	54.3%	2
NATIVE VILLAGE OF PORT LIONS	3A	55	17	1	37	5	3	31	1	0	56	23	1	24	42.9%	4
NATIVE VILLAGE OF TATTLE	3A	32	8	1	25	4	3	21	5	0	32	17	0	17	53.1%	4
NINILCHIK VILLAGE	3A	98	30	2	68	5	1	60	15	1	98	50	0	50	51.0%	4
SELDOVIA VILLAGE TRIBE	3A	50	19	3	30	10	0	23	2	1	50	31	0	31	62.0%	4
SHOONAQ TRIBE OF KODIAK	3A	169	52	24	107	12	3	86	14	0	184	78	15	93	50.5%	27
VILLAGE OF OLD HARBOR	3A	56	19	1	37	4	1	31	4	0	56	27	0	27	48.2%	2
VILLAGE OF SALAMATOFF	3A	16	8	0	10	4	0	4	0	0	16	12	0	12	75.0%	0
YAKUTAT TLINGIT TRIBE	3A	61	20	3	41	5	0	37	6	1	62	31	0	31	50.0%	4
3A Totals		1110	335	102	713	103	32	593	77	13	1221	515	88	603	49.39%	147
AGDAAGUX TRIBE OF KING COVE	3B	50	20	0	31	6	1	27	4	0	50	30	0	30	60.0%	1
CHIGNIK LAKE VILLAGE	3B	10	5	0	5	1	1	3	0	0	10	6	0	6	60.0%	1
IVANOFF BAY VILLAGE	3B	8	1	3	4	1	0	4	0	0	8	2	0	2	25.0%	3
NATIVE VILLAGE OF BELKOFSKI	3B	2														
NATIVE VILLAGE OF CHIGNIK	3B	13	6	0	7	1	0	7	3	0	13	10	0	10	76.9%	0
NATIVE VILLAGE OF CHIGNIK LAGOON	3B	43	10	3	31	7	0	28	3	0	43	20	0	20	46.5%	3
NATIVE VILLAGE OF FALSE PASS	3B	14	2	2	10	0	1	9	1	0	14	3	0	3	21.4%	3
NATIVE VILLAGE OF NELSON LAGOON	3B	3														
NATIVE VILLAGE OF PERRYVILLE	3B	38	14	1	24	4	1	20	3	2	38	21	0	21	55.3%	4
NATIVE VILLAGE OF UNGA	3B	13	3	0	11	0	0	10	1	0	13	4	0	4	30.8%	0
PAULOFF HARBOR VILLAGE	3B	56	7	5	44	3	0	43	6	3	56	16	0	16	28.6%	8
QAGAN TAYAGUNGIN TRIBE OF SAND POINT VILLAGE	3B	318	62	46	211	32	8	175	17	4	318	111	0	111	34.9%	58
VILLAGE OF KANATAK	3B	11	1	0	10	0	3	7	0	1	11	1	0	1	9.1%	4
3B Totals		579	133	60	393	56	16	334	38	10	579	227	0	227	39.21%	86
NATIVE VILLAGE OF AKUTAN	4A	44	5	0	40	4	0	37	0	0	44	9	0	9	20.5%	0
NATIVE VILLAGE OF NIKOLSKI	4A	12	1	0	11	0	0	11	0	0	12	1	0	1	8.3%	0
QAWALANGIN TRIBE OF UNALASKA	4A	43	10	1	35	8	0	27	3	0	43	21	0	21	48.8%	1
4A Totals		99	16	1	86	12	0	75	3	0	99	31	0	31	31.31%	1
NATIVE VILLAGE OF ATKA	4B	5	0	1	4	2	0	2	0	0	6	2	1	3	50.0%	1
4B Totals		5	0	1	4	2	0	2	0	0	6	2	1	3	50.00%	1
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST GEORGE	4C	27	2	0	25	2	0	25	0	0	27	4	0	4	14.8%	0
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST PAUL	4C	12	0	3	9	0	1	8	0	0	254	0	234	234	92.1%	4
4C Totals		39	2	3	34	2	1	33	0	0	281	4	234	238	84.70%	4
NATIVE VILLAGE OF GAMBELL	4D	6	0	0	6	0	0	6	0	0	6	0	0	0	0.0%	0
NATIVE VILLAGE OF SAVOONGA	4D	44	8	0	37	5	0	33	1	0	44	14	0	14	31.8%	0
4D Totals		50	8	0	43	5	0	39	1	0	50	14	0	14	28.00%	0
CHEYAK NATIVE VILLAGE (KASHUNAMIUT)	4E	7	4	1	2	0	0	2	0	0	7	4	0	4	57.1%	1
CHINIK ESKIMO COMMUNITY	4E	1														
EGEGIK VILLAGE	4E	6	5	0	1	1	0	0	0	0	6	6	0	6	100.0%	0
KING ISLAND NATIVE COMMUNITY	4E	2														
LEVELOCK VILLAGE	4E	1														
NAKNEK NATIVE VILLAGE	4E	6	4	0	2	0	0	2	0	0	6	4	0	4	66.7%	0
NATIVE VILLAGE OF ALEKNAGIK	4E	5														
NATIVE VILLAGE OF COUNCIL	4E	1														
NATIVE VILLAGE OF DILLINGHAM (CURYUNG)	4E	23	11	0	12	2	0	11	1	0	23	14	0	14	60.9%	0
NATIVE VILLAGE OF EEK	4E	21	7	0	14	0	0	14	1	0	21	8	0	8	38.1%	0
NATIVE VILLAGE OF ERBE	4E	1														

-continued-

Table 3.-Page 2 of 5.

Tribal Name	Regulatory Areas	First Mailing			Second Mailing			Third Mailing			Totals					
		Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	SHARCs Issued	Returned by Mail	Returned through Staff	Response	Response Rate	Undeliverable
NATIVE VILLAGE OF ELIM	4E	1														
NATIVE VILLAGE OF GOODNEWS BAY (MUMTRAQ)	4E	15	1	0	15	0	0	14	5	0	15	6	0	6	40.0%	0
NATIVE VILLAGE OF HOOPER BAY	4E	92	19	1	75	12	0	62	9	1	92	40	0	40	43.5%	2
NATIVE VILLAGE OF KANAKANAK	4E	1														
NATIVE VILLAGE OF KIPNUK	4E	88	5	1	82	4	0	81	0	0	88	9	0	9	10.2%	1
NATIVE VILLAGE OF KONGIGANAK	4E	10	2	0	8	0	1	7	0	0	10	2	0	2	20.0%	1
NATIVE VILLAGE OF KOYUK	4E	1														
NATIVE VILLAGE OF KWIGILLINGOK	4E	48	1	0	47	4	0	46	2	0	48	7	0	7	14.6%	0
NATIVE VILLAGE OF KWINHAGAK	4E	11	2	0	9	0	0	9	0	0	11	2	0	2	18.2%	0
NATIVE VILLAGE OF MEKORYUK	4E	16	4	0	12	1	1	10	2	0	16	7	0	7	43.8%	1
NATIVE VILLAGE OF NAPAKIAK	4E	3														
NATIVE VILLAGE OF NIGHTMUTE	4E	8	1	0	8	1	0	7	0	0	8	2	0	2	25.0%	0
NATIVE VILLAGE OF PORT HEIDEN	4E	1														
NATIVE VILLAGE OF SCAMMON BAY	4E	5														
NATIVE VILLAGE OF SHAKTOOLIK	4E	1														
NATIVE VILLAGE OF SHISHIMAREF	4E	1														
NATIVE VILLAGE OF TOKSOOK BAY (NUNAKAUAYAK)	4E	532	21	12	501	15	0	484	2	37	532	38	100	138	25.9%	49
NATIVE VILLAGE OF TUNUNAK	4E	73	8	0	65	1	0	64	2	0	73	11	0	11	15.1%	0
NATIVE VILLAGE OF UNALAKLEET	4E	6	2	0	3	2	0	2	0	0	6	4	1	5	83.3%	0
NATIVE VILLAGE OF WHITE MOUNTAIN	4E	2														
NEWTOK VILLAGE	4E	3														
NOME ESKIMO COMMUNITY	4E	14	3	1	10	3	0	11	0	0	15	6	0	6	40.0%	1
ORUTSARARMUT NATIVE VILLAGE	4E	8	0	0	8	2	0	6	0	0	8	2	0	2	25.0%	0
PLATINUM TRADITIONAL VILLAGE	4E	1														
SOUTH NAKNEK VILLAGE	4E	2														
STEBBINS COMMUNITY ASSOCIATION	4E	4														
TRADITIONAL VILLAGE OF TOGIAK	4E	11	3	0	9	2	0	7	0	1	11	5	0	5	45.5%	1
TWIN HILLS VILLAGE	4E	1														
UGASHIK VILLAGE	4E	4														
VILLAGE OF CHEFORNAK	4E	19	5	0	14	1	0	13	0	0	19	6	0	6	31.6%	0
VILLAGE OF CLARK'S POINT	4E	3														
4E Totals		1061	124	19	927	56	5	872	27	39	1062	207	101	308	29.00%	63
Tribal Name Subtotals		6,731	1,460	490	4,854	531	126	4,235	322	133	7,123	2,313	986	3,299	46.3%	749

Rural Community	Regulatory Areas	First Mailing			Second Mailing			Third Mailing			Totals					
		Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	SHARCs Issued	Returned by Mail	Returned through Staff	Response	Response Rate	Undeliverable
ANGOON	2C	26	8	1	18	2	0	13	3	1	26	13	7	20	76.9%	2
COFFMAN COVE	2C	43	26	3	17	5	0	12	2	0	43	33	0	33	76.7%	3
CRAIG	2C	322	185	20	145	32	2	91	14	3	323	231	2	233	72.1%	25
EDNA BAY	2C	47	35	0	47	5	0	9	2	0	47	42	0	42	89.4%	0
ELFIN COVE	2C	18	8	1	10	3	0	8	1	0	18	12	0	12	66.7%	1
GUSTAVUS	2C	67	34	1	39	13	0	29	5	0	67	52	0	52	77.6%	1
HAINES	2C	432	272	12	176	50	3	115	19	3	432	341	0	341	78.9%	18
HOLLIS	2C	50	24	5	27	5	1	21	7	0	50	36	0	36	72.0%	6
HOONAH	2C	115	42	4	75	28	4	49	10	0	115	80	0	80	69.6%	8
HYDABURG	2C	14	0	0	7	0	0	7	0	0	14	0	14	100.0%	0	
HYDER	2C	35	14	0	26	4	0	20	6	0	35	24	0	24	68.6%	0
KAKE	2C	42	25	1	18	6	0	13	1	2	42	32	0	32	76.2%	3
KASAAN	2C	16	7	0	9	2	0	9	1	4	16	10	0	10	62.5%	4
KLAWOCK	2C	114	56	6	65	14	0	47	6	4	114	76	2	78	68.4%	10
KLUKWAN	2C	1														
METLAKATLA	2C	35	10	3	23	6	3	14	0	0	35	16	0	16	45.7%	6
MEYERS CHUCK	2C	10	7	1	3	2	0	2	0	0	10	9	0	9	90.0%	1
PELICAN	2C	43	24	4	21	4	0	12	0	0	43	28	0	28	65.1%	4
PETERSBURG	2C	925	507	24	459	132	2	316	52	16	925	691	1	692	74.8%	42
PORT ALEXANDER	2C	26	12	1	16	5	0	14	3	0	26	20	0	20	76.9%	1
PORT PROTECTION	2C	23	9	0	15	4	0	11	2	0	23	15	2	17	73.9%	0
PT. BAKER	2C	18	11	1	9	1	0	5	1	0	18	13	0	13	72.2%	1
SAXMAN	2C	23	8	1	13	2	0	7	2	0	23	12	8	20	87.0%	1
SITKA	2C	1274	624	64	648	125	7	518	68	25	1429	817	208	1025	71.7%	96
SKAGWAY	2C	56	29	2	30	10	1	20	0	0	56	39	0	39	69.6%	3
TENAKEE SPRINGS	2C	43	27	0	20	5	0	11	2	0	43	34	0	34	79.1%	2
THORNE BAY	2C	138	77	11	62	11	2	43	10	2	139	98	0	98	70.5%	15
WHALE PASS	2C	30	20	0	16	4	0	7	2	1	30	26	1	27	90.0%	1
WRANGELL	2C	367	213	16	166	57	2	95	13	0	367	283	0	283	77.1%	18
2C Totals		4353	2314	182	2156	538	29	1519	232	61	4510	3084	245	3329	73.81%	272
AKHIOK	3A	1														
CHENEGA BAY	3A	1	0	0	0	0	0	3	0	0	11	0	7	7	63.6%	
CORDOVA	3A	534	307	16	245	53	12	149	26	3	534	386	0	386	72.3%	
KODIAK	3A	1182	539	81	623	112	20	545	67	15	1441	718	271	989	68.6%	
LARSEN BAY	3A	13	10	1	4	0	0	2	0	0	13	10	0	10	76.9%	
NANWALEK	3A	0														
OLD HARBOR	3A	24	13	2	10	1	1	8	2	0	24	16	0	16	66.7%	
OUZINKIE	3A	10	8	1	4	0	0	1	1	0	10	9	0	9	90.0%	
PORT GRAHAM	3A	2	0	0	2	1	1	0	0	1	2	1	8	9	75.0%	

-continued-

Table 3.–Page 3 of 5.

Rural Community	Regulatory Areas	First Mailing			Second Mailing			Third Mailing			Totals					
		Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	SHARCs Issued	Returned by Mail	Returned through Staff	Response	Response Rate	Undeliverable
PORT LIONS	3A	30	12	0	18	4	0	16	1	0	30	17	0	17	56.7%	
SELDOVIA	3A	101	60	1	44	16	2	26	9	0	102	85	0	85	83.3%	
TATTLEK	3A	12	4	0	10	1	0	10	1	1	12	6	0	6	50.0%	
YAKUTAT	3A	51	35	2	19	3	0	15	3	0	51	41	0	41	80.4%	
3A Totals		1961	988	104	980	191	36	776	110	19	2245	1289	290	1579	70.33%	159
CHIGNIK	3B	10	5	1	6	2	0	3	0	0	10	7	0	7	70.0%	
CHIGNIK LAGOON	3B	7	2	0	5	1	0	5	0	0	7	3	0	3	42.9%	
CHIGNIK LAKE	3B	4														
COLD BAY	3B	19	10	0	10	4	2	5	1	0	19	15	0	15	78.9%	
FALSE PASS	3B	3														
KING COVE	3B	22	11	0	14	5	0	8	1	0	22	17	0	17	77.3%	
PERRYVILLE	3B	2														
SAND POINT	3B	15	9	1	6	1	0	5	0	0	15	10	0	10	66.7%	
3B Totals		82	39	2	48	15	2	31	4	1	82	58	0	58	70.73%	5
AKUTAN	4A	2														
NIKOLSKI	4A	6	1	0	5	0	0	5	0	0	6	1	0	1	16.7%	
UNALASKA	4A	120	51	2	74	16	2	55	11	2	120	78	0	78	65.0%	
4A Totals		128	53	2	80	16	2	61	11	2	128	80	0	80	62.50%	6
ADAK	4B	12	8	0	4	0	0	4	0	0	12	8	0	8	66.7%	
ATKA	4B	4														
4B Totals		16	9	0	7	0	0	7	0	0	16	9	0	9	56.25%	0
ST GEORGE ISLAND	4C	1														
ST PAUL ISLAND	4C	0														
4C Totals		1	0	0	1	0	0	1	0	0	2	0	1	1	50.00%	0
4D Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	0
ALAKANUK	4E	1														
ALEKNAGIK	4E	3														
BETHEL	4E	4														
CHEFORNAK	4E	1														
CHEVAK	4E	3														
CLARKS POINT	4E	1														
DILLINGHAM	4E	44	23	0	23	9	0	12	5	0	44	37	0	37	84.1%	
EMMONAK	4E	1														
HOOPER BAY	4E	1														
KING SALMON	4E	2														
KOTLIK	4E	1														
KWIGILLINGOK	4E	1														
MANOKOTAK	4E	2														
MEKORYUK	4E	1														
NAKNEK	4E	6	3	1	2	1	0	1	0	0	6	4	0	4	66.7%	
NIGHTMUTE	4E	7	2	0	5	0	0	4	1	0	7	3	0	3	42.9%	
NOME	4E	6	2	1	3	0	0	3	0	0	6	2	0	2	33.3%	
PLATINUM	4E	1														
PORT HEIDEN	4E	2														
QUINHAGAK	4E	2														
SHELDON POINT	4E	1														
SOUTH NAKNEK	4E	2														
TELLER	4E	3														
TOGIAK	4E	3														
TOKSOOK BAY	4E	1														
4E Totals		100	46	3	53	14	0	36	11	0	100	71	0	71	71.0%	3
Rural Community Subtotals		6,641	3,449	293	3,325	774	69	2,431	368	83	7,083	4,591	536	5,127	72.4%	445
TRIBAL/RURAL GRAND TOTALS		13,372	4,909	783	8,179	1,305	195	6,666	690	216	14,206	6,904	1,522	8,426	59.3%	1,194

50

City of Residence	State of Residence	First Mailing			Second Mailing			Third Mailing			Totals					
		Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	SHARCs Issued	Returned by Mail	Returned through Staff	Response	Response Rate	Undeliverable
ADAK	AK	12	7	0	5	1	0	5	0	0	12	8	0	8	66.7%	0
AKHIK	AK	23	1	0	22	1	0	21	1	1	23	3	0	3	13.0%	1
AKUTAN	AK	47	6	0	42	5	0	39	0	0	47	11	0	11	23.4%	0
ALAKANUK	AK	1														
ALEKNAGIK	AK	4														
ANCHOR POINT	AK	12	3	0	9	0	1	8	5	0	12	8	0	8	66.7%	1
ANCHORAGE	AK	235	63	20	157	26	11	121	20	6	235	109	3	112	47.7%	37
ANGOON	AK	173	39	2	135	12	1	120	10	2	173	61	77	138	79.8%	5
ATKA	AK	4														
AUKE BAY	AK	3														
BARROW	AK	1														
BETHEL	AK	11	5	0	6	0	0	6	0	0	11	5	0	5	45.5%	0
BIG LAKE	AK	2														
CHEFORNAK	AK	20	5	0	15	1	0	14	0	0	20	6	0	6	30.0%	0
CHENEGA BAY	AK	3	0	1	1	0	0	8	0	0	19	0	10	10	52.6%	1
CHEVAK	AK	11	6	0	5	1	0	4	0	0	11	7	0	7	63.6%	0

-continued-

Table 3.–Page 4 of 5.

City of Residence	State of Residence	First Mailing			Second Mailing			Third Mailing			Totals					
		Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	SHARCs Issued	Returned by Mail	Returned through Staff	Response	Response Rate	Undeliverable
CHIGNIK	AK	28	15	2	13	4	0	10	3	0	28	22	0	22	78.6%	2
CHIGNIK BAY	AK	3														
CHIGNIK LAGOON	AK	42	11	3	29	5	0	29	1	0	42	17	0	17	40.5%	3
CHIGNIK LAKE	AK	7	3	0	4	2	0	2	0	1	7	5	0	5	71.4%	1
CHINIAK	AK	22	10	3	12	1	2	6	1	0	22	12	0	12	54.5%	5
CHUGIAK	AK	9	2	4	3	1	2	0	0	0	9	3	0	3	33.3%	6
CLARKS POINT	AK	4														
COFFMAN COVE	AK	44	26	3	18	5	0	13	3	0	44	34	0	34	77.3%	3
COLD BAY	AK	23	14	0	12	5	2	4	1	0	23	20	0	20	87.0%	2
CORDOVA	AK	607	331	17	294	68	14	186	31	3	607	430	0	430	70.8%	34
CRAIG	AK	473	244	31	232	44	5	166	20	6	475	308	8	316	66.5%	42
DILLINGHAM	AK	64	33	1	32	9	0	21	6	0	64	48	0	48	75.0%	1
DOUGLAS	AK	26	3	11	12	0	1	11	1	1	26	4	0	4	15.4%	13
DUTCH HARBOR	AK	76	26	1	54	8	3	45	12	2	76	46	0	46	60.5%	6
EAGLE RIVER	AK	9	3	0	6	3	0	3	0	0	9	6	0	6	66.7%	0
EDNA BAY	AK	25	17	0	13	2	0	8	2	0	25	21	0	21	84.0%	0
EEK	AK	20	6	0	14	0	0	14	1	0	20	7	0	7	35.0%	0
ELFIN COVE	AK	18	8	1	10	3	0	8	1	0	18	12	0	12	66.7%	1
EXCURSION INLET	AK	2														
FAIRBANKS	AK	6	1	2	3	1	1	2	0	0	6	2	0	2	33.3%	3
FALSE PASS	AK	11	1	3	7	1	0	6	2	0	11	4	0	4	36.4%	3
FRITZ CREEK	AK	2														
GAMBELL	AK	6	0	0	6	0	0	6	0	0	6	0	0	0	0.0%	0
GOLOVIN	AK	1														
GOODNEWS BAY	AK	15	1	0	15	0	0	14	5	0	15	6	0	6	40.0%	0
GUSTAVUS	AK	67	34	1	39	13	0	29	5	0	67	52	0	52	77.6%	1
HAINES	AK	528	305	19	236	65	5	161	25	5	529	395	0	395	74.7%	29
HOLLIS	AK	5														
HOMER	AK	27	8	0	19	3	0	16	5	0	27	16	0	16	59.3%	0
HOONAH	AK	331	99	13	231	58	6	174	21	2	331	178	0	178	53.8%	21
HOOPER BAY	AK	89	16	0	76	12	1	62	9	1	89	37	0	37	41.6%	2
HYDABURG	AK	193	2	0	161	4	0	140	1	1	194	7	182	189	97.4%	1
HYDER	AK	35	14	0	26	4	0	20	6	0	35	24	0	24	68.6%	0
JUNEAU	AK	485	109	68	315	25	21	273	25	18	485	159	2	161	33.2%	107
KAKE	AK	167	69	16	86	19	0	75	13	2	167	101	0	101	60.5%	18
KARLUK	AK	1														
KASAAN	AK	21	6	0	16	3	0	14	3	5	21	12	0	12	57.1%	5
KASLOF	AK	9	1	0	7	0	0	7	0	0	9	1	0	1	11.1%	1
KENAI	AK	72	31	4	42	8	2	29	4	0	72	43	0	43	59.7%	6
KETCHIKAN	AK	1014	210	107	699	51	26	578	25	21	1014	286	216	502	49.5%	154
KING COVE	AK	70	26	0	48	9	1	39	5	0	70	40	0	40	57.1%	1
KING SALMON	AK	2														
KIPNUK	AK	87	5	0	82	4	0	81	0	0	87	9	0	9	10.3%	0
KLAWOCK	AK	314	95	12	222	29	2	186	19	5	314	143	1	144	45.9%	19
KODIAK	AK	1420	607	124	763	128	27	668	83	18	1716	818	305	1123	65.4%	169
KONGIGANAK	AK	9	2	0	7	0	0	7	0	0	9	2	0	2	22.2%	0
KWIGILLINGOK	AK	48	1	0	47	4	0	46	2	0	48	7	0	7	14.6%	0
LARSEN BAY	AK	37	21	4	14	0	0	12	0	0	37	21	0	21	56.8%	4
MANOKOTAK	AK	2														
MARSHALL	AK	1														
MEKORYUK	AK	14	4	0	10	1	0	9	2	0	14	7	0	7	50.0%	0
METLAKATLA	AK	419	66	7	351	40	6	310	27	1	419	133	0	133	31.7%	14
MEYERS CHUCK	AK	10	7	1	3	2	0	2	0	0	10	9	0	9	90.0%	1
NAKNEK	AK	11	6	1	4	1	0	3	0	0	11	7	0	7	63.6%	1
NANWALEK	AK	0	0	0	0	0	0	0	2	0	31	2	28	30	96.8%	0
NAPAKIAK	AK	3														
NAUKATI	AK	12	8	0	6	2	0	2	1	0	12	11	0	11	91.7%	0
NELSON LAGOON	AK	1														
NEWTOK	AK	3														
NIGHTMUTE	AK	15	3	0	13	1	0	11	1	0	15	5	0	5	33.3%	0
NIKISKI	AK	8	5	0	4	1	0	3	0	0	8	6	0	6	75.0%	0
NIKOLSKI	AK	18	2	0	16	0	0	16	0	0	18	2	0	2	11.1%	0
NINILCHIK	AK	64	15	0	51	3	1	47	8	1	64	26	0	26	40.6%	2
NOME	AK	10	3	1	6	0	0	6	0	0	10	3	0	3	30.0%	1
NORTH POLE	AK	3														
OLD HARBOR	AK	71	32	2	39	5	2	31	4	0	71	41	0	41	57.7%	4
OUZINKIE	AK	48	18	4	29	6	0	19	3	0	48	27	0	27	56.3%	4
PALMER	AK	5														
PELICAN	AK	53	27	6	26	6	2	14	0	0	53	33	0	33	62.3%	8
PERRYVILLE	AK	47	14	4	29	5	1	26	4	2	47	23	0	23	48.9%	7
PETERSBURG	AK	1082	560	30	563	156	3	398	61	17	1082	777	2	779	72.0%	50
PLATINUM	AK	1														
POINT BAKER	AK	27	13	1	16	3	0	12	4	0	27	20	0	20	74.1%	1
PORT ALEXANDER	AK	24	10	0	17	5	0	15	3	0	24	18	0	18	75.0%	0
PORT GRAHAM	AK	0	0	0	0	0	0	0	0	0	50	0	33	33	66.0%	0
PORT HEIDEN	AK	1														
PORT LIONS	AK	77	27	0	50	9	0	45	2	0	77	38	0	38	49.4%	0
PORT PROTECTION	AK	1														
PORT WILLIAM	AK	2														
QUINHAGAK	AK	14	3	0	11	0	0	11	0	0	14	3	0	3	21.4%	0

-continued-

Table 3.–Page 5 of 5.

City of Residence	State of Residence	First Mailing			Second Mailing			Third Mailing			Totals					
		Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	Surveys Mailed	Surveys Returned	Surveys Returned Undeliverable	SHARCs Issued	Returned by Mail	Returned through Staff	Response	Response Rate	Undeliverable
SAND POINT	AK	365	74	47	247	35	7	210	21	5	365	130	0	130	35.6%	59
SAVOONGA	AK	43	8	0	36	5	0	32	1	0	43	14	0	14	32.6%	0
SAXMAN	AK	15	7	0	13	0	0	12	0	0	15	7	2	9	60.0%	0
SCAMMON BAY	AK	2														
SELDOVIA	AK	122	70	1	55	19	1	35	9	1	123	98	0	98	79.7%	3
SEWARD	AK	12	5	0	6	2	0	5	0	0	12	7	1	8	66.7%	0
SHISHMAREF	AK	1														
SITKA	AK	1704	740	96	924	162	8	774	88	42	1895	990	312	1302	68.7%	146
SKAGWAY	AK	60	30	3	33	12	1	20	0	0	60	42	0	42	70.0%	4
SOLDOTNA	AK	16	7	0	10	1	0	10	2	0	16	10	0	10	62.5%	0
SOUTH NAKNEK	AK	3														
ST GEORGE ISLAND	AK	26	2	0	24	2	0	24	0	0	26	4	0	4	15.4%	0
ST PAUL ISLAND	AK	0	0	0	0	0	0	0	0	0	244	0	229	229	93.9%	0
STERLING	AK	4														
SUTTON	AK	1														
TATTLEK	AK	30	10	1	22	5	0	21	2	1	30	17	0	17	56.7%	2
TELLER	AK	3														
TENAKEE SPRINGS	AK	44	27	0	21	6	2	12	2	0	44	35	0	35	79.5%	2
THORNE BAY	AK	134	78	11	57	11	2	38	10	1	135	99	0	99	73.3%	14
TOGLAK	AK	10	4	0	7	3	0	4	0	0	10	7	0	7	70.0%	0
TOKSOOK BAY	AK	533	22	12	501	15	0	484	2	37	533	39	100	139	26.1%	49
TRAPPER CREEK	AK	1														
TUNUNAK	AK	70	7	0	63	1	0	62	2	0	70	10	0	10	14.3%	0
TWIN HILLS	AK	2														
UNALAKLEET	AK	1														
UNALASKA	AK	95	36	2	62	16	1	42	3	0	95	55	4	59	62.1%	3
VALDEZ	AK	27	9	2	17	0	0	17	5	0	27	14	0	14	51.9%	2
WARD COVE	AK	42	11	7	25	2	0	22	0	0	42	13	6	19	45.2%	7
WASILLA	AK	24	6	0	18	5	6	12	0	0	24	11	1	12	50.0%	6
WHALE PASS	AK	2														
WHITE MOUNTAIN	AK	1														
WHITTIER	AK	1														
WILLOW	AK	1														
WRANGELL	AK	504	271	31	233	73	5	145	22	1	504	366	0	366	72.6%	37
YAKUTAT	AK	113	53	4	63	10	0	54	9	1	113	72	0	72	63.7%	5
Alaska Resident Subtotal		13195	4871	752	8064	1292	183	6577	687	210	14029	6850	1522	8372	59.7%	1145
Non-Alaska Resident Subtotal¹		177	38	31	115	13	12	89	3	6	177	54	0	54	30.5%	49
Residence Grand Totals		13372	4909	783	8179	1305	195	6666	690	216	14206	6904	1522	8426	59.3%	1194

¹ To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs are not reported in this table. Tribal and community subtotals include all tribes and communities

² SHARC = Subsistence halibut registration certificate.

³ Note that members of eligible Alaska tribes may obtain SHARCs regardless of place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

Table 4.—Estimated Alaska subsistence harvests of halibut, sport halibut harvests by SHARC holders, and incidental harvests of lingcod and rockfish by SHARC type and regulatory area of the tribe or rural community of registration by the SHARC holder, 2006.

SHARC ¹ Type	Halibut Regulatory Area	Return Rate			Subsistence Fished for Halibut		Subsistence Halibut Harvest		Sport Fished for Halibut		Sport Halibut Harvest		Lingcod Incidental Harvest		Rockfish Incidental Harvest	
		SHARCs Issued	Surveys Returned	Percent	Estimated Number of Fishers	Percent of SHARCs	Estimated Number of Fish	Estimated Pounds ³	Estimated Number	Percent of SHARCs	Estimated Number of Fish	Estimated Pounds ³	Estimated Number of Fishers	Estimated Number of Fish	Estimated Number of Fishers	Estimated Number of Fish
Tribal ²	2C	3,825	1,875	49.0%	1,085	28.4%	10,038	247,576	561	14.7%	1,830	36,477	195	815	329	5,068
Tribal	3A	1,221	603	49.4%	508	41.6%	5,613	122,655	183	15.0%	676	14,195	94	452	113	1,506
Tribal	3B	579	227	39.2%	252	43.6%	1,945	42,715	59	10.2%	255	8,498	27	155	41	959
Tribal	4A	99	31	31.3%	61	61.2%	680	13,876	23	23.3%	66	815	7	42	12	153
Tribal	4B	6	3	50.0%	4	66.7%	94	1,236	2	33.3%	2	30	0	0	0	0
Tribal	4C	281	238	84.7%	47	16.8%	534	8,343	0	0.0%	0	0	0	0	0	0
Tribal	4D	50	14	28.0%	22	44.0%	233	8,297	0	0.0%	0	0	6	19	3	19
Tribal	4E	1,062	308	29.0%	350	33.0%	6,376	66,043	23	2.2%	85	1,596	25	197	20	169
Tribal	All	7,123	3,299	46.3%	2,329	32.7%	25,512	510,740	851	11.9%	2,914	61,611	354	1,679	518	7,874
Rural ²	2C	4,510	3,329	73.8%	2,213	49.1%	16,147	344,210	1,200	26.6%	4,265	76,430	434	1,304	748	6,561
Rural	3A	2,245	1,579	70.3%	1,221	54.4%	10,928	239,077	765	34.1%	3,754	79,490	132	436	249	2,347
Rural	3B	82	58	70.7%	54	66.0%	605	11,373	20	24.6%	105	2,491	5	55	6	86
Rural	4A	128	80	62.5%	65	51.2%	532	13,686	47	36.6%	156	3,261	2	9	8	77
Rural	4B	16	9	56.3%	6	34.4%	32	1,050	0	0.0%	0	0	0	0	0	0
Rural	4C	2	1	50.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Rural	4D	0	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Rural	4E	100	71	71.0%	21	20.8%	334	5,176	11	11.1%	26	356	1	2	0	0
Rural	All	7,083	5,127	72.4%	3,580	50.5%	28,577	614,572	2,044	28.9%	8,305	162,028	573	1,806	1,011	9,071
All ³	2C	8,335	5,204	62.4%	3,298	39.6%	26,185	591,786	1,761	21.1%	6,095	112,907	629	2,119	1,077	11,629
All	3A	3,466	2,182	63.0%	1,729	49.9%	16,541	361,731	948	27.4%	4,430	93,685	226	888	362	3,853
All	3B	661	285	43.1%	306	46.3%	2,549	54,088	79	12.0%	360	10,989	32	210	47	1,045
All	4A	227	111	48.9%	126	55.5%	1,212	27,562	70	30.8%	222	4,076	8	51	19	230
All	4B	22	12	54.5%	10	43.2%	126	2,286	2	9.1%	2	30	0	0	0	0
All	4C	283	239	84.5%	47	16.7%	534	8,343	0	0.0%	0	0	0	0	0	0
All	4D	50	14	28.0%	22	44.0%	233	8,297	0	0.0%	0	0	6	19	3	19
All	4E	1,162	379	32.6%	371	32.0%	6,709	71,219	34	2.9%	111	1,952	26	199	20	169
All	All	14,206	8,426	59.3%	5,909	41.6%	54,089	1,125,312	2,894	20.4%	11,219	223,639	927	3,486	1,529	16,945

¹ SHARC = Subsistence Halibut Registration Certificate

² "Tribal" = individuals who obtained SHARCs as member of an eligible tribe, sorted by location of tribal headquarters. "Rural" = individuals who obtained SHARCs as residents of an eligible rural community. "All" = sum of tribal and rural SHARC holders for a regulatory area based on location of tribal headquarters or rural community. Because some SHARC holders may fish in regulatory areas other than the location of the area of their tribal headquarters or rural residence, area totals in this table differ slightly from those in Table 6, Table 7, and Table 9.

³ Pounds net (dressed) weight, = 75% of round (whole) weight.

Source: Alaska Department of Fish and Game, Division of Subsistence SHARC Survey, 2007.

Table 5.—Age of subsistence halibut registration certificate holders by SHARC type, 2006.

SHARC Type	Age in Years (Number of SHARC Holders)																				totals
	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 - 94	95 - 99	
Tribal	61	241	358	477	487	486	453	645	796	803	704	562	368	304	193	104	50	18	11	2	7,123
	0.9%	3.7%	5.5%	7.3%	7.5%	7.4%	6.9%	9.9%	12.2%	12.3%	10.8%	8.6%	5.6%	4.7%	3.0%	1.6%	0.8%	0.3%	0.2%	0.0%	
Rural	22	86	148	220	236	385	492	633	774	949	1025	840	573	353	203	83	48	11	1	1	7,083
	0.3%	1.2%	2.0%	3.0%	3.2%	5.3%	6.8%	8.7%	10.6%	13.0%	14.1%	11.5%	7.9%	4.8%	2.8%	1.1%	0.7%	0.2%	0.0%	0.0%	
Grand Totals	83	327	506	697	723	871	945	1278	1570	1752	1729	1402	941	657	396	187	98	29	12	3	14,206
	0.6%	2.4%	3.7%	5.0%	5.2%	6.3%	6.8%	9.3%	11.4%	12.7%	12.5%	10.1%	6.8%	4.8%	2.9%	1.4%	0.7%	0.2%	0.1%	0.0%	
Toksook Bay	4	57	82	72	45	31	41	48	39	27	20	16	22	12	6	6	1	1	1	1	532
	0.7%	10.7%	15.4%	13.5%	8.4%	5.8%	7.7%	9.0%	7.3%	5.1%	3.7%	3.0%	4.1%	2.2%	1.1%	1.1%	0.2%	0.2%	0.2%	0.2%	
Tribal, w/o Toksook Bay	57	184	276	405	442	455	412	597	757	776	684	546	346	292	187	98	49	17	10	1	6,591
	1.0%	3.1%	4.6%	6.8%	7.4%	7.6%	6.9%	10.0%	12.6%	12.9%	11.4%	9.1%	5.8%	4.9%	3.1%	1.6%	0.8%	0.3%	0.2%	0.0%	

Source: SHARC database, Restricted Access Management Program, NMFS, Juneau, as of 12/31/2006.

Table 6.—Estimated Alaska subsistence harvests of halibut by halibut regulatory area, and subarea fished and by gear type, and estimated sport harvests by SHARC holders, 2006.

Subarea	Halibut Regulatory Area	Number of SHARCs Fished ³ (any halibut)	Estimated Subsistence Harvest by Gear Type ¹									Estimated Sport Harvest		
			Setline (fixed) Gear			Hand-Operated Gear			All Subsistence Gear			Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested ²
			Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested ²	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested ²	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested ²			
Southern Southeast Alaska	2C	2,156	1,374	10,421	246,748	782	3,339	61,173	1,748	13,760	307,921	1,039	3,615	68,241
Sitka LAMP Area	2C	1,026	777	5,180	132,338	284	1,049	15,188	887	6,229	147,526	394	1,246	21,835
Northern Southeast Alaska	2C	908	649	4,838	103,407	285	1,111	21,262	769	5,949	124,670	327	1,058	19,573
Subtotal	2C	3,936	2,721	20,439	482,494	1,333	5,498	97,623	3,298	25,937	580,117	1,731	5,919	109,649
Yakutat Area	3A	84	63	710	15,698	24	197	3,489	70	907	19,187	25	148	2,288
Prince William Sound	3A	375	245	1,693	38,092	146	448	9,873	301	2,141	47,965	180	528	10,084
Cook Inlet	3A	317	76	1,088	23,743	182	2,106	36,222	221	3,194	59,965	162	869	15,156
Kodiak Island Road System	3A	903	520	4,029	95,688	398	2,035	44,700	758	6,064	140,388	469	2,150	48,569
Kodiak Island Other	3A	685	395	3,015	73,342	319	1,712	38,410	591	4,727	111,752	262	1,027	23,505
Subtotal	3A	2,119	1,220	10,535	246,564	1,003	6,498	132,694	1,790	17,033	379,258	1,025	4,723	99,602
Chignik Area	3B	94	49	545	12,351	66	294	5,428	94	838	17,780	22	89	2,482
Lower Alaska Peninsula	3B	206	86	667	11,010	134	896	19,757	193	1,562	30,767	43	273	8,009
Subtotal	3B	298	135	1,211	23,361	198	1,189	25,185	285	2,401	48,547	65	362	10,491
Eastern Aleutians - East	4A	139	53	341	6,888	83	911	19,105	115	1,251	25,993	56	212	3,830
Eastern Aleutians - West	4A	21	6	30	746	18	9	323	21	39	1,069	12	0	0
Subtotal	4A	156	55	370	7,634	98	920	19,428	132	1,290	27,062	68	212	3,830
Western Aleutians - East	4B	12	10	103	2,179	6	19	583	10	122	2,761	2	3	68
Western Aleutians - Other	4B	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	4B	12	10	103	2,179	6	19	583	10	122	2,761	2	3	68
St. George Island	4C	20	0	0	0	20	169	3,443	20	169	3,443	0	0	0
St. Paul Island	4C	29	24	333	4,097	8	40	988	29	373	5,085	0	0	0
Subtotal	4C	49	24	333	4,097	28	209	4,430	49	542	8,527	0	0	0
St. Lawrence Island	4D	22	22	223	7,708	9	9	589	22	233	8,297	0	0	0
Area 4D, Other	4D	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	4D	22	22	223	7,708	9	9	589	22	233	8,297	0	0	0
Bristol Bay	4E	21	16	40	1,139	10	8	197	18	47	1,336	6	0	0
Yukon/Kuskokwim Delta	4E	358	45	701	7,356	343	5,783	62,050	358	6,484	69,407	10	0	0
Norton Sound	4E	0	0	0	0	0	0	0	9	0	0	0	0	0
Subtotal	4E	379	61	741	8,496	353	5,791	62,247	376	6,531	70,743	16	0	0
Grand totals¹	Alaska	6,899	4,226	33,956	782,532	3,007	20,133	342,779	5,909	54,089	1,125,312	2,894	11,219	223,639

¹ Setline = longline or skate. Hand-operated gear = rod and reel or handline.

² Pounds are net (dressed) weight. Net weight = 75% of round weight.

³ Because fishers might fish in more than one area, subtotals for regulatory areas and the state total might exceed the sum of the subarea values. Includes subsistence and sport fishing.

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2007.

Table 7.—Alaska subsistence halibut harvests in 2003, 2004, 2005, and 2006 by geographic area fished.

	Subsistence Halibut Harvests, Net Lbs				% Change between Years				Percentage of State Total			
	2003	2004	2005	2006	2003 to 2004	2004 to 2005	2005 to 2006	2003 to 2006	2003	2004	2005	2006
Southern Southeast Alaska	290,443	369,319	328,658	307,921	27.2%	-11.0%	-6.3%	6.0%	27.9%	31.0%	27.9%	27.4%
Sitka LAMP Area	173,323	147,312	133,545	147,526	-15.0%	-9.3%	10.5%	-14.9%	16.6%	12.3%	11.3%	13.1%
Northern Southeast Alaska	159,772	160,453	135,869	124,670	0.4%	-15.3%	-8.2%	-22.0%	15.3%	13.4%	11.5%	11.1%
Area 2C Subtotal	623,538	677,084	598,072	580,117	8.6%	-11.7%	-3.0%	-7.0%	59.9%	56.7%	50.8%	51.6%
Yakutat Area	11,198	20,153	36,515	19,187	80.0%	81.2%	-47.5%	71.3%	1.1%	1.7%	3.1%	1.7%
Prince William Sound	28,409	58,429	68,063	47,965	105.7%	16.5%	-29.5%	68.8%	2.7%	4.9%	5.8%	4.3%
Cook Inlet	52,609	83,939	79,024	59,965	59.6%	-5.9%	-24.1%	14.0%	5.1%	7.0%	6.7%	5.3%
Kodiak Island Road System	114,028	129,145	134,849	140,388	13.3%	4.4%	4.1%	23.1%	11.0%	10.8%	11.4%	12.5%
Kodiak Island Other	79,256	111,944	110,824	111,752	41.2%	-1.0%	0.8%	41.0%	7.6%	9.4%	9.4%	9.9%
Area 3A Subtotal	285,500	403,610	429,275	379,258	41.4%	6.4%	-11.7%	32.8%	27.4%	33.8%	36.4%	33.7%
Chignik Area	10,500	12,053	14,783	17,780	14.8%	22.7%	20.3%	69.3%	1.0%	1.0%	1.3%	1.6%
Lower Alaska Peninsula	16,977	21,467	31,442	30,767	26.4%	46.5%	-2.1%	81.2%	1.6%	1.8%	2.7%	2.7%
Area 3B Subtotal	27,477	33,519	46,225	48,547	22.0%	37.9%	5.0%	76.7%	2.6%	2.8%	3.9%	4.3%
Eastern Aleutians - East	19,345	26,715	33,882	25,993	38.1%	26.8%	-23.3%	34.4%	1.9%	2.2%	2.9%	2.3%
Eastern Aleutians - West	1,852	2,162	1,734	1,069	16.7%	-19.8%	-38.4%	-42.3%	0.2%	0.2%	0.1%	0.1%
Area 4A Subtotal	21,197	28,877	35,615	27,062	36.2%	23.3%	-24.0%	27.7%	2.0%	2.4%	3.0%	2.4%
Western Aleutians - East	2,582	916	1,351	2,761	-64.5%	47.5%	104.4%	6.9%	0.2%	0.1%	0.1%	0.2%
Western Aleutians - Other	0	0	0	0					0.0%	0.0%	0.0%	0.0%
Area 4B Subtotal	2,582	916	1,351	2,761	-64.5%	47.5%	104.4%	6.9%	0.2%	0.1%	0.1%	0.2%
St. George Island	2,042	1,823	2,145	3,443	-10.7%	17.7%	60.5%	68.6%	0.2%	0.2%	0.2%	0.3%
St. Paul Island	20,839	7,911	5,571	5,085	-62.0%	-29.6%	-8.7%	-75.6%	2.0%	0.7%	0.5%	0.5%
Area 4C Subtotal	22,881	9,734	7,716	8,527	-57.5%	-20.7%	10.5%	-62.7%	2.2%	0.8%	0.7%	0.8%
St. Lawrence Island	4,380	10,923	5,848	8,297	149.4%	-46.5%	41.9%	89.4%	0.4%	0.9%	0.5%	0.7%
Area 4D, Other	0	0	0	0					0.0%	0.0%	0.0%	0.0%
Area 4D Subtotal	4,380	10,923	5,848	8,297	149.4%	-46.5%	41.9%	89.4%	0.4%	0.9%	0.5%	0.7%
Bristol Bay	435	203	2,169	1,336	-53.3%	967.2%	-38.4%	207.2%	0.0%	0.0%	0.2%	0.1%
YK Delta	53,284	28,298	51,950	69,407	-46.9%	83.6%	33.6%	30.3%	5.1%	2.4%	4.4%	6.2%
Norton Sound	56	0	0	0	-100.0%			-100.0%	0.0%	0.0%	0.0%	0.0%
Area 4E Subtotal	53,775	28,501	54,119	70,743	-47.0%	89.9%	30.7%	31.6%	5.2%	2.4%	4.6%	6.3%
Alaska grand totals ¹	1,041,330	1,193,162	1,178,222	1,125,312	14.6%	-1.3%	-4.5%	8.1%	100.0%	100.0%	100.0%	100.0%

¹ The sum of the harvests by geographic areas for 2003 reported here differs slightly from that reported in Table 8 in Fall et al (2004:50) due to rounding.

Table 8.—Number of hooks usually fished, setline (stationary) gear, Alaska subsistence halibut fishery, 2006.

Regulatory Area	SHARC holders	Number of Hooks ²																														Grand Total ¹	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		Missing
2C	8,335	8	8	10	22	14	35	4	18	7	226	0	68	1	1	224	8	5	24	1	575	4	8	5	15	218	17	13	47	15	1,022	100	2,726
		0.3%	0.3%	0.4%	0.8%	0.5%	1.3%	0.2%	0.7%	0.3%	8.3%	0.0%	2.5%	0.0%	0.0%	8.2%	0.3%	0.2%	0.9%	0.1%	21.1%	0.2%	0.3%	0.2%	0.5%	8.0%	0.6%	0.5%	1.7%	0.5%	37.5%	3.8%	
3A	3,466	11	6	5	9	12	6	10	5	3	83	1	26	6	0	85	5	0	11	0	231	3	0	2	5	111	5	5	15	10	471	45	1,186
		0.9%	0.5%	0.4%	0.8%	1.0%	0.5%	0.8%	0.4%	0.2%	7.0%	0.1%	2.2%	0.5%	0.0%	7.2%	0.4%	0.0%	0.9%	0.0%	19.5%	0.2%	0.0%	0.2%	0.4%	9.4%	0.4%	0.4%	1.2%	0.8%	39.8%	6.0%	
3B	661	5	7	0	3	2	2	1	0	0	17	0	1	0	0	13	0	0	0	0	20	0	0	0	0	4	0	0	0	0	65	11	151
		3.3%	4.9%	0.0%	1.9%	1.0%	1.0%	0.8%	0.0%	0.0%	11.2%	0.0%	0.9%	0.0%	0.0%	8.4%	0.0%	0.0%	0.0%	0.0%	13.4%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	43.1%	16.2%	
4A	227	0	0	0	0	0	0	0	0	0	5	0	2	0	5	2	2	0	0	0	5	0	0	0	0	2	0	0	0	0	27	0	48
		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	0.0%	4.2%	0.0%	10.1%	4.2%	3.1%	0.0%	0.0%	0.0%	10.5%	0.0%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	55.3%	0.0%	
4B	22	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	10
		42.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	
4C	283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	22	
		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	24.0%		
4D	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	3	3	22	
		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	71.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.3%	17.5%		
4E	1,162	2	7	1	0	0	2	0	0	0	3	0	0	0	0	2	0	0	0	0	3	0	0	0	0	4	0	0	0	20	18	61	
		3.3%	10.8%	1.6%	0.0%	0.0%	3.6%	0.0%	0.0%	0.0%	4.9%	0.0%	0.0%	0.0%	0.0%	3.7%	0.0%	0.0%	0.0%	0.0%	4.1%	0.0%	0.0%	0.0%	0.0%	6.5%	0.0%	0.0%	0.0%	32.8%	22.0%		
Alaska	14,206	30	29	15	34	28	44	15	22	10	335	1	98	8	6	326	14	5	35	1	852	7	8	7	20	339	22	19	61	24	1,620	189	4,226
		0.7%	0.7%	0.4%	0.8%	0.7%	1.0%	0.4%	0.5%	0.2%	7.9%	0.0%	2.3%	0.2%	0.1%	7.7%	0.3%	0.1%	0.8%	0.0%	20.2%	0.2%	0.2%	0.2%	0.5%	8.0%	0.5%	0.4%	1.5%	0.6%	38.3%	4.5%	

¹ Number of fishers using setline (fixed) gear. Based on location of tribe or rural community of SHARC holder.

² The column for 30 hooks includes those fishers who reported using more than 30. There is no 30-hook limit in Areas 4C, 4D, or 4E.

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2007.

Table 9.—Average net weight of subsistence and sport harvested halibut, 2006, by regulatory area fished.

Area ²	Subsistence Methods			Sport Harvest ¹			Total Halibut		
	Number	Pounds, Net Weight	Average per fish	Number	Pounds, Net Weight	Average per fish	Number	Pounds, Net Weight	Average per fish
2C	25,937	580,117	22.4	5,919	109,649	18.5	31,856	689,765	21.7
3A	17,033	379,258	22.3	4,723	99,602	21.1	21,756	478,860	22.0
3B	2,401	48,547	20.2	362	10,491	29.0	2,762	59,038	21.4
4A	1,290	27,062	21.0	212	3,830	18.0	1,503	30,892	20.6
4B	122	2,761	22.6	3	68	22.5	125	2,829	22.6
4C	542	8,527	15.7	0	0		542	8,527	15.7
4D	233	8,297	35.7	0	0		233	8,297	35.7
4E	6,531	70,743	10.8	0	0		6,531	70,743	10.8
Alaska	54,089	1,125,312	20.8	11,219	223,639	19.9	65,308	1,348,951	20.7

¹ Sport harvest of halibut by SHARC holders.

² Area totals are based on the location of the harvest (see also Table 6 and Table 7).

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2007.

Table 10.—Estimated harvests of lingcod and rockfish by SHARC holders while subsistence fishing for halibut, by regulatory area and geographic subarea fish, 2006.

Subarea	Regulatory Area	Number of SHARCs Fished	Estimated Harvest			
			Lingcod		Rockfish	
			Estimated Number Fished	Estimated Number Harvested	Estimated Number Fished	Estimated Number Harvested
Southern Southeast Alaska	2C	1,748	262	849	548	5,517
Sitka LAMP Area	2C	887	313	998	402	4,038
Northern Southeast Alaska	2C	769	83	210	165	1,927
Area 2C Subtotal	2C	3,298	626	2,057	1,069	11,486
Yakutat Area	3A	70	37	229	27	276
Prince William Sound	3A	301	39	93	83	719
Cook Inlet	3A	221	27	228	32	330
Kodiak Island Road System	3A	758	103	265	171	1,826
Kodiak Island Other	3A	591	61	134	100	826
Area 3A Subtotal	3A	1,790	240	949	376	3,977
Chignik Area	3B	94	10	49	20	345
Lower Alaska Peninsula	3B	193	22	172	25	669
Area 3B Subtotal	3B	285	32	221	45	1,014
Eastern Aleutians - East	4A	115	8	51	19	230
Eastern Aleutians - West	4A	21	0	0	3	17
Area 4A Subtotal	4A	132	8	51	22	247
Western Aleutians - East	4B	10	0	0	4	9
Area 4B Subtotal	4B	10	0	0	4	9
St. George Island	4C	20	0	0	0	0
St. Paul Island	4C	29	0	0	0	0
Area 4C Subtotal	4C	49	0	0	0	0
St. Lawrence Island	4D	22	6	19	3	19
Area 4D Subtotal	4D	22	6	19	3	19
Bristol Bay	4E	18	0	0	0	0
Yukon/Kuskokwim Delta	4E	358	24	189	24	194
Norton Sound	4E	0	0	0	0	0
Area 4E Subtotal	4E	376	24	189	24	194
Alaska Grand Total ¹	Alaska	5,909	927	3,486	1,529	16,945

¹ Because fishers might fish in more than one area, subtotals for regulatory areas and the state total might exceed the sum of the subarea values.

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2007.

Table 11.—Estimated harvests of halibut by gear type and participation in subsistence and sport fisheries, selected Alaska communities, 2003, 2004, 2005, and 2006.

Community	Year	Number of SHARC Holders ²	Subsistence Harvests						Sport Harvest ⁴		All Harvests	
			Setline (fixed) Gear		Hand-Operated Gear		Total Subsistence Harvest		Estimated Number Fished	Estimated Pounds Harvested	Estimated Number Fished	Estimated Pounds Harvested
			Estimated Number Fished	Estimated Pounds Harvested	Estimated Number Fished	Estimated Pounds Harvested	Estimated Number Fished	Estimated Pounds Harvested				
Cordova	2003	358	68	7,613	40	7,885	102	15,498	144	11,534	194	27,032
	2004	526	174	29,693	97	10,946	262	40,640	174	12,149	325	52,789
	2005	602	238	34,907	104	12,234	281	47,141	179	10,519	358	57,660
	2006	607	202	21,059	125	7,968	248	29,027	152	7,020	301	36,047
Kodiak	2003	1,320	438	101,575	278	51,678	646	153,254	498	68,170	858	221,424
	2004	1,561	554	131,719	335	55,605	802	187,214	581	73,181	971	260,395
	2005	1,741	650	146,781	398	64,047	871	210,828	669	82,455	1,116	293,283
	2006	1,716	684	142,326	497	63,496	961	205,822	562	64,320	1,092	270,142
Petersburg	2003	1,047	330	41,704	138	14,013	415	55,718	268	19,611	523	75,329
	2004	1,187	322	53,885	206	17,900	482	71,784	351	26,408	617	98,192
	2005	1,197	338	44,050	175	17,321	436	61,372	312	23,289	569	84,661
	2006	1,082	300	35,608	222	18,075	426	53,682	246	17,351	529	71,033
Port Graham	2003	52	10	4,398	28	7,056	35	11,454	3	156	36	11,610
	2004	57	15	4,425	31	4,755	42	9,181	11	850	42	10,031
	2005	52	8	7,938	18	3,190	18	11,127	9	488	18	11,615
	2006	50	9	2,397	24	3,797	30	6,194	2	0	30	6,194
Sand Point	2003	73	15	3,409	11	1,410	21	4,819	11	410	21	5,229
	2004	351	25	4,360	74	6,996	109	11,355	50	1,384	121	12,739
	2005	321	35	12,201	77	9,700	100	21,901	23	1,281	105	23,182
	2006	365	59	7,406	87	12,809	133	20,214	29	6,300	140	26,514
Sitka	2003	1,639	760	155,276	160	19,604	821	174,880	401	32,408	956	207,288
	2004	1,871	714	151,660	147	14,739	904	166,474	412	25,829	1,026	192,303
	2005	1,974	738	126,426	172	19,893	814	146,319	417	55,913	987	202,232
	2006	1,895	809	145,542	297	17,830	915	163,372	395	23,032	1,036	186,404
Toksook Bay	2003	532	8	3,790	47	20,709	54	24,500	0	0	54	24,500
	2004	529	7	859	44	5,737	56	6,596	0	0	56	6,596
	2005	522	5	602	60	14,269	61	14,870	2	98	62	14,968
	2006	533	6	2,333	112	34,149	113	36,481	0	0	113	36,481
Tununak	2003	0										
	2004	70	16	878	23	1,076	31	1,954	0	0	31	1,954
	2005	70	3	332	18	2,329	20	2,661	0	0	20	2,661
	2006	70	7	224	33	3,808	33	4,032	0	0	33	4,032
Unalaska ³	2003	92	39	6,713	31	4,146	50	10,860	33	5,519	70	16,379
	2004	131	43	9,557	39	5,973	81	15,530	34	2,165	93	17,695
	2005	150	60	9,573	57	8,535	88	18,108	28	2,439	97	20,547
	2006	171	53	7,526	47	8,805	81	16,331	50	3,768	101	20,100

¹ For data on all communities for 2005, see Appendix Tables 4, 5, and 6.

² SHARC = Subsistence halibut registration certificate; includes all SHARC holders living in the community.

³ Includes Dutch Harbor.

⁴ Sport harvests by SHARC holders only.

Table 12.—Estimated harvests of halibut for home use, Sitka.

Year	Number of Fishing Households	Pounds Usable (Net) Weight				Total w/o Commercial Removal	95% confidence range (+/-%) ²
		Removed from Commercial Harvests	Rod and Reel	Other Methods ¹	Total		
1987	1,252	12,353	180,982		193,335	180,982	22
1996	943	16,528	135,048	14,196	165,772	149,244	28
Annual	1,098	14,441	158,015	14,196	179,554	165,113	

¹ Harvest data not collected for "other methods" in 1987.

² Pertains to estimate of total harvests.

Source: Scott et al. 2001.

Table 13.—Estimated harvests of halibut for home use, Petersburg.

Year	Number of Fishing Households	Pounds Usable (Net) Weight				Total w/o Commercial Removal	95% confidence range (+/-%) ²
		Removed from Commercial Harvests	Rod and Reel	Other Methods ¹	Total		
1987	604	11,728	107,448		119,176	107,448	51
2000	468	6,951	49,023	0	55,974	49,023	39
Annual	536	9,339	78,236	0	87,575	78,236	

¹ Harvest data not collected for "other methods" in 1987.

² Pertains to estimate of total harvests.

Source: Scott et al. 2001; Division of Subsistence, ADF&G, Household Survey, 2001.

Table 14.—Estimated harvests of halibut for home use, Cordova.

Year	Number of Fishing Households	Pounds Usable (Net) Weight				Total w/o Commercial Removal	95% confidence range (+/-%) ¹
		Removed from Commercial Harvests	Rod and Reel	Other Methods	Total		
1985	228	3,776	31,002	1,752	36,530	32,754	29
1988	343	18,701	119,873	348	138,922	120,221	62
1991	272	25,107	25,493	116	50,716	25,609	33
1992	401	11,383	60,612	0	71,995	60,612	48
1993	382	3,762	39,556	2,056	45,374	41,612	32
1997	321	3,551	58,647	4,252	66,450	62,899	41
Annual	325	11,047	55,864	1,421	68,331	57,285	

¹ Pertains to estimate of total harvests.

Source: Scott et al. 2001.

Table 15.—Estimated harvests of halibut for home use, Port Graham.

Year	Number of Fishing Households	Pounds Usable (Net) Weight				Total	Total w/o Commercial Removal	95% confidence range (+/-%) ²
		Removed from Commercial Harvests	Rod and Reel	Other Methods				
1987	42	1,237	3,809	3,389	8,435	7,198	14	
1989	29	3,217	1,482	1,222	5,921	2,704	47	
1990	32	3,003	4,106	3,171	10,280	7,277	22	
1991	35	1,663	2,332	4,846	8,841	7,178	17	
1992	42	24	7,867	3,365	11,256	11,232	14	
1993	42	86	3,105	1,346	4,537	4,451	14	
1997	36	79	2,881	5,326	8,286	8,207	28	
Annual average ¹	38	1,015	4,017	3,574	8,606	7,591		

¹ Excludes 1989, the year of the *Exxon Valdez* oil spill.

² Pertains to estimate of total harvests.

Source: Scott et al. 2001.

Table 16.—Estimated harvests of halibut for home use, Kodiak Road System.

Year	Number of Fishing Households	Pounds Usable (Net) Weight				Total	Total w/o Commercial Removal	95% confidence range (+/-%) ²
		Removed from Commercial Harvests	Rod and Reel	Other Methods				
1982	1,404	NA	NA	NA	451,223	360,113	45	
1991	1,178	48,245	206,692	40,591	295,528	247,283	30	
1992	1,178	89,625	329,345	18,732	437,702	348,077	33	
1993	1,336	142,108	479,391	31,863	653,362	511,254	33	
Annual average	1,306	93,326	338,476	30,395	462,197	366,682		

¹ Harvest data are available based on random samples drawn from the entire road system population for 1982 and 1991. Just Kodiak City was sampled in 1992 and 1993. Estimates for the entire road system population were developed for this table based on the known portion of the total road system harvest harvested by city residents in 1982 and 1991.

² Pertains to estimate of total harvests.

Source: Scott et al. 2001.

Table 17.—Halibut removals in Alaska by regulatory area, 2006.

Area	Pounds Net Weight					Total
	Commercial ¹	Sport ²	Subsistence ³	Wastage	Bycatch	
2C	10,492,000	3,033,000	580,117	307,000	341,000	14,753,117
3A	25,714,000	6,088,000	379,258	763,000	2,939,000	35,883,258
3B	10,792,000	11,000	48,547	483,000	1,264,000	12,598,547
4	8,149,000	63,000	137,100	162,000	6,876,000	15,387,100
Alaska	55,147,000	9,195,000	1,145,022	1,715,000	11,420,000	78,622,022

¹ Commercial catch includes IPHC research catch and in Area 2C, the Metlakatla fishery catch.

² Projected harvests.

³ Includes 19,710 pounds of sublegal halibut legally retained by CDQ organizations in areas 4D and 4E for personal use. The subsistence harvest by SHARC holders was 1,128,015 pounds, including 117,405 pounds in Area 4.

Sources: Gilroy 2007; Williams 2007; Division of Subsistence, ADF&G, SHARC Survey, 2007.

Table 18.—Comparison of selected SHARC results, 2003, 2004, 2005 and 2006 study years.

	Study Years				% Change				
	2003	2004	2005	2006	2004 Compared to 2003	2005 Compared to 2004	2005 Compared to 2003	2006 Compared to 2005	2006 Compared to 2003
<u>Response to Survey</u>									
Number of SHARCs Issued	11,635	13,813	14,306	14,206	18.7%	3.6%	23.0%	-0.7%	22.1%
Number of Surveys Returned	7,593	8,524	8,565	8,426	12.3%	0.5%	12.8%	-1.6%	11.0%
Response Rate	65.3%	61.7%	59.9%	59.3%	-5.4%	-3.0%	-8.3%	-0.9%	-9.1%
<u>Subsistence Halibut Fishing</u>									
Estimated Number of Subsistence Halibut Fishers	4,942	5,984	5,621	5,909	21.1%	-6.1%	13.7%	5.1%	19.6%
Percent of All SHARC Holders Subsistence Fishing	42.5%	43.3%	39.3%	41.6%	2.0%	-9.3%	-7.5%	5.9%	-2.1%
Estimated Number of Subsistence Halibut	43,926	52,412	55,875	54,089	19.3%	6.6%	27.2%	-3.2%	23.1%
Estimated Net Pounds of Subsistence Halibut	1,041,330	1,193,162	1,178,222	1,125,312	14.6%	-1.3%	13.1%	-4.5%	8.1%
Average Weight of Subsistence-Harvested Halibut	23.7	22.8	21.1	20.8	-4.0%	-7.3%	-11.0%	-1.4%	-12.2%
Average Harvest per Fisher, Fish	8.9	8.8	9.9	9.2	-1.5%	13.5%	11.8%	-7.9%	3.0%
Average Harvest per Fisher, Net Pounds	210.7	199.4	209.6	190.4	-5.4%	5.1%	-0.5%	-9.2%	-9.6%
<u>Sport Halibut Fishing by SHARC Holders</u>									
Estimated Number of Sport Halibut Fishers	2,580	3,107	3,147	2,894	20.4%	1.3%	22.0%	-8.0%	12.2%
Percent of All SHARC Holders Sport Fishing	22.2%	22.5%	22.0%	20.4%	1.4%	-2.2%	-0.8%	-7.4%	-8.1%
Estimated Number of Sport Halibut	10,784	12,530	14,096	11,219	16.2%	12.5%	30.7%	-20.4%	4.0%
Estimated Net Pounds of Sport Halibut	245,947	251,092	293,415	223,639	2.1%	16.9%	19.3%	-23.8%	-9.1%
Average Weight of Sport-Harvested Halibut	22.8	20.0	20.8	19.9	-12.1%	3.8%	-8.8%	-4.2%	-12.6%
Average Harvest per Fisher, Fish	4.2	4.0	4.5	3.9	-3.5%	11.1%	7.2%	-13.5%	-7.3%
Average Harvest per Fisher, Net Pounds	95.3	80.8	93.2	77.3	-15.2%	15.4%	-2.2%	-17.1%	-18.9%
<u>Total Number of Halibut Fishers</u>									
Estimated Number of Fishers, Subsistence or Sport	5,941	6,980	6,876	6,899	17.5%	-1.5%	15.7%	0.3%	16.1%
Percent of Total SHARC Holders who Fished	51.1%	50.5%	48.1%	48.6%	-1.0%	-4.9%	-5.9%	1.0%	-4.9%

-continued-

Table 18.—Page 2 of 2.

	Study Years				% Change				
	2003	2004	2005	2006	2004 Compared to 2003	2005 Compared to 2004	2005 Compared to 2003	2006 Compared to 2005	2006 Compared to 2003
<u>Incidental Rockfish Harvests</u>									
Number of Rockfish Harvesters	1,239	1,616	1,544	1,529	30.4%	-4.5%	24.6%	-1.0%	23.4%
Percent of all SHARC Holders	10.6%	11.7%	10.8%	10.8%	9.9%	-7.7%	1.4%	-0.3%	1.1%
Percent of all Subsistence Halibut Fishers	25.1%	27.0%	27.5%	25.9%	7.7%	1.7%	9.6%	-5.8%	3.2%
Number of Rockfish Harvested	14,870	19,001	12,395	16,945	27.8%	-34.8%	-16.6%	36.7%	14.0%
Average Number of Rockfish Harvested, All Subsistence Halibut Fishers	3.0	3.2	2.2	2.9	5.5%	-30.6%	-26.7%	30.0%	-4.7%
Average Number of Rockfish Harvested, Subsistence Halibut Fishers who Harvested Rockfish	12.0	11.8	8.0	11.1	-2.0%	-31.7%	-33.1%	38.1%	-7.6%
<u>Incidental Lingcod Harvests</u>									
Number of Lingcod Harvesters	699	953	862	927	36.3%	-9.5%	23.3%	7.6%	32.7%
Percent of all SHARC Holders	6.0%	6.9%	6.0%	6.5%	14.8%	-12.7%	0.3%	8.4%	8.7%
Percent of all Subsistence Halibut Fishers	14.1%	15.9%	15.3%	15.7%	12.6%	-3.7%	8.4%	2.3%	11.0%
Number of Lingcod Harvested	3,298	4,407	2,355	3,486	33.6%	-46.6%	-28.6%	48.0%	5.7%
Average Number of Lingcod Harvested, All Subsistence Halibut Fishers	0.7	0.7	0.4	0.6	10.4%	-43.1%	-37.2%	40.8%	-11.6%
Average Number of Lingcod Harvested, Subsistence Halibut Fishers who Harvested Lingcod	4.7	4.6	2.7	3.8	-2.0%	-40.9%	-42.1%	37.6%	-20.3%

Sources: Fall et al. 2004, 2005, 2006; Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2007.

REPORT FIGURES

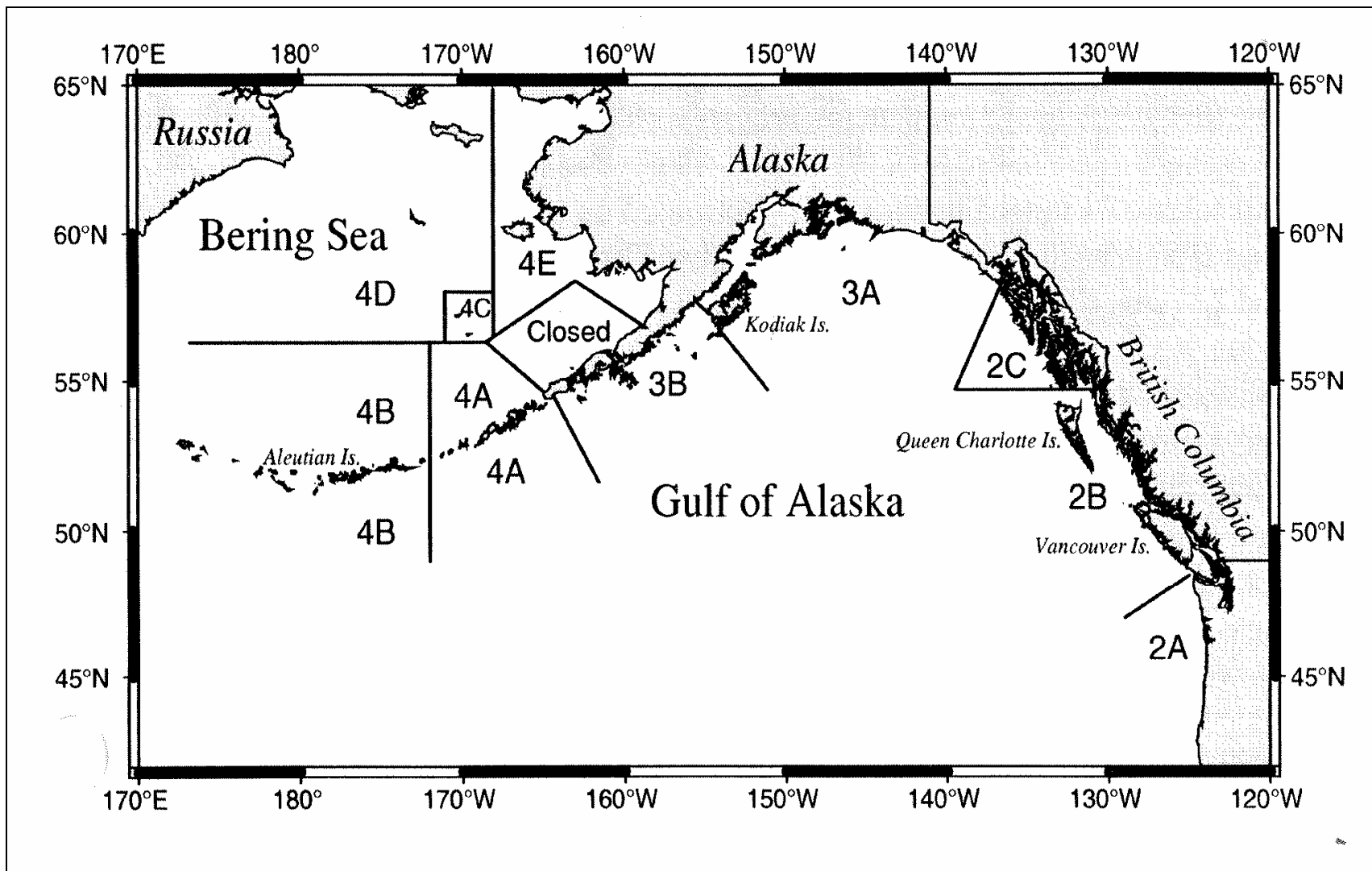


Figure 1.—Regulatory areas for the Pacific halibut fishery.

Figure 2.—Number of surveys returned and return rates for subsistence halibut surveys by SHARC type, 2006.

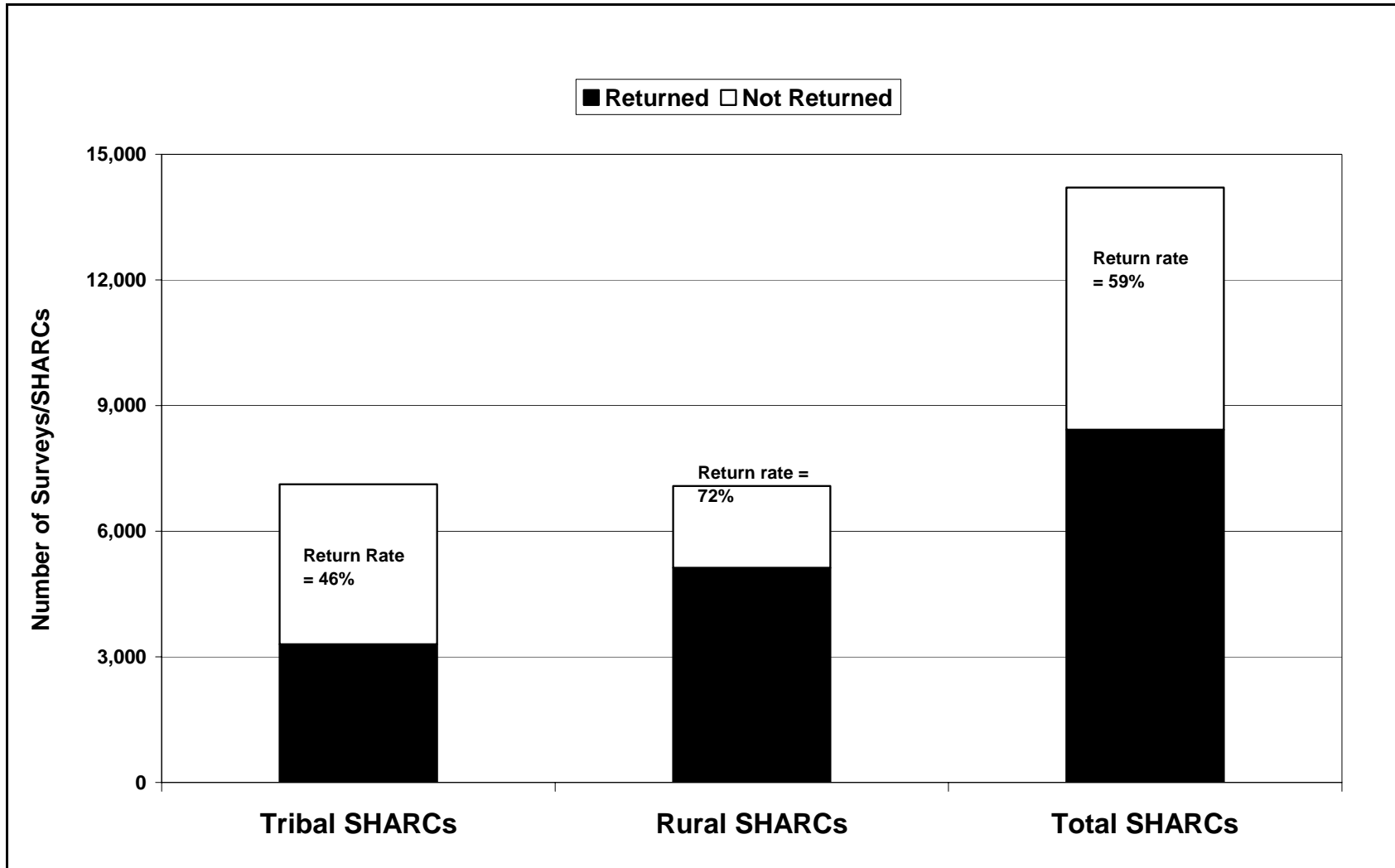


Figure 3.—Subsistence halibut harvest survey return rates, communities and tribes with more than 100 SHARCs issued, 2006.

70

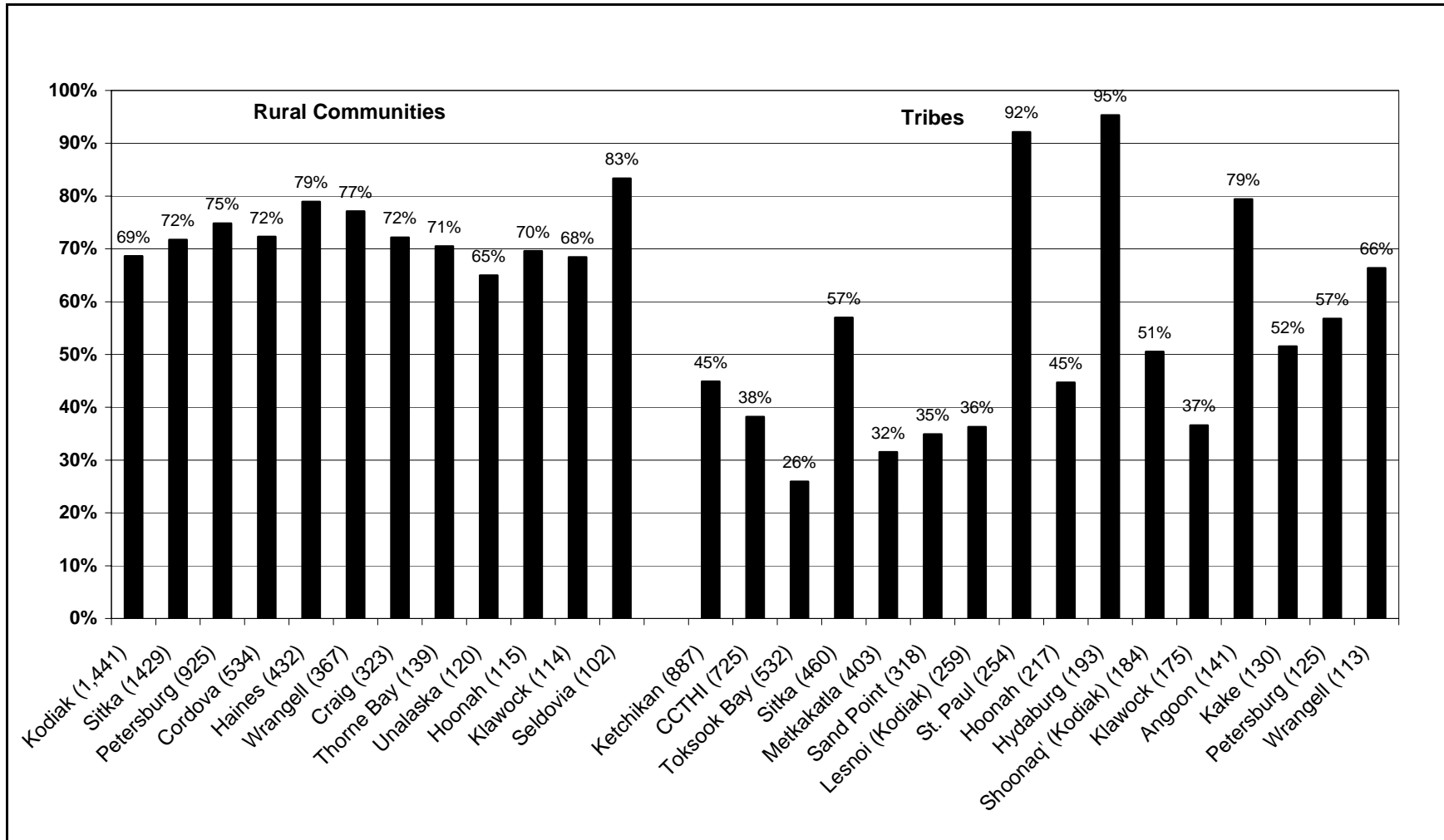


Figure 4.—Return rate by place of residence, 2006.

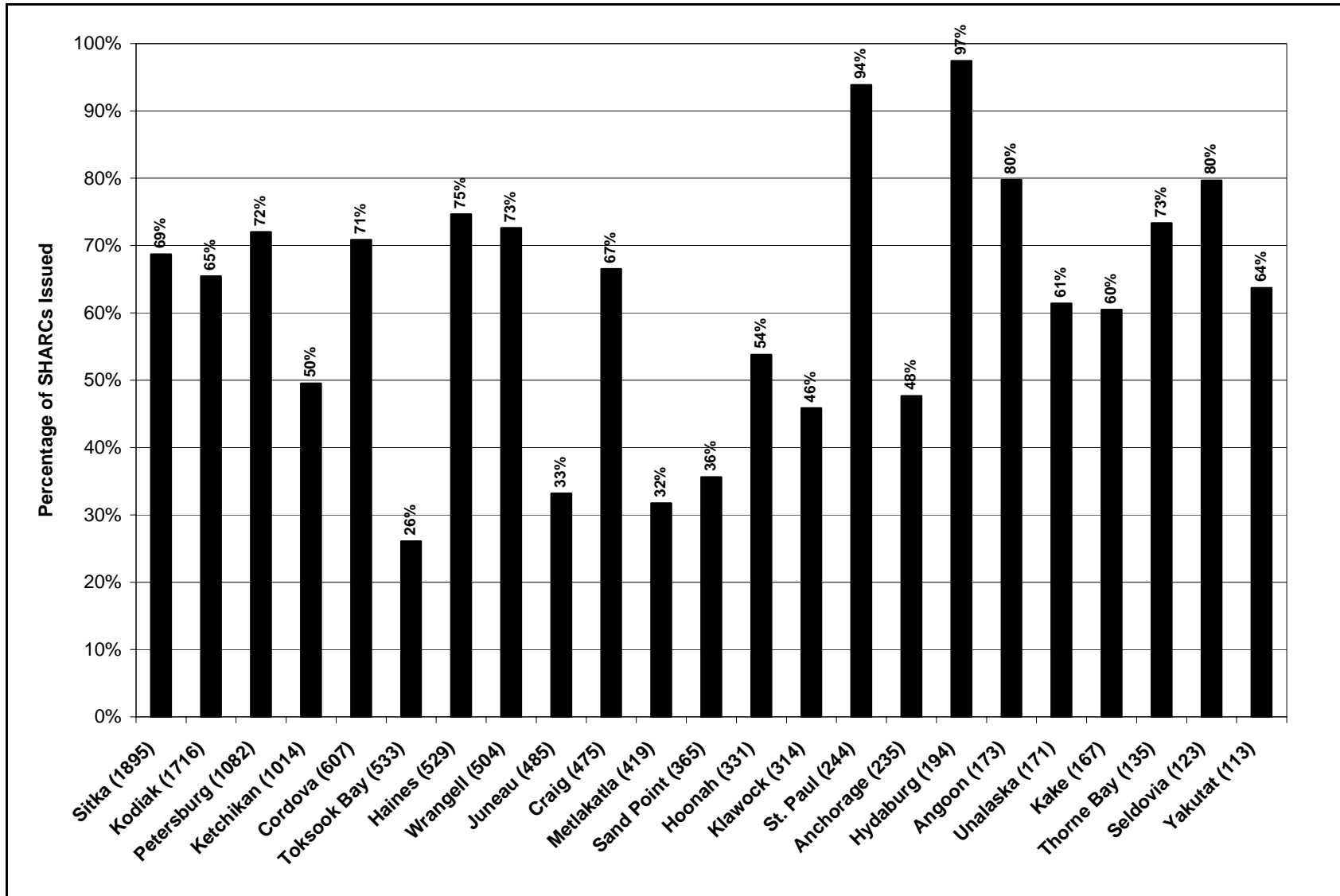


Figure 5.—Number of survey responses by response category, 2006.

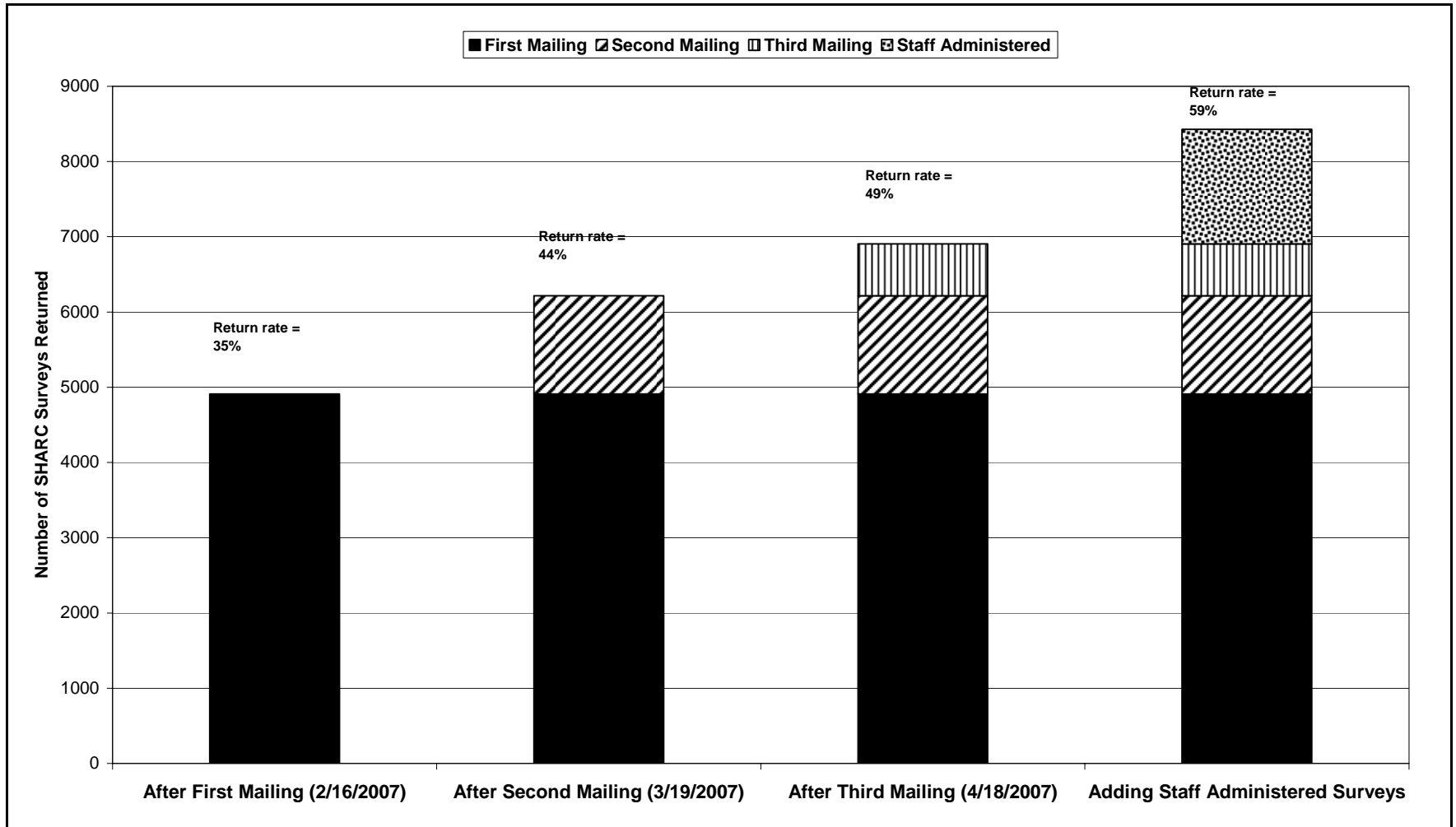


Figure 6.—Number of SHARCs issued and estimated number of subsistence halibut fishers in Alaska by SHARC type, 2003, 2004, 2005, and 2006.

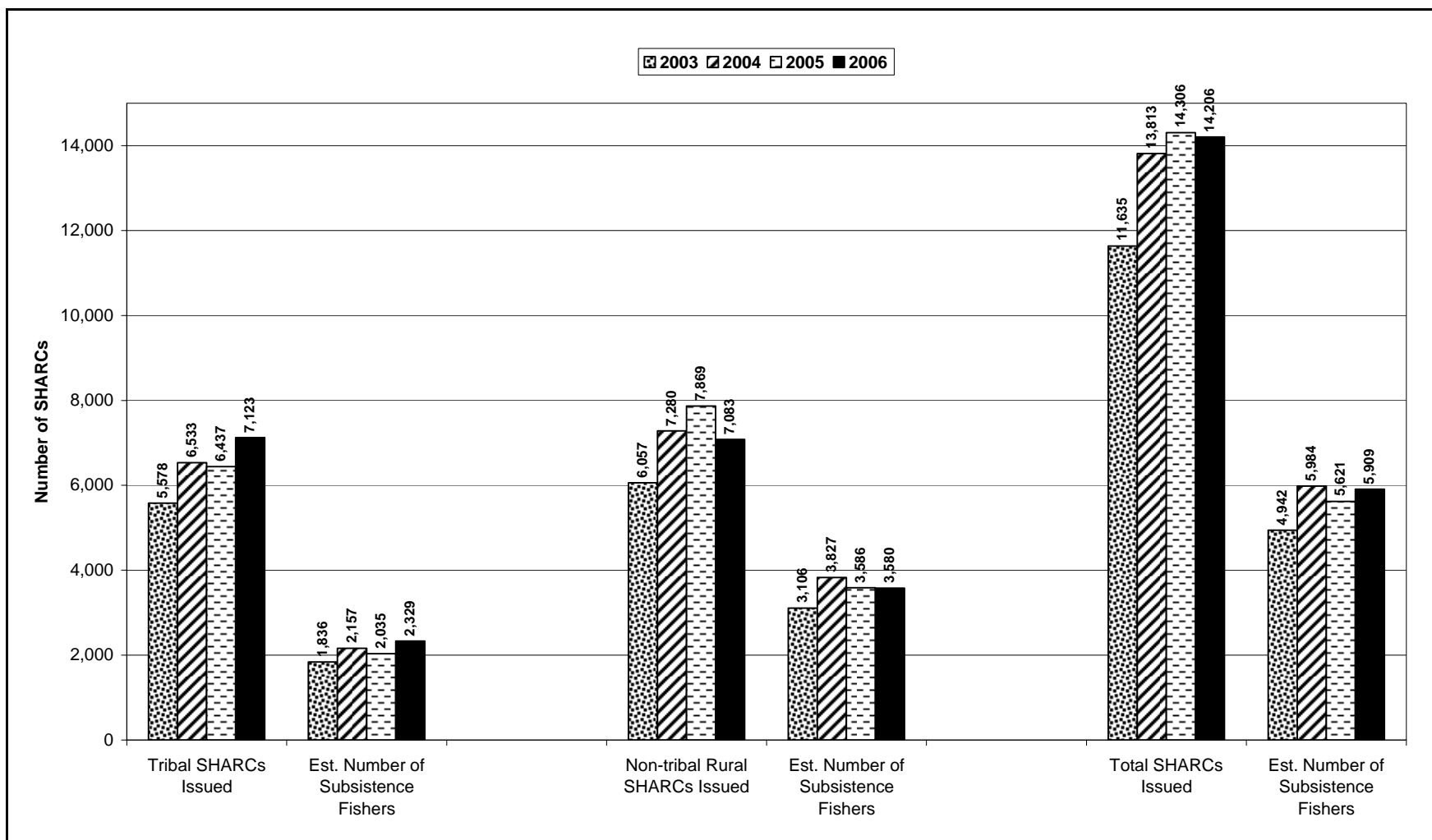


Figure 7.—Age of subsistence halibut registration certificate holders by SHARC Type, 2006.

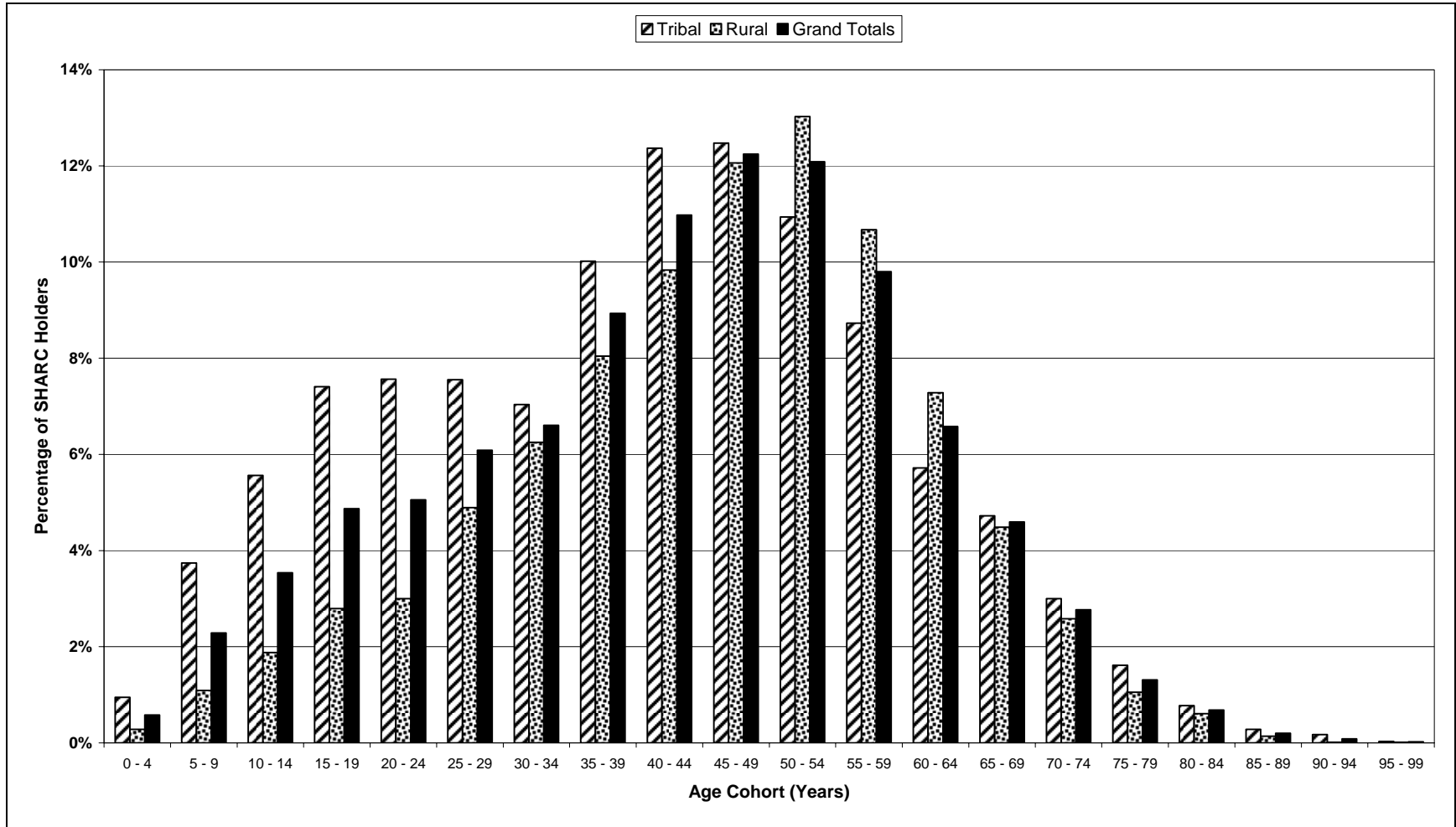


Figure 8.—Estimated number of subsistence halibut fishers, 2003, 2004, 2005, and 2006 by regulatory area of tribe or rural community.

57

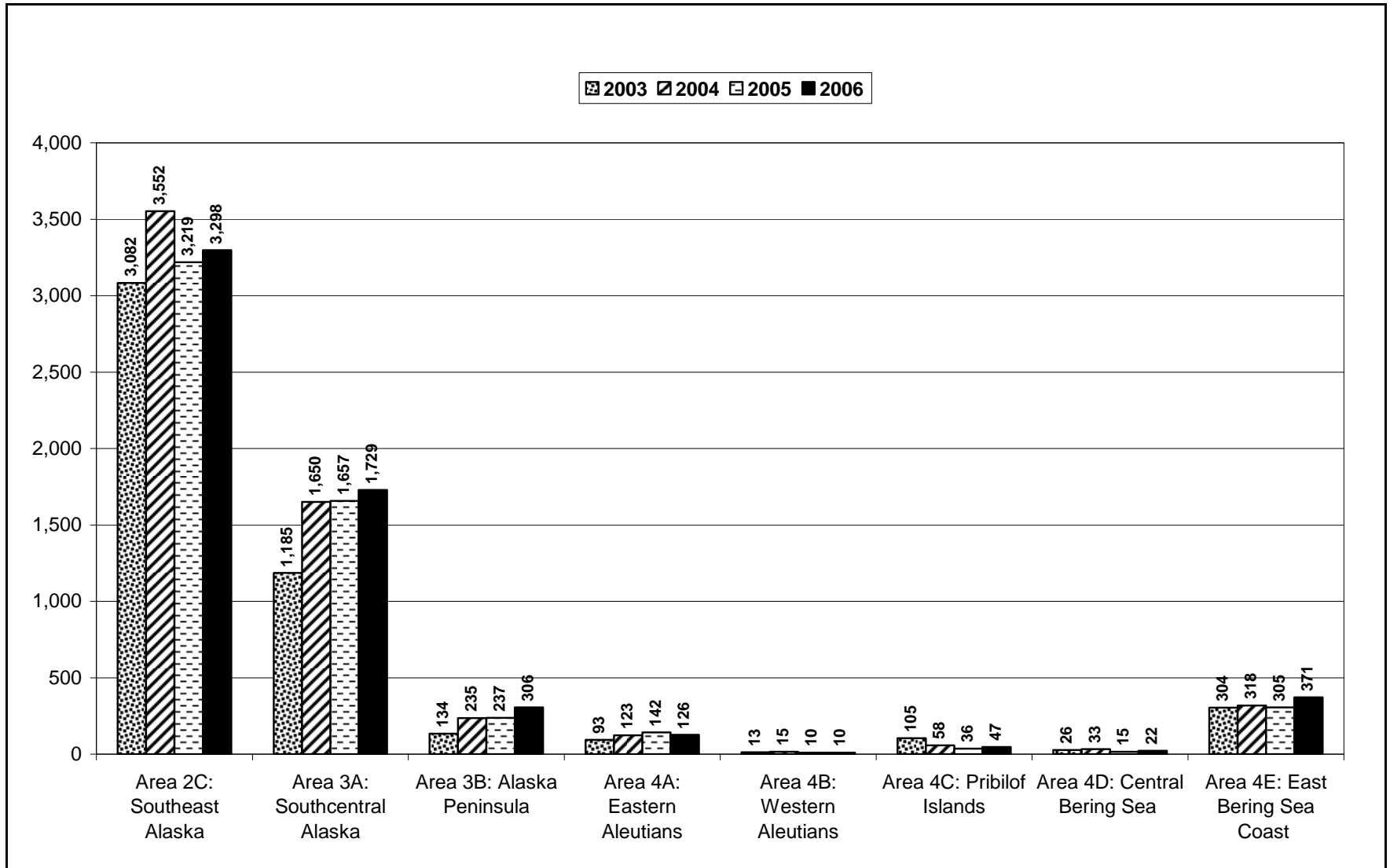


Figure 9.—Estimated number of subsistence halibut fishers by place of residence (selected communities), 2003, 2004, 2005, and 2006.

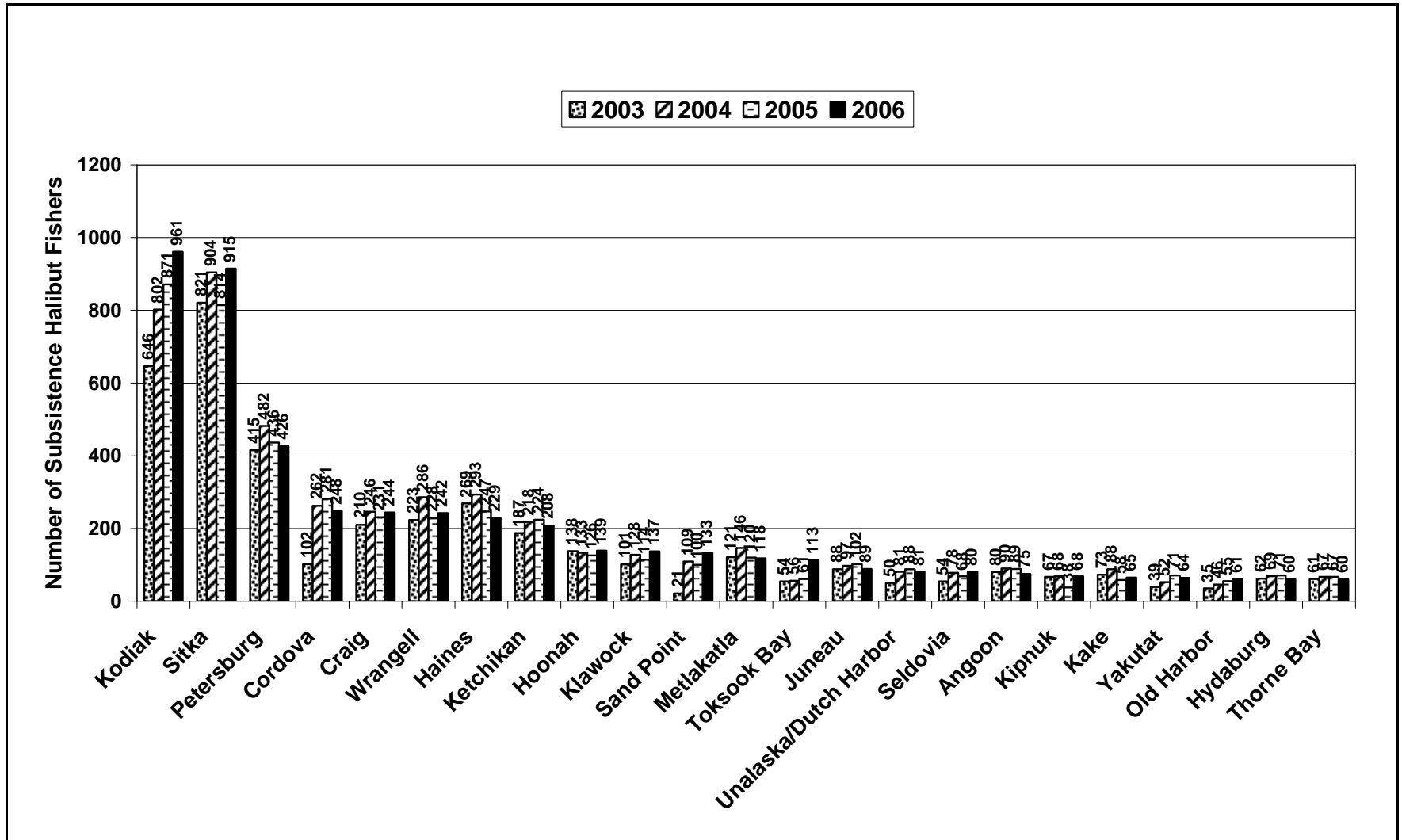


Figure 10.—Estimated subsistence harvest of halibut in Alaska, 2006, by regulatory area of tribe and rural community, in pounds net weight.

LL

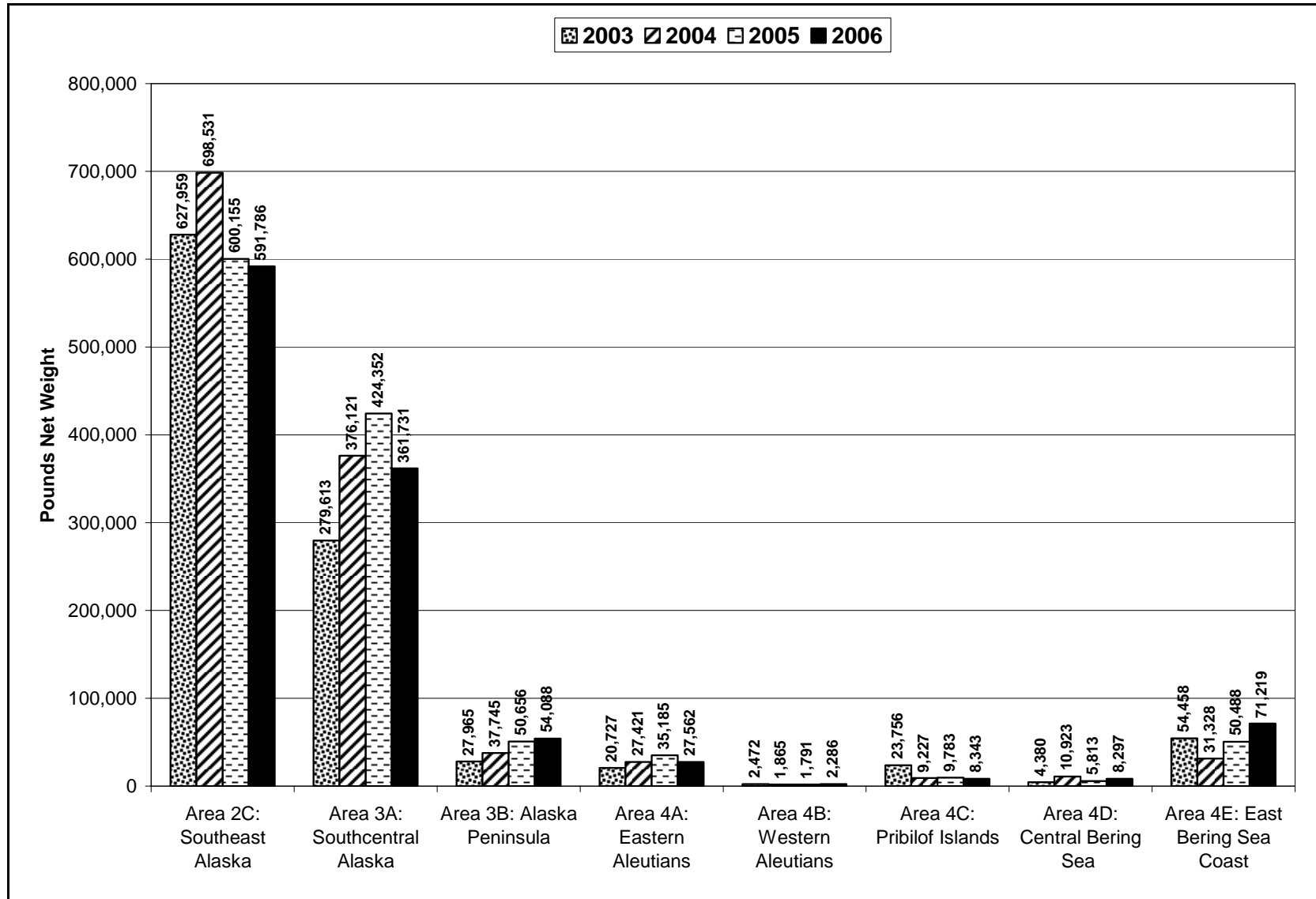


Figure 11.—Estimated Alaska subsistence halibut harvests in pounds net weight by SHARC type, 2003, 2004, 2005, and 2006.

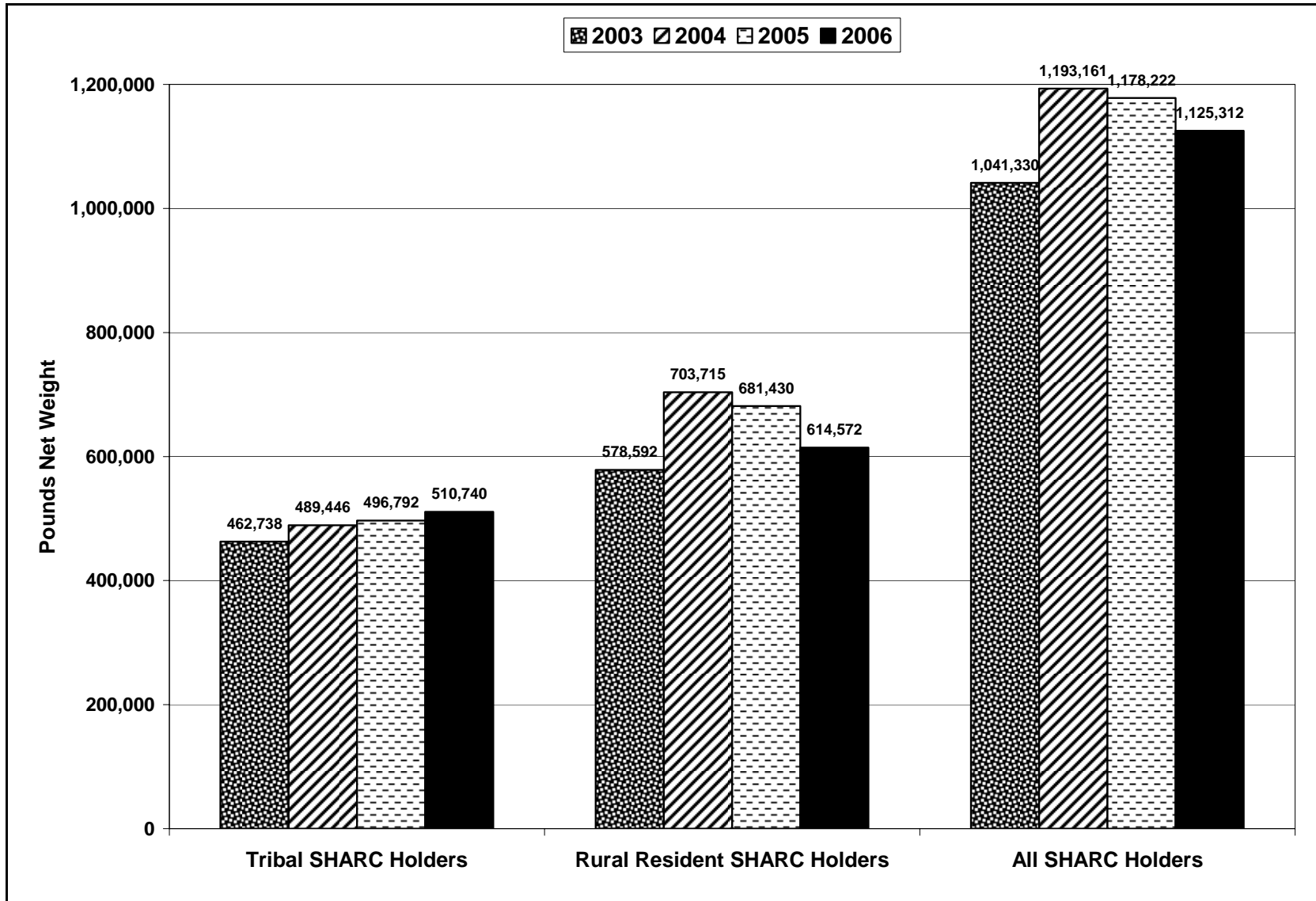


Figure 12.—Percentage of tribal subsistence halibut harvest by tribe, 2006.

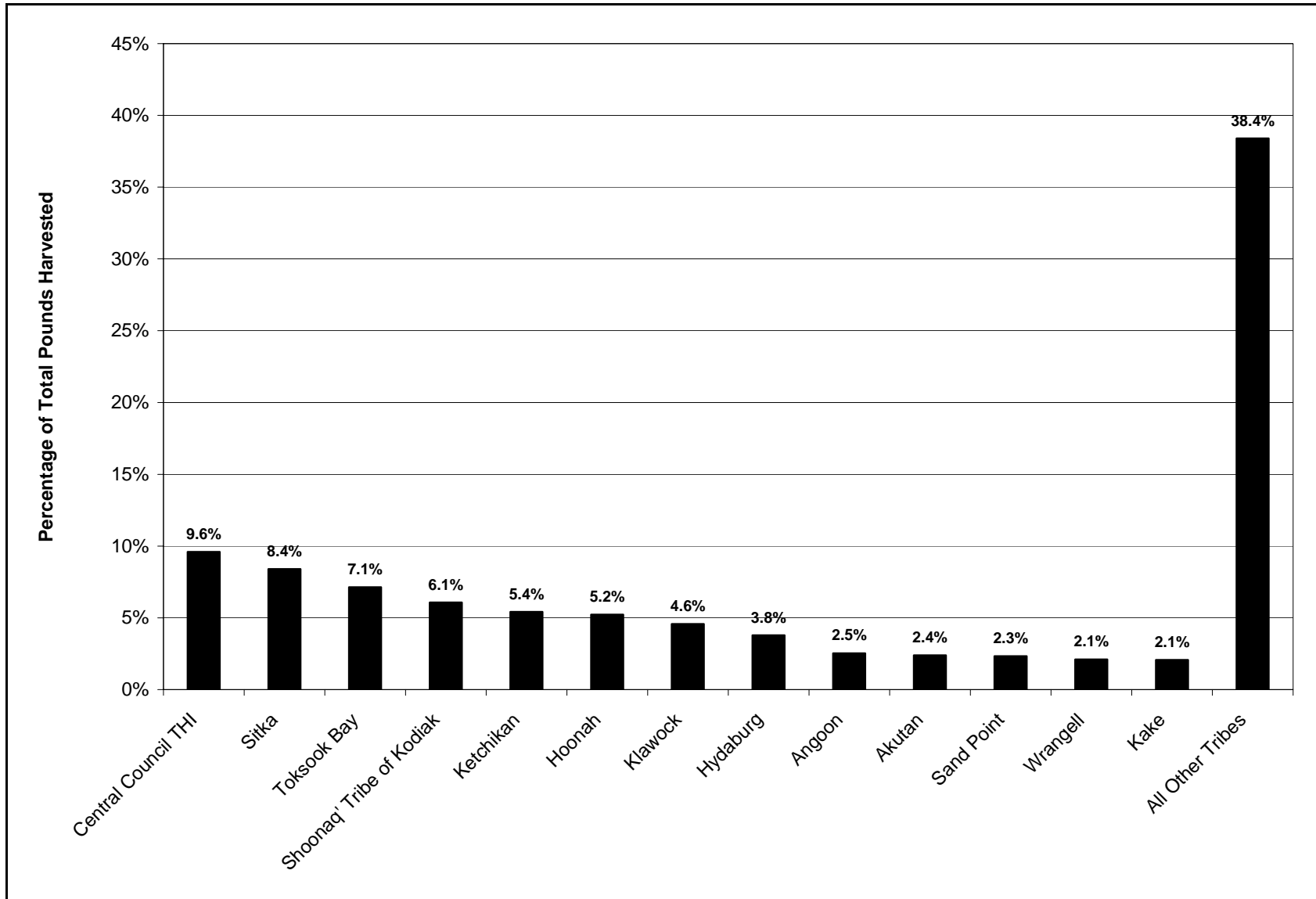


Figure 13.—Percentage of rural community subsistence halibut harvest by community, 2006.

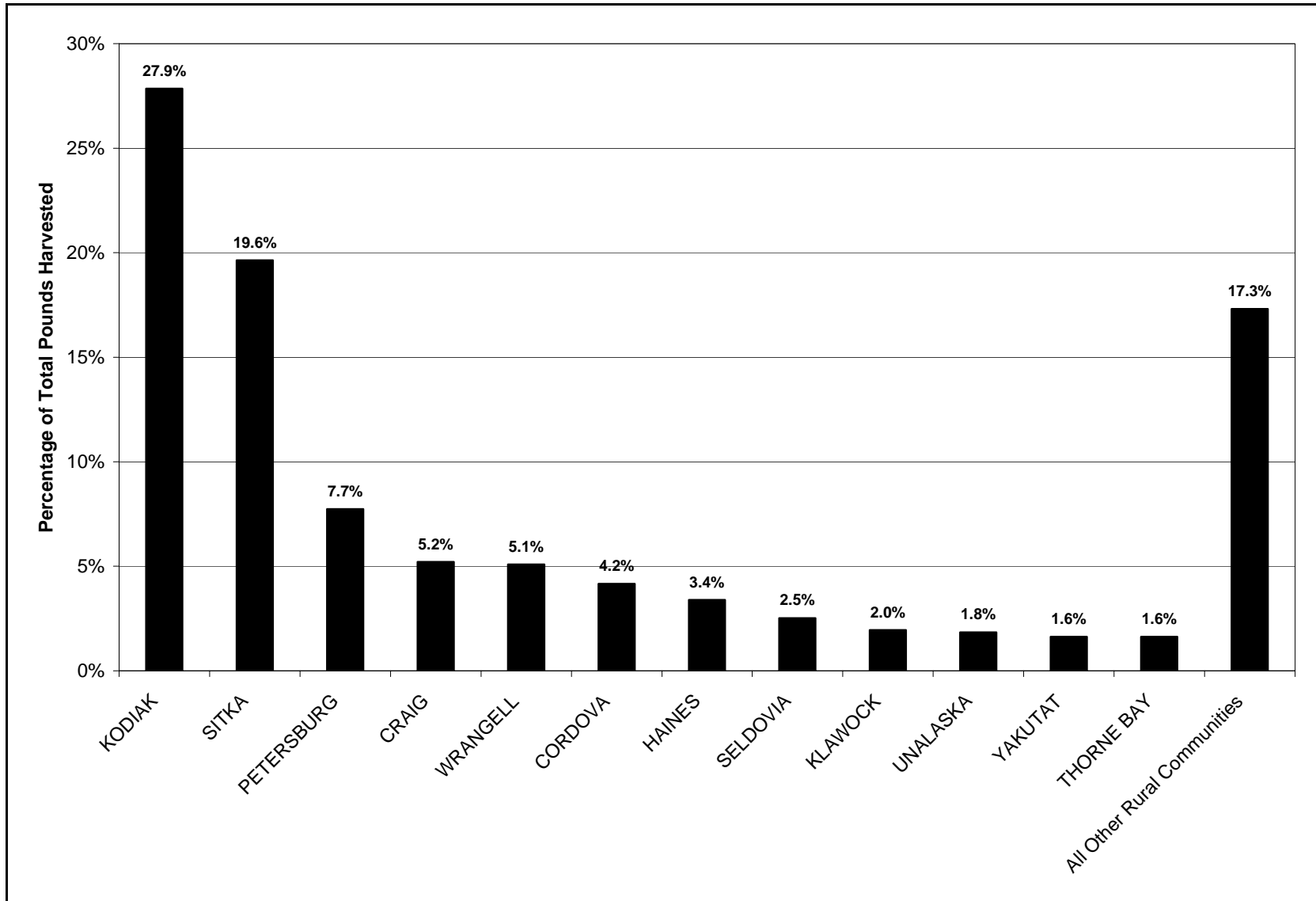


Figure 14.—Percentage of subsistence halibut harvest by regulatory area fished, 2006.

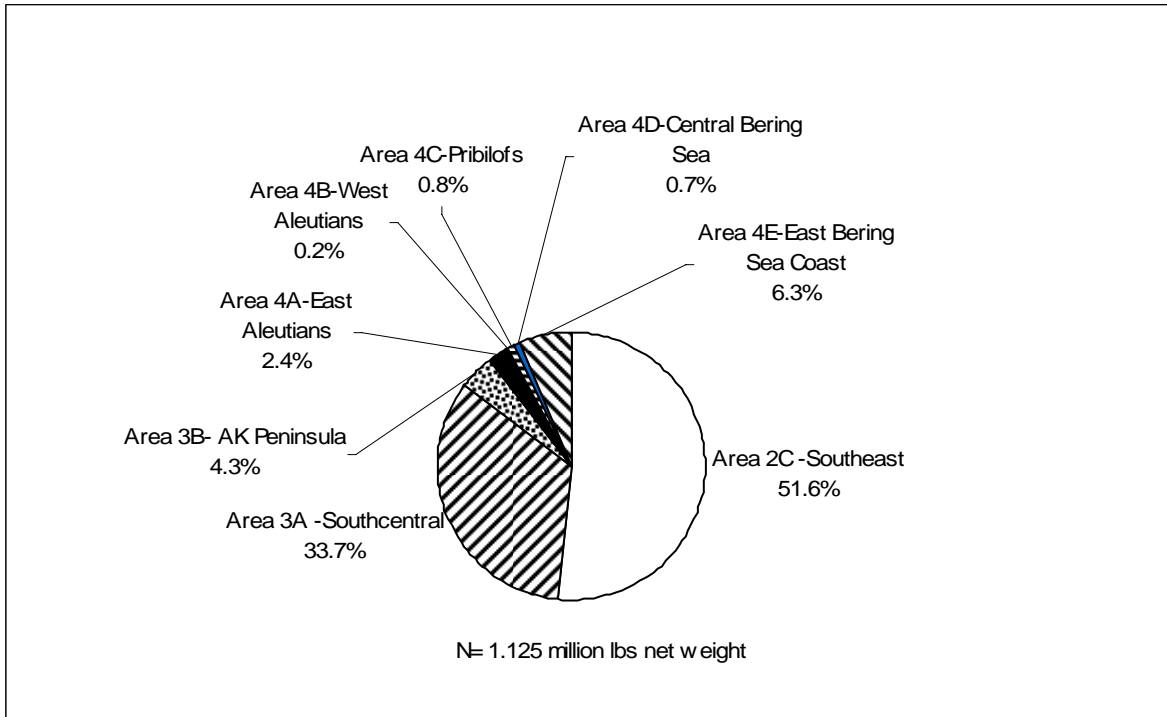


Figure 15.—Alaska subsistence halibut harvests by geographic area, 2006.

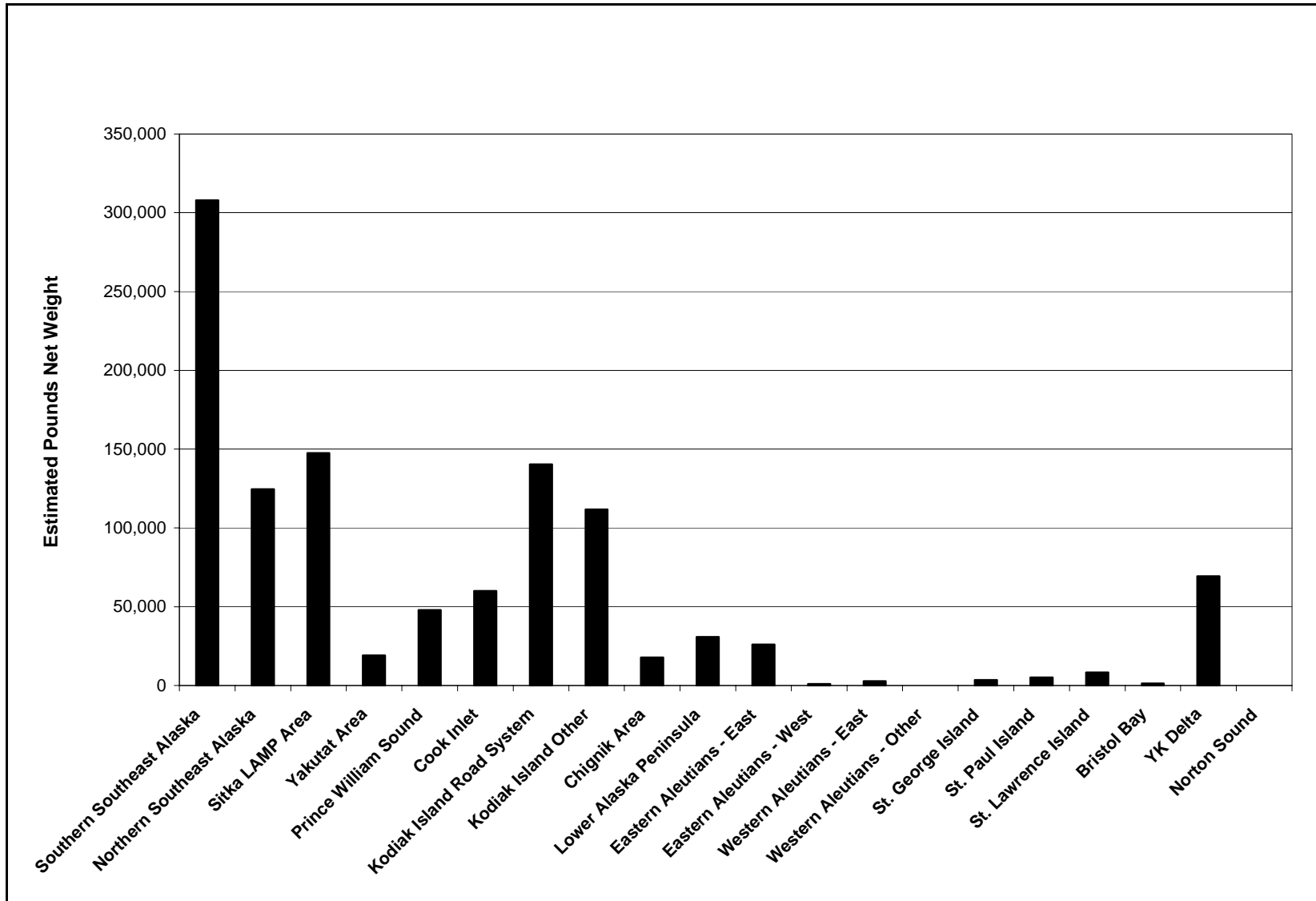


Figure 16.—Percentage of Alaska subsistence halibut harvest by geographic area, 2006.

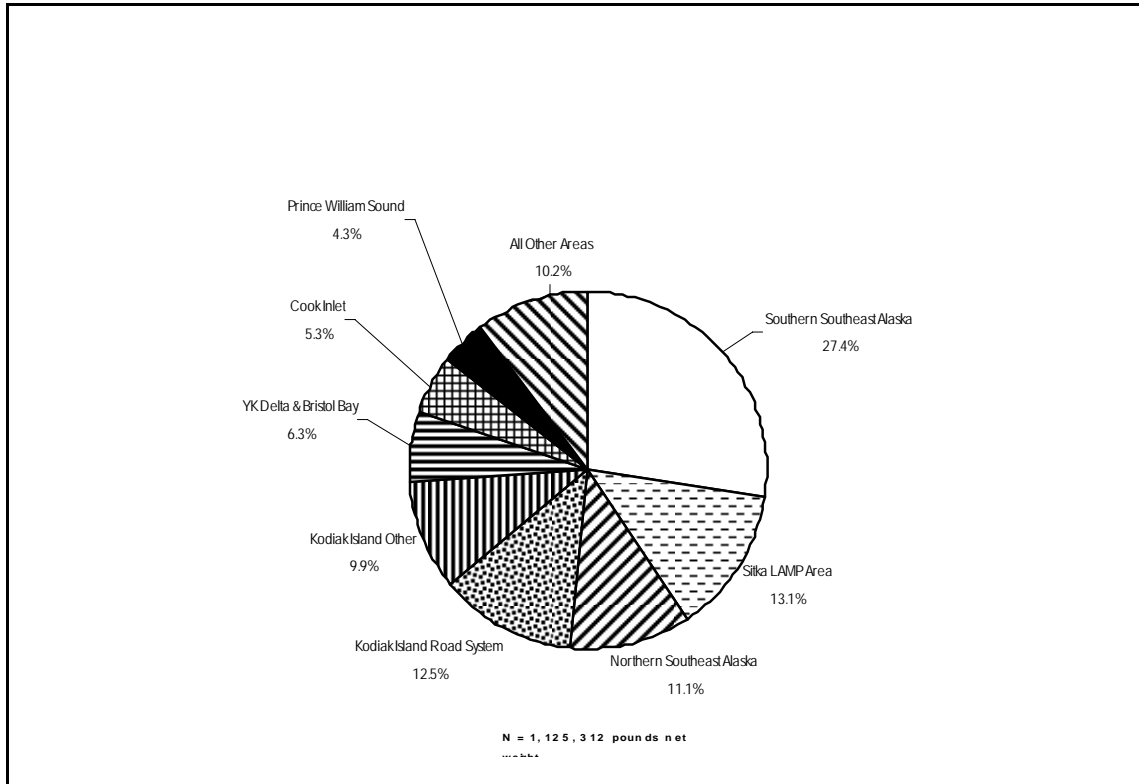


Figure 17.—Estimated subsistence halibut harvests, pounds net weight, by regulatory area fished, 2003, 2004, 2005, and 2006.

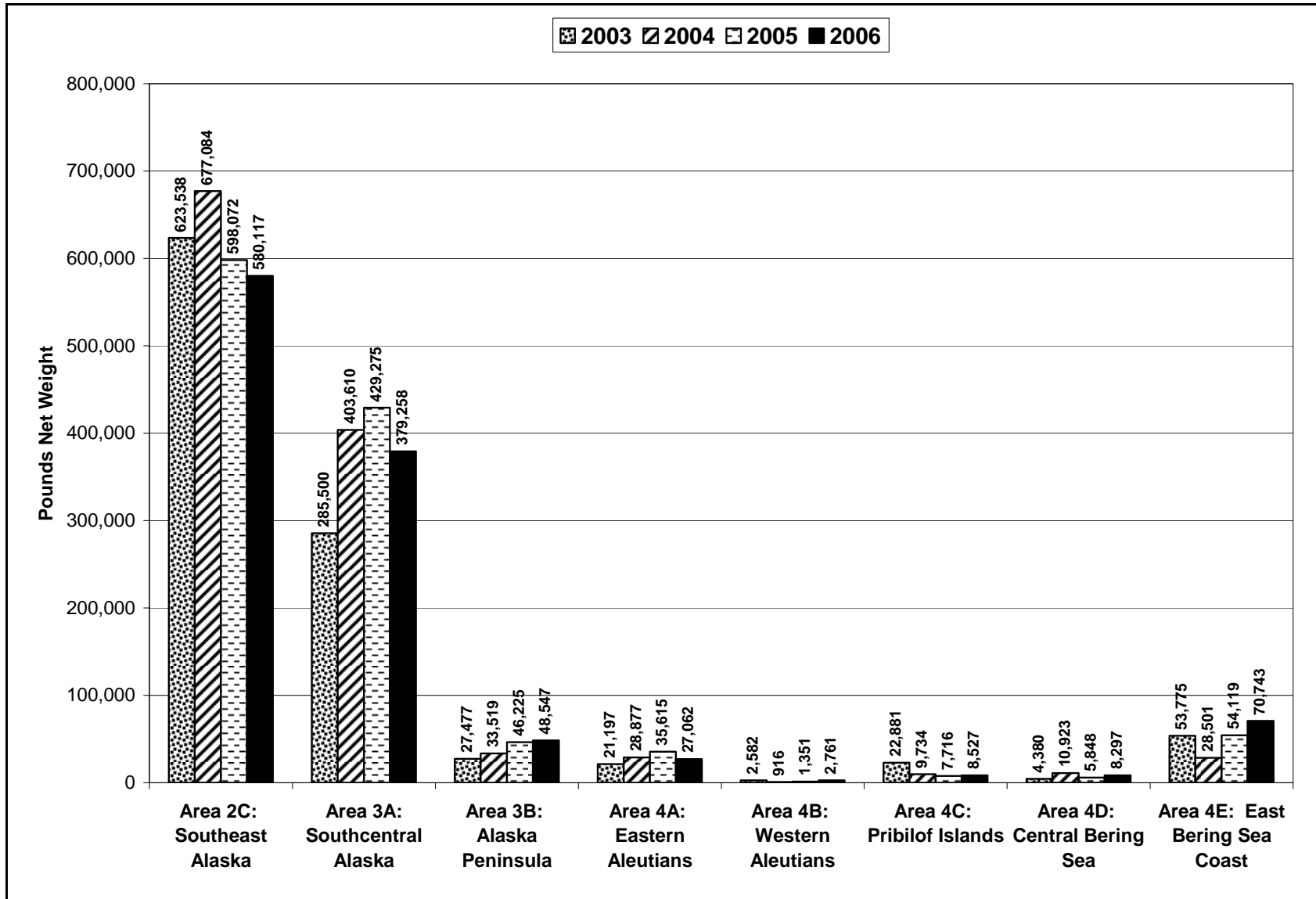


Figure 18.—Change in Alaska subsistence halibut harvests from 2005 to 2006 by regulatory area fished.

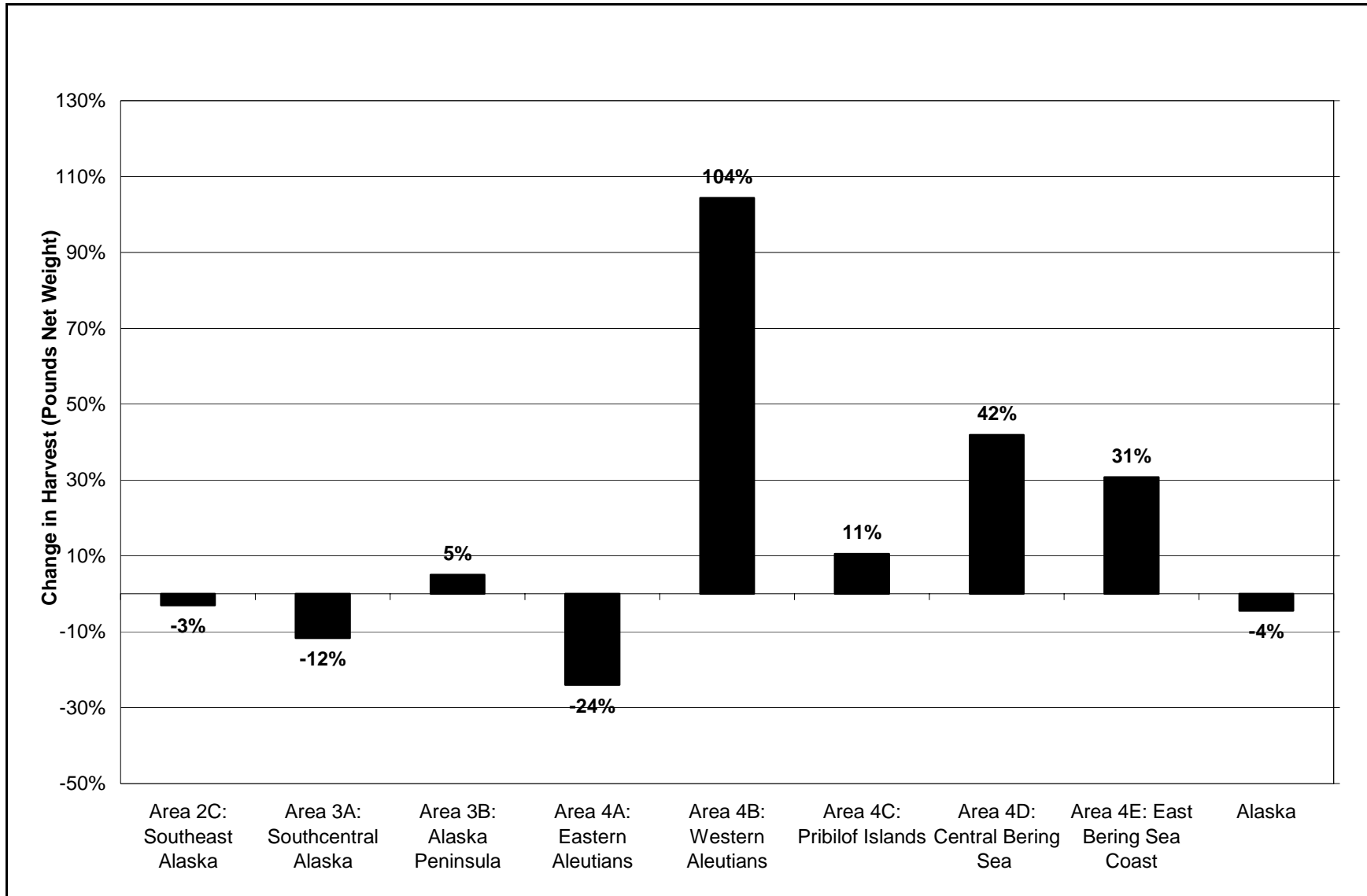


Figure 19.—Change in Alaska subsistence halibut harvests from 2003 to 2006 by regulatory area fished.

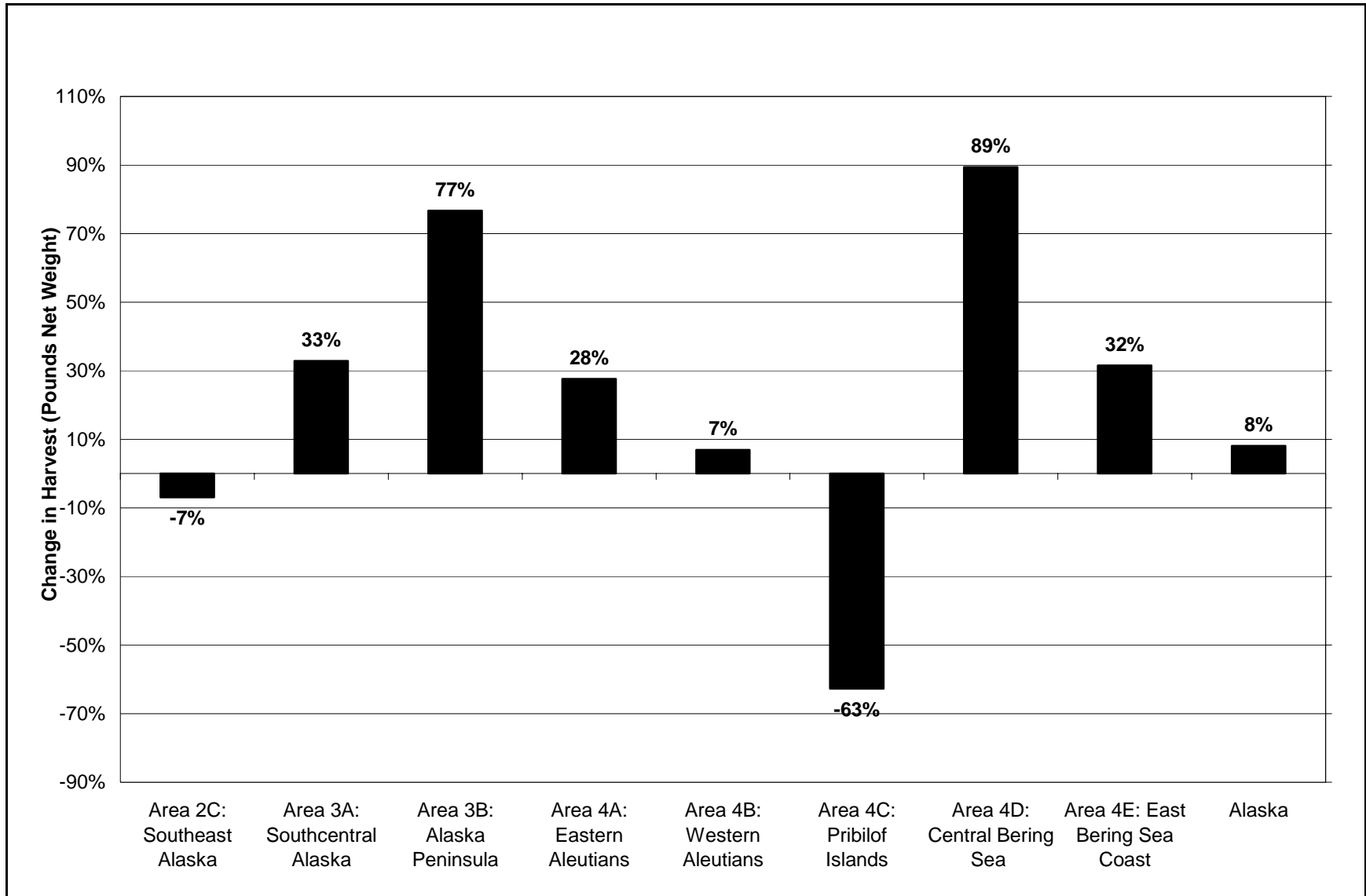


Figure 20.—Average subsistence harvest of halibut per fisher in Alaska, 2006, by regulatory area, in pounds net weight.

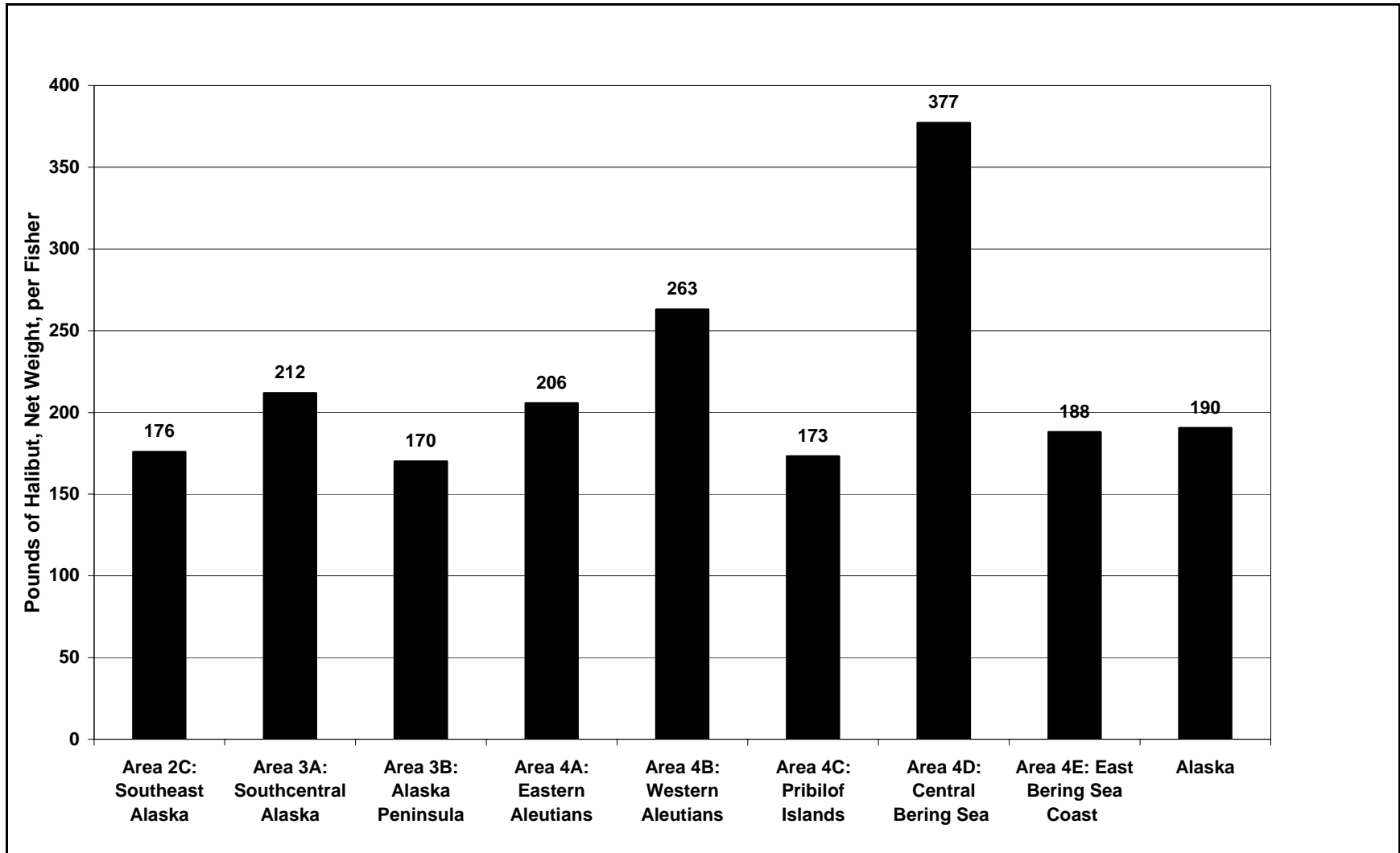


Figure 21.—Average subsistence harvest of halibut per fisher in Alaska, 2006, by regulatory area, in number of fish.

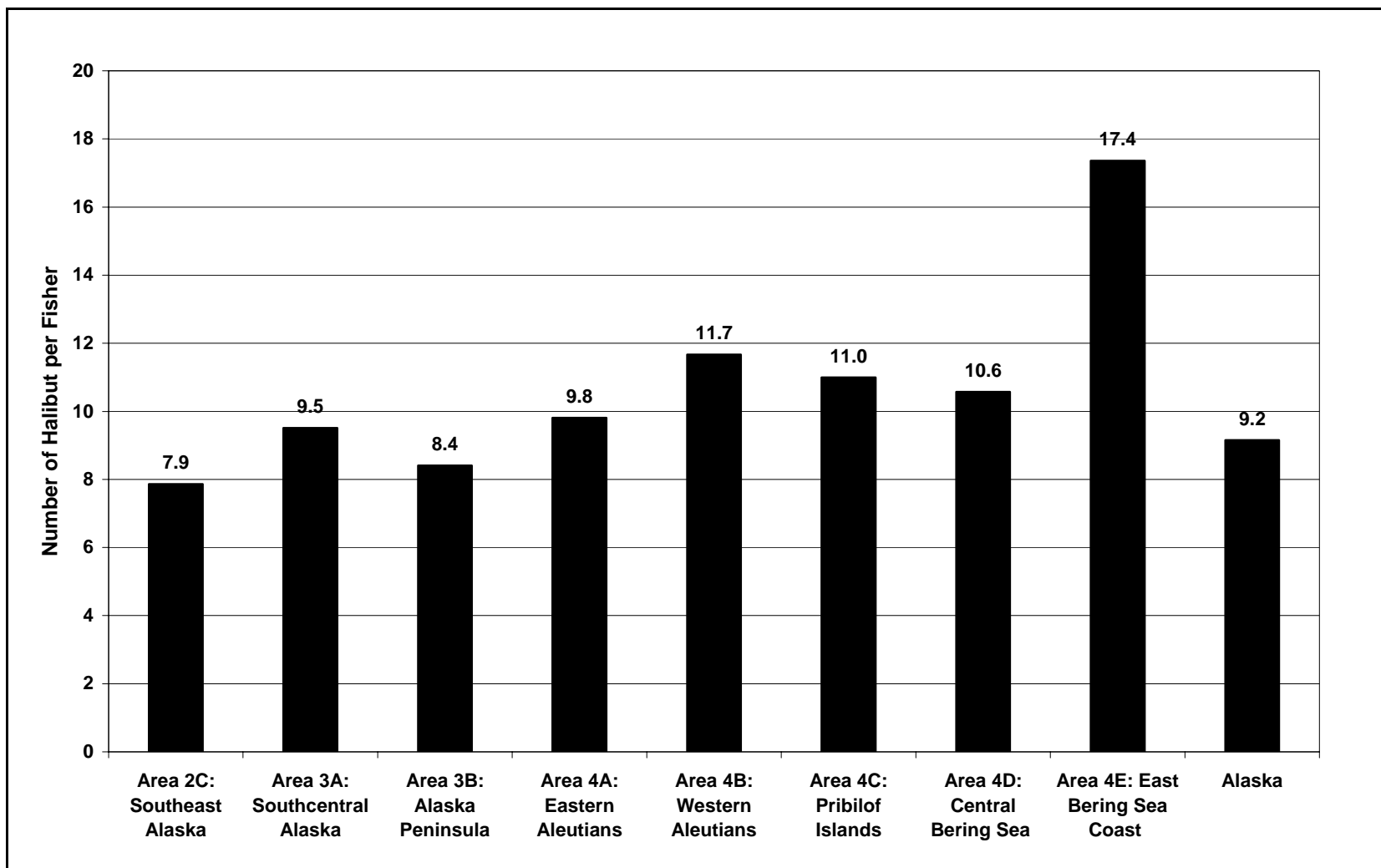


Figure 22.—Alaska subsistence halibut harvests by place of residence, 2006.

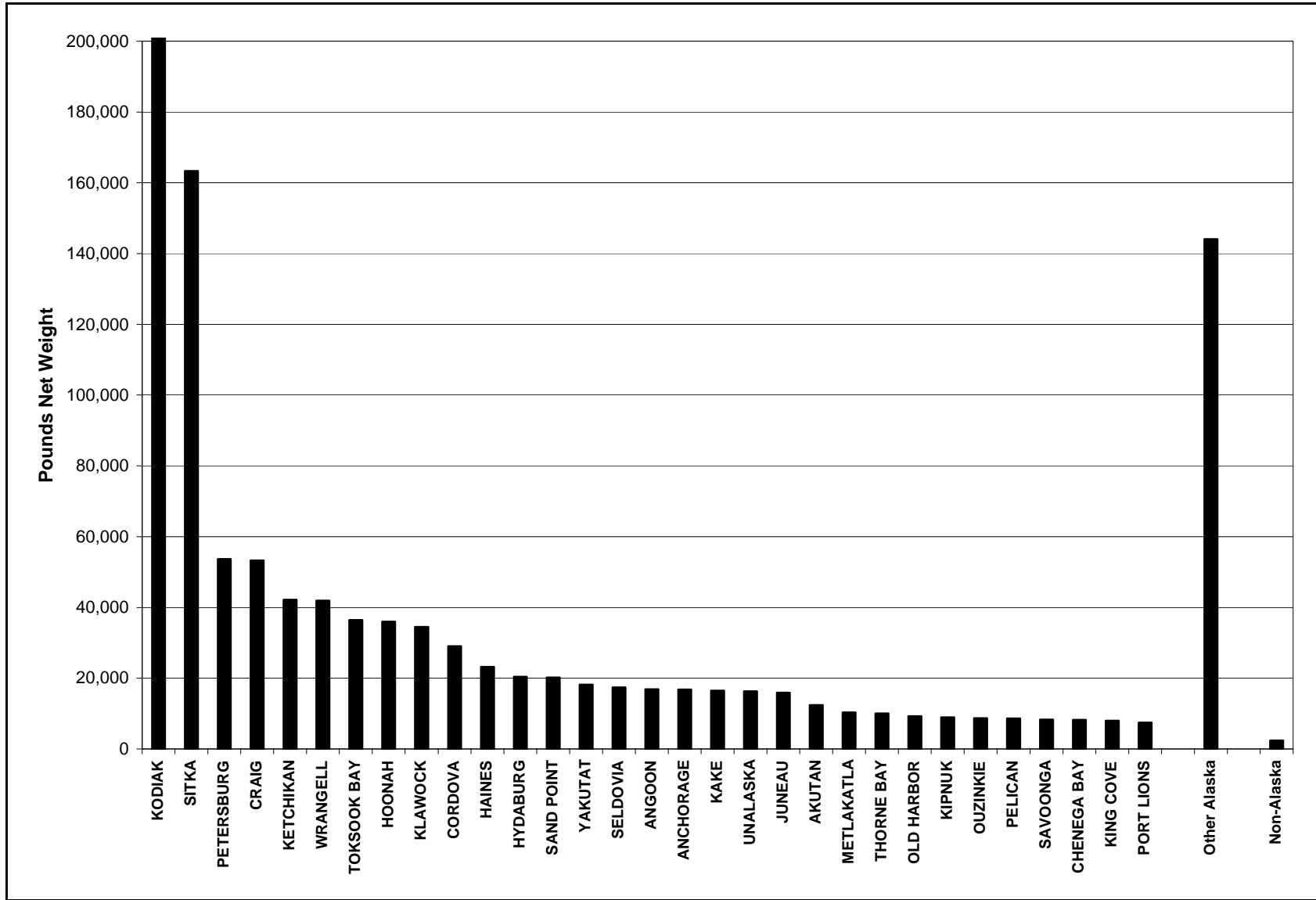


Figure 23.—Percentage of subsistence halibut harvest by gear type by regulatory area, 2006.

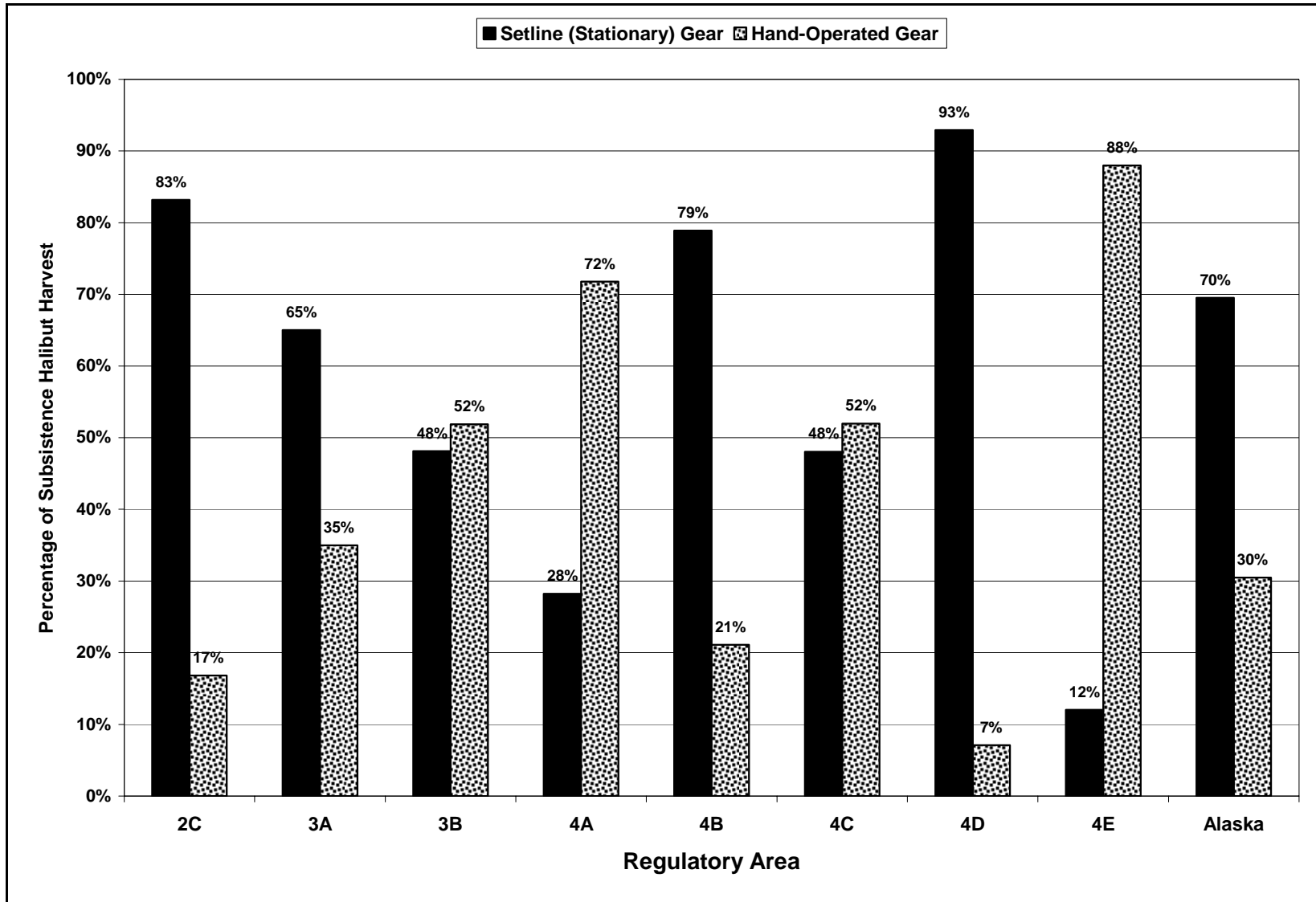


Figure 24.—Number of hooks usually fished, percentage of fishers using setline (stationary) gear, Alaska subsistence halibut fishery, 2006.

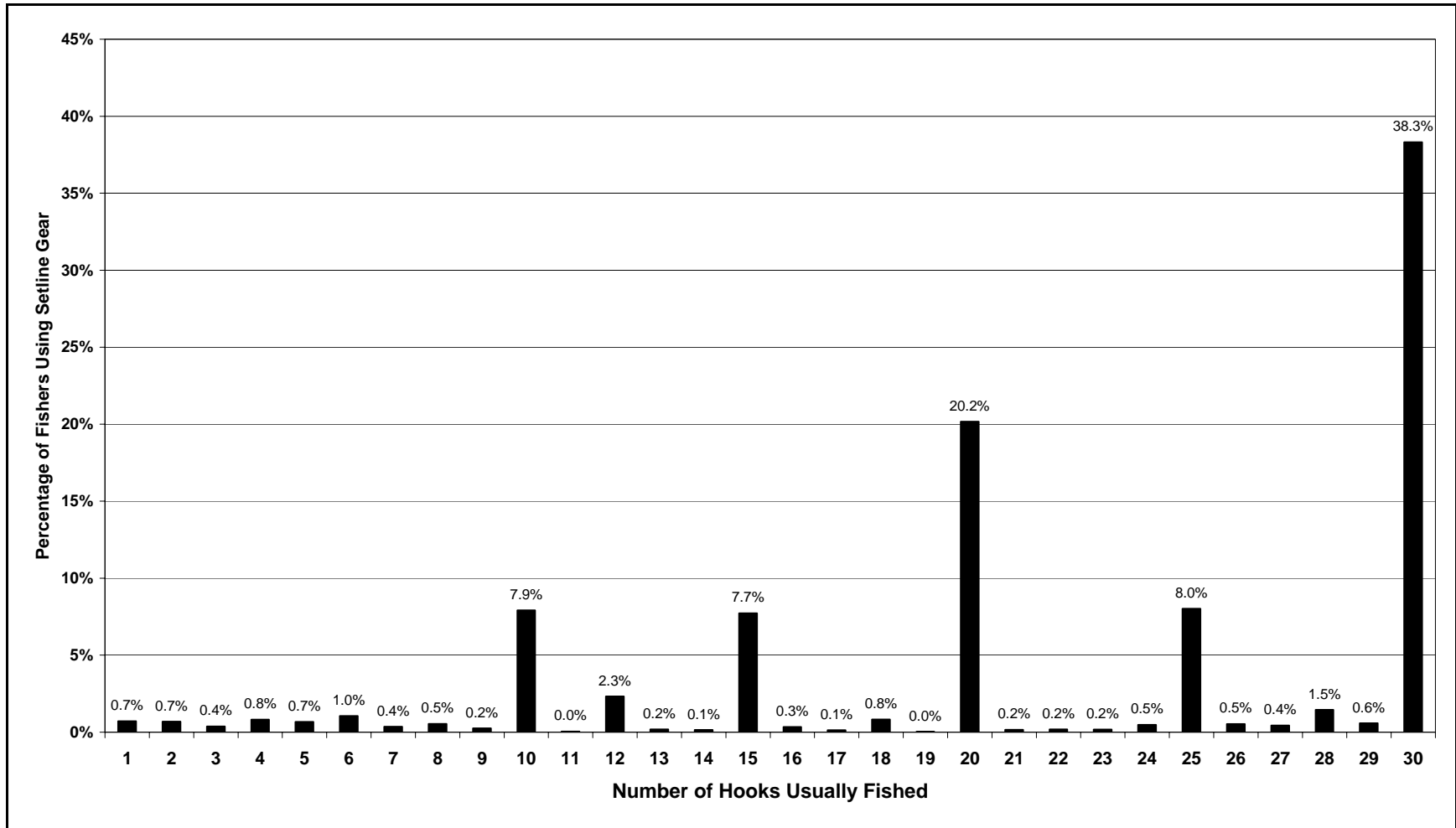


Figure 25.—Estimated incidental harvest of rockfish in the Alaska subsistence halibut fishery, 2003, 2004, 2005, and 2006 by regulatory area fished.

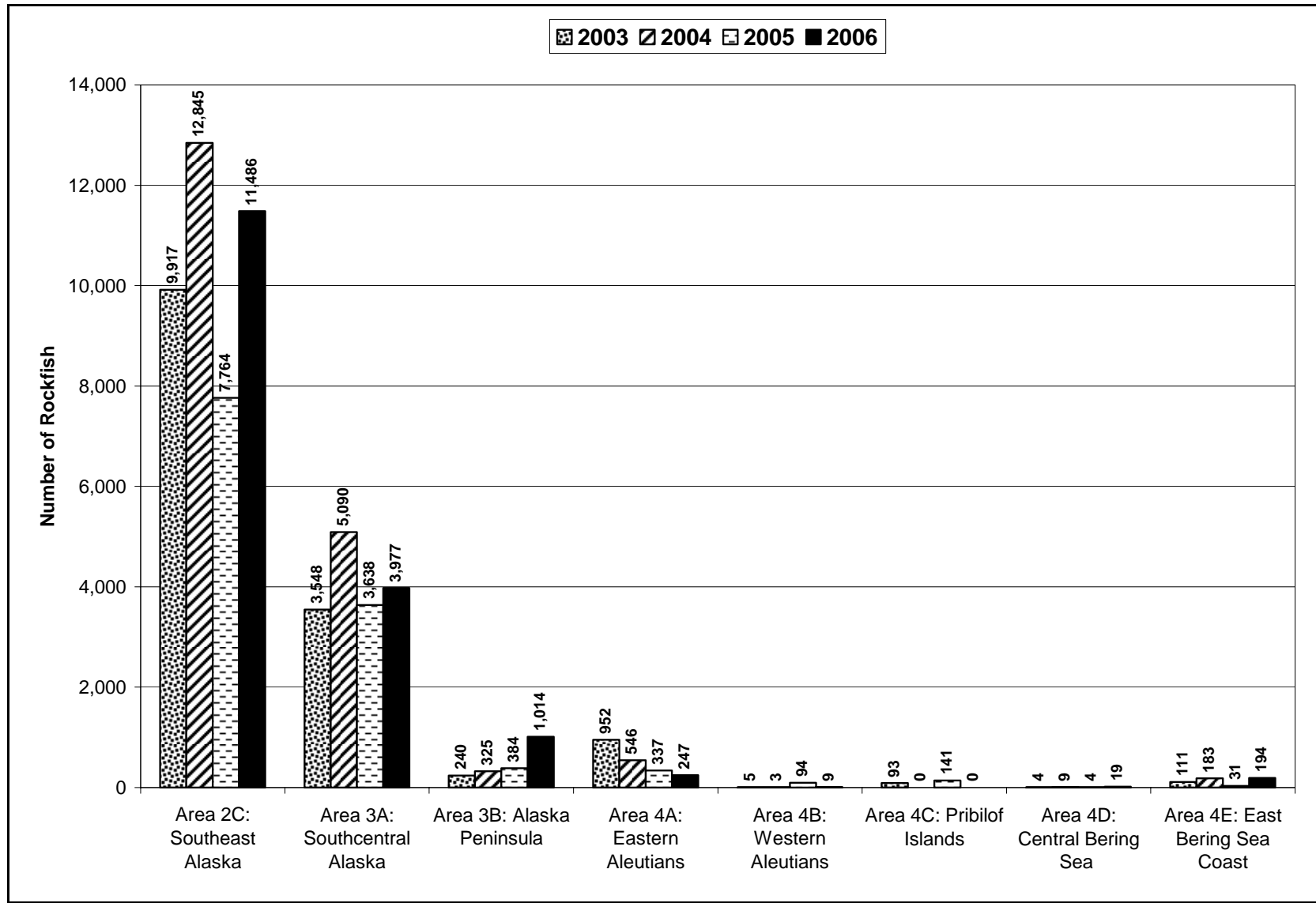
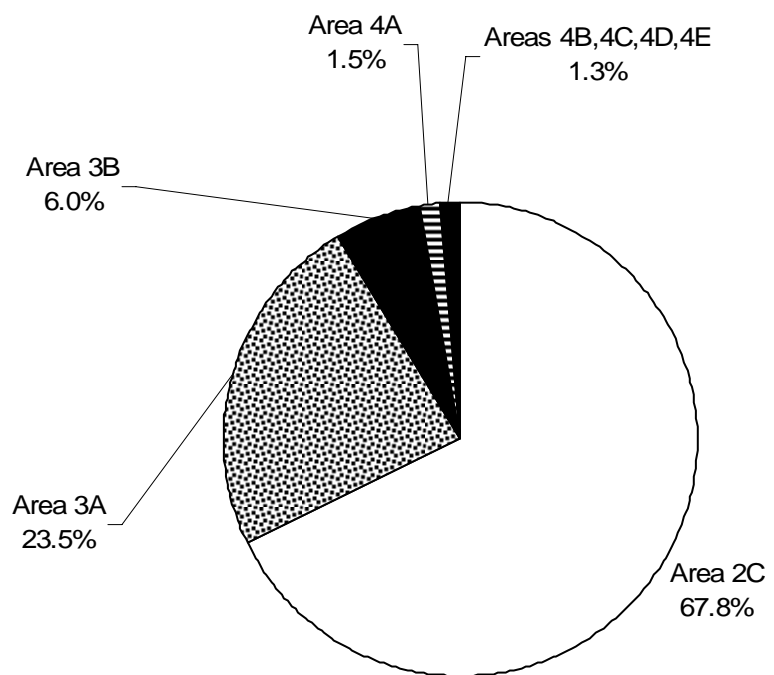


Figure 26.—Percentage of incidental harvest of rockfish by regulatory area fished, 2006.



N = 16,945 rockfish

Figure 27.—Estimated incidental harvest of lingcod in the Alaska subsistence halibut fishery, 2003, 2004, 2005 and 2006, by regulatory area fished.

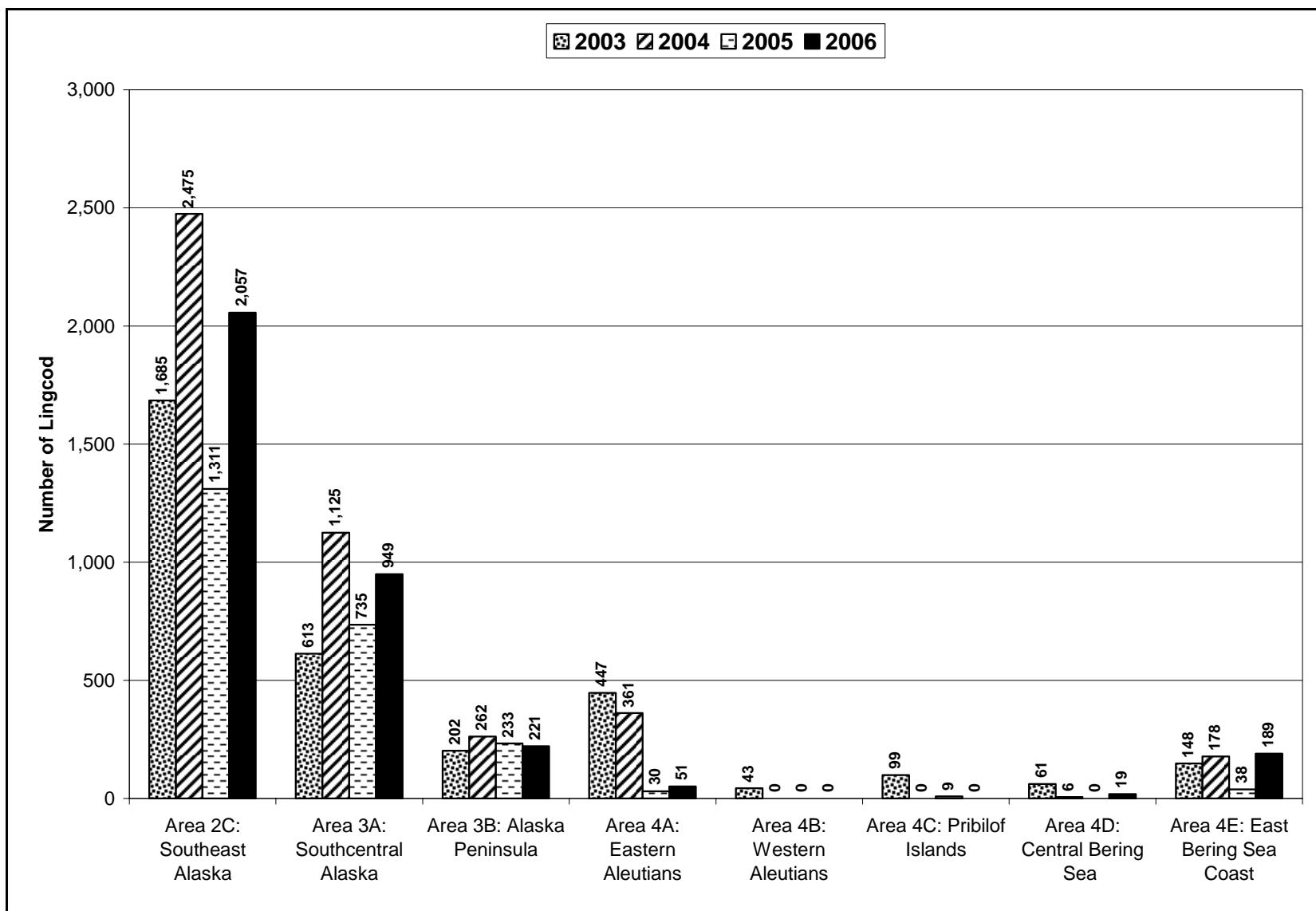


Figure 28.—Percentage of incidental harvest of lingcod by regulatory area fished, 2006.

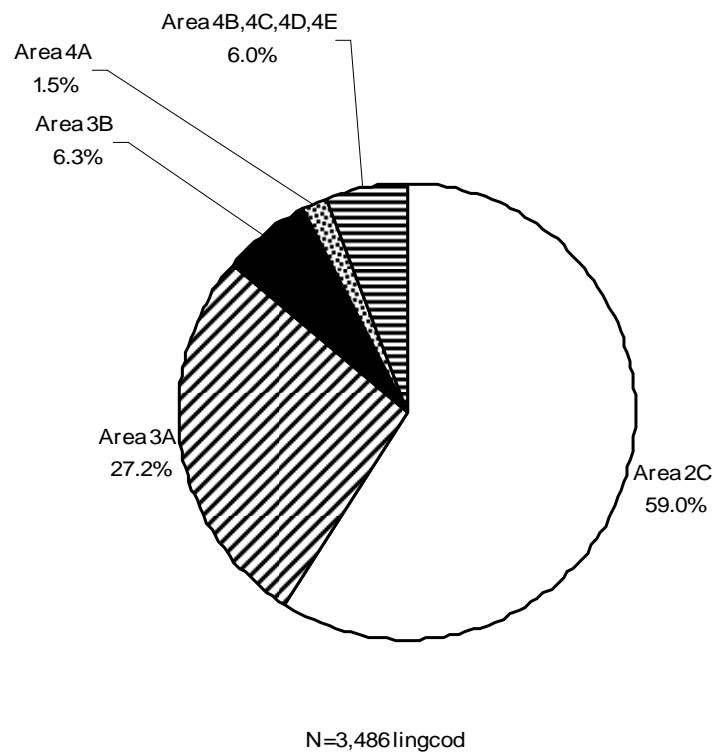


Figure 29.—Estimated harvests of halibut for home use, Port Graham.

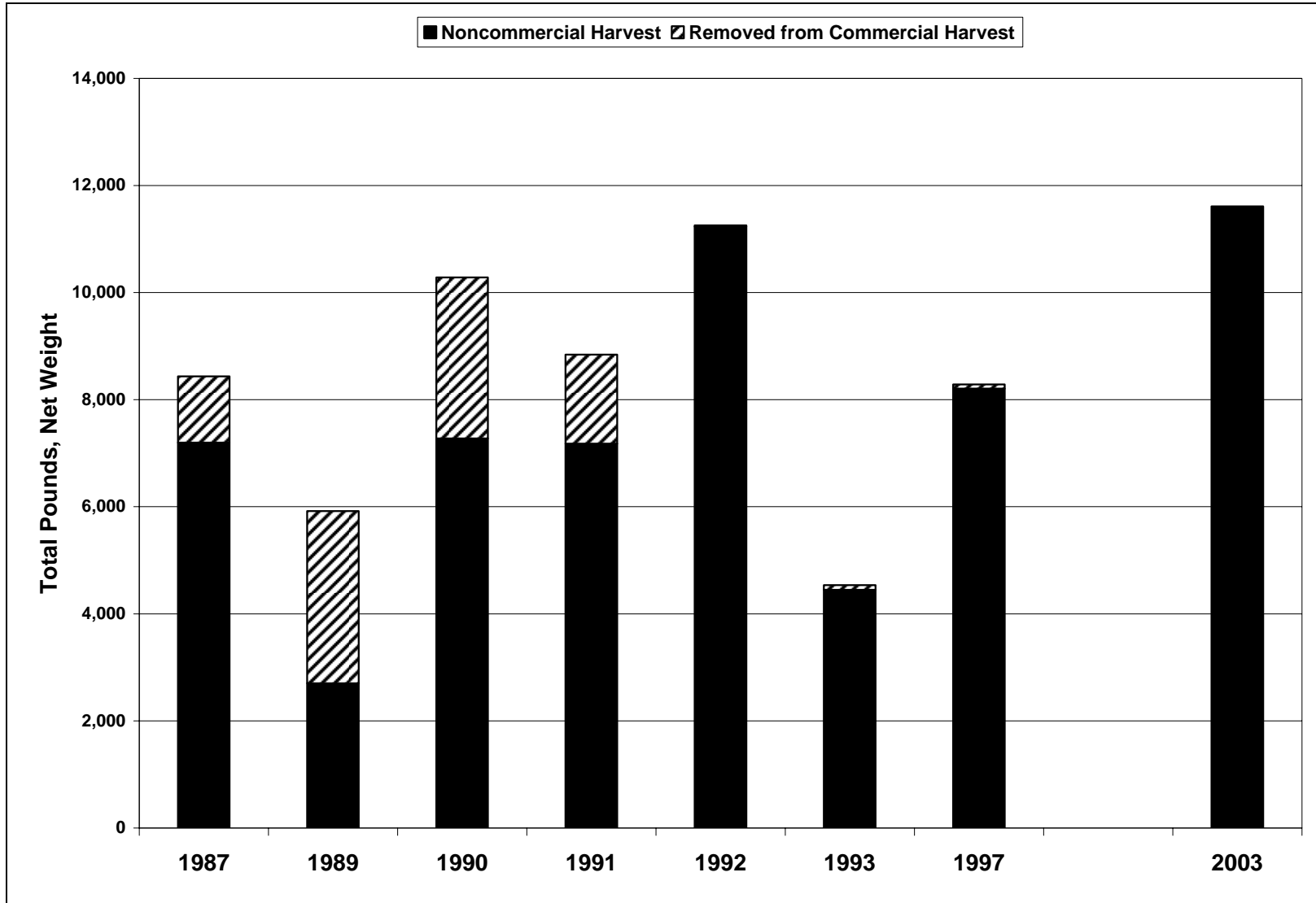
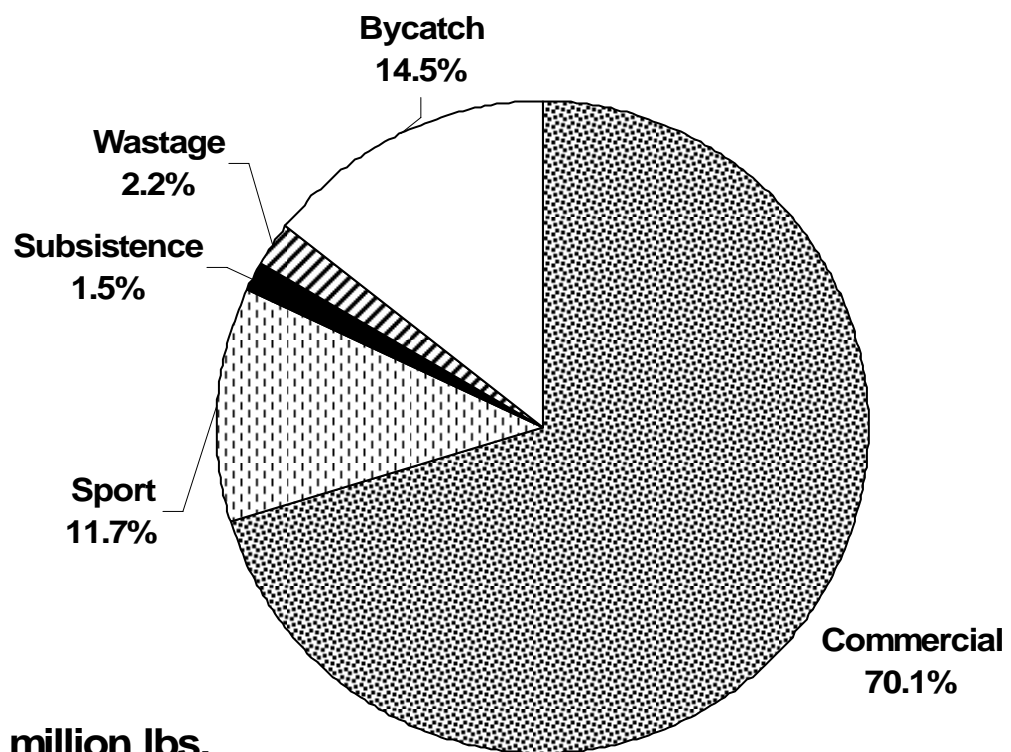
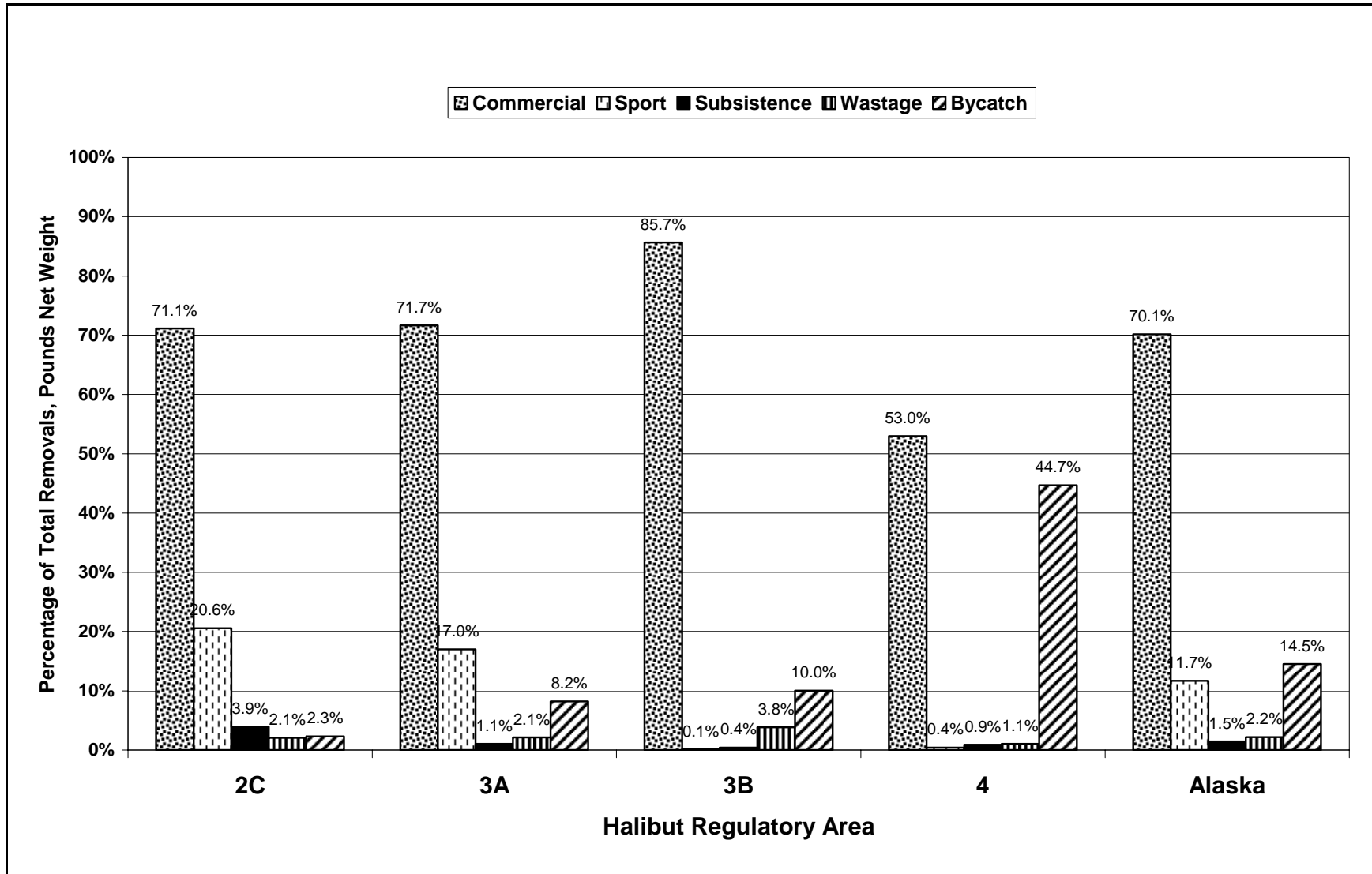


Figure 30.—Halibut removals, Alaska, 2006.



**N = 78.622 million lbs,
net weight**

Figure 31.—Halibut removals in Alaska by regulatory area and removal category, 2006.



**APPENDIX A: LIST OF ELIGIBLE TRIBES AND RURAL
COMMUNITIES (FROM FEDERAL REGISTER)**

Chichagof Island at 57°22'03" N. lat., 135°43'00" W. long., and
 (B) A line from Chichagof Island at 57°22'35" N. lat., 135°41'18" W. long. to Baranof Island at 57°22'17" N. lat., 135°40'57" W. lat.; and

(C) That is enclosed on the south and west by a line from Sitka Point at 56°59'23" N. lat., 135°41'34" W. long., to Hanus Point at 56°51'55" N. lat., 135°40'30" W. long.,

(D) To the green day marker in Dorothy Narrows at 56°49'17" N. lat., 135°22'45" W. long. to Baranof Island at 56°49'17" N. lat., 135°22'36" W. long.

(2) A person using a vessel greater than 35 ft (10.7 m) in overall length, as defined at 50 CFR 300.61, is prohibited from fishing for IFQ halibut with setline gear, as defined at 50 CFR 300.61, within Sitka Sound as defined in paragraph (d)(1)(i) of this section.

(3) A person using a vessel less than or equal to 35 ft (10.7 m) in overall length, as defined at 50 CFR 300.61:

(i) Is prohibited from fishing for IFQ halibut with setline gear within Sitka Sound, as defined in paragraph (d)(1)(ii) of this section, from June 1 through August 31; and

(ii) Is prohibited, during the remainder of the designated IFQ season, from retaining more than 2,000 lb (0.91 mt) of IFQ halibut within Sitka Sound, as defined in paragraph (d)(1)(ii) of this section, per IFQ fishing trip, as defined in 50 CFR 300.61.

(4) No charter vessel, as defined at 50 CFR 300.61, shall engage in sport fishing, as defined at 50 CFR 300.61(b), for halibut within Sitka Sound, as defined in paragraph (d)(1)(ii) of this section, from June 1 through August 31.

(i) No charter vessel shall retain halibut caught while engaged in sport fishing, as defined at 50 CFR 300.61(b), for other species, within Sitka Sound, as defined in paragraph (d)(1)(ii) of this section, from June 1 through August 31.

(ii) Notwithstanding paragraphs (d)(4) and (d)(4)(i) of this section, halibut harvested outside Sitka Sound, as defined in (d)(1)(ii) of this section, may be retained onboard a charter vessel engaged in sport fishing, as defined in 50 CFR 300.61(b), for other species within Sitka Sound, as defined in paragraph (d)(1)(ii) of this section, from June 1 through August 31.

(e) Sitka Pinnacles Marine Reserve. (1) For purposes of this paragraph (e), the Sitka Pinnacles Marine Reserve means an area totaling 2.5 square nm off Cape Edgecumbe, defined by straight lines connecting the following points in a counterclockwise manner:

- 56°55.5'N lat., 135°54.0'W long;
- 56°57.0'N lat., 135°54.0'W long;
- 56°57.0'N lat., 135°57.0'W long;

56°55.5'N lat., 135°57.0'W long.

(2) No person shall engage in commercial, sport or subsistence fishing, as defined at § 300.61, for halibut within the Sitka Pinnacles Marine Reserve.

(3) No person shall anchor a vessel within the Sitka Pinnacles Marine Reserve if halibut is on board.

(f) *Subsistence fishing in and off Alaska.* No person shall engage in subsistence fishing for halibut unless that person meets the requirements in paragraphs (f)(1) or (f)(2) of this section.

(1) A person is eligible to harvest subsistence halibut if he or she is a rural resident of a community with customary and traditional uses of halibut listed in the following table:

HALIBUT REGULATORY AREA 2C

Rural Community	Organized Entity
Angeon	Municipality
Coffman Cove	Municipality
Craig	Municipality
Edna Bay	Census Designated Place
Elfin Cove	Census Designated Place
Gustavus	Census Designated Place
Haines	Municipality
Hollis	Census Designated Place
Hoonah	Municipality
Hydaburg	Municipality
Hyder	Census Designated Place
Kake	Municipality
Kasaan	Municipality
Klawock	Municipality
Klukwan	Census Designated Place
Mellakata	Census Designated Place
Meyers Chuck	Census Designated Place
Pelican	Municipality
Petersburg	Municipality
Point Baker	Census Designated Place
Port Alexander	Municipality
Port Protection	Census Designated Place
Saxman	Municipality
Sitka	Municipality
Skagway	Municipality
Tenakee Springs	Municipality
Thorne Bay	Municipality
Whale Pass	Census Designated Place
Wrangell	Municipality

HALIBUT REGULATORY AREA 3A

Rural Community	Organized Entity
Akiok	Municipality
Chenega Bay	Census Designated Place
Cordova	Municipality

**HALIBUT REGULATORY AREA 3A—
Continued**

Rural Community	Organized Entity
Karluk	Census Designated Place
Kodlak City	Municipality
Larsen Bay	Municipality
Nanwalek	Census Designated Place
Old Harbor	Municipality
Ouzinkie	Municipality
Port Graham	Census Designated Place
Port Lions	Municipality
Seldovia	Municipality
Tatitlek	Census Designated Place
Yakutat	Municipality

HALIBUT REGULATORY AREA 3B

Rural Community	Organized Entity
Chignik Bay	Municipality
Chignik Lagoon	Census Designated Place
Chignik Lake	Census Designated Place
Cold Bay	Municipality
False Pass	Municipality
Ivanof Bay	Census Designated Place
King Cove	Municipality
Nelson Lagoon	Census Designated Place
Perryville	Census Designated Place
Sand Point	Municipality

HALIBUT REGULATORY AREA 4A

Rural Community	Organized Entity
Akutan	Municipality
Nikolski	Census Designated Place
Unalaska	Municipality

HALIBUT REGULATORY AREA 4B

Rural Community	Organized Entity
Adak	Census Designated Place
Atka	Municipality

HALIBUT REGULATORY AREA 4C

Rural Community	Organized Entity
St. George	Municipality
St. Paul	Municipality

HALIBUT REGULATORY AREA 4D

Rural Community	Organized Entity
Gambell	Municipality
Savoonga	Municipality

**HALIBUT REGULATORY AREA 4D—
Continued**

Rural Community	Organized Entity
Diomede (Inalik)	Municipality

HALIBUT REGULATORY AREA 4E

Rural Community	Organized Entity
Alakanuk	Municipality
Aleknegik	Municipality
Bethel	Municipality
Brevig Mission	Municipality
Chefomak	Municipality
Chevak	Municipality
Clark's Point	Municipality
Council	Census Designated Place
Dillingham	Municipality
Eak	Municipality
Egegik	Municipality
Elim	Municipality
Emmonak	Municipality
Golovin	Municipality
Goodnews Bay	Municipality
Hooper Bay	Municipality
King Salmon	Census Designated Place
Kipruuk	Census Designated Place
Kortiganak	Census Designated Place
Kotlik	Municipality
Koyuk	Municipality
Kwigillingok	Census Designated Place
Levelock	Census Designated Place
Manokotak	Municipality
Mekoryak	Municipality
Naknek	Census Designated Place
Napaklak	Municipality
Napaskiak	Municipality
Nowtok	Census Designated Place
Nightmute	Municipality
Nome	Municipality
Oscarville	Census Designated Place
Pilot Point	Municipality
Platnum	Municipality
Port Heiden	Municipality
Quinhagak	Municipality
Scammon Bay	Municipality
Shaktolik	Municipality
Sheldon Point	Municipality
(Nunam Iqaa)	
Shishmaref	Municipality
Solomon	Census Designated Place
South Naknek	Census Designated Place
St. Michael	Municipality
Stebbins	Municipality
Teller	Municipality
Togiak	Municipality
Toksook Bay	Municipality
Tuntutuliak	Census Designated Place
Tununak	Census Designated Place

**HALIBUT REGULATORY AREA 4E—
Continued**

Rural Community	Organized Entity
Twin Hills	Census Designated Place
Ugashik	Census Designated Place
Unalakleet	Municipality
Wales	Municipality
White Mountain	Municipality

(2) A person is eligible to harvest subsistence halibut if he or she is a member of an Alaska Native tribe with customary and traditional uses of halibut listed in the following table:

HALIBUT REGULATORY AREA 2C

Place with Tribal Headquarters	Organized Tribal Entity
Angoon	Angoon Community Association
Craig	Craig Community Association
Haines	Chilkoot Indian Association
Hoonah	Hoonah Indian Association
Hydaburg	Hydaburg Cooperative Association
Juneau	Aukquan Traditional Council
	Central Council
	Tlingit and Haida Indian Tribes
	Douglas Indian Association
Kake	Organized Village of Kake
Kasaan	Organized Village of Kasaan
Ketchikan	Ketchikan Indian Corporation
Klawock	Klawock Cooperative Association
Klukwan	Chilkat Indian Village
Metlakatla	Metlakatla Indian Community, Annette Island Reserve
Petersburg	Petersburg Indian Association
Saxman	Organized Village of Saxman
Sitka	Sitka Tribe of Alaska
Skagway	Skagway Village
Wrangell	Wrangell Cooperative Association

HALIBUT REGULATORY AREA 3A

Place with Tribal Headquarters	Organized Tribal Entity
Akhiok	Native Village of Akhiok
Chenega Bay	Native Village of Chenega

**HALIBUT REGULATORY AREA 3A—
Continued**

Place with Tribal Headquarters	Organized Tribal Entity
Cordova	Native Village of Eyak
Karluk	Native Village of Karluk
Kenai-Soldotna	Kenaitze Indian Tribe
	Village of Salamatoff
Kodiak City	Lesnoi Village (Woody Island)
	Native Village of Afognak
	Shoonaq Tribe of Kodiak
Larsen Bay	Native Village of Larsen Bay
Nanwalek	Native Village of Nanwalek
Ninilchik	Ninilchik Village
Old Harbor	Village of Old Harbor
Ouzinkie	Native Village of Ouzinkie
Port Graham	Native Village of Port Graham
Port Lions	Native Village of Port Lions
Seldovia	Seldovia Village
Tatitlek	Native Village of Tatitlek
Yakutat	Yakutat Tlingit Tribe

HALIBUT REGULATORY AREA 3B

Place with Tribal Headquarters	Organized Tribal Entity
Chignik Bay	Native Village of Chignik
Chignik Lagoon	Native Village of Chignik Lagoon
Chignik Lake	Chignik Lake Village
False Pass	Native Village of False Pass
Ivanof Bay	Ivanof Bay Village
King Cove	Agdaagux Tribe of King Cove
	Native Village of Belkofski
Nelson Lagoon	Native Village of Nelson Lagoon
Perryville	Native Village of Perryville
Sand Point	Pauloff Harbor Village
	Native Village of Unga
	Qagan Toyagungin Tribe of Sand Point Village

HALIBUT REGULATORY AREA 4A		HALIBUT REGULATORY AREA 4E— Continued		HALIBUT REGULATORY AREA 4E— Continued	
Place with Tribal Headquarters	Organized Tribal Entity	Place with Tribal Headquarters	Organized Tribal Entity	Place with Tribal Headquarters	Organized Tribal Entity
Akutan	Native Village of Akutan	Elim	Native Village of Elim	Stebbins	Stebbins Community Association
Nikolski	Native Village of Nikolski	Ermonak	Chuloonawick Native Village	Teller	Native Village of Mary's Igloo
Unalaska	Cawalingin Tribe of Unalaska		Emmonak Village		Native Village of Teller
			Chinik Eskimo Community	Togiak	Traditional Village of Togiak
HALIBUT REGULATORY AREA 4B		Goodnews Bay	Native Village of Goodnews Bay	Toksook Bay	Native Village of Toksook Bay
Place with Tribal Headquarters	Organized Tribal Entity	Hooper Bay	Native Village of Hooper Bay	Tuntutuliak	Native Village of Tuntutuliak
Alka	Native Village of Alka		Native Village of Paimlut	Tununak	Native Village of Tununak
HALIBUT REGULATORY AREA 4C		King Salmon	King Salmon Tribal Council	Twin Hills	Twin Hills Village
Place with Tribal Headquarters	Organized Tribal Entity	Kipnuk	Native Village of Kipnuk	Ugashik	Ugashik Village
		Kongiganak	Native Village of Kongiganak	Unalakleet	Native Village of Unalakleet
		Kotlik	Native Village of Hamilton	Wales	Native Village of Wales
St. George	Pribilof Islands Aleut Communities of St. Paul Island and St. George Island		Village of Bill Moore's Slough	White Mountain	Native Village of White Mountain
St. Paul			Village of Kotlik		
HALIBUT REGULATORY AREA 4D		Koyuk	Native Village of Koyuk		
Place with Tribal Headquarters	Organized Tribal Entity	Kwigillingok	Native Village of Kwigillingok		
		Levelock	Levelock Village		
Gambell	Native Village of Gambell	Manokotak	Manokotak Village		
Savoonga	Native Village of Savoonga	Mekoryak	Native Village of Mekoryak		
Diomede (Inalik)	Native Village of Diomede (Inalik)	Naknek	Naknek Native Village		
HALIBUT REGULATORY AREA 4E		Napakiak	Native Village of Napakiak		
Place with Tribal Headquarters	Organized Tribal Entity	Napaskiak	Native Village of Napaskiak		
		Newtok	Newtok Village		
		Nightmute	Native Village of Nightmute		
			Umkumliute Native Village		
		Nome	King Island Native Community		
			Nome Eskimo Community		
Alakanuk	Village of Alakanuk	Oscarville	Oscarville Traditional Village		
Aleknagik	Native Village of Aleknagik	Pilot Point	Native Village of Pilot Point		
Bethel	Orutsaramuit Native Village	Platinum	Platinum Traditional Village		
Brevig Mission	Native Village of Brevig Mission	Port Helden	Native Village of Port Helden		
Chefornak	Village of Chefornak	Quinhagak	Native Village of Quinhagak		
Chevak	Chevak Native Village	Scammon Bay	Native Village of Scammon Bay		
Clark's Point	Village of Clark's Point	Shaktoolik	Native Village of Shaktoolik		
Council	Native Village of Council		Native Village of Sheldon's Point		
Dillingham	Village of Dillingham	Sheldon Point (Nuna Iqua)	Native Village of Sheldon's Point		
	Native Village of Ekuk	Shishmaref	Native Village of Shishmaref		
	Native Village of Kanakanak	Solomon	Village of Solomon		
Eek	Native Village of Eek	South Naknek	South Naknek Village		
Egegik	Egegik Village	St. Michael	Native Village of Saint Michael		
	Village of Kanatak				

(g) *Limitations on subsistence fishing.* Subsistence fishing for halibut may be conducted only by persons who qualify for such fishing pursuant to paragraph (f) of this section and who hold a valid subsistence halibut registration certificate in that person's name issued by NMFS pursuant to paragraph (h) of this section, provided that such fishing is consistent with the following limitations.

(1) Subsistence fishing is limited to setline gear and hand-held gear, including longline, handline, rod and reel, spear, jig and hand-troll gear.

(i) Subsistence fishing gear must not have more than 30 hooks per person registered in accordance with paragraph (h) of this section and on board the vessel from which gear is being set or retrieved.

(ii) All setline gear marker buoys carried on board or used by any vessel regulated under this section shall be marked with the following: first initial, last name, and address (street, city, and state), followed by the letter "S" to indicate that it is used to harvest subsistence halibut.

(iii) Markings on setline marker buoys shall be in characters at least 4 inches (10.16 cm) in height and 0.5 inch (1.27 cm) in width in a contrasting color visible above the water line and shall be maintained so the markings are clearly visible.

(2) The daily retention of subsistence halibut in rural areas is limited to no more than 20 fish per person eligible to conduct subsistence fishing for halibut under paragraph (g) of this section.

**APPENDIX B: LETTER SENT TO TRIBES ABOUT THE
PROJECT**

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

DIVISION OF SUBSISTENCE

SARAH PALIN, GOVERNOR

333 Raspberry Road
ANCHORAGE, AK 99518-1599
PHONE: (907) 267-2353
FAX: (907) 267-2450

December 21, 2006

TO:

SUBJECT: Subsistence Halibut Fishing and Harvest Survey

In December 2005, we informed you about the third year of the project conducted by the Division of Subsistence of ADF&G to estimate the subsistence harvests of halibut in Alaska. As part of a contract with the National Marine Fisheries Service (NMFS), in early 2006 we mailed a short (one-page) questionnaire to every person who obtained a subsistence halibut registration certificate (called a "SHARC") from NMFS. Through the survey, we collected information about participation in the fishery and the number of halibut, rockfish, and lingcod harvested for subsistence use in 2005. Participation in the survey was voluntary. Of the 14,306 SHARC holders, 8,565 (60%) completed the survey – an excellent response.

We have completed the final report for the project as part of our Technical Paper Series (No. 320). A copy will be mailed to you shortly. Enclosed is a short overview of the study findings. You can also obtain the overview and the complete report through the Division of Subsistence website at www.subsistence.adfg.state.ak.us. Please contact us if you have questions.

We also wanted to let you know that we will be doing the survey again beginning in late January 2007, to collect information about subsistence halibut harvests in 2006. Again, we'll be mailing a short questionnaire to every SHARC holder, and asking them to voluntarily fill it out and send it back to us (we pay the postage). We will again compile the harvest information in a report to NMFS that will be available to tribes and to the public in late 2007. In our view, collecting and reporting accurate information about subsistence halibut harvests is important in supporting this fishery.

In addition to mailing out the survey forms, Division of Subsistence staff plan to visit some communities in 2007 to provide information about the subsistence halibut fishery program, and to encourage subsistence fishers to obtain registration cards (SHARCs) and

return the surveys. We will of course coordinate these visits with tribal governments. We will also coordinate collection of subsistence halibut harvest information with other subsistence projects taking place in some communities, such as the collection of harbor seal and sea lion harvest data in communities of southeast, southcentral, and southwest Alaska.

As we noted, an important feature of the subsistence halibut regulations is that eligible people who want to subsistence fish need to obtain a subsistence halibut registration certificate (called a "SHARC" for short). Applications are available from NMFS at the address below. People can also submit applications on the Internet by logging on to: www.fakr.noaa.gov/ram and following the links to the subsistence halibut program. We encourage you to get the word out about this program to your tribal members who subsistence fish for halibut. More information about the subsistence halibut fishing program is available from NMFS as follows:

On the Internet: www.fakr.noaa.gov/ram/subsistence/halibut.htm
By e-mail: RAM.Alaska@noaa.gov
By phone: 800-304-4846 (option #2)
By mail: Alaska Region, National Marine Fisheries Service
Restricted Access Management (RAM) Program
PO Box 21668
Juneau, AK 99802

We will develop public notices about our subsistence halibut harvest survey within the next month or so, and will be contacting tribes in communities that we would like to visit. Again, the survey form itself will be mailed in late January. In the meantime, if you have questions about our project, please contact me (see below), or contact Jim Simon in our Fairbanks office (907-459-7317; james_simon@fishgame.state.ak.us) or Mike Turek in our Juneau office (907-465-3617; mike_turek@fishgame.state.ak.us).

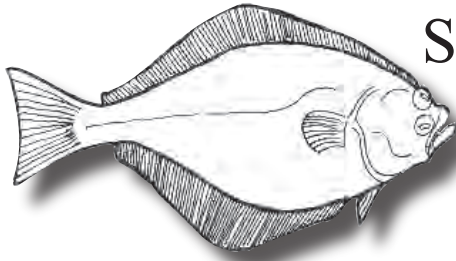
Sincerely,

James Fall
Regional Program Manager
907-267-2359
jim_fall@fishgame.state.ak.us

Enclosures: "Subsistence Harvests of Pacific Halibut in Alaska, 2005"

cc: Jim Simon, Mike Turek, Elizabeth Andrews

APPENDIX C: NEWSPAPER NOTICE



Notice to SUBSISTENCE HALIBUT FISHERS regarding MAIL-OUT HARVEST SURVEY

All holders of Subsistence Halibut Registration Certificates (SHARCs) will receive a 1-page harvest survey in the mail from the Division of Subsistence, Alaska Department of Fish and Game on approximately February 5, 2007. You will be asked whether you subsistence fished for halibut in 2006 and how many halibut you harvested. Even if you did not fish, please complete the survey and return it to ADF&G.

In April 2003, National Marine Fisheries Service (NMFS) issued regulations allowing the harvest of halibut for subsistence purposes. Residents of 117 rural Alaska communities and 123 Alaska Native tribes with customary and traditional uses of halibut are eligible to participate after they obtain a SHARC from NMFS.

Accurate and complete subsistence harvest information is essential for proper management of the fishery and protection of future subsistence fishing opportunities.

Please, fill out and return your survey form as soon as it arrives in the mail.

Questions?

Contact NMFS:

- by phone: 1-800-304-4846 (option #2)
- on the internet:
www.fakr.noaa.gov/ram/subsistence/halibut.htm

• by mail:

Alaska Region, NMFS
Restricted Access Management
Program
PO Box 21668
Juneau, Alaska 99802

Contact ADF&G, Division of Subsistence:

- by phone: 1-907-267-2353
- by email:
subsistence_halibut@fishgame.state.ak.us
- by mail:

Division of Subsistence, ADF&G
333 Raspberry Road
Anchorage, AK 99518



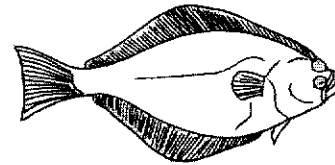
*Thank you for support
of this program!*

APPENDIX D: SURVEY FORM

SUBSISTENCE HALIBUT HARVEST SURVEY 2006

National Marine Fisheries Service &
AK Dept. Fish & Game/Division of Subsistence

(Please make address changes as needed)



2
0
0
6

Fisher's Name			Date of Birth		
First name	M.I.	Last name	Mo.	Day	Year
Mailing Address					
Number and street or PO Box		City	State	Zip code	
Community of Residence		Daytime Telephone	SHARC Number		
Tribe (if you are on a tribal role)					

Please answer each question to the best of your knowledge.

1. Did you subsistence fish for halibut during 2006? (Please check one) Yes No

2. How many halibut did you harvest with set hook gear (longline, skate) while subsistence fishing during 2006?
("Set hook gear" is hook-and-line set with anchors and buoys. Please write in both the number and pounds of halibut. Pounds should be round (live) weight.)

2a. Number of halibut

2b. Pounds of halibut

2c. How many hooks did you usually set?

2d. Water body, bay or sound usually fished

3. How many halibut did you harvest with hook-and-rod or hand-held lines while subsistence fishing during 2006?
(Please write in both the number and pounds of halibut. Do not count fish reported in Question 6. Pounds should be round (live) weight.)

3a. Number of halibut

3b. Pounds of halibut

3c. Water body, bay or sound usually fished

4. How many lingcod and rockfish did you harvest while subsistence halibut fishing during 2006?
(Please write in numbers of fish only.)

4a. Number of lingcod

4b. Number of rockfish

5. Did you sport fish for halibut during 2006? (Please check one) Yes No

6. How many halibut did you harvest while sport fishing during 2006?
(Please write in both the number and pounds of halibut. Do not count fish reported in Question 3. Pounds should be round (live) weight.)

6a. Number of halibut

6b. Pounds of halibut

6c. Water body, bay or sound usually sport fished

THANK YOU!

Please mail the completed survey to:
Subsistence Halibut Harvest Survey
Ak. Dept. Fish & Game/Div. of Subsistence
333 Raspberry Rd
Anchorage AK 99518-1599

QUESTIONS?

ADF&G 1-907-267-2353
NMFS at 1-800-304-4846 (option 2)
subsistence_halibut@fishgame.state.ak.us

APPENDIX E: SURVEY INSTRUCTIONS

INSTRUCTIONS FOR SUBSISTENCE HALIBUT HARVEST SURVEY, 2006

PLEASE COMPLETE AND RETURN THE SURVEY EVEN IF YOUR SHARC HAS EXPIRED

Question 1.

- Mark “yes” even if you fished but were unsuccessful

Questions 2 and 3.

- Include only those fish harvested by you, the individual fisher (SHARC holder). If you fished with someone else and split the catch, count only your share of the catch. Other household members who harvested halibut should fill out their own forms.
- Include fish that you harvested and kept for your household’s use AND fish you harvested and gave away or traded. DO NOT include fish that you received from someone else.
- Identify both the number and pounds of halibut harvested; if you cannot provide both, please provide what you are able. Pounds should be **ROUND (LIVE) WEIGHT**. If you only know the dressed weight of your halibut harvest, record that number and make a note of “dressed, head on” (equals about 88% of round weight) or “dressed, head off” (equals about 75% of round weight).
- Number of hooks: write in the number that you use most often each time you set a line. That is, the number of hooks you usually have on your longline/skate.
- Water body, bay, or sound: record the general location where you did most of your subsistence halibut fishing (for example, “Chiniak Bay,” “Sitka Sound”). If you used more than one general area for a significant portion of your catch, please provide the portion of your harvest from each.

Question 4.

- DO NOT include all the lingcod and rockfish you harvested, but just those you harvested while subsistence halibut fishing.
- “Rockfish” means all fish of the genus *Sebastes*. These include fish with common English names such as red snapper, black bass, and sea bass.
- “Rockfish” DO NOT include sculpin, greenling, sablefish (black cod), tomcod, or Pacific cod. Please DO NOT include these other fish in your harvest estimates for rockfish.

Questions 5 and 6.

- Sport fishing for halibut requires an Alaska sport fishing license. Sport fishers for halibut must fish with a line attached to a rod or pole. There is a limit of two hooks. The daily bag limit is two halibut and the possession limit is four halibut.

Do you still have questions?

Call the National Marine Fisheries Service at: 1-800-304-4846 (option 2);

Or visit <http://www.fakr.noaa.gov/ram/subsistence/halibut.htm>;

Or call ADF&G Division of Subsistence at: 907-267-2353;

Or contact the Division of Subsistence via e-mail at: subsistence_halibut@fishgame.state.ak.us

**APPENDIX F: RESPONSES TO FREQUENTLY ASKED
QUESTIONS**

RAM: FAQ's for Subsistence Halibut Harvest Survey

The following is a list of standard responses that may be given to common questions regarding the Subsistence Halibut Harvest Survey. Any question that cannot be answered by the responses below or by other personnel in RAM division may be directed to ADF&G Division of Subsistence at the phone number(s) indicated at the bottom of the page.

1. I got my SHARC from NMFS. Why is this survey being done by ADF&G?

- NMFS contracted with ADF&G Division of Subsistence to conduct this survey because the Division of Subsistence has a lot of experience in collecting and analyzing subsistence harvest data. They have staff who are familiar with local communities and subsistence harvest patterns.

2. What happens to this information after I send it in?

- The survey responses are entered into a database by ADF&G. They will use the responses to estimate and report subsistence harvests at a community level. NMFS will receive a report from ADF&G with the survey results. The report will not include individual responses.

3. Why do you need my birth date?

- ADF&G needs birth date only to distinguish between individuals who may have the same name. For instance, there may be many John Smith's in area 2C. Providing birth date prevents ADF&G from counting the same person more than once or even counting multiple people as the same person. However, ADF&G is required to maintain birth date confidential under the Privacy Act.

4. I live in an isolated area near [insert]. What do I put down as my Community of Residence?

- Your Community of Residence is defined as the geographical location of your home. If you live in a remote location, you may list the community nearest your home. "Community of residence" is not necessarily the same as where you receive your mail.

5. The survey asks me to put down Pounds of Halibut. Does this mean I should weigh all my halibut on a scale?

- No. While an actual weight using a scale would be helpful to ADF&G, you only need to estimate the total pounds of halibut you harvested. If you know how many halibut you harvested, but have no idea how much they weighed, leave the "pounds" area blank. If you know about how many pounds you harvested but have no idea how many fish you caught, leave the "number" area blank. We will calculate the pounds or number based on standard conversion factors. However, we prefer that you do your best to provide an estimate of both numbers and pounds, because this information is lacking for the subsistence fishery.

6. Should I record the weight of my halibut before or after I process them?

- The survey asks for **ROUND WEIGHT**, which is the weight of the fish BEFORE it is gutted and beheaded. If you only know the approximate weight of the fish after you gutted them, write “dressed, head on” next to the weight (this equals about 88% of round/live weight). If you only know the approximate weight of the fish after you gutted and beheaded them, write “dressed, head off” next to the weight (this equals about 72% of round/live weight).

7. I fish near [insert]. What is the water body, bay, or sound?

- The water body, bay, or sound is the area in which you subsistence fished for halibut. For instance, a subsistence fisher from Sitka might put down that he subsistence fished for halibut in Sitka *Sound* or a subsistence fisher from Kodiak might put down that he subsistence fished for halibut in Chiniak *Bay*. However, a subsistence fisher from Akutan might put down that he subsistence fished for halibut in Unimak Pass, which is neither a bay nor sound but would be classified as a *water body*. Likewise, a subsistence fisher from St. Paul might put down that he subsistence fished for halibut in the Bering Sea, which is also a *water body*. However, the more specific the description, the more helpful it will be to ADF&G.

8. What is a lingcod?

- A lingcod is a relatively long fish that ranges from black, to grey, to greenish, to bluish-purple, usually with dark brown or copper blotches arranged in clusters, and has a large mouth with 18 large teeth. For a more accurate description and local or tribal names, you can refer to the sheet distributed by ADF&G in the original mailing that also contained your Subsistence Halibut Harvest Survey or visit the NMFS website http://www.afsc.noaa.gov/race/media/photo_gallery/fish_by_family.htm.

9. What is a rockfish?

- These fish are characterized by having bony plates or spines on the head and body and a large mouth. Some species are brightly colored, and many are difficult to distinguish from one another. They are also known as sea bass, black bass, and red snapper. For a more accurate description and local or tribal names, you can refer to the instruction sheet distributed by ADF&G in the original mailing that also contained your Subsistence Halibut Harvest Survey or visit the NMFS website http://www.afsc.noaa.gov/race/media/photo_gallery/fish_by_family.htm.

10. What is “sport fishing”?

- Sport fishing is defined as all fishing other than commercial fishing, personal use fishing, and subsistence fishing. Typically, sport fishing is conducted with a rod and reel using no more than 2 hooks under ADF&G regulations.

11. Why do I need to report my sport-caught halibut on this subsistence harvest survey form (Question 6)?

- The survey is designed to prevent double-counting of harvested halibut. If you fish for halibut with a rod and reel and have a sport fishing license, you may include your harvests in Question 2 if you consider your activity to be subsistence fishing, or under Question 6 if you consider it sport fishing. **DO NOT INCLUDE THE SAME FISH IN YOUR REPSONSES TO QUESTIONS 2 AND 6.** We will exclude responses to Question 6 from our estimate of subsistence halibut harvests. Holders of sport fishing licenses may receive a survey from ADF&G about their sport harvests. If you do, you should report the halibut you record in Question 6 in that survey too, but do not include the halibut you record in Question 2.

All other inquiries regarding the survey should be directed to ADF&G Division of Subsistence at (907) 267-2353 (Anchorage) or 907-465-3617, or e-mail at subsistence_halibut@fishgame.state.ak.us

APPENDIX G: APPENDIX TABLES

Appendix Table 1.—Results from returned surveys by eligible Alaska Tribe, eligible Alaska rural community, and place of residence, 2006.

Tribal Name ¹	Return Rate			Subsistence Fished		Subsistence Harvest		Sport Fished		Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
	SHARCs Issued ²	Surveys Returned	Percent Returned	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Number Lingcod	Number Respondents	Number Rockfish
AGDAAGUX TRIBE OF KING COVE	50	30	60.0%	17	56.7%	200	5179	5	16.7%	15	453	1	4	2	13
ANGOON COMMUNITY ASSOCIATION	141	112	79.4%	44	39.3%	581	13928	7	6.3%	24	390	5	8	6	39
AUKQUAN TRADITIONAL COUNCIL	2														
CENTRAL COUNCIL TLINGIT AND HAIDA INDIAN TRIBES	725	277	38.2%	79	28.5%	849	25288	55	19.9%	205	5045	10	49	23	303
CHEVAK NATIVE VILLAGE (KASHUNAMIUT)	7	4	57.1%	4	100.0%	13	330	0	0.0%	0	0	1	3	0	0
CHIGNIK LAKE VILLAGE	10	6	60.0%	4	66.7%	24	330	1	16.7%	2	63	0	0	0	0
CHILKAT INDIAN VILLAGE	42	27	64.3%	4	14.8%	9	435	0	0.0%	0	0	0	0	0	0
CHILKOOT INDIAN ASSOCIATION	52	27	51.9%	9	33.3%	46	1429	1	3.7%	2	70	1	6	2	5
CHINIK ESKIMO COMMUNITY	1														
CRAIG COMMUNITY ASSOCIATION	59	27	45.8%	12	44.4%	58	2508	6	22.2%	11	450	2	3	5	48
DOUGLAS INDIAN ASSOCIATION	25	13	52.0%	2	15.4%	25	500	1	7.7%	2	85	0	0	1	10
EGEGIK VILLAGE	6	6	100.0%	5	83.3%	18	222	4	66.7%	10	104	4	17	1	4
HOONAH INDIAN ASSOCIATION	217	97	44.7%	38	39.2%	557	15975	11	11.3%	50	1235	5	24	5	352
HYDABURG COOPERATIVE ASSOCIATION	193	184	95.3%	52	28.3%	442	24544	5	2.7%	31	2740	11	70	27	516
IVANOFF BAY VILLAGE	8	2	25.0%	1	50.0%	6	120	0	0.0%	0	0	0	0	0	0
KENAITZE INDIAN TRIBE	80	49	61.3%	15	30.6%	191	3730	7	14.3%	33	980	2	6	0	0
KETCHIKAN INDIAN CORPORATION	887	398	44.9%	65	16.3%	593	16546	68	17.1%	266	5198	16	35	26	389
KING ISLAND NATIVE COMMUNITY	2														
KLAWOCK COOPERATIVE ASSOCIATION	175	64	36.6%	24	37.5%	199	11389	11	17.2%	52	2312	8	45	11	215
LESNOI VILLAGE (WOODY ISLAND)	259	94	36.3%	15	16.0%	109	3640	18	19.1%	53	1735	5	9	4	55
LEVELOCK VILLAGE	1														
METLAKATLA INDIAN COMMUNITY, ANNETTE ISLAND RES	403	127	31.5%	33	26.0%	96	2904	21	16.5%	19	521	5	27	11	55
NAKNEK NATIVE VILLAGE	6	4	66.7%	3	75.0%	5	225	2	50.0%	12	480	0	0	0	0
NATIVE VILLAGE OF AFOGNAK	27	16	59.3%	6	37.5%	30	923	4	25.0%	3	125	0	0	0	0
NATIVE VILLAGE OF AKHIOK	25	5	20.0%	4	80.0%	76	1225	1	20.0%	1	30	0	0	0	0
NATIVE VILLAGE OF AKUTAN	44	9	20.5%	7	77.8%	119	3332	1	11.1%	8	100	1	6	2	30
NATIVE VILLAGE OF ALEKNAGIK	5														
NATIVE VILLAGE OF ATKA	6	3	50.0%	2	66.7%	47	824	1	33.3%	1	20	0	0	0	0
NATIVE VILLAGE OF BELKOFSKI	2														
NATIVE VILLAGE OF CHENEGA	30	12	40.0%	5	41.7%	58	3118	2	16.7%	4	75	1	1	3	73
NATIVE VILLAGE OF CHIGNIK	13	10	76.9%	8	80.0%	49	1457	2	20.0%	0	0	1	1	1	12
NATIVE VILLAGE OF CHIGNIK LAGOON	43	20	46.5%	17	85.0%	169	5136	6	30.0%	24	835	1	2	5	89
NATIVE VILLAGE OF COUNCIL	1														
NATIVE VILLAGE OF DILLINGHAM (CURYUNG)	23	14	60.9%	4	28.6%	18	593	3	21.4%	6	120	0	0	0	0
NATIVE VILLAGE OF EEK	21	8	38.1%	4	50.0%	14	900	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF EKUK	3														
NATIVE VILLAGE OF ELIM	1														
NATIVE VILLAGE OF EYAK	76	44	57.9%	18	40.9%	115	3023	9	20.5%	16	365	2	8	2	9
NATIVE VILLAGE OF FALSE PASS	14	3	21.4%	2	66.7%	10	0	0	0.0%	0	0	1	4	0	0
NATIVE VILLAGE OF GAMBELL	6	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF GOODNEWS BAY (MUMTRAQ)	15	6	40.0%	2	33.3%	12	200	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF HOOPER BAY	92	40	43.5%	9	22.5%	37	575	1	2.5%	0	0	2	52	0	0
NATIVE VILLAGE OF KANAKANAK	1														
NATIVE VILLAGE OF KARLUK	5														
NATIVE VILLAGE OF KIPNUK	88	9	10.2%	7	77.8%	61	1224	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF KONGIGANAK	10	2	20.0%	2	100.0%	13	300	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF KOYUK	1														
NATIVE VILLAGE OF KWIGILLINGOK	48	7	14.6%	3	42.9%	22	565	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF KWINHAGAK	11	2	18.2%	1	50.0%	4	150	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF LARSEN BAY	45	25	55.6%	12	48.0%	129	4592	2	8.0%	8	148	3	4	4	56
NATIVE VILLAGE OF MEKORYUK	16	7	43.8%	4	57.1%	71	871	1	14.3%	6	130	1	8	0	0
NATIVE VILLAGE OF NANWALEK	29	27	93.1%	14	51.9%	187	4371	2	7.4%	9	155	5	67	4	60
NATIVE VILLAGE OF NAPAKIAK	3														
NATIVE VILLAGE OF NELSON LAGOON	3														
NATIVE VILLAGE OF NIGHTMUTE	8	2	25.0%	1	50.0%	21	0	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF NIKOLSKI	12	1	8.3%	1	100.0%	0	0	1	100.0%	0	0	0	0	0	0
NATIVE VILLAGE OF OUZINKIE	45	19	42.2%	13	68.4%	106	4297	6	31.6%	17	717	4	8	4	68

-continued-

Appendix Table 1.–Page 2 of 6.

611

Tribal Name ¹	Return Rate			Subsistence Fished		Subsistence Harvest		Sport Fished		Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
	SHARCs Issued ²	Surveys Returned	Percent Returned	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Number Lingcod	Number Respondents	Number Rockfish
	NATIVE VILLAGE OF PERRYVILLE	38	21	55.3%	13	61.9%	125	3970	1	4.8%	5	450	1	1	2
NATIVE VILLAGE OF PORT GRAHAM	46	25	54.3%	13	52.0%	186	3658	1	4.0%	0	0	0	0	1	20
NATIVE VILLAGE OF PORT HEIDEN	1														
NATIVE VILLAGE OF PORT LIONS	56	24	42.9%	16	66.7%	136	4334	10	41.7%	23	809	1	5	2	12
NATIVE VILLAGE OF SAVOONGA	44	14	31.8%	7	50.0%	74	3520	0	0.0%	0	0	2	6	1	6
NATIVE VILLAGE OF SCAMMON BAY	5														
NATIVE VILLAGE OF SHAKTOOLIK	1														
NATIVE VILLAGE OF SHISHMAREF	1														
NATIVE VILLAGE OF TATITLEK	32	17	53.1%	10	58.8%	118	4505	0	0.0%	0	0	1	1	8	77
NATIVE VILLAGE OF TOKSOOK BAY (NUNAKAUYAK)	532	138	25.9%	112	81.2%	4041	48562	0	0.0%	0	0	9	27	3	41
NATIVE VILLAGE OF TUNUNAK	73	11	15.1%	6	54.5%	87	910	0	0.0%	0	0	0	0	2	13
NATIVE VILLAGE OF UNALAKLEET	6	5	83.3%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF UNGA	13	4	30.8%	3	75.0%	36	745	1	25.0%	4	240	1	21	1	18
NATIVE VILLAGE OF WHITE MOUNTAIN	2														
NEWTOK VILLAGE	3														
NINILCHIK VILLAGE	98	50	51.0%	14	28.0%	143	3736	7	14.0%	50	1205	1	6	0	0
NOME ESKIMO COMMUNITY	15	6	40.0%	0	0.0%	0	0	1	16.7%	2	100	0	0	0	0
ORGANIZED VILLAGE OF KAKE	130	67	51.5%	22	32.8%	199	7241	4	6.0%	2	150	4	18	5	58
ORGANIZED VILLAGE OF KASAAAN	11	6	54.5%	5	83.3%	40	1270	2	33.3%	4	100	0	0	2	16
ORGANIZED VILLAGE OF SAKMAN	63	39	61.9%	16	41.0%	62	2180	8	20.5%	15	450	8	11	8	46
ORUTSARARMUIT NATIVE VILLAGE	8	2	25.0%	1	50.0%	52	1195	0	0.0%	0	0	0	0	0	0
PAULOFF HARBOR VILLAGE	56	16	28.6%	8	50.0%	64	2646	4	25.0%	42	2060	0	0	1	8
PETERSBURG INDIAN ASSOCIATION	125	71	56.8%	26	36.6%	240	4365	14	19.7%	49	1033	2	7	5	8
PLATINUM TRADITIONAL VILLAGE	1														
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST GEORGE	27	4	14.8%	3	75.0%	25	680	0	0.0%	0	0	0	0	0	0
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST PAUL	254	234	92.1%	25	10.7%	338	6043	0	0.0%	0	0	0	0	0	0
QAGAN TAYAGUNGIN TRIBE OF SAND POINT VILLAGE	318	111	34.9%	34	30.6%	180	5580	4	3.6%	4	48	4	17	5	201
QAWALANGIN TRIBE OF UNALASKA	43	21	48.8%	7	33.3%	48	1080	3	14.3%	13	292	1	6	1	3
SELDOVIA VILLAGE TRIBE	50	31	62.0%	12	38.7%	225	6605	11	35.5%	66	1573	1	29	3	32
SHOONAQ' TRIBE OF KODIAK	184	93	50.5%	57	61.3%	675	21019	11	11.8%	58	1685	14	65	16	228
SITKA TRIBE OF ALASKA	460	262	57.0%	85	32.4%	885	32588	23	8.8%	39	1210	18	95	23	487
SKAGWAY VILLAGE	2														
SOUTH NAKNEK VILLAGE	2														
STEBBINS COMMUNITY ASSOCIATION	4														
TRADITIONAL VILLAGE OF TOGIAK	11	5	45.5%	1	20.0%	0	0	0	0.0%	0	0	0	0	0	0
TWIN HILLS VILLAGE	1														
UGASHIK VILLAGE	4														
VILLAGE OF CHEFORNAK	19	6	31.6%	3	50.0%	86	875	0	0.0%	0	0	1	3	1	12
VILLAGE OF CLARK'S POINT	3														
VILLAGE OF KANATAK	11	1	9.1%	1	100.0%	10	200	1	100.0%	1	15	1	6	1	13
VILLAGE OF OLD HARBOR	56	27	48.2%	18	66.7%	105	3375	3	11.1%	9	220	3	9	2	12
VILLAGE OF SALAMATOFF	16	12	75.0%	7	58.3%	104	2710	1	8.3%	5	175	2	4	3	38
WRANGELL COOPERATIVE ASSOCIATION	113	75	66.4%	29	38.7%	289	9466	17	22.7%	73	2335	3	10	5	43
YAKUTAT TLINGIT TRIBE	62	31	50.0%	14	45.2%	213	5389	1	3.2%	10	100	6	44	4	50
Tribal Name Subtotals	7123	3299	46.31%	1147	34.77%	14196	356296	398	12.06%	1380	39317	182	858	254	3878

Rural Community ¹	Return Rate			Subsistence Fished		Subsistence Harvest		Sport Fished		Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
	SHARCs Issued ²	Surveys Returned	Percent Returned	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Number Lingcod	Number Respondents	Number Rockfish
	ADAK	12	8	66.7%	1	12.5%	0	0	0	0.0%	0	0	0	0	0
AKHIOK	1														
AKUTAN	2														
ALAKANUK	1														
ALEKNAGIK	3														
ANGOON	26	20	76.9%	10	50.0%	151	3652	8	40.0%	21	518	1	1	4	60

-continued-

Appendix Table 1.–Page 3 of 6.

Rural Community ¹	Return Rate			Subsistence Fished		Subsistence Harvest		Sport Fished		Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
	SHARCs Issued ²	Surveys Returned	Percent Returned	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Number Lingcod	Number Respondents	Number Rockfish
	BETHEL	4													
CHEFORNAK	1														
CHENEGA BAY	11	7	63.6%	4	57.1%	120	2920	2	28.6%	23	550	2	10	3	38
CHEVAK	3														
CHIGNIK	10	7	70.0%	4	57.1%	28	719	0	0.0%	0	0	1	1	1	15
CHIGNIK LAGOON	7	3	42.9%	2	66.7%	23	553	1	33.3%	3	120	1	10	1	20
CHIGNIK LAKE	4														
CLARKS POINT	1														
COFFMAN COVE	43	33	76.7%	17	51.5%	138	3518	11	33.3%	30	910	3	12	5	67
COLD BAY	19	15	78.9%	12	80.0%	138	3515	6	40.0%	25	825	1	25	0	0
CORDOVA	534	386	72.3%	162	42.0%	955	25574	102	26.4%	259	6623	17	35	32	177
CRAIG	323	233	72.1%	124	53.2%	1206	31275	85	36.5%	438	8485	24	65	52	608
DILLINGHAM	44	37	84.1%	1	2.7%	0	0	2	5.4%	0	0	0	0	0	0
EDNA BAY	47	42	89.4%	21	50.0%	132	5718	8	19.0%	25	572	4	10	10	84
ELFIN COVE	18	12	66.7%	5	41.7%	17	856	1	8.3%	1	8	0	0	2	9
EMMONAK	1														
FALSE PASS	3														
GUSTAVUS	67	52	77.6%	27	51.9%	268	7015	16	30.8%	71	1680	0	0	2	5
HAINES	432	341	78.9%	162	47.5%	710	22179	69	20.2%	104	3386	10	17	17	99
HOLLIS	50	36	72.0%	24	66.7%	106	4805	10	27.8%	26	330	3	4	7	28
HOONAH	115	80	69.6%	36	45.0%	372	8195	21	26.3%	116	2328	1	1	4	25
HOOPER BAY	1														
HYDABURG	14	14	100.0%	7	50.0%	21	1737	5	35.7%	5	300	2	6	3	32
HYDER	35	24	68.6%	14	58.3%	70	2397	5	20.8%	7	300	2	5	7	38
KAKE	42	32	76.2%	17	53.1%	172	6090	7	21.9%	6	273	2	6	4	32
KASAAN	16	10	62.5%	5	50.0%	33	700	5	50.0%	7	310	0	0	3	20
KING COVE	22	17	77.3%	13	76.5%	133	2996	5	29.4%	16	495	0	0	1	3
KING SALMON	2														
KLAWOCK	114	78	68.4%	45	57.7%	408	11129	23	29.5%	102	1681	9	46	17	189
KLUKWAN	1														
KODIAK	1441	989	68.6%	575	58.1%	5204	159198	368	37.2%	1904	56720	54	145	110	1124
KOTLIK	1														
KWIGILLINGOK	1														
LARSEN BAY	13	10	76.9%	8	80.0%	73	2325	5	50.0%	25	805	0	0	4	41
MANOKOTAK	2														
MEKORYUK	1														
METLAKATLA	35	16	45.7%	8	50.0%	110	2535	7	43.8%	15	385	2	4	4	39
MEYERS CHUCK	10	9	90.0%	7	77.8%	20	639	0	0.0%	0	0	0	0	3	10
NAKNEK	6	4	66.7%	2	50.0%	5	180	1	25.0%	0	0	0	0	0	0
NANWALEK	4														
NIGHTMUTE	7	3	42.9%	3	100.0%	125	2426	0	0.0%	0	0	0	0	0	0
NIKOLSKI	6	1	16.7%	1	100.0%	7	500	1	100.0%	0	0	0	0	0	0
NOME	6	2	33.3%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
OLD HARBOR	24	16	66.7%	11	68.8%	86	2255	4	25.0%	7	190	0	0	0	0
OUZINKIE	10	9	90.0%	8	88.9%	72	2580	3	33.3%	16	400	1	3	4	92
PELICAN	43	28	65.1%	21	75.0%	155	5530	11	39.3%	14	730	8	30	12	140
PERRYVILLE	2														
PETERSBURG	925	692	74.8%	277	40.0%	1976	47503	163	23.6%	603	15825	10	21	43	268
PLATINUM	1														
PORT ALEXANDER	26	20	76.9%	6	30.0%	52	1775	6	30.0%	29	1034	2	21	3	50
PORT GRAHAM	12	9	75.0%	4	44.4%	57	1250	1	11.1%	1	25	1	2	1	2
PORT HEIDEN	2														
PORT LIONS	30	17	56.7%	9	52.9%	58	1214	11	64.7%	80	2650	0	0	0	0
PORT PROTECTION	23	17	73.9%	10	58.8%	66	1664	4	23.5%	16	350	3	5	7	38
PT. BAKER	18	13	72.2%	12	92.3%	105	2623	2	15.4%	5	100	1	20	4	49
QUINHAGAK	2														
SAND POINT	15	10	66.7%	5	50.0%	94	2350	3	30.0%	32	960	0	0	1	11
SAXMAN	23	20	87.0%	4	20.0%	149	1115	7	35.0%	31	895	2	5	3	14

-continued-

Appendix Table 1.–Page 4 of 6.

Rural Community ¹	Return Rate			Subsistence Fished		Subsistence Harvest		Sport Fished		Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
	SHARCs Issued ²	Surveys Returned	Percent Returned	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Number Lingcod	Number Respondents	Number Rockfish
	SELDOVIA	102	85	83.3%	59	69.4%	781	17204	36	42.4%	295	5618	5	32	10
SHELDON POINT	1														
SITKA	1429	1025	71.7%	553	54.0%	3770	117358	256	25.0%	845	20179	207	614	266	2429
SKAGWAY	56	39	69.6%	15	38.5%	52	1569	10	25.6%	16	227	1	2	5	13
SOUTH NAKNEK	2														
ST GEORGE ISLAND	1														
ST PAUL ISLAND	1														
TATITLEK	12	6	50.0%	4	66.7%	30	915	2	33.3%	11	190	0	0	3	29
TELLER	3														
TENAKEE SPRINGS	43	34	79.1%	25	73.5%	161	5214	14	41.2%	33	685	3	5	12	86
THORNE BAY	139	98	70.5%	42	42.9%	314	9657	49	50.0%	346	6537	5	20	17	132
TOGIAK	3														
TOKSOOK BAY	1														
UNALASKA	120	78	65.0%	38	48.7%	317	9947	27	34.6%	103	2874	1	6	5	51
WHALE PASS	30	27	90.0%	10	37.0%	57	2313	13	48.1%	30	1295	0	0	2	26
WRANGELL	367	283	77.1%	146	51.6%	1201	32462	78	27.6%	215	6574	14	37	34	241
YAKUTAT	51	41	80.4%	31	75.6%	386	10992	12	29.3%	38	870	15	91	12	130
Rural Community Subtotals	7,083	5,127	72.38%	2,624	51.18%	20,832	596,516	1,494	29.14%	6,040	156,648	421	1,330	741	6,622
TRIBAL/RURAL GRAND TOTALS	14,206	8,426	59.3%	3,771	44.75%	35,029	952,811	1,892	22.45%	7,420	195,965	603	2,188	995	10,500

City of Residence	Return Rate			Subsistence Fished		Subsistence Harvest		Sport Fished		Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
	SHARCs Issued ²	Surveys Returned	Percent Returned	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Number Lingcod	Number Respondents	Number Rockfish
	ADAK	12	8	66.7%	1	12.5%	8	406	0	0.0%	0	0	0	0	1
AKHIOK	23	3	13.0%	3	100.0%	30	950	0	0.0%	0	0	0	0	0	0
AKUTAN	47	11	23.4%	9	81.8%	125	3462	1	9.1%	8	100	1	6	2	30
ALAKANUK	1														
ALEKNAGIK	4														
ANCHOR POINT	12	8	66.7%	0	0.0%	0	0	3	37.5%	22	690	0	0	0	0
ANCHORAGE	235	112	47.7%	27	24.1%	378	12101	23	20.5%	114	2964	4	49	6	92
ANGOON	173	138	79.8%	57	41.3%	746	17760	16	11.6%	46	933	6	9	12	119
ATKA	4														
AUKE BAY	3														
BARROW	1														
BETHEL	11	5	45.5%	5	100.0%	26	705	0	0.0%	0	0	0	0	0	0
BIG LAKE	2														
CHEFORNAK	20	6	30.0%	3	50.0%	86	875	0	0.0%	0	0	1	3	1	12
CHENEGA BAY	19	10	52.6%	6	60.0%	155	5490	2	20.0%	23	550	3	11	5	103
CHEVAK	11	7	63.6%	6	85.7%	13	330	2	28.6%	12	200	1	3	0	0
CHIGNIK	28	22	78.6%	15	68.2%	122	3421	3	13.6%	10	255	3	10	3	41
CHIGNIK BAY	3														
CHIGNIK LAGOON	42	17	40.5%	13	76.5%	151	4104	6	35.3%	26	880	2	12	6	109
CHIGNIK LAKE	7	5	71.4%	3	60.0%	16	281	0	0.0%	0	0	0	0	0	0
CHINIAK	22	12	54.5%	10	83.3%	145	4550	5	41.7%	9	380	1	1	1	4
CHUGIAK	9	3	33.3%	1	33.3%	35	600	2	66.7%	10	235	0	0	0	0
CLARKS POINT	4														
COFFMAN COVE	44	34	77.3%	17	50.0%	138	3518	11	32.4%	30	910	3	12	5	67
COLD BAY	23	20	87.0%	14	70.0%	147	3680	11	55.0%	33	1031	1	25	0	0
CORDOVA	607	430	70.8%	180	41.9%	1058	28227	111	25.8%	274	6908	19	43	34	186
CRAIG	475	316	66.5%	162	51.3%	1517	43090	104	32.9%	452	9089	30	75	70	754
DILLINGHAM	64	48	75.0%	5	10.4%	21	763	4	8.3%	6	120	0	0	0	0
DOUGLAS	26	4	15.4%	2	50.0%	21	640	1	25.0%	4	150	0	0	0	0
DUTCH HARBOR	76	46	60.5%	19	41.3%	190	6191	18	39.1%	90	2614	0	0	5	51
EAGLE RIVER	9	6	66.7%	1	16.7%	52	1195	1	16.7%	4	80	0	0	0	0

-continued-

Appendix Table 1.–Page 5 of 6.

City of Residence	Return Rate			Subsistence Fished		Subsistence Harvest		Sport Fished		Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
	SHARCs Issued ²	Surveys Returned	Percent Returned	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Number Lingcod	Number Respondents	Number Rockfish
	EDNA BAY	25	21	84.0%	10	47.6%	58	2323	3	14.3%	7	190	3	8	4
EELK	20	7	35.0%	3	42.9%	12	710	0	0.0%	0	0	0	0	0	0
ELFIN COVE	18	12	66.7%	5	41.7%	17	856	1	8.3%	1	8	0	0	2	9
EXCURSION INLET	2														
FAIRBANKS	6	2	33.3%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
FALSE PASS	11	4	36.4%	4	100.0%	36	856	0	0.0%	0	0	1	4	0	0
FRITZ CREEK	2														
GAMBELL	6	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
GOLOVIN	1														
GOODNEWS BAY	15	6	40.0%	2	33.3%	12	200	0	0.0%	0	0	0	0	0	0
GUSTAVUS	67	52	77.6%	27	51.9%	268	7015	16	30.8%	71	1680	0	0	2	5
HAINES	529	395	74.7%	174	44.1%	756	23783	67	17.0%	92	3126	11	23	19	104
HOLLIS	5														
HOMER	27	16	59.3%	11	68.8%	55	771	8	50.0%	39	544	4	17	1	4
HOONAH	331	178	53.8%	75	42.1%	938	24450	31	17.4%	169	3503	6	25	9	377
HOOPER BAY	89	37	41.6%	8	21.6%	29	375	1	2.7%	0	0	2	52	0	0
HYDABURG	194	189	97.4%	57	30.2%	461	26034	8	4.2%	36	3040	13	76	29	546
HYDER	35	24	68.6%	14	58.3%	70	2397	5	20.8%	7	300	2	5	7	38
JUNEAU	485	161	33.2%	37	23.0%	355	8702	31	19.3%	134	2953	1	1	11	101
KAKE	167	101	60.5%	39	38.6%	371	13331	11	10.9%	8	423	6	24	9	90
KARLUK	1														
KASAAN	21	12	57.1%	10	83.3%	68	1740	5	41.7%	4	100	0	0	5	36
KASILOF	9	1	11.1%	1	100.0%	13	500	0	0.0%	0	0	1	1	0	0
KENAI	72	43	59.7%	7	16.3%	86	1751	11	25.6%	37	1000	1	5	0	0
KETCHIKAN	1014	502	49.5%	108	21.5%	1031	28824	107	21.3%	339	8548	25	50	43	545
KING COVE	70	40	57.1%	26	65.0%	309	7189	7	17.5%	21	695	1	4	2	13
KING SALMON	2														
KIPNUK	87	9	10.3%	7	77.8%	61	1224	0	0.0%	0	0	0	0	0	0
KLAWOCK	314	144	45.9%	72	50.0%	605	23171	34	23.6%	152	3799	16	79	24	376
KODIAK	1716	1123	65.4%	642	57.2%	5821	181135	384	34.2%	1965	58907	70	210	127	1382
KONGIGANAK	9	2	22.2%	2	100.0%	13	300	0	0.0%	0	0	0	0	0	0
KWIGILLINGOK	48	7	14.6%	3	42.9%	22	565	0	0.0%	0	0	0	0	0	0
LARSEN BAY	37	21	56.8%	14	66.7%	126	4336	7	33.3%	33	953	1	2	6	70
MANOKOTAK	2														
MARSHALL	1														
MEKORYUK	14	7	50.0%	5	71.4%	75	931	0	0.0%	0	0	2	10	0	0
METLAKATLA	419	133	31.7%	40	30.1%	201	5279	24	18.0%	26	736	7	31	14	90
MEYERS CHUCK	10	9	90.0%	7	77.8%	20	639	0	0.0%	0	0	0	0	3	10
NAKNEK	11	7	63.6%	5	71.4%	10	405	2	28.6%	0	0	0	0	0	0
NANWALEK	31	30	96.8%	16	53.3%	265	7871	3	10.0%	29	555	7	78	5	62
NAPAKIAK	3														
NAUKATI	12	11	91.7%	9	81.8%	72	2587	5	45.5%	45	842	1	11	5	36
NELSON LAGOON	1														
NEWTOK	3														
NIGHTMUTE	15	5	33.3%	4	80.0%	146	2426	0	0.0%	0	0	0	0	0	0
NIKISKI	8	6	75.0%	3	50.0%	55	1535	2	33.3%	6	225	1	2	2	28
NIKOLSKI	18	2	11.1%	2	100.0%	7	500	2	100.0%	0	0	0	0	0	0
NINILCHIK	64	26	40.6%	8	30.8%	86	2541	3	11.5%	20	520	0	0	0	0
NOME	10	3	30.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
NORTH POLE	3														
OLD HARBOR	71	41	57.7%	32	78.0%	249	6365	7	17.1%	16	410	3	9	2	12
OUZINKIE	48	27	56.3%	21	77.8%	176	6324	8	29.6%	31	1050	5	11	8	160
PALMER	5														
PELICAN	53	33	62.3%	23	69.7%	202	6920	11	33.3%	18	1060	11	49	15	177
PERRYVILLE	47	23	48.9%	14	60.9%	120	3090	0	0.0%	0	0	1	1	2	35
PETERSBURG	1082	779	72.0%	307	39.4%	2225	52047	179	23.0%	655	16943	12	28	48	276
PLATINUM	1														

-continued-

Appendix Table 1.–Page 6 of 6.

City of Residence	Return Rate			Subsistence Fished		Subsistence Harvest		Sport Fished		Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
	SHARCs Issued ²	Surveys Returned	Percent Returned	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Percent Respondents	Number Halibut	Pounds Halibut ³	Number Respondents	Number Lingcod	Number Respondents	Number Rockfish
	POINT BAKER	27	20	74.1%	16	80.0%	135	3288	4	20.0%	18	385	2	21	8
PORT ALEXANDER	24	18	75.0%	6	33.3%	52	1775	5	27.8%	23	884	2	21	3	50
PORT GRAHAM	50	33	66.0%	18	54.5%	243	4908	1	3.0%	0	0	1	2	2	22
PORT HEIDEN	1														
PORT LIONS	77	38	49.4%	21	55.3%	178	4562	20	52.6%	102	3389	0	0	1	4
PORT PROTECTION	1														
PORT WILLIAM	2														
QUINHAGAK	14	3	21.4%	2	66.7%	7	265	0	0.0%	0	0	0	0	0	0
SAND POINT	365	130	35.6%	48	36.9%	353	10101	11	8.5%	78	3068	5	38	8	238
SAVOONGA	43	14	32.6%	7	50.0%	74	3520	0	0.0%	0	0	2	6	1	6
SAXMAN	15	9	60.0%	7	77.8%	16	700	1	11.1%	1	60	6	8	6	22
SCAMMON BAY	2														
SELDOVIA	123	98	79.7%	64	65.3%	848	18750	39	39.8%	306	5858	5	32	12	80
SEWARD	12	8	66.7%	1	12.5%	0	0	3	37.5%	10	420	0	0	0	0
SHISHMAREF	1														
SITKA	1895	1302	68.7%	641	49.2%	4633	149621	280	21.5%	910	21769	226	710	289	2913
SKAGWAY	60	42	70.0%	16	38.1%	62	1819	10	23.8%	16	227	1	2	5	13
SOLDOTNA	16	10	62.5%	6	60.0%	66	1328	3	30.0%	10	330	0	0	0	0
SOUTH NAKNEK	3														
ST GEORGE ISLAND	26	4	15.4%	3	75.0%	25	680	0	0.0%	0	0	0	0	0	0
ST PAUL ISLAND	244	229	93.9%	26	11.4%	373	6757	0	0.0%	0	0	0	0	0	0
STERLING	4														
SUTTON	1														
TATITLEK	30	17	56.7%	11	64.7%	122	4540	2	11.8%	11	190	0	0	8	83
TELLER	3														
TENAKEE SPRINGS	44	35	79.5%	26	74.3%	162	5249	14	40.0%	33	685	3	5	12	86
THORNE BAY	135	99	73.3%	43	43.4%	314	9657	49	49.5%	346	6537	5	20	17	132
TOGIAK	10	7	70.0%	1	14.3%	0	0	0	0.0%	0	0	0	0	0	0
TOKSOOK BAY	533	139	26.1%	113	81.3%	4047	48641	0	0.0%	0	0	9	27	3	41
TRAPPER CREEK	1														
TUNUNAK	70	10	14.3%	5	50.0%	78	810	0	0.0%	0	0	0	0	2	13
TWIN HILLS	2														
UNALAKLEET	1														
UNALASKA	95	59	62.1%	30	50.8%	266	6871	13	22.0%	28	587	2	12	2	6
VALDEZ	27	14	51.9%	5	35.7%	43	1280	0	0.0%	0	0	2	2	3	23
WARD COVE	42	19	45.2%	2	10.5%	16	400	3	15.8%	9	235	1	4	1	10
WASILLA	24	12	50.0%	3	25.0%	70	2180	4	33.3%	18	612	1	6	1	13
WHALE PASS	2														
WHITE MOUNTAIN	1														
WHITTIER	1														
WILLOW	1														
WRANGELL	504	366	72.6%	178	48.6%	1491	41076	97	26.5%	292	8749	17	47	39	284
YAKUTAT	113	72	63.7%	44	61.1%	572	16301	13	18.1%	48	970	22	145	16	180
Alaska Totals	14029	8372	59.7%	3767	45.0%	34988	950961	1885	22.5%	7411	195515	601	2183	994	10488
Non-Alaska Totals ⁴	177	54	30.5%	4	7.4%	41	1850	7	13.0%	9	450	2	5	1	12
CITY GRAND TOTALS	14206	8426	59.3%	3771	44.75%	35029	952811	1892	22.45%	7420	195965	603	2188	995	10500

123

¹ To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs issued are not reported in this table. Tribal and community subtotals included all tribes and communities.

² SHARC=subsistence halibut registration certificate

³ Pounds round weight, as reported by respondents; converted to pounds net weight in other tables. Net weight=75% of round weight.

⁴ Note that members of eligible Alaska tribes could obtain SHARCs regardless of their place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

Appendix Table 2.—Reported harvests of halibut in number of fish by return category, eligible Alaska Tribe, eligible Alaska rural community, and community of residence, 2005.

Tribal Name ¹	First Mailing Response					Second Mailing Response					Third Mailing Response					Staff Administered				
	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished
AGDAAGUX TRIBE OF KING COVE	20	11	87	4.4	7.9	6	2	15	2.5	7.5	4	4	98	24.5	24.5	0	0	0	0.0	0.0
ANGOON COMMUNITY ASSOCIATION	30	17	364	12.1	21.4	10	5	45	4.5	9.0	7	2	21.4	5	0.7	65	20	167	2.6	8.4
AUKQUAN TRADITIONAL COUNCIL																				
CENTRAL COUNCIL TLINGIT AND HAIDA INDIAN TRIBE	177	54	566	3.2	10.5	48	11	163	3.4	14.8	34	9	99	2.9	11.0	18	5	21	1.2	4.2
CHEVAK NATIVE VILLAGE (KASHUNAMIUT)	4	4	13	3.3	3.3	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
CHIGNIK LAKE VILLAGE	5	3	18	3.6	6.0	1	1	6	6.0	6.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
CHILKAT INDIAN VILLAGE	15	3	9	0.6	3.0	9	0	0	0.0	0.0	3	1	0	0.0	0.0	0	0	0	0.0	0.0
CHILKOOT INDIAN ASSOCIATION	16	8	38	2.4	4.8	7	0	0	0.0	0.0	4	1	8	2.0	8.0	0	0	0	0.0	0.0
CHINI K ESKIMO COMMUNITY																				
CRAIG COMMUNITY ASSOCIATION	18	10	43	2.4	4.3	6	1	5	0.8	5.0	3	1	10	3.3	10.0	0	0	0	0.0	0.0
DOUGLAS INDIAN ASSOCIATION	4	1	5	1.3	5.0	2	0	0	0.0	0.0	7	1	20	2.9	20.0	0	0	0	0.0	0.0
ELEGIK VILLAGE	5	5	18	3.6	3.6	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
HOONAH INDIAN ASSOCIATION	57	26	513	9.0	19.7	29	5	12	0.4	2.4	11	7	32	2.9	4.6	0	0	0	0.0	0.0
HYDABURG COOPERATIVE ASSOCIATION	2	1	8	4.0	8.0	4	2	34	8.5	17.0	1	0	0	0.0	0.0	177	49	400	2.3	8.2
IVANOFF BAY VILLAGE	1	0	0	0.0	0.0	1	1	6	6.0	6.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
KENAITZE INDIAN TRIBE	31	10	145	4.7	14.5	9	3	32	3.6	10.7	8	2	14	1.8	7.0	1	0	0	0.0	0.0
KETCHIKAN INDIAN CORPORATION	160	36	338	2.1	9.4	40	8	141	3.5	17.6	20	7	38	1.9	5.4	178	14	76	0.4	5.4
KING ISLAND NATIVE COMMUNITY																				
KLAWOCK COOPERATIVE ASSOCIATION	42	15	155	3.7	10.3	17	6	35	2.1	5.8	5	3	9	1.8	3.0	0	0	0	0.0	0.0
LESNOI VILLAGE (WOODY ISLAND)	62	9	77	1.2	8.6	17	1	2	0.1	2.0	7	4	30	4.3	7.5	8	1	0	0.0	0.0
LEVELOCK VILLAGE																				
METLAKATLA INDIAN COMMUNITY	58	22	46	0.8	2.1	37	6	34	0.9	5.7	30	5	16	0.5	3.2	2	0	0	0.0	0.0
NAKNEK NATIVE VILLAGE	4	3	5	1.3	1.7	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF AFOGNAK	8	5	26	3.3	5.2	2	0	0	0.0	0.0	1	0	0	0.0	0.0	5	1	4	0.7	3.7
NATIVE VILLAGE OF AKHIOK	2	2	51	25.5	25.5	2	1	15	7.5	15.0	1	1	10	10.0	10.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF AKUTAN	5	4	94	18.8	23.5	4	3	25	6.3	8.3	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF ALEKNAGIK																				
NATIVE VILLAGE OF ATKA	0	0	0	0.0	0.0	2	1	12	6.0	12.0	0	0	0	0.0	0.0	1	1	35	35.0	35.0
NATIVE VILLAGE OF BELKOFSKI																				
NATIVE VILLAGE OF CHENEGA	6	2	12	2.0	6.0	1	0	0	0.0	0.0	2	1	11	5.5	11.0	3	2	35	11.7	17.5
NATIVE VILLAGE OF CHIGNIK	6	4	12	2.0	3.0	1	1	29	29.0	29.0	3	3	8	2.7	2.7	0	0	0	0.0	0.0
NATIVE VILLAGE OF CHIGNIK LAGOON	10	10	132	13.2	13.2	7	5	27	3.9	5.4	3	2	10	3.3	5.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF COUNCIL																				
NATIVE VILLAGE OF DILLINGHAM (CURYUNG)	11	4	18	1.6	4.5	2	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF EEK	7	3	13	1.9	4.3	0	0	0	0.0	0.0	1	1	1	1.0	1.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF EKUK																				
NATIVE VILLAGE OF ELIM																				
NATIVE VILLAGE OF EYAK	23	10	72	3.1	7.2	15	6	28	1.9	4.7	6	2	15	2.5	7.5	0	0	0	0.0	0.0
NATIVE VILLAGE OF FALSE PASS	2	1	0	0.0	0.0	0	0	0	0.0	0.0	1	1	10	10.0	10.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF GAMBELL	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF GOODNEWS BAY (MUMTRAQ)	1	1	2	2.0	2.0	0	0	0	0.0	0.0	5	1	10	2.0	10.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF HOOPER BAY	19	5	31	1.6	6.2	12	3	5	0.4	1.7	9	1	1	0.1	1.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF KANAKANAK																				
NATIVE VILLAGE OF KARLUK																				
NATIVE VILLAGE OF KIPNUK	5	5	37	7.4	7.4	4	2	24	6.0	12.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF KONGIGANAK	2	2	13	6.5	6.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF KOYUK																				
NATIVE VILLAGE OF KWIGILLINGOK	1	0	0	0.0	0.0	4	1	3	0.8	3.0	2	2	19	9.5	9.5	0	0	0	0.0	0.0
NATIVE VILLAGE OF KWINHAGAK	2	1	4	2.0	4.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF LARSEN BAY	17	10	110	6.5	11.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0	6	2	19	3.2	9.5
NATIVE VILLAGE OF MEKORYUK	4	3	67	16.8	22.3	1	0	0	0.0	0.0	2	1	4	2.0	4.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF NANWALEK	0	0	0	0.0	0.0	0	0	0	0.0	0.0	2	1	0	0.0	0.0	25	13	187	7.5	14.4
NATIVE VILLAGE OF NAPAKIAK																				
NATIVE VILLAGE OF NELSON LAGOON																				
NATIVE VILLAGE OF NIGHTMUTE	1	1	21	21.0	21.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF NIKOLSKI	1	1	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF OUZINKIE	12	9	55	4.6	6.1	5	2	22	4.4	11.0	2	2	29	14.5	14.5	0	0	0	0.0	0.0
NATIVE VILLAGE OF PERRYVILLE	14	10	96	6.9	9.6	4	1	25	6.3	25.0	3	2	4	1.3	2.0	0	0	0	0.0	0.0

-continued-

Appendix Table 2.–Page 2 of 6.

125

Tribal Name ¹	First Mailing Response					Second Mailing Response					Third Mailing Response					Staff Administered				
	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished
NATIVE VILLAGE OF PORT GRAHAM	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	24	13	186	7.8	14.3
NATIVE VILLAGE OF PORT HEIDEN																				
NATIVE VILLAGE OF PORT LIONS	17	12	106	6.2	8.8	5	3	24	4.8	8.0	1	1	6	6.0	6.0	1	0	0	0.0	0.0
NATIVE VILLAGE OF SAVOONGA	8	5	74	9.3	14.8	5	2	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF SCAMMON BAY																				
NATIVE VILLAGE OF SHAKTOOLIK																				
NATIVE VILLAGE OF SHISHMAREF																				
NATIVE VILLAGE OF TATILEK	8	6	102	12.8	17.0	4	2	12	3.0	6.0	5	2	4	0.8	2.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF TOKSOOK BAY (NUNAKAUAYAK)	21	9	171	8.1	19.0	15	2	170	11.3	85.0	2	1	20	10.0	20.0	100	100	3,680	36.8	36.8
NATIVE VILLAGE OF TUNUNAK	8	4	43	5.4	10.8	1	1	20	20.0	20.0	2	1	24	12.0	24.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF UNALAKLEET	2	0	0	0.0	0.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0
NATIVE VILLAGE OF UNGA	3	2	26	8.7	13.0	0	0	0	0.0	0.0	1	1	10	10.0	10.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF WHITE MOUNTAIN																				
NEWTOK VILLAGE																				
NINILCHIK VILLAGE	30	12	129	4.3	10.8	5	0	0	0.0	0.0	15	2	14	0.9	7.0	0	0	0	0.0	0.0
NOME ESKIMO COMMUNITY	3	0	0	0.0	0.0	3	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
ORGANIZED VILLAGE OF KAKE	43	12	101	2.3	8.4	13	6	52	4.0	8.7	11	4	46	4.2	11.5	0	0	0	0.0	0.0
ORGANIZED VILLAGE OF KASAAN	3	3	20	6.7	6.7	1	0	0	0.0	0.0	2	2	20	10.0	10.0	0	0	0	0.0	0.0
ORGANIZED VILLAGE OF SAXMAN	14	10	51	3.6	5.1	1	1	0	0.0	0.0	1	0	0	0.0	0.0	23	5	11	0.5	2.2
ORUTSARARMUIT NATIVE VILLAGE	0	0	0	0.0	0.0	2	1	52	26.0	52.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
PAULOFF HARBOR VILLAGE	7	4	13	1.9	3.3	3	1	11	3.7	11.0	6	3	40	6.7	13.3	0	0	0	0.0	0.0
PETERSBURG INDIAN ASSOCIATION	43	20	121	2.8	6.1	21	5	104	5.0	20.8	6	1	15	2.5	15.0	1	0	0	0.0	0.0
PLATINUM TRADITIONAL VILLAGE																				
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST GEORGE	2	2	20	10.0	10.0	2	1	5	2.5	5.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST PAUL	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	234	25	338	1.4	13.5
QAGAN TAYAGUNGIN TRIBE OF SAND POINT VILLAGE	62	19	105	1.7	5.5	32	11	45	1.4	4.1	17	4	30	1.8	7.5	0	0	0	0.0	0.0
QAWALANGIN TRIBE OF UNALASKA	10	5	34	3.4	6.8	8	1	4	0.5	4.0	3	1	10	3.3	10.0	0	0	0	0.0	0.0
SELDOVIA VILLAGE TRIBE	19	10	218	11.5	21.8	10	1	0	0.0	0.0	2	1	7	3.5	7.0	0	0	0	0.0	0.0
SHOONAOI TRIBE OF KODIAK	52	35	486	9.3	13.9	12	5	51	4.3	10.2	14	9	106	7.6	11.8	15	8	32	2.2	4.0
SITKA TRIBE OF ALASKA	108	43	262	2.4	6.1	34	6	17	0.5	2.8	22	9	173	7.9	19.2	98	27	433	4.4	16.0
SKAGWAY VILLAGE																				
SOUTH NAKNEK VILLAGE																				
STEBBINS COMMUNITY ASSOCIATION																				
TRADITIONAL VILLAGE OF TOGIAK	3	1	0	0.0	0.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
TWIN HILLS VILLAGE																				
UGASHIK VILLAGE																				
VILLAGE OF CHEFORNAK	5	2	56	11.2	28.0	1	1	30	30.0	30.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
VILLAGE OF CLARK'S POINT																				
VILLAGE OF KANATAK	1	1	10	10.0	10.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
VILLAGE OF OLD HARBOR	19	15	90	4.7	6.0	4	3	15	3.8	5.0	4	0	0	0.0	0.0	0	0	0	0.0	0.0
VILLAGE OF SALAMATOFF	8	5	89	11.1	17.8	4	2	15	3.8	7.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0
WRANGELL COOPERATIVE ASSOCIATION	52	22	215	4.1	9.8	14	7	74	5.3	10.6	9	0	0	0.0	0.0	0	0	0	0.0	0.0
YAKUTAT TLINGIT TRIBE	20	10	137	6.9	13.7	5	4	76	15.2	19.0	6	0	0	0.0	0.0	0	0	0	0.0	0.0
Tribal Name Subtotals	1,460	602	5,995	4.1	10.0	531	146	1,523	2.9	10.4	322	113	1,054	3.3	9.3	986	286	5,624	5.7	19.7

Rural Community ¹	First Mailing Response					Second Mailing Response					Third Mailing Response					Staff Administered					
	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	
ADAK	8	1	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	
AKHIOK																					
AKUTAN																					
ALAKANUK																					
ALEKNAGIK																					

-continued-

Appendix Table 2.–Page 3 of 6.

Rural Community ¹	First Mailing Response					Second Mailing Response					Third Mailing Response					Staff Administered				
	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished
ANGOON	8	3	52	6.5	17.3	2	2	49	24.5	24.5	3	1	0	0.0	0.0	7	4	50	7.1	12.5
ATKA																				
BETHEL																				
CHEFORNAK																				
CHENEGA BAY	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	7	4	120	17.1	30.0
CHEVAK																				
CHIGNIK	5	3	28	5.6	9.3	2	1	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
CHIGNIK LAGOON	2	1	21	10.5	21.0	1	1	2	2.0	2.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
CHIGNIK LAKE																				
CLARKS POINT																				
COFFMAN COVE	26	13	97	3.7	7.5	5	2	30	6.0	15.0	2	2	11	5.5	5.5	0	0	0	0.0	0.0
COLD BAY	10	8	77	7.7	9.6	4	4	61	15.3	15.3	1	0	0	0.0	0.0	0	0	0	0.0	0.0
CORDOVA	307	139	836	2.7	6.0	53	15	72	1.4	4.8	26	8	47	1.8	5.9	0	0	0	0.0	0.0
CRAIG	185	102	940	5.1	9.2	32	15	176	5.5	11.7	14	5	71	5.1	14.2	2	2	19	9.5	9.5
DILLINGHAM	23	0	0	0.0	0.0	9	1	0	0.0	0.0	5	0	0	0.0	0.0	0	0	0	0.0	0.0
EDNA BAY	35	17	119	3.4	7.0	5	3	12	2.4	4.0	2	1	1	0.5	1.0	0	0	0	0.0	0.0
ELFIN COVE	8	3	14	1.8	4.7	3	1	1	0.3	1.0	1	1	2	2.0	2.0	0	0	0	0.0	0.0
EMMONAK																				
FALSE PASS																				
GUSTAVUS	34	17	141	4.1	8.3	13	5	106	8.2	21.2	5	5	21	4.2	4.2	0	0	0	0.0	0.0
HAINES	272	143	643	2.4	4.5	50	11	26	0.5	2.4	19	8	41	2.2	5.1	0	0	0	0.0	0.0
HOLLIS	24	16	72	3.0	4.5	5	2	5	1.0	2.5	7	6	29	4.1	4.8	0	0	0	0.0	0.0
HOONAH	42	18	170	4.0	9.4	28	10	147	5.3	14.7	10	8	55	5.5	6.9	0	0	0	0.0	0.0
HOOPER BAY																				
HYDABURG	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	14	7	21	1.5	3.0
HYDER	14	11	64	4.6	5.8	4	2	4	1.0	2.0	6	1	2	0.3	2.0	0	0	0	0.0	0.0
KAKE	25	11	85	3.4	7.7	6	6	87	14.5	14.5	1	0	0	0.0	0.0	0	0	0	0.0	0.0
KASAAN	7	3	0	0.0	0.0	2	2	33	16.5	16.5	1	0	0	0.0	0.0	0	0	0	0.0	0.0
KING COVE	11	9	97	8.8	10.8	5	3	33	6.6	11.0	1	1	3	3.0	3.0	0	0	0	0.0	0.0
KING SALMON																				
KLAWOCK	56	41	389	6.9	9.5	14	3	19	1.4	6.3	6	0	0	0.0	0.0	2	1	0	0.0	0.0
KLUKWAN																				
KODIAK	539	344	3,213	6.0	9.3	112	65	887	7.9	13.6	67	37	296	4.4	8.0	271	129	808	3.0	6.3
KOTLIK																				
KWIGILLINGOK																				
LARSEN BAY	10	8	73	7.3	9.1	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
MANOKOTAK																				
MEKORYUK																				
METLAKATLA	10	5	96	9.6	19.2	6	3	14	2.3	4.7	0	0	0	0.0	0.0	0	0	0	0.0	0.0
MEYERS CHUCK	7	5	17	2.4	3.4	2	2	3	1.5	1.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NAKNEK	3	2	5	1.7	2.5	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NANWALEK																				
NIGHTMUTE	2	2	100	50.0	50.0	0	0	0	0.0	0.0	1	1	25	25.0	25.0	0	0	0	0.0	0.0
NIKOLSKI	1	1	7	7.0	7.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NOME	2	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
OLD HARBOR	13	9	59	4.5	6.6	1	1	27	27.0	27.0	2	1	0	0.0	0.0	0	0	0	0.0	0.0
OUZINKIE	8	7	47	5.9	6.7	0	0	0	0.0	0.0	1	1	25	25.0	25.0	0	0	0	0.0	0.0
PELICAN	24	18	123	5.1	6.8	4	3	32	8.0	10.7	0	0	0	0.0	0.0	0	0	0	0.0	0.0
PERRYVILLE																				
PETERSBURG	507	214	1,583	3.1	7.4	132	47	303	2.3	6.4	52	15	90	1.7	6.0	1	1	0	0.0	0.0
PLATINUM																				
PORT ALEXANDER	12	5	48	4.0	9.6	5	0	0	0.0	0.0	3	1	4	1.3	4.0	0	0	0	0.0	0.0
PORT GRAHAM	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	8	4	57	7.1	14.3
PORT HEIDEN																				
PORT LIONS	12	7	39	3.3	5.6	4	1	12	3.0	12.0	1	1	7	7.0	7.0	0	0	0	0.0	0.0
PORT PROTECTION	9	7	32	3.6	4.6	4	0	0	0.0	0.0	2	2	14	7.0	7.0	2	1	20	10.0	20.0
PT. BAKER	11	11	90	8.2	8.2	1	0	0	0.0	0.0	1	1	15	15.0	15.0	0	0	0	0.0	0.0

-continued-

Appendix Table 2.–Page 4 of 6.

Rural Community ¹	First Mailing Response					Second Mailing Response					Third Mailing Response					Staff Administered				
	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished
SAND POINT	9	4	82	9.1	20.5	1	1	12	12.0	12.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
SAXMAN	8	4	149	18.6	37.3	2	0	0	0.0	0.0	2	0	0	0.0	0.0	8	0	0	0.0	0.0
SELDOVIA	60	45	650	10.8	14.4	16	9	82	5.1	9.1	9	5	49	5.4	9.8	0	0	0	0.0	0.0
SHELDON POINT																				
SITKA	624	343	2,455	3.9	7.2	125	58	418	3.3	7.2	68	36	344	5.1	9.6	208	116	553	2.7	4.8
SKAGWAY	29	11	40	1.4	3.6	10	4	12	1.2	3.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
SOUTH NAKNEK																				
ST GEORGE ISLAND																				
ST PAUL ISLAND																				
TATTLEK	4	3	15	3.8	5.0	1	0	0	0.0	0.0	1	1	15	15.0	15.0	0	0	0	0.0	0.0
TELLER																				
TENAKEE SPRINGS	27	21	140	5.2	6.7	5	3	18	3.6	6.0	2	1	3	1.5	3.0	0	0	0	0.0	0.0
THORNE BAY	77	33	240	3.1	7.3	11	7	64	5.8	9.1	10	2	10	1.0	5.0	0	0	0	0.0	0.0
TOGIAK																				
TOKSOOK BAY																				
UNALASKA	51	29	253	5.0	8.7	16	4	28	1.8	7.0	11	5	36	3.3	7.2	0	0	0	0.0	0.0
WHALE PASS	20	10	57	2.9	5.7	4	0	0	0.0	0.0	2	0	0	0.0	0.0	1	0	0	0.0	0.0
WRANGELL	213	115	1,015	4.8	8.8	57	28	142	2.5	5.1	13	3	44	3.4	14.7	0	0	0	0.0	0.0
YAKUTAT	35	30	380	10.9	12.7	3	1	6	2.0	6.0	3	0	0	0.0	0.0	0	0	0	0.0	0.0
Rural Community Subtotals	3,449	1,862	14,894	4.3	8.0	774	328	2,931	3.8	8.9	368	162	1,282	3.5	7.9	536	272	1,726	3.2	6.3
TRIBAL/RURAL GRAND TOTALS	4,909	2,464	20,889	4.3	8.5	1,305	474	4,454	3.4	9.4	690	275	2,336	3.4	8.5	1,522	558	7,350	4.8	13.2

Place of Residence ¹	First Mailing Response					Second Mailing Response					Third Mailing Response					Staff Administered				
	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished
ADAK	7	0	0	0.0	0.0	1	1	8	8.0	8.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
AKHIOK	1	1	5	5.0	5.0	1	1	15	15.0	15.0	1	1	10	10.0	10.0	0	0	0	0.0	0.0
AKUTAN	6	5	99	16.5	19.8	5	4	26	5.2	6.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0
ALAKANUIK																				
ALEKNAGIK																				
ANCHOR POINT	3	0	0	0.0	0.0	0	0	0	0.0	0.0	5	0	0	0.0	0.0	0	0	0	0.0	0.0
ANCHORAGE	63	14	268	4.3	19.1	26	5	19	0.7	3.8	20	8	91	4.6	11.4	3	0	0	0.0	0.0
ANGOON	39	21	418	10.7	19.9	12	7	94	7.8	13.4	10	4	13	1.3	3.3	77	25	221	2.9	8.8
ATKA																				
AUKE BAY																				
BARROW																				
BETHEL	5	5	26	5.2	5.2	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
BIG LAKE																				
CHEFORNAK	5	2	56	11.2	28.0	1	1	30	30.0	30.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
CHENEGA BAY	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	10	6	155	15.5	25.8
CHEVAK	6	6	13	2.2	2.2	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
CHIGNIK	15	9	75	5.0	8.3	4	3	39	9.8	13.0	3	3	8	2.7	2.7	0	0	0	0.0	0.0
CHIGNIK BAY																				
CHIGNIK LAGOON	11	10	137	12.5	13.7	5	3	14	2.8	4.7	1	0	0	0.0	0.0	0	0	0	0.0	0.0
CHIGNIK LAKE	3	1	6	2.0	6.0	2	2	10	5.0	5.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
CHINIAK	10	8	79	7.9	9.9	1	1	6	6.0	6.0	1	1	60	60.0	60.0	0	0	0	0.0	0.0
CHUGIAK	2	1	35	17.5	35.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
CLARKS POINT																				
COFFMAN COVE	26	13	97	3.7	7.5	5	2	30	6.0	15.0	3	2	11	3.7	5.5	0	0	0	0.0	0.0
COLD BAY	14	10	86	6.1	8.6	5	4	61	12.2	15.3	1	0	0	0.0	0.0	0	0	0	0.0	0.0
CORDOVA	331	150	908	2.7	6.1	68	21	100	1.5	4.8	31	9	50	1.6	5.8	0	0	0	0.0	0.0
CRAIG	244	135	1244	5.1	9.2	44	18	187	4.3	10.4	20	7	67	3.4	9.6	8	2	19	2.4	9.5

-continued-

Appendix Table 2.–Page 5 of 6.

Place of Residence ¹	First Mailing Response					Second Mailing Response					Third Mailing Response					Staff Administered				
	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished
DILLINGHAM	33	4	21	0.6	5.3	9	1	0	0.0	0.0	6	0	0	0.0	0.0	0	0	0	0.0	0.0
DOUGLAS	3	2	21	7.0	10.5	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
DUTCH HARBOR	26	13	148	5.7	11.4	8	1	6	0.8	6.0	12	5	36	3.0	7.2	0	0	0	0.0	0.0
EAGLE RIVER	3	0	0	0.0	0.0	3	1	52	17.3	52.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
EDNA BAY	17	8	52	3.1	6.5	2	1	5	2.5	5.0	2	1	1	0.5	1.0	0	0	0	0.0	0.0
E EK	6	2	11	1.8	5.5	0	0	0	0.0	0.0	1	1	1	1.0	1.0	0	0	0	0.0	0.0
ELFIN COVE	8	3	14	1.8	4.7	3	1	1	0.3	1.0	1	1	2	2.0	2.0	0	0	0	0.0	0.0
EXCURSION INLET																				
FAIRBANKS	1	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
FALSE PASS	1	1	0	0.0	0.0	1	1	4	4.0	4.0	2	2	32	16.0	16.0	0	0	0	0.0	0.0
FRITZ CREEK																				
GAMBELL	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
GOLOVIN																				
GOODNEWS BAY	1	1	2	2.0	2.0	0	0	0	0.0	0.0	5	1	10	2.0	10.0	0	0	0	0.0	0.0
GUSTAVUS	34	17	141	4.1	8.3	13	5	106	8.2	21.2	5	5	21	4.2	4.2	0	0	0	0.0	0.0
HAINES	305	154	681	2.2	4.4	65	10	26	0.4	2.6	25	10	49	2.0	4.9	0	0	0	0.0	0.0
HOLLIS																				
HOMER	8	6	28	3.5	4.7	3	0	0	0.0	0.0	5	5	27	5.4	5.4	0	0	0	0.0	0.0
HOONAH	99	46	708	7.2	15.4	58	14	143	2.5	10.2	21	15	87	4.1	5.8	0	0	0	0.0	0.0
HOOPER BAY	16	4	23	1.4	5.8	12	3	5	0.4	1.7	9	1	1	0.1	1.0	0	0	0	0.0	0.0
HYDABURG	2	1	8	4.0	8.0	4	2	34	8.5	17.0	1	0	0	0.0	0.0	182	54	419	2.3	7.8
HYDER	14	11	64	4.6	5.8	4	2	4	1.0	2.0	6	1	2	0.3	2.0	0	0	0	0.0	0.0
JUNEAU	109	28	283	2.6	10.1	25	3	14	0.6	4.7	25	6	58	2.3	9.7	2	0	0	0.0	0.0
KAKE	69	23	186	2.7	8.1	19	12	139	7.3	11.6	13	4	46	3.5	11.5	0	0	0	0.0	0.0
KARLUK																				
KASAAN	6	6	15	2.5	2.5	3	2	33	11.0	16.5	3	2	20	6.7	10.0	0	0	0	0.0	0.0
KASILOF	1	1	13	13.0	13.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
KENAI	31	5	56	1.8	11.2	8	1	20	2.5	20.0	4	1	10	2.5	10.0	0	0	0	0.0	0.0
KETCHIKAN	210	68	731	3.5	10.8	51	9	141	2.8	15.7	25	8	42	1.7	5.3	216	23	117	0.5	5.1
KING COVE	26	18	175	6.7	9.7	9	3	33	3.7	11.0	5	5	101	20.2	20.2	0	0	0	0.0	0.0
KING SALMON																				
KIPNUK	5	5	37	7.4	7.4	4	2	24	6.0	12.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
KLAWOCK	95	56	530	5.6	9.5	29	8	44	1.5	5.5	19	8	31	1.6	3.9	1	0	0	0.0	0.0
KODIAK	607	385	3697	6.1	9.6	129	70	934	7.2	13.3	85	49	349	4.1	7.1	292	112	862	3.0	7.7
KONGIGANAK	2	2	13	6.5	6.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
KWIGILLINGOK	1	0	0	0.0	0.0	4	1	3	0.8	3.0	2	2	19	9.5	9.5	0	0	0	0.0	0.0
LARSEN BAY	21	14	126	6.0	9.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
MANOKOTAK																				
MARSHALL																				
MEKORYUK	4	4	71	17.8	17.8	1	0	0	0.0	0.0	2	1	4	2.0	4.0	0	0	0	0.0	0.0
METLAKATLA	66	26	137	2.1	5.3	40	9	48	1.2	5.3	27	5	16	0.6	3.2	0	0	0	0.0	0.0
MEYERS CHUCK	7	5	17	2.4	3.4	2	2	3	1.5	1.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NAKNEK	6	5	10	1.7	2.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NANWALEK	0	0	0	0.0	0.0	0	0	0	0.0	0.0	2	1	0	0.0	0.0	28	15	265	9.5	17.7
NAPAKIAK																				
NAUKATI	8	6	50	6.3	8.3	2	2	7	3.5	3.5	1	1	15	15.0	15.0	0	0	0	0.0	0.0
NELSON LAGOON																				
NEWTOK																				
NIGHTMUTE	3	3	121	40.3	40.3	1	0	0	0.0	0.0	1	1	25	25.0	25.0	0	0	0	0.0	0.0
NIKISKI	5	2	42	8.4	21.0	1	1	13	13.0	13.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NIKOLSKI	2	2	7	3.5	3.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NINILCHIK	15	8	86	5.7	10.8	3	0	0	0.0	0.0	8	0	0	0.0	0.0	0	0	0	0.0	0.0
NOME	3	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NORTH POLE																				
OLD HARBOR	32	27	207	6.5	7.7	5	4	42	8.4	10.5	4	1	0	0.0	0.0	0	0	0	0.0	0.0
OUZINKIE	18	15	94	5.2	6.3	6	3	28	4.7	9.3	3	3	54	18.0	18.0	0	0	0	0.0	0.0
PALMER																				
PELICAN	27	18	123	4.6	6.8	6	5	79	13.2	15.8	0	0	0	0.0	0.0	0	0	0	0.0	0.0

-continued-

Appendix Table 2.–Page 6 of 6.

Place of Residence ¹	First Mailing Response					Second Mailing Response					Third Mailing Response					Staff Administered				
	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished	Number Returned	Number Subsistence Fished	Number of Halibut Harvested	Mean, All Returned	Mean, Those Who Fished
PERRYVILLE	14	9	85	6.1	9.4	5	2	31	6.2	15.5	4	3	4	1.0	1.3	0	0	0	0.0	0.0
PETERSBURG	560	237	1711	3.1	7.2	156	52	407	2.6	7.8	61	17	107	1.8	6.3	2	0	0	0.0	0.0
PLATINUM																				
POINT BAKER	13	13	106	8.2	8.2	3	0	0	0.0	0.0	4	3	29	7.3	9.7	0	0	0	0.0	0.0
PORT ALEXANDER	10	5	48	4.8	9.6	5	0	0	0.0	0.0	3	1	4	1.3	4.0	0	0	0	0.0	0.0
PORT GRAHAM	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	33	18	243	7.4	13.5
PORT HEIDEN																				
PORT LIONS	27	16	135	5.0	8.4	9	3	30	3.3	10.0	2	2	13	6.5	6.5	0	0	0	0.0	0.0
PORT PROTECTION																				
PORT WILLIAM																				
QUINHAGAK	3	2	7	2.3	3.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
SAND POINT	74	28	217	2.9	7.8	35	13	68	1.9	5.2	21	7	68	3.2	9.7	0	0	0	0.0	0.0
SAVOONGA	8	5	74	9.3	14.8	5	2	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
SAXMAN	7	5	14	2.0	2.8	0	0	0	0.0	0.0	0	0	0	0.0	0.0	2	2	2	1.0	1.0
SCAMMON BAY																				
SELDOVIA	70	52	723	10.3	13.9	19	9	82	4.3	9.1	9	3	43	4.8	14.3	0	0	0	0.0	0.0
SEWARD	5	0	0	0.0	0.0	2	1	0	0.0	0.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0
SHISHMAREF																				
SITKA	740	388	2695	3.6	6.9	162	64	435	2.7	6.8	88	44	510	5.8	11.6	312	132	993	3.2	7.5
SKAGWAY	30	11	40	1.3	3.6	12	5	22	1.8	4.4	0	0	0	0.0	0.0	0	0	0	0.0	0.0
SOLDOTNA	7	4	53	7.6	13.3	1	1	7	7.0	7.0	2	1	6	3.0	6.0	0	0	0	0.0	0.0
SOUTH NAKNEK																				
ST GEORGE ISLAND	2	2	20	10.0	10.0	2	1	5	2.5	5.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
ST PAUL ISLAND	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	229	26	373	1.6	14.3
STERLING																				
SUTTON																				
TATITLEK	10	8	95	9.5	11.9	5	2	12	2.4	6.0	2	1	15	7.5	15.0	0	0	0	0.0	0.0
TELLER																				
TENAKEE SPRINGS	27	21	140	5.2	6.7	6	4	19	3.2	4.8	2	1	3	1.5	3.0	0	0	0	0.0	0.0
THORNE BAY	78	34	240	3.1	7.1	11	7	64	5.8	9.1	10	2	10	1.0	5.0	0	0	0	0.0	0.0
TOGIAK	3	1	0	0.0	0.0	3	0	0	0.0	0.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0
TOKSOOK BAY	22	10	177	8.0	17.7	15	2	170	11.3	85.0	2	1	20	10.0	20.0	100	100	3680	36.8	36.8
TRAPPER CREEK																				
TUNUNAK	7	3	34	4.9	11.3	1	1	20	20.0	20.0	2	1	24	12.0	24.0	0	0	0	0.0	0.0
TWIN HILLS																				
UNALAKLEET																				
UNALASKA	36	23	158	4.4	6.9	16	5	38	2.4	7.6	3	2	70	23.3	35.0	4	0	0	0.0	0.0
VALDEZ	9	3	39	4.3	13.0	0	0	0	0.0	0.0	5	2	4	0.8	2.0	0	0	0	0.0	0.0
WARD COVE	11	2	16	1.5	8.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0	6	0	0	0.0	0.0
WASILLA	6	1	10	1.7	10.0	5	2	60	12.0	30.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0
WHALE PASS																				
WHITE MOUNTAIN																				
WHITTIER																				
WILLOW																				
WRANGELL	271	138	1201	4.4	8.7	73	37	246	3.4	6.6	22	3	44	2.0	14.7	0	0	0	0.0	0.0
YAKUTAT	53	39	497	9.4	12.7	10	5	75	7.5	15.0	9	0	0	0.0	0.0	0	0	0	0.0	0.0
Alaska Subtotal	4850	2456	20836	4.3	8.5	1280	470	4421	3.5	9.4	679	275	2343	3.5	8.5	1510	515	7349	4.9	14.3
Non-Alaska Subtotal ²	38	3	39	1.0	13.0	13	1	2	0.2	2.0	3	0	0	0.0	0.0	0	0	0	0.0	0.0
PLACE OF RESIDENCE GRAND TOTALS	4,888	2,459	20,875	4.3	8.5	1,293	471	4,423	3.4	9.4	682	275	2,343	3.4	8.5	1,510	515	7,349	4.9	14.3

129

¹ To protect confidentiality, data for tribes or communities with five or fewer SHARCs issued are not reported in this table. Subtotals and totals include all tribes and communities.

² Note that members of eligible Alaska tribes could obtain SHARCs regardless of their place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2006.

Appendix Table 3.—Estimated Alaska subsistence harvests of halibut by eligible Alaska Tribe and eligible Alaska Rural community, by gear type and regulatory area in number of fish and pounds net weight, 2006.

Tribal Name ¹	Regulatory Area	Number of SHARCs Issued ²	Set Hook Gear			Hook & Line or Handline			All Gear				
			Estimated Number Respondents	Estimated Number Halibut	Estimated Pounds Halibut	Estimated Number Respondents	Estimated Number Halibut	Estimated Pounds Halibut	Estimated Number Respondents	Estimated Number Halibut	Confidence Interval for Number of Halibut	Estimated Pounds Halibut	Confidence Interval for Pounds of Halibut
			Fished	Harvested	Harvested ³	Fished	Harvested	Harvested ³	Fished	Harvested	Halibut	Harvested ³	Halibut
ANGOON COMMUNITY ASSOCIATION	2C	141	47	578	10,335	21	143	2,630	55	721	13.6%	12,964	12.4%
AUKQUAN TRADITIONAL COUNCIL	2C	2											
CENTRAL COUNCIL TLINGIT AND HAIDA INDIAN TRIBES	2C	725	158	1,616	37,618	98	578	11,407	204	2,194	23.7%	49,025	26.2%
CHILKAT INDIAN VILLAGE	2C	42	6	14	508	0	0	0	6	14	66.1%	508	64.5%
CHILKOOT INDIAN ASSOCIATION	2C	52	17	85	1,992	2	4	72	17	89	38.3%	2,064	37.4%
CRAIG COMMUNITY ASSOCIATION	2C	59	24	97	3,190	15	28	851	26	125	36.7%	4,041	35.4%
DOUGLAS INDIAN ASSOCIATION	2C	25	4	48	721	0	0	0	4	48	101.9%	721	85.3%
HOONAH INDIAN ASSOCIATION	2C	217	62	964	21,401	60	276	5,279	85	1,240	34.0%	26,680	40.1%
HYDABURG COOPERATIVE ASSOCIATION	2C	193	52	435	17,884	9	28	1,424	55	464	9.5%	19,308	9.8%
KETCHIKAN INDIAN CORPORATION	2C	887	107	1,021	21,256	60	301	6,400	145	1,322	24.8%	27,657	23.1%
KLAWOCK COOPERATIVE ASSOCIATION	2C	175	52	446	21,059	27	98	2,297	66	544	42.1%	23,356	42.1%
METLAKATLA INDIAN COMMUNITY, ANNETTE ISLAND RESERVE	2C	403	60	216	4,953	70	90	1,958	105	305	44.0%	6,910	36.8%
ORGANIZED VILLAGE OF KAKE	2C	130	41	355	9,955	14	31	582	43	386	34.4%	10,537	27.7%
ORGANIZED VILLAGE OF KASAAK	2C	11	9	59	1,513	7	15	234	9	73	62.4%	1,746	47.7%
ORGANIZED VILLAGE OF SAXMAN	2C	63	21	94	2,514	6	6	127	26	100	33.6%	2,641	31.0%
PETERSBURG INDIAN ASSOCIATION	2C	125	21	261	3,619	30	162	2,144	46	423	34.7%	5,764	27.9%
SITKA TRIBE OF ALASKA	2C	460	137	1,248	38,896	40	305	4,016	149	1,554	35.7%	42,912	37.4%
SKAGWAY VILLAGE	2C	2											
WRANGELL COOPERATIVE ASSOCIATION	2C	113	35	347	8,750	26	89	1,947	44	435	24.1%	10,697	25.3%
	2C	3,825	854	7,881	206,163	488	2,157	41,413	1,085	10,038	10.0%	247,576	11.1%
KENAITZE INDIAN TRIBE	3A	80	5	39	204	19	269	4,306	24	308	31.6%	4,510	35.3%
LESNOI VILLAGE (WOODY ISLAND)	3A	259	23	163	3,976	16	28	816	26	191	61.3%	4,792	71.0%
NATIVE VILLAGE OF AFOGNAK	3A	27	7	16	459	7	34	709	10	50	47.4%	1,168	52.5%
NATIVE VILLAGE OF AKHIOK	3A	25	5	200	750	20	180	3,844	20	380	103.7%	4,594	77.0%
NATIVE VILLAGE OF CHENEGA	3A	30	10	100	4,622	10	45	1,224	13	145	64.1%	5,846	96.8%
NATIVE VILLAGE OF EYAK	3A	76	29	174	3,384	12	24	532	31	199	31.5%	3,916	32.3%
NATIVE VILLAGE OF KARLUK	3A	5											
NATIVE VILLAGE OF LARSEN BAY	3A	45	9	88	2,264	18	144	3,936	22	232	34.8%	6,200	29.3%
NATIVE VILLAGE OF NANWALEK	3A	29	8	67	996	13	134	2,525	15	201	14.1%	3,521	14.2%
NATIVE VILLAGE OF OUZINKIE	3A	45	26	178	5,475	21	73	2,158	31	251	39.8%	7,633	38.5%
NATIVE VILLAGE OF PORT GRAHAM	3A	46	7	74	1,984	18	269	3,064	24	342	37.1%	5,048	42.2%
NATIVE VILLAGE OF PORT LIONS	3A	56	35	245	5,726	19	72	1,859	37	317	27.3%	7,585	26.0%
NATIVE VILLAGE OF TATITLEK	3A	32	17	222	6,360	2	0	0	19	222	48.2%	6,360	58.3%
NINILCHIK VILLAGE	3A	98	10	71	1,479	20	210	4,013	27	280	43.0%	5,492	40.4%
SELDOVIA VILLAGE TRIBE	3A	50	5	192	5,105	18	171	2,885	19	363	48.7%	7,990	63.0%
SHOONAQ TRIBE OF KODIAK	3A	184	102	998	24,210	45	331	6,809	112	1,329	19.4%	31,019	20.3%
VILLAGE OF OLD HARBOR	3A	56	8	35	544	35	183	4,706	37	218	29.4%	5,250	30.4%
VILLAGE OF SALAMATOFF	3A	16	4	32	400	7	107	2,310	9	139	38.9%	2,710	44.3%
YAKUTAT TLINGIT TRIBE	3A	62	24	340	7,142	10	86	942	28	426	34.6%	8,084	39.3%
	3A	1,221	336	3,254	76,016	310	2,359	46,638	508	5,613	10.3%	122,655	11.6%
AGDAAGUX TRIBE OF KING COVE	3B	50	12	185	3,694	22	148	2,780	28	333	37.7%	6,474	34.1%
CHIGNIK LAKE VILLAGE	3B	10	2	13	150	7	27	263	7	40	60.7%	413	83.2%
IVANOFF BAY VILLAGE	3B	8	0	0	0	4	24	360	4	24	584.5%	360	584.5%
NATIVE VILLAGE OF BELKOFSKI	3B	2											
NATIVE VILLAGE OF CHIGNIK	3B	13	3	33	658	10	31	762	10	64	52.1%	1,421	50.3%
NATIVE VILLAGE OF CHIGNIK LAGOON	3B	43	17	198	4,580	32	166	3,702	37	363	28.9%	8,282	29.1%
NATIVE VILLAGE OF FALSE PASS	3B	14	5	47	0	5	0	0	9	47	268.6%	0	0.0%
NATIVE VILLAGE OF NELSON LAGOON	3B	8											
NATIVE VILLAGE OF PERRYVILLE	3B	38	22	212	5,320	4	14	68	24	226	35.1%	5,388	38.9%
NATIVE VILLAGE OF UNGA	3B	13	7	85	1,292	3	33	524	10	117	83.7%	1,816	70.9%
PAULOFF HARBOR VILLAGE	3B	56	7	43	810	20	169	5,764	27	212	72.6%	6,574	84.5%
QAGAN TAYAGUNGIN TRIBE OF SAND POINT VILLAGE	3B	318	48	280	6,582	62	228	5,257	96	508	28.7%	11,839	31.7%
VILLAGE OF KANATAK	3B	11	1	10	150	0	0	0	1	10	0.0%	150	0.0%
	3B	579	122	1,105	23,235	169	840	19,480	252	1,945	16.7%	42,715	17.1%
NATIVE VILLAGE OF AKUTAN	4A	44	5	49	1,008	34	533	11,209	34	582	52.6%	12,217	58.5%
NATIVE VILLAGE OF NIKOLSKI	4A	12	0	0	0	12	0	0	12	0	0.0%	0	0.0%
QAWALANGIN TRIBE OF UNALASKA	4A	43	10	63	1,052	8	35	607	14	98	47.1%	1,659	45.8%
	4A	99	15	112	2,060	54	568	11,816	61	680	41.6%	13,876	46.2%
NATIVE VILLAGE OF ATKA	4B	6	4	74	1,131	2	20	105	4	94	148.2%	1,236	182.8%
	4B	6	4	74	1,131	2	20	105	4	94	148.2%	1,236	182.8%

-continued-

Appendix Table 3.–Page 2 of 4.

Tribal Name ¹	Regulatory Area	Number of SHARCs Issued ²	Set Hook Gear			Hook & Line or Handline			All Gear				
			Estimated Number Respondents	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents	Estimated Number Halibut Harvested	Confidence Interval for Number of Halibut	Estimated Pounds Halibut Harvested ³	Confidence Interval for Pounds of Halibut
			Fished	Harvested	Harvested ³	Fished	Harvested	Harvested ³	Fished	Harvested	Halibut	Harvested ³	Halibut
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST GEORGE	4C	27	0	0	0	20	169	3,443	20	169	102.6%	3,443	93.4%
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST PAUL	4C	254	22	325	3,913	9	40	988	27	365	15.2%	4,900	15.5%
	4C	281	22	325	3,913	29	209	4,430	47	534	19.9%	8,343	19.7%
NATIVE VILLAGE OF GAMBELL	4D	6	0	0	0	0	0	0	0	0	0.0%	0	0.0%
NATIVE VILLAGE OF SAVOONGA	4D	44	22	223	7,708	9	9	589	22	233	88.2%	8,297	79.9%
	4D	50	22	223	7,708	9	9	589	22	233	90.5%	8,297	81.9%
CHEVAK NATIVE VILLAGE (KASHUNAMIUT)	4E	7	4	4	39	5	19	394	7	23	56.8%	433	67.1%
CHINIK ESKIMO COMMUNITY	4E	1											
EGEGIK VILLAGE	4E	6	1	6	60	5	12	107	5	18	0.0%	167	0.0%
KING ISLAND NATIVE COMMUNITY	4E	2											
LEVELOCK VILLAGE	4E	1											
NAKNEK NATIVE VILLAGE	4E	6	5	6	225	3	2	28	5	8	148.8%	253	148.8%
NATIVE VILLAGE OF ALEKNAGIK	4E	5											
NATIVE VILLAGE OF COUNCIL	4E	1											
NATIVE VILLAGE OF DILLINGHAM (CURYUNG)	4E	23	5	23	644	2	7	86	7	30	53.4%	731	61.1%
NATIVE VILLAGE OF EEK	4E	21	0	0	0	11	37	1,772	11	37	78.7%	1,772	81.5%
NATIVE VILLAGE OF EKUK	4E	3											
NATIVE VILLAGE OF ELIM	4E	1											
NATIVE VILLAGE OF GOODNEWS BAY (MUMTRAQ)	4E	15	0	0	0	5	30	375	5	30	131.9%	375	119.8%
NATIVE VILLAGE OF HOOPER BAY	4E	92	5	14	121	18	71	871	21	85	69.1%	992	61.6%
NATIVE VILLAGE OF KANAKANAK	4E	1											
NATIVE VILLAGE OF KIPNUK	4E	88	10	0	0	68	594	8,976	68	594	79.5%	8,976	52.8%
NATIVE VILLAGE OF KONGIGANAK	4E	10	0	0	0	10	65	1,125	10	65	320.5%	1,125	0.0%
NATIVE VILLAGE OF KOYUK	4E	1											
NATIVE VILLAGE OF KWIGILLINGOK	4E	48	0	0	0	21	151	2,906	21	151	98.0%	2,906	124.2%
NATIVE VILLAGE OF KWINHAGAK	4E	11	0	0	0	6	22	619	6	22	599.0%	619	599.0%
NATIVE VILLAGE OF MEKORYUK	4E	16	7	114	1,200	7	48	293	9	162	71.1%	1,493	83.1%
NATIVE VILLAGE OF NAKAKIAK	4E	3											
NATIVE VILLAGE OF NIGHTMUTE	4E	8	0	0	0	4	84	0	4	84	584.5%	0	0.0%
NATIVE VILLAGE OF PORT HEIDEN	4E	1											
NATIVE VILLAGE OF SCAMMON BAY	4E	5											
NATIVE VILLAGE OF SHAKTOOLIK	4E	1											
NATIVE VILLAGE OF SHISHMAREF	4E	1											
NATIVE VILLAGE OF TOKSOOK BAY (NUNAKAUYAK)	4E	532	6	285	2,333	111	3,756	34,089	112	4,041	32.0%	36,422	33.6%
NATIVE VILLAGE OF TUNUNAK	4E	73	7	146	224	40	431	4,305	40	577	56.4%	4,529	60.6%
NATIVE VILLAGE OF UNALAKLEET	4E	6	0	0	0	0	0	0	0	0	0.0%	0	0.0%
NATIVE VILLAGE OF WHITE MOUNTAIN	4E	2											
NEWTOK VILLAGE	4E	3											
NOME ESKIMO COMMUNITY	4E	15	0	0	0	0	0	0	0	0	0.0%	0	0.0%
ORUTSARARMUIT NATIVE VILLAGE	4E	8	3	111	1,665	3	45	1,024	3	156	826.7%	2,689	826.7%
PLATINUM TRADITIONAL VILLAGE	4E	1											
SOUTH NAKNEK VILLAGE	4E	2											
STEBBINS COMMUNITY ASSOCIATION	4E	4											
TRADITIONAL VILLAGE OF TOGIAK	4E	11	2	0	0	2	0	0	2	0	0.0%	0	0.0%
TWIN HILLS VILLAGE	4E	1											
UGASHIK VILLAGE	4E	4											
VILLAGE OF CHEFORNAK	4E	19	0	0	0	10	272	2,078	10	272	76.9%	2,078	102.4%
VILLAGE OF CLARK'S POINT	4E	3											
	4E	1,062	55	712	6,624	336	5,664	59,419	350	6,376	21.8%	66,043	22.0%
Tribal Name Subtotals	All Regulatory Areas	7,123	1,430	13,686	326,849	1,397	11,826	183,890	2,329	25,512	6.5%	510,740	7.1%
Rural Community ¹	Regulatory Area	Number of SHARCs Issued ²	Set Hook Gear			Hook & Line or Handline			All Gear				
			Estimated Number Respondents	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents	Estimated Number Halibut Harvested	Confidence Interval for Number of Halibut	Estimated Pounds Halibut Harvested ³	Confidence Interval for Pounds of Halibut
			Fished	Harvested	Harvested ³	Fished	Harvested	Harvested ³	Fished	Harvested	Halibut	Harvested ³	Halibut
ANGOON	2C	26	12	172	3,083	7	25	478	13	196	33.9%	3,561	34.3%
COFFMAN COVE	2C	43	17	93	2,402	9	87	1,036	22	180	19.9%	3,438	17.1%

-continued-

Appendix Table 3.–Page 3 of 4.

Rural Community ¹	Regulatory Area	Number of SHARCs Issued ²	Set Hook Gear			Hook & Line or Handline			All Gear				
			Estimated Number Respondents	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents	Estimated Number Halibut Harvested	Confidence Interval for Number of Halibut	Estimated Pounds Halibut Harvested ³	Confidence Interval for Pounds of Halibut
			Fished	Harvested	Harvested ³	Fished	Harvested	Harvested ³	Fished	Harvested	Number of Halibut	Harvested ³	Harvested ³
CRAIG	2C	323	143	1,423	28,482	56	222	3,531	169	1,646	9.6%	32,013	9.7%
EDNA BAY	2C	47	18	109	3,874	11	39	925	24	148	16.4%	4,799	15.1%
ELFIN COVE	2C	18	7	21	855	3	3	54	7	24	52.8%	910	52.1%
GUSTAVUS	2C	67	24	251	5,228	19	94	1,551	35	345	18.8%	6,779	21.4%
HAINES	2C	432	196	830	19,549	43	62	1,329	203	891	11.5%	20,878	11.2%
HOLLIS	2C	50	28	103	3,695	17	44	1,310	33	147	17.5%	5,005	18.3%
HOONAH	2C	115	43	443	7,196	14	87	1,563	51	530	19.4%	8,758	16.4%
HYDABURG	2C	14	7	18	1,153	4	3	150	7	21	0.0%	1,303	0.0%
HYDER	2C	35	19	83	2,087	12	19	535	20	102	36.9%	2,622	30.8%
KAKE	2C	42	21	206	5,488	5	20	507	22	226	20.9%	5,995	23.2%
KASAAN	2C	16	8	50	788	5	0	0	8	50	84.5%	788	81.1%
KLAWOCK	2C	114	43	349	8,289	33	237	3,696	65	586	14.9%	11,985	16.8%
KLUKWAN	2C	1											
METLAKATLA	2C	35	14	190	3,270	6	30	533	16	220	61.0%	3,803	59.1%
MEYERS CHUCK	2C	10	7	18	438	3	4	95	8	22	20.7%	533	19.9%
PELICAN	2C	43	29	189	4,623	16	33	1,302	30	221	22.6%	5,925	21.1%
PETERSBURG	2C	925	268	1,693	31,758	191	945	15,814	370	2,638	6.8%	47,572	6.2%
PORT ALEXANDER	2C	26	4	43	1,294	4	23	370	8	65	44.6%	1,664	48.8%
PORT PROTECTION	2C	23	12	70	1,318	8	19	370	14	89	30.9%	1,688	26.3%
PT. BAKER	2C	18	15	136	2,559	3	10	165	17	145	34.7%	2,724	33.4%
SAXMAN	2C	23	3	121	635	3	43	285	4	164	40.9%	920	35.9%
SITKA	2C	1,429	668	4,362	106,788	255	810	13,947	759	5,172	5.9%	120,735	6.1%
SKAGWAY	2C	56	20	70	1,554	6	4	136	22	75	26.6%	1,690	27.5%
TENAKEE SPRINGS	2C	43	27	145	4,099	14	54	732	31	199	12.0%	4,831	12.9%
THORNE BAY	2C	139	51	377	8,545	14	58	1,506	58	436	18.9%	10,051	18.0%
WHALE PASS	2C	30	8	50	1,333	9	13	594	11	63	18.5%	1,928	19.0%
WRANGELL	2C	367	161	1,138	24,582	76	406	6,733	188	1,545	8.7%	31,315	8.1%
	2C	4,510	1,873	12,751	284,963	844	3,395	59,247	2,213	16,147	3.0%	344,210	3.0%
AKHIOK	3A	1											
CHENEGA BAY	3A	11	5	168	2,888	3	20	554	6	189	73.9%	3,441	65.9%
CORDOVA	3A	534	172	923	18,155	111	351	7,436	216	1,274	8.1%	25,591	8.5%
KODIAK	3A	1,441	566	4,803	115,061	442	2,659	56,129	824	7,461	4.7%	171,190	5.2%
LARSEN BAY	3A	13	6	49	1,080	7	38	1,013	10	88	20.4%	2,093	21.6%
NANWALEK	3A	4											
OLD HARBOR	3A	24	6	58	1,160	12	61	1,165	15	118	45.6%	2,325	36.4%
OUIZINKIE	3A	10	9	66	1,650	3	14	500	9	80	19.6%	2,150	24.1%
PORT GRAHAM	3A	12	1	24	413	5	45	733	5	70	50.7%	1,146	55.2%
PORT LIONS	3A	30	14	88	1,249	2	14	357	16	102	31.7%	1,606	38.3%
SELDOVIA	3A	102	28	294	5,471	60	643	10,012	71	937	9.4%	15,483	9.7%
TATITLEK	3A	12	6	54	1,268	2	6	105	8	60	67.9%	1,373	81.1%
YAKUTAT	3A	51	34	328	7,494	15	143	2,560	38	471	13.8%	10,054	12.6%
	3A	2,245	850	6,915	158,025	664	4,012	81,052	1,221	10,928	3.8%	239,077	4.2%
CHIGNIK	3B	10	5	21	460	3	15	233	5	36	60.9%	693	62.4%
CHIGNIK LAGOON	3B	7	2	49	826	2	5	142	5	54	208.1%	968	188.5%
CHIGNIK LAKE	3B	4											
COLD BAY	3B	19	10	34	662	13	132	2,502	14	166	26.7%	3,164	25.1%
FALSE PASS	3B	3											
KING COVE	3B	22	5	31	434	14	133	2,342	16	164	29.2%	2,776	28.8%
PERRYVILLE	3B	2											
SAND POINT	3B	15	6	51	844	3	90	1,800	8	141	61.0%	2,644	58.2%
	3B	82	29	190	3,391	40	415	7,982	54	605	17.6%	11,373	16.5%
AKUTAN	4A	2											
NIKOLSKI	4A	6	0	0	0	6	42	2,250	6	42	0.0%	2,250	0.0%
UNALASKA	4A	120	33	222	5,009	32	257	6,277	57	480	18.2%	11,286	18.5%
	4A	128	33	222	5,009	40	309	8,677	65	532	18.2%	13,686	18.4%

-continued-

Appendix Table 3.–Page 4 of 4.

Rural Community ¹	Regulatory Area	Number of SHARCs Issued ²	Set Hook Gear			Hook & Line or Handline			All Gear				
			Estimated Number Respondents Fished	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents Fished	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents Fished	Estimated Number Halibut Harvested	Confidence Interval for Number of Halibut	Estimated Pounds Halibut Harvested ³	Confidence Interval for Pounds of Halibut
ADAK	4B	12	2	0	0	2	0	0	2	0	0.0%	0	0.0%
ATKA	4B	4											
	4B	16	6	16	525	6	16	525	6	32	127.0%	1,050	127.0%
ST GEORGE ISLAND	4C	1											
ST PAUL ISLAND	4C	1											
	4C	2											
ALAKANUK	4E	1											
ALEKNAGIK	4E	3											
BETHEL	4E	4											
CHEFORNAK	4E	1											
CHEVAK	4E	3											
CLARKS POINT	4E	1											
DILLINGHAM	4E	44	0	0	0	1	0	0	1	0	0.0%	0	0.0%
EMMONAK	4E	1											
HOOPER BAY	4E	1											
KING SALMON	4E	2											
KOTLIK	4E	1											
KWIGILLINGOK	4E	1											
MANOKOTAK	4E	2											
MEKORYUK	4E	1											
NAKNEK	4E	6	1	0	0	1	6	169	3	6	148.8%	169	148.8%
NIGHTMUTE	4E	7	2	163	3,500	5	128	746	7	292	81.5%	4,246	175.7%
NOME	4E	6	0	0	0	0	0	0	0	0	0.0%	0	0.0%
PLATINUM	4E	1											
PORT HEIDEN	4E	2											
QUINHAGAK	4E	2											
SHELDON POINT	4E	1											
SOUTH NAKNEK	4E	2											
TELLER	4E	3											
TOGIAK	4E	3											
TOKSOOK BAY	4E	1											
	4E	100	6	174	3,770	17	160	1,406	21	334	46.0%	5,176	55.8%
Rural Community Subtotals	All Regulatory Areas	7,083	2,796	20,269	455,683	1,610	8,307	158,889	3,580	28,577	2.3%	614,572	2.4%

Tribal Name Subtotals	Regulatory Area	Number of SHARCs Issued ²	Set Hook Gear			Hook & Line or Handline			All Gear				
			Estimated Number Respondents Fished	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents Fished	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents Fished	Estimated Number Halibut Harvested	Confidence Interval for Number of Halibut	Estimated Pounds Halibut Harvested ³	Confidence Interval for Pounds of Halibut
	All	7,123	1,430	13,686	326,849	1,397	11,826	183,890	2,329	25,512	6.5%	510,740	7.1%
Rural Community Subtotals	All	7,083	2,796	20,269	455,683	1,610	8,307	158,889	3,580	28,577	2.3%	614,572	2.4%
Grand Totals	All	14,206	4,226	33,956	782,532	3,007	20,133	342,779	5,909	54,089	2.8%	1,125,312	2.9%

Regulatory Area	Number of SHARCs Issued ²	Set Hook Gear			Hook & Line or Handline			All Gear					
		Estimated Number Respondents Fished	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents Fished	Estimated Number Halibut Harvested	Estimated Pounds Halibut Harvested ³	Estimated Number Respondents Fished	Estimated Number Halibut Harvested	Confidence Interval for Number of Halibut	Estimated Pounds Halibut Harvested ³	Confidence Interval for Pounds of Halibut	
2C	8,338	2,726	20,633	491,126	1,332	5,552	100,659	3,298	26,185	3.6%	591,786	4.0%	
3A	3,466	1,186	10,169	234,041	973	6,372	127,690	1,729	16,541	3.9%	361,731	4.3%	
3B	661	151	1,295	26,626	208	1,254	27,463	306	2,549	13.6%	54,088	13.5%	
4A	227	48	335	7,070	94	677	20,492	126	1,212	18.2%	27,562	18.8%	
4B	22	10	90	1,856	8	36	638	10	126	80.9%	2,296	80.2%	
4C	263	22	325	3,919	29	209	4,430	47	534	20.0%	8,343	19.9%	
4D	50	22	223	7,708	9	9	589	22	233	90.5%	8,297	81.9%	
4E	1,162	61	885	10,394	353	5,824	60,825	371	6,709	19.8%	71,219	20.3%	
Grand Totals	All	14,206	4,226	33,956	782,532	3,007	20,133	342,779	5,909	54,089	2.8%	1,125,312	2.9%

¹ To protect confidentiality, values for tribes and communities with 5 or fewer SHARCs issued are not reported here. Subtotals and totals included all tribes and communities.

² SHARC = Subsistence Halibut Registration Certificate

³ Pounds net weight. Net weight = 75% of round (whole) weight

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2007

Appendix Table 4.—Estimated subsistence and sport harvests of halibut and harvests of lingcod and rockfish by place of residence, 2006.

Place of Residence ¹	Number of SHARCs Issued ²	Subsistence Fished		Subsistence Harvest		Sport Fished		Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
		Estimated Number Respondents	Estimated Number Respondents	Estimated Number Halibut	Estimated Pounds Halibut ³	Estimated Number Respondents	Estimated Number Respondents	Estimated Number Halibut	Estimated Pounds Halibut ³	Estimated Number Respondents	Estimated Number Lingcod	Estimated Number Respondents	Estimated Number Rockfish
ADAK	12	2	2	13	508	0	0	0	0	0	0	2	5
AKHIOK	23	15	15	150	3563	0	0	0	0	0	0	0	0
AKUTAN	47	38	38	594	12412	5	39	367	5	29	10	147	
ALAKANUK	1												
ALEKNAGIK	4												
ANCHOR POINT	12	0	0	0	0	7	48	1247	0	0	0	0	0
ANCHORAGE	235	49	49	696	16854	47	222	4316	7	92	11	185	
ANGOON	173	75	75	954	16875	22	60	917	8	11	18	178	
ATKA	4												
AUKE BAY	3												
BARROW	1												
BETHEL	11	14	14	93	1432	0	0	0	0	0	0	0	0
BIG LAKE	2												
CHEFORNAK	20	10	10	272	2078	0	0	0	3	10	3	38	
CHENEGA BAY	19	11	11	276	8260	3	36	648	6	18	10	222	
CHEVAK	11	9	9	23	433	2	12	150	2	5	0	0	0
CHIGNIK	28	22	22	191	4051	5	20	376	5	18	5	62	
CHIGNIK BAY	3												
CHIGNIK LAGOON	42	28	28	329	6694	13	56	1436	4	28	13	238	
CHIGNIK LAKE	7	5	5	25	310	0	0	0	0	0	0	0	0
CHINIAK	22	14	14	207	4874	7	13	409	1	1	1	6	
CHUGIAK	9	2	2	56	726	3	16	284	0	0	0	0	0
CLARKS POINT	4												
COFFMAN COVE	44	22	22	180	3438	14	39	889	4	16	7	87	
COLD BAY	23	17	17	179	3341	13	41	930	1	30	0	0	0
CORDOVA	607	248	248	1452	29027	152	374	7020	26	61	46	252	
CRAIG	475	244	244	2413	53317	156	654	10412	45	111	106	1149	
DILLINGHAM	64	8	8	34	914	5	9	139	0	0	0	0	0
DOUGLAS	26	5	5	51	1117	3	10	291	0	0	0	0	0
DUTCH HARBOR	76	30	30	305	7518	28	143	3078	0	0	8	77	
EAGLE RIVER	9	3	3	156	2689	2	7	99	0	0	0	0	0
EDNA BAY	25	11	11	65	1950	3	8	159	3	9	4	45	
EEK	20	8	8	32	1398	0	0	0	0	0	0	0	0
ELFIN COVE	18	7	7	24	910	1	1	9	0	0	3	13	
EXCURSION INLET	2												
FAIRBANKS	6	0	0	0	0	0	0	0	0	0	0	0	0
FALSE PASS	11	12	12	86	963	0	0	0	5	19	0	0	0
FRITZ CREEK	2												
GAMBELL	6	0	0	0	0	0	0	0	0	0	0	0	0

-continued-

Appendix Table 4.–Page 2 of 4.

Place of Residence ¹	Number of SHARCs Issued ²	Subsistence Fished	Subsistence Harvest		Sport Fished	Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
		Estimated Number Respondents	Estimated Number Halibut	Estimated Pounds Halibut ³	Estimated Number Respondents	Estimated Number Halibut	Estimated Pounds Halibut ³	Estimated Number Respondents	Estimated Number Lingcod	Estimated Number Respondents	Estimated Number Rockfish
GOLOVIN	1										
GOODNEWS BAY	15	5	30	375	0	0	0	0	0	0	0
GUSTAVUS	67	35	345	6779	21	92	1623	0	0	3	6
HAINES	529	229	982	23205	85	117	2978	14	33	25	134
HOLLIS	5										
HOMER	27	15	80	820	10	59	621	4	17	1	4
HOONAH	331	139	1801	35989	53	291	4497	13	55	17	819
HOOPER BAY	89	18	67	647	2	0	0	5	120	0	0
HYDABURG	194	60	483	20426	8	38	2381	14	79	30	571
HYDER	35	20	102	2622	7	10	328	3	7	10	55
JUNEAU	485	89	863	15954	72	318	5186	3	3	28	253
KAKE	167	65	611	16532	17	12	487	10	43	15	155
KARLUK	1										
KASAAN	21	17	114	2218	9	7	138	0	0	8	59
KASILOF	9	2	21	605	0	0	0	2	2	0	0
KENAI	72	12	141	2166	23	71	1416	2	8	0	0
KETCHIKAN	1014	208	1987	42187	207	677	12104	50	100	83	1148
KING COVE	70	38	458	8017	10	28	709	2	7	3	20
KING SALMON	2										
KIPNUK	87	68	594	8976	0	0	0	0	0	0	0
KLAWOCK	314	137	1062	34514	61	269	5722	32	168	47	803
KODIAK	1716	961	8750	205822	562	2855	64320	109	337	192	2126
KONGIGANAK	9	10	65	1125	0	0	0	0	0	0	0
KWIGILLINGOK	48	21	151	2906	0	0	0	0	0	0	0
LARSEN BAY	37	22	189	5022	10	44	924	2	4	8	101
MANOKOTAK	2										
MARSHALL	1										
MEKORYUK	14	10	166	1538	0	0	0	3	20	0	0
METLAKATLA	419	118	509	10332	68	65	1413	20	94	40	240
MEYERS CHUCK	10	8	22	533	0	0	0	0	0	3	11
NAKNEK	11	7	14	422	3	0	0	0	0	0	0
NANWALEK	31	17	279	6146	3	30	425	7	83	5	66
NAPAKIAK	3										
NAUKATI	12	11	87	2340	6	58	799	1	16	6	43
NELSON LAGOON	1										
NEWTOK	3										
NIGHTMUTE	15	11	376	4246	0	0	0	0	0	0	0
NIKISKI	8	4	74	1556	3	8	241	1	3	3	37

-continued-

Appendix Table 4.–Page 3 of 4.

Place of Residence ¹	Number of SHARCs Issued ²	Subsistence Fished	Subsistence Harvest		Sport Fished	Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
		Estimated Number Respondents	Estimated Number Halibut	Estimated Pounds Halibut ³	Estimated Number Respondents	Estimated Number Halibut	Estimated Pounds Halibut ³	Estimated Number Respondents	Estimated Number Lingcod	Estimated Number Respondents	Estimated Number Rockfish
NIKOLSKI	18	18	42	2250	18	0	0	0	0	0	0
NINILCHIK	64	16	169	3735	6	38	749	0	0	0	0
NOME	10	0	0	0	0	0	0	0	0	0	0
NORTH POLE	3										
OLD HARBOR	71	61	589	9270	12	28	538	6	19	4	25
OUZINKIE	48	39	324	8718	15	53	1488	11	22	14	263
PALMER	5										
PELICAN	53	36	345	8672	17	30	1422	19	92	25	296
PERRYVILLE	47	28	230	4391	0	0	0	2	2	4	63
PETERSBURG	1082	426	3084	53682	246	898	17351	17	40	66	372
PLATINUM	1										
POINT BAKER	27	22	186	3399	5	25	393	3	29	11	104
PORT ALEXANDER	24	8	65	1664	6	29	829	3	26	4	63
PORT GRAHAM	50	30	412	6194	2	0	0	1	2	3	39
PORT HEIDEN	1										
PORT LIONS	77	44	382	7465	40	192	4784	0	0	2	9
PORT PROTECTION	1										
PORT WILLIAM	2										
QUINHAGAK	14	8	28	791	0	0	0	0	0	0	0
SAND POINT	365	133	914	20214	29	198	6300	15	116	22	670
SAVOONGA	43	22	233	8297	0	0	0	6	19	3	19
SAXMAN	15	11	23	806	2	2	73	10	13	10	36
SCAMMON BAY	2										
SELDOVIA	123	80	1048	17406	48	371	5340	6	38	15	106
SEWARD	12	2	0	0	5	16	508	0	0	0	0
SHISHMAREF	1										
SITKA	1895	915	6691	163372	395	1287	23032	318	1011	405	4182
SKAGWAY	60	24	101	2174	14	23	244	1	3	7	19
SOLDOTNA	16	10	98	1439	5	17	413	0	0	0	0
SOUTH NAKNEK	3										
ST GEORGE ISLAND	26	20	169	3443	0	0	0	0	0	0	0
ST PAUL ISLAND	244	29	435	5971	0	0	0	0	0	0	0
STERLING	4										
SUTTON	1										
TATITLEK	30	21	233	6490	4	22	285	0	0	15	160
TELLER	3										
TENAKEE SPRINGS	44	33	201	4898	17	41	635	4	6	15	106
THORNE BAY	135	60	436	10051	68	480	6804	7	28	24	183

-continued-

Appendix Table 4.–Page 4 of 4.

Place of Residence ¹	Number of SHARCs Issued ²	Subsistence Fished	Subsistence Harvest		Sport Fished	Sport Harvest		Lingcod Bycatch		Rockfish Bycatch	
		Estimated Number Respondents	Estimated Number Halibut	Estimated Pounds Halibut ³	Estimated Number Respondents	Estimated Number Halibut	Estimated Pounds Halibut ³	Estimated Number Respondents	Estimated Number Lingcod	Estimated Number Respondents	Estimated Number Rockfish
TOGIAK	10	2	0	0	0	0	0	0	0	0	0
TOKSOOK BAY	533	113	4047	36481	0	0	0	9	27	3	41
TRAPPER CREEK	1										
TUNUNAK	70	33	518	4032	0	0	0	0	0	13	86
TWIN HILLS	2										
UNALAKLEET	1										
UNALASKA	95	51	468	8813	22	44	690	4	21	5	14
VALDEZ	27	10	88	1909	0	0	0	4	4	6	43
WARD COVE	42	4	34	632	6	18	349	2	9	2	22
WASILLA	24	6	165	3988	8	32	778	1	6	1	13
WHALE PASS	2										
WHITE MOUNTAIN	1										
WHITTIER	1										
WILLOW	1										
WRANGELL	504	242	2021	41929	132	399	8913	23	63	51	375
YAKUTAT	113	64	847	18193	17	66	946	33	225	23	259
Alaska Subtotals	14029	5902	54017	1122876	2881	11202	222966	924	3477	1527	16924
Non-Alaska Subtotals*	177	7	72	2436	13	18	673	4	9	2	21
GRAND TOTALS	14206	5909	54089	1125312	2894	11219	223639	927	3486	1529	16945

¹ To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs issued are not reported in this table. Tribal and community subtotals include all tribes and communities.

² SHARC = subsistence halibut registration certificate

³ Pounds net weight; converted from reported pounds round weight. Net weight = 75% of round weight.

⁴ Note that members of eligible Alaska tribes could obtain SHARCs regardless of their place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

Source: Alaska Department of Fish and Game, Division of Subsistence SHARC Survey, 2007.

Appendix Table 5.—Estimated subsistence harvests of halibut by gear type and place of residence, 2006.

Place of Residence ¹	Number of SHARCs Issued ²	Estimated Harvest by Gear Type								
		Set Hook Gear			Hook and Line or Handline			All Gear		
		Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³	Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³	Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³
ADAK	12	2	10	450	2	3	58	2	13	508
AKHIOK	23	0	0	0	15	150	3563	15	150	3563
AKUTAN	47	5	49	1008	38	545	11404	38	594	12412
ALAKANUK	1									
ALEKNAGIK	4									
ANCHOR POINT	12	0	0	0	0	0	0	0	0	0
ANCHORAGE	235	31	429	11691	32	267	5163	49	696	16854
ANGOON	173	67	784	13670	30	170	3204	75	954	16875
ATKA	4									
AUKE BAY	3									
BARROW	1									
BETHEL	11	0	0	0	14	93	1432	14	93	1432
BIG LAKE	2									
CHEFORNAK	20	0	0	0	10	272	2078	10	272	2078
CHENEGA BAY	19	7	221	6638	8	55	1623	11	276	8260
CHEVAK	11	5	4	39	7	19	394	9	23	433
CHIGNIK	28	12	118	2568	18	73	1484	22	191	4051
CHIGNIK BAY	3									
CHIGNIK LAGOON	42	13	189	3987	26	140	2707	28	329	6694
CHIGNIK LAKE	7	1	5	166	3	20	144	5	25	310
CHINIYAK	22	10	160	3756	9	47	1118	14	207	4874
CHUGIAK	9	0	0	0	2	56	726	2	56	726
CLARKS POINT	4									
COFFMAN COVE	44	17	93	2402	9	87	1036	22	180	3438
COLD BAY	23	11	45	791	15	133	2550	17	179	3341
CORDOVA	607	202	1077	21059	125	375	7968	248	1452	29027
CRAIG	475	208	1987	46428	103	425	6888	244	2413	53317
DILLINGHAM	64	6	34	914	3	0	0	8	34	914
DOUGLAS	26	2	10	361	3	41	756	5	51	1117
DUTCH HARBOR	76	15	112	2172	19	193	5346	30	305	7518
EAGLE RIVER	9	3	111	1665	3	45	1024	3	156	2689
EDNA BAY	25	10	62	1807	4	3	143	11	65	1950
EEK	20	0	0	0	8	32	1398	8	32	1398
ELFIN COVE	18	7	21	855	3	3	54	7	24	910
EXCURSION INLET	2									
FAIRBANKS	6	0	0	0	0	0	0	0	0	0
FALSE PASS	11	5	47	0	8	39	963	12	86	963

-continued-

Appendix Table 5.–Page 2 of 4.

Place of Residence ¹	Number of SHARCs Issued ²	Estimated Harvest by Gear Type								
		Set Hook Gear			Hook and Line or Handline			All Gear		
		Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³	Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³	Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³
FRITZ CREEK	2									
GAMBELL	6	0	0	0	0	0	0	0	0	0
GOLOVIN	1									
GOODNEWS BAY	15	0	0	0	5	30	375	5	30	375
GUSTAVUS	67	24	251	5228	19	94	1551	35	345	6779
HAINES	529	221	917	21804	46	65	1401	229	982	23205
HOLLIS	5									
HOMER	27	4	23	297	12	57	523	15	80	820
HOONAH	331	104	1385	28490	79	416	7499	139	1801	35989
HOOPER BAY	89	5	14	121	16	53	526	18	67	647
HYDABURG	194	57	451	18852	11	31	1574	60	483	20426
HYDER	35	19	83	2087	12	19	535	20	102	2622
JUNEAU	485	66	715	12927	42	149	3027	89	863	15954
KAKE	167	62	561	15443	19	51	1089	65	611	16532
KARLUK	1									
KASAAN	21	17	101	2025	13	13	193	17	114	2218
KASILOF	9	0	0	0	2	21	605	2	21	605
KENAI	72	2	8	157	10	133	2009	12	141	2166
KETCHIKAN	1014	156	1522	32730	91	465	9457	208	1987	42187
KING COVE	70	13	194	3177	30	263	4840	38	458	8017
KING SALMON	2									
KIPNUK	87	10	0	0	68	594	8976	68	594	8976
KLAWOCK	314	101	774	28861	61	289	5652	137	1062	34514
KODIAK	1716	684	5776	142326	497	2973	63496	961	8750	205822
KONGIGANAK	9	0	0	0	10	65	1125	10	65	1125
KWIGILLINGOK	48	0	0	0	21	151	2906	21	151	2906
LARSEN BAY	37	11	80	1937	17	109	3084	22	189	5022
MANOKOTAK	2									
MARSHALL	1									
MEKORYUK	14	7	114	1200	8	52	338	10	166	1538
METLAKATLA	419	71	390	7842	76	120	2490	118	509	10332
MEYERS CHUCK	10	7	18	438	3	4	95	8	22	533
NAKNEK	11	6	6	225	4	8	197	7	14	422
NANWALEK	31	11	127	3133	14	152	3013	17	279	6146
NAPAKIAK	3									
NAUKATI	12	10	75	2059	3	12	281	11	87	2340
NELSON LAGOON	1									

-continued-

Appendix Table 5.--Page 3 of 4.

Place of Residence ¹	Number of SHARCs Issued ²	Estimated Harvest by Gear Type								
		Set Hook Gear			Hook and Line or Handline			All Gear		
		Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³	Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³	Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³
NEWTOK	3									
NIGHTMUTE	15	2	163	3500	9	212	746	11	376	4246
NIKISKI	8	1	16	200	4	58	1356	4	74	1556
NIKOLSKI	18	0	0	0	18	42	2250	18	42	2250
NINILCHIK	64	8	59	1273	10	110	2462	16	169	3735
NOME	10	0	0	0	0	0	0	0	0	0
NORTH POLE	3									
OLD HARBOR	71	23	308	2940	55	281	6329	61	589	9270
OUZINKIE	48	35	236	6060	25	88	2658	39	324	8718
PALMER	5									
PELICAN	53	36	307	7192	17	38	1480	36	345	8672
PERRYVILLE	47	20	192	3963	10	38	428	28	230	4391
PETERSBURG	1082	300	1972	35608	223	1113	18075	426	3084	53682
PLATINUM	1									
POINT BAKER	27	21	164	3056	8	22	343	22	186	3399
PORT ALEXANDER	24	4	43	1294	4	23	370	8	65	1664
PORT GRAHAM	50	9	98	2397	24	314	3797	30	412	6194
PORT HEIDEN	1									
PORT LIONS	77	40	301	5365	18	82	2100	44	382	7465
PORT PROTECTION	1									
PORT WILLIAM	2									
QUINHAGAK	14	0	0	0	8	28	791	8	28	791
SAND POINT	365	59	402	7406	87	512	12809	133	914	20214
SAVOONGA	43	22	223	7708	9	9	589	22	233	8297
SAXMAN	15	11	23	806	0	0	0	11	23	806
SCAMMON BAY	2									
SELDOVIA	123	28	327	6081	70	721	11325	80	1048	17406
SEWARD	12	0	0	0	2	0	0	2	0	0
SHISHMAREF	1									
SITKA	1895	809	5582	145542	297	1109	17830	915	6691	163372
SKAGWAY	60	20	70	1554	8	30	620	24	101	2174
SOLDOTNA	16	3	31	46	6	68	1393	10	98	1439
SOUTH NAKNEK	3									
ST GEORGE ISLAND	26	0	0	0	20	169	3443	20	169	3443
ST PAUL ISLAND	244	24	395	4984	9	40	988	29	435	5971
STERLING	4									
SUTTON	1									

-continued-

Appendix Table 5.–Page 4 of 4.

Place of Residence ¹	Number of SHARCs Issued ²	Estimated Harvest by Gear Type								
		Set Hook Gear			Hook and Line or Handline			All Gear		
		Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³	Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³	Estimated Number Respondents Fished	Estimated Number Fish Harvested	Estimated Pounds Fish Harvested ³
TATITLEK	30	17	227	6385	4	6	105	21	233	6490
TELLER	3									
TENAKEE SPRINGS	44	27	145	4099	16	57	800	33	201	4898
THORNE BAY	135	53	377	8545	15	58	1506	60	436	10051
TOGIAK	10	2	0	0	2	0	0	2	0	0
TOKSOOK BAY	533	6	285	2333	112	3762	34149	113	4047	36481
TRAPPER CREEK	1									
TUNUNAK	70	7	146	224	33	372	3808	33	518	4032
TWIN HILLS	2									
UNALAKLEET	1									
UNALASKA	95	38	255	5354	27	212	3459	51	468	8813
VALDEZ	27	10	88	1909	0	0	0	10	88	1909
WARD COVE	42	2	31	535	2	3	97	4	34	632
WASILLA	24	1	10	150	5	155	3838	6	165	3988
WHALE PASS	2									
WHITE MOUNTAIN	1									
WHITTIER	1									
WILLOW	1									
WRANGELL	504	207	1515	33134	101	506	8795	242	2021	41929
YAKUTAT	113	59	659	14961	23	189	3232	64	847	18193
Alaska Subtotal	14029	4219	33884	780097	3002	20133	342779	5902	54017	1122876
Non-Alaska Subtotal ⁴	177	7	72	2436	5	0	0	7	72	2436
GRAND TOTALS	14206	4226	33956	782532	3007	20133	342779	5909	54089	1125312

¹ To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs issued are not reported in this table. Tribal and community subtotals include all tribes and communities.

² SHARC = subsistence halibut registration certificate

³ Pounds net weight; converted from reported pounds round weight. Net weight = 75% of round weight.

⁴ Note that members of eligible Alaska tribes could obtain SHARCs regardless of their place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

Source: Alaska Department of Fish and Game, Division of Subsistence SHARC Survey, 2007.

Appendix Table 6.—Estimated number of SHARC holders who either subsistence or sport fished for halibut by place of residence, 2006.

Place of Residence ¹	Number of SHARCs Issued ²	Estimated Number Subsistence or Sport Fished
ADAK	12	2
AKHIOK	23	15
AKUTAN	47	38
ALAKANUK	1	
ALEKNAGIK	4	
ANCHOR POINT	12	7
ANCHORAGE	235	85
ANGOON	173	82
ATKA	4	
AUKE BAY	3	
BARROW	1	
BETHEL	11	14
BIG LAKE	2	
CHEFORNAK	20	10
CHENEGA BAY	19	11
CHEVAK	11	9
CHIGNIK	28	22
CHIGNIK BAY	3	
CHIGNIK LAGOON	42	28
CHIGNIK LAKE	7	5
CHINIAK	22	14
CHUGIAK	9	3
CLARKS POINT	4	
COFFMAN COVE	44	26
COLD BAY	23	23
CORDOVA	607	301
CRAIG	475	302
DILLINGHAM	64	12
DOUGLAS	26	5
DUTCH HARBOR	76	43
EAGLE RIVER	9	5
EDNA BAY	25	12
EEK	20	8
ELFIN COVE	18	7
EXCURSION INLET	2	
FAIRBANKS	6	0
FALSE PASS	11	12
FRITZ CREEK	2	
GAMBELL	6	0
GOLOVIN	1	
GOODNEWS BAY	15	5
GUSTAVUS	67	46
HAINES	529	253

Appendix Table 6.–Page 2 of 4.

Place of Residence ¹	Number of SHARCs Issued ²	Estimated Number Subsistence or Sport Fished
HOLLIS	5	
HOMER	27	16
HOONAH	331	160
HOOPER BAY	89	18
HYDABURG	194	60
HYDER	35	22
JUNEAU	485	135
KAKE	167	68
KARLUK	1	
KASAAN	21	17
KASILOF	9	2
KENAI	72	31
KETCHIKAN	1014	312
KING COVE	70	39
KING SALMON	2	
KIPNUK	87	68
KLAWOCK	314	148
KODIAK	1716	1092
KONGIGANAK	9	10
KWIGILLINGOK	48	21
LARSEN BAY	37	23
MANOKOTAK	2	
MARSHALL	1	
MEKORYUK	14	10
METLAKATLA	419	147
MEYERS CHUCK	10	8
NAKNEK	11	7
NANWALEK	31	18
NAPAKIAK	3	
NAUKATI	12	12
NELSON LAGOON	1	
NEWTOK	3	
NIGHTMUTE	15	11
NIKISKI	8	7
NIKOLSKI	18	18
NINILCHIK	64	17
NOME	10	0
NORTH POLE	3	
OLD HARBOR	71	64
OUZINKIE	48	43
PALMER	5	
PELICAN	53	36
PERRYVILLE	47	28
PETERSBURG	1082	529
PLATINUM	1	

Appendix Table 6.–Page 3 of 4.

Place of Residence ¹	Number of SHARCs Issued ²	Estimated Number Subsistence or Sport Fished
POINT BAKER	27	22
PORT ALEXANDER	24	11
PORT GRAHAM	50	30
PORT HEIDEN	1	
PORT LIONS	77	59
PORT PROTECTION	1	
PORT WILLIAM	2	
QUINHAGAK	14	8
SAND POINT	365	140
SAVOONGA	43	22
SAXMAN	15	11
SCAMMON BAY	2	
SELDOVIA	123	96
SEWARD	12	5
SHISHMAREF	1	
SITKA	1895	1036
SKAGWAY	60	33
SOLDOTNA	16	11
SOUTH NAKNEK	3	
ST GEORGE ISLAND	26	20
ST PAUL ISLAND	244	29
STERLING	4	
SUTTON	1	
TATITLEK	30	23
TELLER	3	
TENAKEE SPRINGS	44	36
THORNE BAY	135	90
TOGIAK	10	2
TOKSOOK BAY	533	113
TRAPPER CREEK	1	
TUNUNAK	70	33
TWIN HILLS	2	
UNALAKLEET	1	
UNALASKA	95	59
VALDEZ	27	10
WARD COVE	42	6
WASILLA	24	8
WHALE PASS	2	
WHITE MOUNTAIN	1	
WHITTIER	1	
WILLOW	1	
WRANGELL	504	279
YAKUTAT	113	69

Appendix Table 6.–Page 3 of 4.

Place of Residence ¹	Number of SHARCs Issued ²	Estimated Number Subsistence or Sport Fished
Alaska Total	14,029	6,886
Non-Alaska Total ³	177	13
GRAND TOTALS	14,206	6,899

1 To protect confidentiality, data for communities with 5 or fewer SHARCs issued are not reported in this table. Subtotals include all SHARC holders.

2 SHARC = subsistence halibut registration certificate.

3 Note that members of eligible Alaska tribes could obtain SHARCs regardless of their place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

Source: Alaska Department of Fish and Game, Division of Subsistence SHARC Survey, 2007.

Appendix Table 7.—Estimated subsistence harvests of halibut and sport harvests of halibut, pounds net weight, and incidental harvests of lingcod and rockfish by eligible Alaska Tribe and eligible Alaska rural community SHARC holders, 2006.

Tribe Name ¹	Regulatory Area	Return Rate			Subsistence Fished Halibut		Subsistence Halibut Harvest		Sport Fished Halibut		Sport Halibut Harvest		Lingcod Bycatch		Rockfish Bycatch	
		SHARCs Issued ²	Surveys Returned	Percent	Estimated Number Respondents	Percent of SHARCs	Estimated Number Fish	Estimated Number Pounds ³	Estimated Number Respondents	Percent of SHARCs	Estimated Number Fish	Estimated Number Pounds ³	Estimated Number Respondents	Estimated Number Fish	Estimated Number Respondents	Estimated Number Fish
AGDAAGUX TRIBE OF KING COVE	3B	50	30	60.0%	28	56.7%	333	6474	8	16.7%	25	568	2	7	3	22
ANGOON COMMUNITY ASSOCIATION	2C	141	112	79.4%	55	38.7%	721	12964	9	6.2%	30	363	6	10	7	48
AUKQUAN TRADITIONAL COUNCIL	2C	2														
CENTRAL COUNCIL TLINGIT AND HAIDA INDIAN TRIBES	2C	725	277	38.2%	204	28.2%	2194	49025	142	19.6%	530	9780	26	127	59	783
CHEVAK NATIVE VILLAGE (KASHUNAMIUT)	4E	7	4	57.1%	7	100.0%	23	433	0	0.0%	0	0	2	5	0	0
CHIGNIK LAKE VILLAGE	3B	10	6	60.0%	7	66.7%	40	413	2	16.7%	3	79	0	0	0	0
CHILKAT INDIAN VILLAGE	2C	42	27	64.3%	6	14.8%	14	508	0	0.0%	0	0	0	0	0	0
CHILKOOT INDIAN ASSOCIATION	2C	52	27	51.9%	17	33.3%	89	2064	2	3.7%	4	101	2	12	4	10
CHINIK ESKIMO COMMUNITY	4E	1														
CRAIG COMMUNITY ASSOCIATION	2C	59	27	45.8%	26	43.7%	125	4041	13	21.8%	24	725	4	6	11	103
DOUGLAS INDIAN ASSOCIATION	2C	25	13	52.0%	4	15.4%	48	721	2	7.7%	4	123	0	0	2	19
EGEGIK VILLAGE	4E	6	6	100.0%	5	83.3%	18	167	4	66.7%	10	78	4	17	1	4
HOONAH INDIAN ASSOCIATION	2C	217	97	44.7%	85	39.0%	1240	26680	24	11.3%	111	2063	11	53	11	784
HYDABURG COOPERATIVE ASSOCIATION	2C	193	184	95.3%	55	28.3%	464	19308	5	2.7%	33	2156	12	73	28	541
IVANOFF BAY VILLAGE	3B	8	2	25.0%	4	50.0%	24	360	0	0.0%	0	0	0	0	0	0
KENAITZE INDIAN TRIBE	3A	80	49	61.3%	24	30.2%	308	4510	11	14.1%	53	1185	3	10	0	0
KETCHIKAN INDIAN CORPORATION	2C	887	398	44.9%	145	16.3%	1322	27657	152	17.1%	593	8689	36	78	58	867
KING ISLAND NATIVE COMMUNITY	4E	2														
KLAWOOK COOPERATIVE ASSOCIATION	2C	175	64	36.6%	66	37.5%	544	23356	30	17.2%	142	4741	22	123	30	588
LESNOI VILLAGE (WOODY ISLAND)	3A	259	94	36.3%	26	10.2%	191	4792	32	12.2%	93	2284	9	16	7	97
LEVELOCK VILLAGE	4E	1														
METLAKATLA INDIAN RESERVE	2C	403	127	31.5%	105	26.0%	305	6910	67	16.5%	60	1240	16	86	35	175
NAKNEK NATIVE VILLAGE	4E	6	4	66.7%	5	75.0%	8	253	3	50.0%	18	540	0	0	0	0
NATIVE VILLAGE OF AFOGNAK	3A	27	16	59.3%	10	37.5%	50	1168	7	25.0%	5	158	0	0	0	0
NATIVE VILLAGE OF AKHIOK	3A	25	5	20.0%	20	80.0%	380	4594	5	20.0%	5	113	0	0	0	0
NATIVE VILLAGE OF AKUTAN	4A	44	9	20.5%	34	77.8%	582	12217	5	11.1%	39	367	5	29	10	147
NATIVE VILLAGE OF ALEKNAGIK	4E	5														
NATIVE VILLAGE OF ATKA	4B	6	3	50.0%	4	66.7%	94	1236	2	33.3%	2	30	0	0	0	0
NATIVE VILLAGE OF BELKOFSKI	3A	2														
NATIVE VILLAGE OF GAMBELL	4A	30	12	40.0%	13	41.7%	145	5846	5	16.7%	10	141	3	3	8	183
NATIVE VILLAGE OF CHIGNIK	3B	13	10	76.9%	10	80.0%	64	1421	3	20.0%	0	0	1	1	1	16
NATIVE VILLAGE OF CHIGNIK LAGOON	3B	43	20	46.5%	37	85.0%	363	8282	13	30.0%	52	1346	2	4	11	191
NATIVE VILLAGE OF COUNCIL	4E	1														
NATIVE VILLAGE OF DILLINGHAM (CURYUNG)	4E	23	14	60.9%	7	28.6%	30	731	5	21.4%	10	148	0	0	0	0
NATIVE VILLAGE OF EEK	4E	21	8	38.1%	11	50.0%	37	1772	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF EKUK	4E	3														
NATIVE VILLAGE OF ELIM	4E	1														
NATIVE VILLAGE OF EYAK	3A	76	44	57.9%	31	40.9%	199	3916	16	20.5%	28	473	3	14	3	16
NATIVE VILLAGE OF FALSE PASS	3B	14	3	21.4%	9	66.7%	47	0	0	0.0%	0	0	5	19	0	0
NATIVE VILLAGE OF GAMBELL	4E	6	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF GOODNEWS BAY (MUMTRAQ)	4E	15	6	40.0%	5	33.3%	30	375	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF HOOPER BAY	4E	92	40	43.5%	21	22.5%	85	992	2	2.5%	0	0	5	120	0	0
NATIVE VILLAGE OF KANAKANAK	4E	1														
NATIVE VILLAGE OF KARLUK	3A	5														
NATIVE VILLAGE OF KIPNUK	4E	88	9	10.2%	68	77.8%	594	8976	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF KONGIGANAK	4E	10	2	20.0%	10	100.0%	65	1125	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF KOYUK	4E	1														
NATIVE VILLAGE OF KWIGILLINGOK	4E	48	7	14.6%	21	42.9%	151	2906	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF KWINHAGAK	4E	11	2	18.2%	6	50.0%	22	619	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF LARSEN BAY	3A	45	25	55.6%	22	48.0%	232	6200	4	8.0%	14	200	5	7	7	101
NATIVE VILLAGE OF MEKORYUK	4E	16	7	43.8%	9	57.1%	162	1493	2	14.3%	14	223	2	18	0	0
NATIVE VILLAGE OF NANWALEK	3A	29	27	93.1%	15	51.9%	201	3521	2	7.4%	10	125	5	72	4	64
NATIVE VILLAGE OF NAPAKIAK	4E	3														
NATIVE VILLAGE OF NELSON LAGOON	3B	3														
NATIVE VILLAGE OF NIGHTMUTE	4E	8	2	25.0%	4	50.0%	84	0	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF NIKOLSKI	4A	12	1	8.3%	12	100.0%	0	0	12	100.0%	0	0	0	0	0	0
NATIVE VILLAGE OF OUZINKIE	3A	45	19	42.2%	31	68.4%	251	7633	14	31.6%	40	1274	9	19	9	161
NATIVE VILLAGE OF PERRYVILLE	3B	38	21	55.3%	24	61.9%	226	5388	2	4.8%	9	611	2	2	4	63
NATIVE VILLAGE OF PORT GRAHAM	3A	46	25	54.3%	24	52.0%	342	5048	2	4.0%	0	0	0	0	2	37
NATIVE VILLAGE OF PORT HEIDEN	4E	1														
NATIVE VILLAGE OF PORT LIONS	3A	56	24	42.9%	37	66.7%	317	7585	23	41.7%	54	1416	2	12	5	28
NATIVE VILLAGE OF SAVOONGA	4D	44	14	31.8%	22	50.0%	233	8297	0	0.0%	0	0	6	19	3	19
NATIVE VILLAGE OF SCAMMON BAY	4E	5														
NATIVE VILLAGE OF SHAKTOOLIK	4E	1														
NATIVE VILLAGE OF SHISHMAREF	4E	1														
NATIVE VILLAGE OF TATTLEK	3A	32	17	53.1%	19	58.8%	222	6360	0	0.0%	0	0	2	2	15	145
NATIVE VILLAGE OF TOKSOOK BAY (NUNAKAUYAK)	4E	532	138	25.9%	112	21.1%	4041	36422	0	0.0%	0	0	9	27	3	41
NATIVE VILLAGE OF TUNUNAK	4E	73	11	15.1%	40	54.5%	577	4529	0	0.0%	0	0	0	0	13	86
NATIVE VILLAGE OF UNALAKLEET	4E	6	5	83.3%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF UNGA	3B	13	4	30.8%	10	75.0%	117	1816	3	25.0%	13	585	3	68	3	59
NATIVE VILLAGE OF WHITE MOUNTAIN	4E	2														
NEWTOK VILLAGE	4E	3														
NINILCHIK VILLAGE	3A	98	50	51.0%	27	28.0%	280	5492	14	14.0%	98	1771	2	12	0	0
NOME ESKIMO COMMUNITY	4E	15	6	40.0%	0	0.0%	0	0	3	16.7%	5	188	0	0	0	0
ORGANIZED VILLAGE OF KAKE	2C	130	67	51.5%	43	32.8%	386	10537	8	6.0%	4	218	8	35	10	113
ORGANIZED VILLAGE OF KASAAN	2C	11	6	54.5%	9	83.3%	73	1746	4	33.3%	7	138	0	0	4	29

-continued-

Appendix Table 7.–Page 2 of 3.

Tribal Name ¹	Regulatory Area	Return Rate			Subsistence Fished Halibut		Subsistence Halibut Harvest		Sport Fished Halibut		Sport Halibut Harvest		Lingcod Bycatch		Rockfish Bycatch	
		SHARCs Issued ²	Surveys Returned	Percent	Estimated Number Respondents	Percent of SHARCs	Estimated Number Fish	Estimated Number Pounds ³	Estimated Number Respondents	Percent of SHARCs	Estimated Number Fish	Estimated Number Pounds ³	Estimated Number Respondents	Estimated Number Fish	Estimated Number Respondents	Estimated Number Fish
ORGANIZED VILLAGE OF SAXMAN	2C	63	39	61.9%	26	41.0%	100	2641	13	20.5%	24	545	13	18	13	74
ORUTSARARMIUT NATIVE VILLAGE	4E	8	2	25.0%	3	37.5%	156	2689	0	0.0%	0	0	0	0	0	0
PAULOFF HARBOR VILLAGE	3B	56	16	28.6%	27	47.3%	212	6574	13	23.7%	139	5118	0	0	3	27
PETERSBURG INDIAN ASSOCIATION	2C	125	71	56.8%	46	36.6%	423	5764	25	19.7%	86	1364	4	12	9	14
PLATINUM TRADITIONAL VILLAGE	4E	1														
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST GEORGE	4C	27	4	14.8%	20	75.0%	169	3443	0	0.0%	0	0	0	0	0	0
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST PAUL	4C	254	234	92.1%	27	10.6%	365	4900	0	0.0%	0	0	0	0	0	0
QAGAN TAYAGUNGIN TRIBE OF SAND POINT VILLAGE	3B	318	111	34.9%	96	30.2%	508	11839	11	3.6%	11	102	11	48	14	569
QAWALANGIN TRIBE OF UNALASKA	4A	43	21	48.8%	14	33.3%	98	1659	6	14.3%	27	448	2	12	2	6
SELDOVIA VILLAGE TRIBE	3A	50	31	62.0%	19	38.7%	363	7990	18	35.5%	106	1903	2	47	5	52
SHOONAQ TRIBE OF KODIAK	3A	184	93	50.5%	112	61.0%	1329	31019	22	11.8%	114	2487	28	128	31	449
SITKA TRIBE OF ALASKA	2C	460	262	57.0%	149	32.4%	1554	42912	40	8.8%	68	1593	32	167	40	855
SKAGWAY VILLAGE	2C	2														
SOUTH NAKNEK VILLAGE	4E	2														
STEBBINS COMMUNITY ASSOCIATION	4E	4														
TRADITIONAL VILLAGE OF TOGIAK	4E	11	5	45.5%	2	20.0%	0	0	0	0.0%	0	0	0	0	0	0
TWIN HILLS VILLAGE	4E	1														
UGASHIK VILLAGE	4E	4														
VILLAGE OF CHEFORNAK	4E	19	6	31.6%	10	50.0%	272	2078	0	0.0%	0	0	3	10	3	38
VILLAGE OF CLARK'S POINT	4E	3														
VILLAGE OF KANATAK	3B	11	1	9.1%	1	9.1%	10	150	1	9.1%	1	11	1	6	1	13
VILLAGE OF OLD HARBOR	3A	56	27	48.2%	37	66.7%	218	5259	6	11.1%	19	342	6	19	4	25
VILLAGE OF SALAMATOFF	3A	16	12	75.0%	9	56.3%	139	2710	1	8.3%	7	176	3	4	4	51
WRANGELL COOPERATIVE ASSOCIATION	2C	113	75	66.4%	44	38.7%	435	10697	26	22.7%	110	2639	5	15	8	65
YAKUTAT TLINGIT TRIBE	3A	62	31	50.0%	28	45.2%	426	8084	2	3.2%	20	150	12	88	8	100
Tribal Name Subtotals		7,123	3,299	46.3%	2,329	32.7%	25,512	510,740	851	11.9%	2,914	61,611	354	1,679	518	7,874

Rural Community ¹	Regulatory Area	Return Rate			Subsistence Fished Halibut		Subsistence Halibut Harvest		Sport Fished Halibut		Sport Halibut Harvest		Lingcod Bycatch		Rockfish Bycatch	
		SHARCs Issued ²	Surveys Returned	Percent	Estimated Number Respondents	Percent of SHARCs	Estimated Number Fish	Estimated Number Pounds ³	Estimated Number Respondents	Percent of SHARCs	Estimated Number Fish	Estimated Number Pounds ³	Estimated Number Respondents	Estimated Number Fish	Estimated Number Respondents	Estimated Number Fish
ADAK	4B	12	8	66.7%	2	12.5%	0	0	0	0.0%	0	0	0	0	0	0
AKHIOK	3A	1														
AKUTAN	4A	2														
ALAKANUK	4E	1														
ALEKNAGIK	4E	3														
ANGOON	2C	26	20	76.9%	13	50.0%	196	3561	10	40.0%	27	505	1	1	5	78
ATKA	4B	4														
BETHEL	4E	4														
CHEFORNAK	4E	1														
CHENEGA BAY	3A	11	7	63.6%	6	57.1%	189	3441	3	28.6%	36	648	3	16	5	60
CHEVAK	4E	3														
CHIGNIK	3B	10	7	70.0%	5	51.4%	36	693	0	0.0%	0	0	1	1	1	19
CHIGNIK LAGOON	3B	7	3	42.9%	5	66.7%	54	968	2	33.3%	7	210	2	23	2	47
CHIGNIK LAKE	3B	4														
CLARKS POINT	4E	1														
COFFMAN COVE	2C	43	33	76.7%	22	51.5%	180	3438	14	33.3%	39	889	4	16	7	87
COLD BAY	3B	19	15	78.9%	14	75.8%	166	3164	7	37.9%	30	743	1	30	0	0
CORDOVA	3A	534	386	72.3%	216	40.5%	1274	25591	136	25.5%	346	6627	23	47	43	236
CRAIG	2C	323	233	72.1%	169	52.4%	1646	32013	116	35.9%	598	8686	33	89	71	830
DILLINGHAM	4E	44	37	84.1%	1	2.6%	0	0	2	5.3%	0	0	0	0	0	0
EDNA BAY	2C	47	42	89.4%	24	50.0%	148	4799	9	19.0%	28	480	4	11	11	94
ELFIN COVE	2C	18	12	66.7%	7	39.4%	24	910	1	7.9%	1	9	0	0	3	13
EMMONAK	4E	1														
FALSE PASS	3B	3														
GUSTAVUS	2C	67	52	77.6%	35	51.9%	345	6779	21	30.8%	92	1623	0	0	3	6
HAINES	2C	432	341	78.9%	203	47.1%	891	20878	87	20.0%	131	3197	13	21	21	124
HOLLIS	2C	50	36	72.0%	33	66.7%	147	5005	14	27.8%	36	344	4	6	10	39
HOONAH	2C	115	80	69.6%	51	44.6%	530	8758	30	26.0%	165	2488	1	1	6	36
HOOPER BAY	4E	1														
HYDABURG	2C	14	14	100.0%	7	50.0%	21	1303	5	35.7%	5	225	2	6	3	32
HYDER	2C	35	24	68.6%	20	58.3%	102	2622	7	20.8%	10	328	3	7	10	55
KAKE	2C	42	32	76.2%	22	53.1%	226	5995	9	21.9%	8	269	3	8	5	42
KASAAN	2C	16	10	62.5%	8	46.9%	50	788	8	46.9%	11	349	0	0	5	30
KING COVE	3B	22	17	77.3%	16	73.0%	164	2776	6	28.1%	20	459	0	0	1	4
KING SALMON	4E	2														
KLAWOCK	2C	114	78	68.4%	65	56.7%	586	11985	33	29.0%	146	1810	13	66	24	271
KLUKWAN	2C	1														
KODIAK	3A	1441	989	68.6%	824	57.2%	7461	171190	528	36.6%	2730	60993	77	208	158	1612
KOTLIK	4E	1														
KWIGILLINGOK	4E	1														
LARSEN BAY	3A	13	10	76.9%	10	73.8%	88	2093	6	46.2%	30	725	0	0	5	49
MANOKOTAK	4E	2														
MEKORYUK	4E	1														
METLAKATLA	2C	35	16	45.7%	16	45.7%	220	3803	14	40.0%	30	578	4	8	8	78

-continued-

Appendix Table 7.--Page 3 of 3.

Rural Community ¹	Regulatory Area	Return Rate			Subsistence Fished Halibut		Subsistence Halibut Harvest		Sport Fished Halibut		Sport Halibut Harvest		Lingcod Bycatch		Rockfish Bycatch	
		SHARCs Issued ²	Surveys Returned	Percent	Estimated Number Respondents	Percent of SHARCs	Estimated Number Fish	Estimated Number Pounds ³	Estimated Number Respondents	Percent of SHARCs	Estimated Number Fish	Estimated Number Pounds ³	Estimated Number Respondents	Estimated Number Fish	Estimated Number Respondents	Estimated Number Fish
MEYERS CHUCK	2C	10	9	90.0%	8	77.8%	22	533	0	0.0%	0	0	0	0	3	11
NAKNEK	4E	6	4	66.7%	3	41.7%	6	169	1	20.8%	0	0	0	0	0	0
NANWALEK	3A	4														
NIGHTMUTE	4E	7	3	42.9%	7	100.0%	292	4246	0	0.0%	0	0	0	0	0	0
NIKOLSKI	4A	6	1	16.7%	6	100.0%	42	2250	6	100.0%	0	0	0	0	0	0
NOME	4E	6	2	33.3%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
OLD HARBOR	3A	24	16	66.7%	15	63.0%	118	2325	6	22.9%	10	196	0	0	0	0
OUZINKIE	3A	10	9	90.0%	9	88.9%	80	2150	3	33.3%	18	333	1	3	4	102
PELICAN	2C	43	28	65.1%	30	69.8%	221	5925	16	36.5%	20	782	11	43	17	200
PERRYVILLE	3B	2														
PETERSBURG	2C	925	692	74.8%	370	40.0%	2638	47572	218	23.5%	805	15848	13	28	57	358
PLATINUM	4E	1														
PORT ALEXANDER	2C	26	20	76.9%	8	28.8%	65	1664	8	28.8%	36	969	3	26	4	63
PORT GRAHAM	3A	12	9	75.0%	5	40.7%	70	1146	1	10.2%	1	23	1	2	1	2
PORT HEIDEN	4E	2														
PORT LIONS	3A	30	17	56.7%	16	52.9%	102	1606	19	64.7%	141	3507	0	0	0	0
PORT PROTECTION	2C	23	17	73.9%	14	58.8%	89	1688	5	23.5%	4	355	4	7	9	51
PT. BAKER	2C	18	13	72.2%	17	92.3%	145	2724	3	15.4%	7	104	1	28	6	68
QUINHAGAK	4E	2														
SAND POINT	3B	15	10	66.7%	8	50.0%	141	2644	5	30.0%	48	1080	0	0	2	17
SAXMAN	2C	23	20	87.0%	4	19.1%	164	920	4	33.5%	34	738	2	6	3	15
SELDOVIA	3A	102	85	83.3%	71	69.4%	937	15483	43	42.4%	354	5056	6	38	12	67
SHELDON POINT	4E	1														
SITKA	2C	1429	1025	71.7%	759	53.1%	5172	120735	351	24.6%	1159	20760	284	842	365	3332
SKAGWAY	2C	56	39	69.6%	22	38.5%	75	1690	14	25.6%	23	244	1	3	7	19
SOUTH NAKNEK	4E	2														
ST GEORGE ISLAND	4C	1														
ST PAUL ISLAND	4C	1														
TATITLEK	3A	12	6	50.0%	8	66.7%	60	1373	4	33.3%	22	285	0	0	6	58
TELLER	4E	3														
TENAKEE SPRINGS	2C	43	34	79.1%	31	71.8%	199	4831	17	40.2%	41	635	4	6	15	106
THORNE BAY	2C	139	98	70.5%	58	41.9%	436	10051	68	48.9%	480	6804	7	28	24	183
TOGIAK	4E	3														
TOKSOOK BAY	4E	1														
UNALASKA	4A	120	78	65.0%	57	47.9%	480	11286	41	34.0%	156	3261	2	9	8	77
WHALE PASS	2C	30	27	90.0%	11	37.0%	63	1928	14	48.1%	33	1079	0	0	2	29
WRANGELL	2C	367	283	77.1%	188	51.2%	1545	31315	100	27.3%	277	6342	18	48	44	310
YAKUTAT	3A	51	41	80.4%	38	74.1%	471	10054	15	28.7%	46	796	18	111	15	159
Rural Community Subtotals		7,083	5,127	72.4%	3,580	50.5%	28,577	614,572	2,044	28.9%	8,305	162,028	573	1,806	1,011	9,071

Totals	Regulatory Area	Return Rate			Subsistence Fished Halibut		Subsistence Halibut Harvest		Sport Fished Halibut		Sport Halibut Harvest		Lingcod Bycatch		Rockfish Bycatch	
		SHARCs Issued ²	Surveys Returned	Percent	Estimated Number Respondents	Percent of SHARCs	Estimated Number Fish	Estimated Number Pounds ³	Estimated Number Respondents	Percent of SHARCs	Estimated Number Fish	Estimated Number Pounds ³	Estimated Number Respondents	Estimated Number Fish	Estimated Number Respondents	Estimated Number Fish
Tribal Name Subtotals		7,123	3,299	46.3%	2,329	32.7%	25,512	510,740	851	11.9%	2,914	61,611	354	1,679	518	7,874
Rural Community Subtotals		7,083	5,127	72.4%	3,580	50.5%	28,577	614,572	2,044	28.9%	8,305	162,028	573	1,806	1,011	9,071
Grand Totals		14,206	8,426	59.3%	5,909	41.6%	54,089	1,125,312	2,894	20.4%	11,219	223,639	927	3,486	1,529	16,945

148

¹ To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs issued are not reported in this table. Tribal and community subtotals include all tribes and communities.

² SHARC = subsistence halibut registration certificate

³ Pounds net weight; converted from reported pounds round weight. Net weight = 75% of round weight.

Source: Alaska Department of Fish and Game, Division of Subsistence SHARC Survey, 2007.

APPENDIX H: PROJECT FINDINGS SUMMARY



SUBSISTENCE HARVESTS OF PACIFIC HALIBUT IN ALASKA, 2006

Division of Subsistence, Alaska Department of Fish and Game

333 Raspberry Road, Anchorage, AK 99518

December 2007

Through a grant from the National Marine Fisheries Service, the Division of Subsistence of the Alaska Department of Fish and Game conducted a study to estimate the subsistence harvests of Pacific halibut in Alaska in 2006. The full results of the study appear in Division of Subsistence Technical Paper No. 333, "Subsistence Harvests of Pacific Halibut in Alaska, 2006" (December 2007). Key points in the report include the following:

- In May 2003, the NMFS published final federal regulations for a subsistence halibut fishery in Alaska. Residents of 117 rural communities and members of 123 tribes are eligible to participate. Fishers must obtain a subsistence halibut registration certificate (SHARC) from NMFS before fishing (www.fakr.noaa.gov/ram/subsistence/halibut.htm; 800-304-4846).
- 2006 was the fourth year in which subsistence halibut fishing took place under these regulations. Information about subsistence halibut harvests in 2003, 2004, and 2005 is reported in Division of Subsistence Technical Papers 288, 304, and 320, respectively.
- To estimate the 2006 harvests, a one-page survey form was mailed to SHARC holders in early 2007 or administered in person. After three mailings and the community visits, 8,426 of 14,206 SHARC holders (59%) responded. Participation in the survey was voluntary.
- An estimated 5,909 individuals subsistence fished for halibut in 2006 (see Figure 8, below).
- The estimated subsistence harvest was 54,089 halibut for 1,125,312 pounds net weight.
- Of this total, 70% was harvested with setline (stationary) gear (longline or skate) and 30% was harvested with hand-operated gear (handline or rod and reel).
- The largest subsistence harvests occurred in southeast Alaska (Halibut Regulatory Area 2C), at 52% of the total, followed by southcentral Alaska (Area 3A) at 34%. Table 6 and Figure 17 from the final report (below) give more details on harvests by gear type and area.
- Based on place of residence of SHARC holders, communities with the largest subsistence halibut harvests in 2006 were Kodiak and Sitka (the eligible communities with the largest populations) (see Figure 22, below).
- An estimated 16,945 rockfish were harvested by 1,529 fishers in the subsistence halibut fishery in 2006. Most (68%) were harvested in southeast Alaska.
- An estimated 2,486 lingcod were harvested by 927 fishers in the subsistence halibut fishery in 2006. Most (59%) were harvested in southeast Alaska.
- Based on preliminary data from the International Pacific Halibut Commission and this study, the estimated halibut removal in Alaska in 2006 was 78.622 million pounds, net weight. Subsistence harvests accounted for 1.5% of this total (see Figure 30, below).
- The report concludes that the project was, overall, a success, with good public outreach, good response rates, and a reliable estimate of subsistence halibut harvests.
- The report recommends that the subsistence harvest study continue for at least one more year (for a total of five years) in order to evaluate trends in the fishery.

For a copy of the full report, go to www.subsistence.adfg.state.ak.us, or call the Division of Subsistence of ADF&G at 907-267-2353 (Anchorage) or 907-465-4147 (Juneau).

Table 6. Estimated Alaska Subsistence Harvests of Halibut by Halibut Regulatory Area and Subarea Fished and by Gear Type, and Estimated Sport Harvests by SHARC Holders, 2006.

Subarea	Halibut Regulatory Area	Number of SHARCs Fished ³ (any halibut fishing)	Estimated Subsistence Harvest by Gear Type ¹									Estimated Sport Harvest		
			Setline (fixed) Gear			Hand-Operated Gear			All Subsistence Gear			Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested ²
			Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested ²	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested ²	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested ²			
Southern Southeast Alaska	2C	2,156	1,374	10,421	246,748	782	3,339	61,173	1,748	13,760	307,921	1,039	3,615	68,241
Sitka LAMP Area	2C	1,026	777	5,180	132,338	284	1,049	15,188	887	6,229	147,526	394	1,246	21,835
Northern Southeast Alaska	2C	908	649	4,838	103,407	285	1,111	21,262	769	5,949	124,670	327	1,058	19,573
Subtotal	2C	3,936	2,721	20,439	482,494	1,333	5,498	97,623	3,298	25,937	580,117	1,731	5,919	109,649
Yakutat Area	3A	84	63	710	15,698	24	197	3,489	70	907	19,187	25	148	2,288
Prince William Sound	3A	375	245	1,693	38,092	146	448	9,873	301	2,141	47,965	180	528	10,084
Cook Inlet	3A	317	76	1,088	23,743	182	2,106	36,222	221	3,194	59,965	162	869	15,156
Kodiak Island Road System	3A	903	520	4,029	95,688	398	2,035	44,700	758	6,064	140,388	469	2,150	48,569
Kodiak Island Other	3A	685	395	3,015	73,342	319	1,712	38,410	591	4,727	111,752	262	1,027	23,505
Subtotal	3A	2,119	1,220	10,535	246,564	1,003	6,498	132,694	1,790	17,033	379,258	1,025	4,723	99,602
Chignik Area	3B	94	49	545	12,351	66	294	5,428	94	838	17,780	22	89	2,482
Lower Alaska Peninsula	3B	206	86	667	11,010	134	896	19,757	193	1,562	30,767	43	273	8,009
Subtotal	3B	298	135	1,211	23,361	198	1,189	25,185	285	2,401	48,547	65	362	10,491
Eastern Aleutians - East	4A	139	53	341	6,888	83	911	19,105	115	1,251	25,993	56	212	3,830
Eastern Aleutians - West	4A	21	6	30	746	18	9	323	21	39	1,069	12	0	0
Subtotal	4A	156	55	370	7,634	98	920	19,428	132	1,290	27,062	68	212	3,830
Western Aleutians - East	4B	12	10	103	2,179	6	19	583	10	122	2,761	2	3	68
Western Aleutians - Other	4B	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	4B	12	10	103	2,179	6	19	583	10	122	2,761	2	3	68
St. George Island	4C	20	0	0	0	20	169	3,443	20	169	3,443	0	0	0
St. Paul Island	4C	29	24	333	4,097	8	40	988	29	373	5,085	0	0	0
Subtotal	4C	49	24	333	4,097	28	209	4,430	49	542	8,527	0	0	0
St. Lawrence Island	4D	22	22	223	7,708	9	9	589	22	233	8,297	0	0	0
Area 4D, Other	4D	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	4D	22	22	223	7,708	9	9	589	22	233	8,297	0	0	0
Bristol Bay	4E	21	16	40	1,139	10	8	197	18	47	1,336	6	0	0
Yukon/Kuskokwim Delta	4E	358	45	701	7,356	343	5,783	62,050	358	6,484	69,407	10	0	0
Norton Sound	4E	0	0	0	0	0	0	0	9	0	0	0	0	0
Subtotal	4E	379	61	741	8,496	353	5,791	62,247	376	6,531	70,743	16	0	0
Grand totals ¹	Alaska	6,899	4,226	33,956	782,532	3,007	20,133	342,779	5,909	54,089	1,125,312	2,894	11,219	223,639

¹ Setline = longline or skate. Hand-operated gear = rod and reel or handline.² Pounds are net (dressed) weight. Net weight = 75% of round weight.³ Because fishers might fish in more than one area, subtotals for regulatory areas and the state total might exceed the sum of the subarea values. Includes subsistence and sport fishing.

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2007.

Figure 8. Estimated Number of Alaska Subsistence Halibut Fishers, 2003, 2004, 2005, and 2006 by Regulatory Area of Tribe or Rural Community

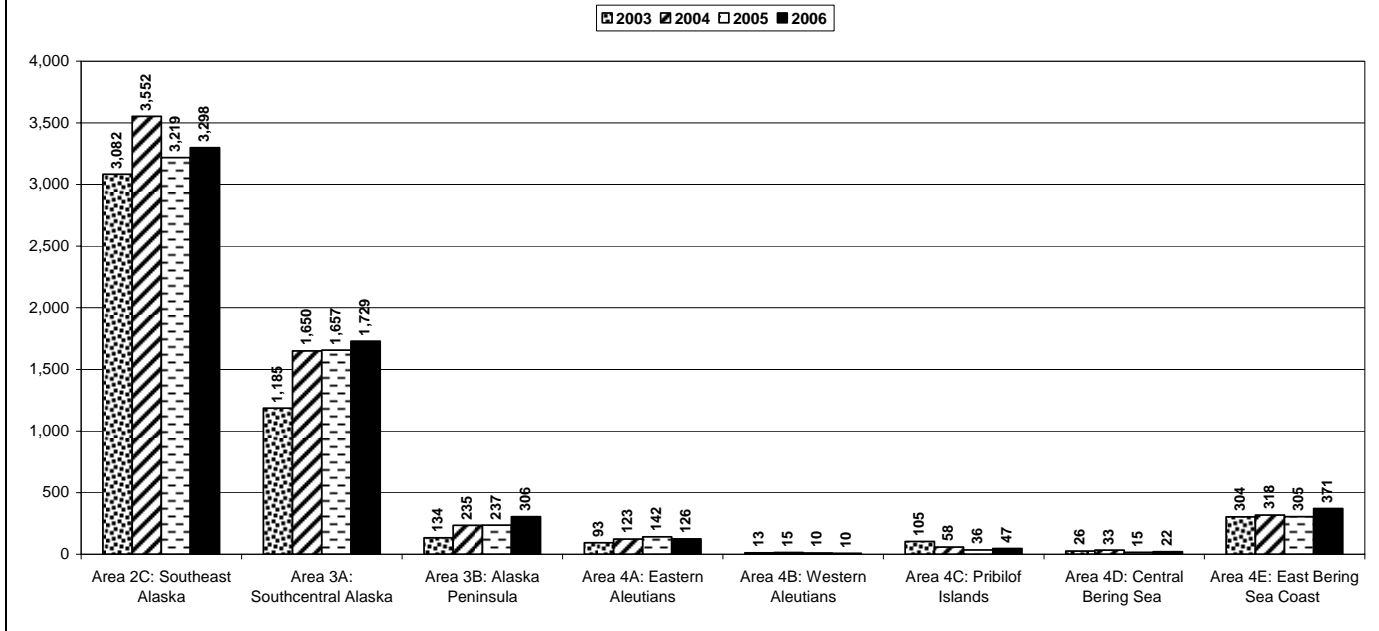


Figure 17. Estimated Subsistence Halibut Harvests, Pounds Net Weight, by Regulatory Area Fished, 2003, 2004, 2005, and 2006

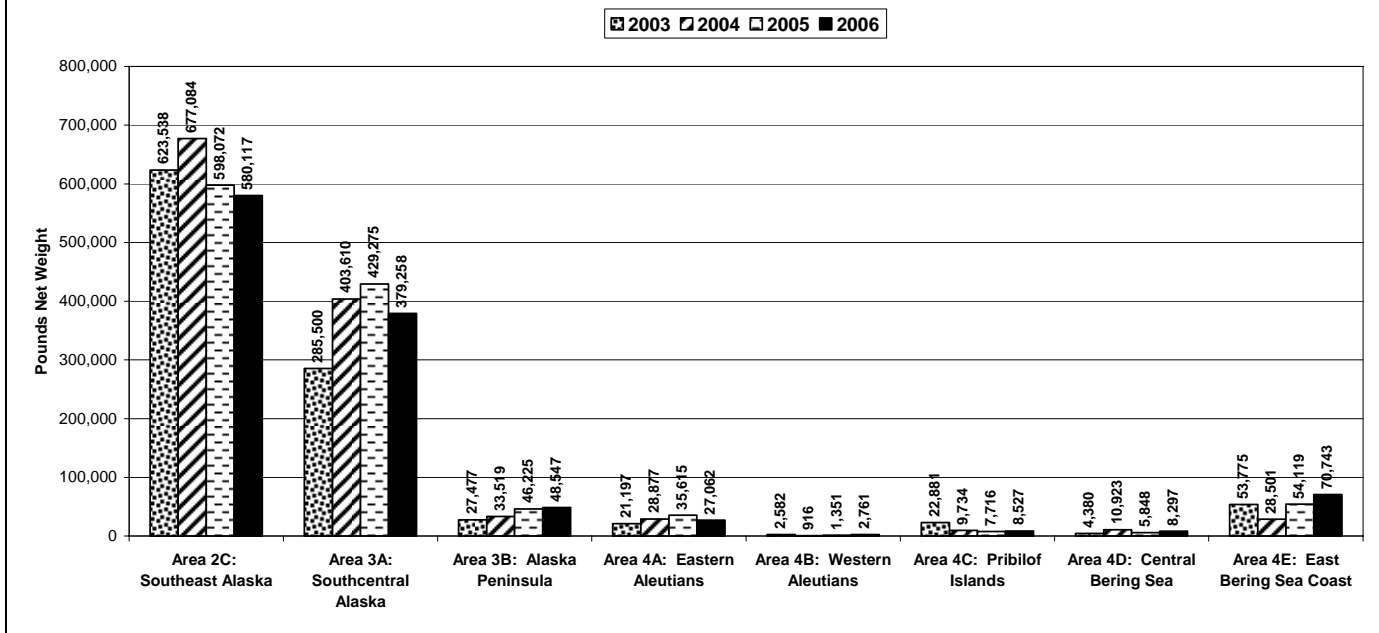


Figure 22. Alaska Subsistence Halibut Harvests by Place of Residence, 2006

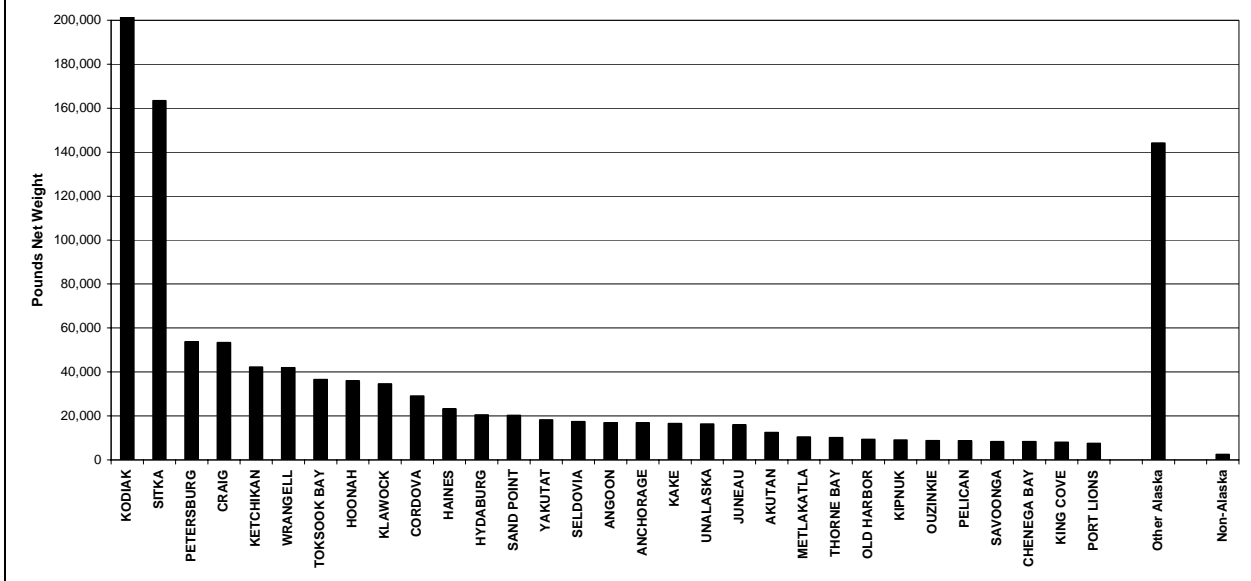
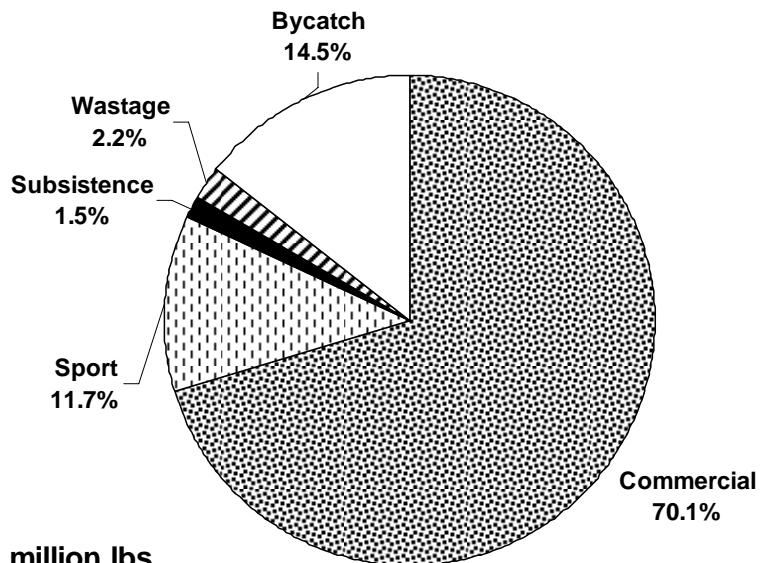


Figure 30. Halibut Removals, Alaska, 2006



**N = 78.622 million lbs,
net weight**

The Alaska Department of Fish and Game 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 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, PO Box 115526, Juneau, AK 99811-5526 [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]; U.S. Fish and Wildlife Service, 4040 N. Fairfax Drive, Suite 300 Webb, Arlington, VA 22203; Office of Equal Opportunity, U.S. Department of the Interior, Washington DC 20240. For information on alternative formats and questions on this publication, please go to <http://www.subsistence.adfg.state.ak.us/> for contact information.