SUBSISTENCE HARVESTS OF PACIFIC HALIBUT IN ALASKA, 2003

by

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ABSTRACT

This report presents findings of a study designed to estimate the subsistence harvest of Pacific halibut (*Hippoglossus stenolepis*) in Alaska in 2003. The Division of Subsistence of the Alaska Department of Fish and Game conducted the study under contract to the National Marine Fisheries Service (NMFS). In May 2003, NMFS published final 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. Subsistence fishers are required to obtain a subsistence halibut registration certificate (SHARC) from NMFS before fishing. A one-page survey form was mailed to 11,635 SHARC holders in early 2004, with two follow-up mailings. Household visits supplemented the mailings in selected communities. In total, 7,593 surveys were returned, a sampling rate of 65.3 percent. Participation in the survey was voluntary.

According to the study findings, an estimated 4,942 individuals subsistence fished for halibut in 2003. The estimated subsistence halibut harvest was 43,926 fish for 1,041,330 pounds (+/- 3.9 percent) net weight. ("Net weight" is 75 percent of "round" or live weight.) Of this total, 752,858 pounds (72.3 percent) were harvested with setline (fixed) gear (longlines or skates) and 288,474 pounds (27.7 percent) were harvested with hand-operated gear (rod and reel or handline). Of those subsistence fishers using setline gear, the most (43.1 percent) usually fished with 30 hooks, the maximum number allowed by regulation. Subsistence fishers also harvested an estimated 14,870 rockfish (*Sebastes* spp) and 3,298 lingcod (*Ophiodon elongatus*) in 2003 while fishing for halibut.

The largest subsistence halibut harvest in 2003 occurred in Halibut Regulatory Area 2C (southeast Alaska), 627,959 pounds net weight, for 60.3 percent of the statewide total. Harvests for the other regulatory areas, in descending order, were as follows: Area 3A (southcentral Alaska), 279,613 pounds (26.9 percent); Area 4E (east Bering Sea coast), 54,458 pounds (5.2 percent); Area 3B (Alaska Peninsula), 27,613 pounds (2.7 percent); Area 4C (Pribilof Islands), 23,756 pounds (2.3 percent); Area 4A (east Aleutian Islands), 20,727 pounds (2.0 percent); Area 4D (central Bering Sea), 4,380 pounds (0.4 percent); and Area 4B (western Aleutian Islands), 2,472 pounds (0.2 percent).

Preliminary data from the International Pacific Halibut Commission indicate that 83.065 million pounds (net weight) of halibut were removed from Alaskan waters in 2003. Of this total, the subsistence harvest accounted for 1.3 percent. Commercial harvests took 73.0 percent of the halibut, followed by bycatch in other commercial fisheries (14.5 percent), sport harvests (9.2 percent), and wastage in the commercial fishery (2.0 percent).

This was the first study to estimate the subsistence halibut harvest in Alaska for a single year. Also, 2003 was the first year for the new subsistence halibut regulations. Therefore, it is not possible to compare the statewide harvest estimate for 2003 with estimates developed with similar methods and under similar conditions for previous years. Changes in the magnitude of the Alaska subsistence halibut harvest resulting from the new regulations cannot be demonstrated using the results of the SHARC survey for 2003, given the limitations of the earlier harvest estimates. Subsistence harvest estimates for 2003 for many of the larger communities such as

Sitka, Petersburg, and Kodiak for 2003 are not markedly different from earlier estimates based on household surveys. The report concludes that the study's estimate of about one million pounds is a reliable estimate of subsistence harvests of halibut in Alaska for 2003. It recommends that the research be continued for at least two more years in order to develop a time series for assessment of trends in the fishery and to further assess the study results for 2003.

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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)
EVOS	*Exxon Valdez* 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
SHARC	Subsistence Halibut Registration Certificate

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CHAPTER ONE: BACKGROUND AND METHODS

BACKGROUND

The primary goal of this project was to estimate the subsistence harvest of Pacific halibut (*Hippoglossus stenolepis*) in Alaska in 2003 through a survey mailed to registered subsistence halibut fishers and supplemented by a limited number of face-to-face interviews in selected communities. The project was conducted by the Division of Subsistence of the Alaska Department of Fish and Game (ADF&G) through a contract with the National Marine Fisheries Service (NMFS) (Contract No. 50ABNF-02-RP-0107; ADF&G No. IHP-03-029).

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") by NPFMC, ADF&G, IPHC, and NMFS, August 11, 2000 (NMFS 2000), subsistence halibut fisheries are local, non-commercial, customary and traditional food fisheries in Alaska's coastal areas. The EA/RIR summarizes information about the subsistence halibut fishery in Alaska. This background information is not repeated here. Figure 1 illustrates halibut regulatory areas in Alaska.

In May 2003, the National Marine Fisheries Service, Alaska Region, published final federal regulations implementing a subsistence halibut fishery for qualified individuals in the waters in and off Alaska (50 CFR Parts 300, 600, and 679). In total, residents of 117 rural communities and members of 123 Alaska Native tribes are eligible to participate in the fishery. (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." The total population of eligible rural communities and tribes was estimated at approximately 90,000 (Wolfe 2001), although Wolfe (2002) also estimated the number of potential subsistence halibut fishers at about 9,300. 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 81,193, of which 37,816 were Alaska Natives. In addition, the non-rural places of Juneau and Ketchikan in 2000 had Alaska Native populations of 5,084 and 2,689, respectively, 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 non-rural places such as Anchorage and the Kenai Peninsula Borough. Thus the estimate of about 90,000 eligible individuals continues to appear reasonable.

PROJECT OBJECTIVES

The primary goal of the project was to estimate the subsistence harvest of halibut in Alaska in the calendar year 2003. Objectives included:

1. An expanded list of subsistence halibut fishers (and SHARC holders), to serve as the basis for the mailed survey and household interviews in the study year and in subsequent years.
2. An estimate of the subsistence harvest of halibut in Alaska in 2003 by community, tribe, and IPHC regulatory area, along with an estimate of the number of individuals who subsistence fished for halibut in 2003.[1]
3. An estimate of the number of lingcod (*Ophiodon elongatus*) and rockfish (genus *Sebastes*) taken by subsistence fishers while fishing for halibut.

DATA COLLECTION METHODS

Public Outreach

Division of Subsistence personnel, working in coordination with NMFS, tribes, and the Alaska Native Subsistence Halibut Working Group (ANSHWG), contacted communities and tribes in November 2003 to encourage enrollment of subsistence halibut fishers in the registration certificate system and to provide background on the harvest assessment program. (Appendix B is a copy of the letter sent to all eligible tribes.) In January 2004, 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 the news release. Appendix D is a copy of an announcement that ran in the following Alaska newspapers in late January 2004: 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, and the Chilkat Valley News [Haines]). 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

This was the first year of a harvest assessment program for the subsistence halibut fishery in Alaska. Because the subsistence halibut regulations only came into effect in May 2003, this first year of collecting harvest data should be viewed as a trial run and exploratory. 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 years will build upon the lessons learned in this first year and benefit from outreach efforts to improve response rates in subsequent years. (See recommendations in Chapter Four.)

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. All SHARC holders as of December 31, 2003 were surveyed with a mailed, retrospective recall survey covering a 12-month harvest period in calendar year 2003.

[1] It should be noted that the survey documented subsistence halibut harvests and sport fishing for halibut by SHARC holders for a full calendar year (2003). For the full year, subsistence halibut fishing was allowed under state regulations outside nonsubsistence areas using a hand held line with no more than two hooks attached, with a two fish per day bag limit. The survey documented subsistence halibut harvests for only a partial year, from May 15 through December 31, 2003, that took place under the new federal subsistence fishing regulations.

The survey form was based on that which appears in Wolfe (2002) as Appendix A, with slight modifications such as study year and return address. (See Appendix E in this report.) 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 2003; number of hooks usually set; and harvests of lingcod and rockfish taken while subsistence fishing for halibut. A question addressing the water body fished (primary location) was added at the recommendation of NMFS staff. 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 Sport Angler 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. The form received approval from the federal Office of Management and Budget as required under the Paperwork Reduction Act (Approval Number 0648-0486).

A short explanatory letter with instructions on the back for completing the form was included in the mailings (Appendix F). Also included was a letter from NMFS regional administrator James Balsiger explaining the background for the survey (Appendix G). The form was designed so that it could be directly mailed to the Division of Subsistence, postage paid.

Presently, under International Pacific Halibut Commission (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 the meeting of the ANSHWG on October 9, 2003, 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, and incorporated local English and/or Alaska Native language names when known.[2]

The first mailing of the survey form to 11,635 SHARC holders took place on February 11, 2004. Table 2 provides a chronology of key activities during the project. In addition to the initial mail-out of the survey form, there were two more mailings of the form to nonrespondents: the second mailing, to 8,263 SHARC holders, occurred on March 8, and the third mailing, to 5,484 SHARC holders, occurred on April 9, 2004.

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 1-800 number (1-800-304-4846) to provide information about the subsistence halibut program,

[2] 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. See also Meyer [2000:6].) The goal of the first year of this study was to keep the questions about incidental harvests simple. As discussed in the recommendations section (see Chapter Four), 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.

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 to guide staff responses to phone calls and e-mail inquiries about how to fill out the survey form (Appendix H).

Community Visits

Because the response rate to the mailed survey was uncertain and was expected to vary by community and tribe, the mailings were 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. Therefore, communities and tribes were divided into four categories based upon the potential need and opportunity to conduct household surveys in order to augment the mailed survey returns.

A. Category A Communities: Coordination with Other Fieldwork

Communities in this category were already part of other Division of Subsistence harvest assessment survey projects that entailed household visits and face-to-face interviewing. Collection of information about subsistence halibut harvests became part of these interviews. As noted above, all SHARC holders were mailed survey forms, including those living in communities where household surveys were planned. These individuals received the mailed forms before these community visits took place.

A.1. EVOS Update Project. The Division of Subsistence, in partnership with the Chugach Regional Resources Commission, the Kodiak Area Native Association, and the Bristol Bay Native Association, conducted a comprehensive household harvest survey in 15 communities in early 2004 as part of an *Exxon Valdez* Oil Spill (EVOS) Trustee Council-funded project to update information about subsistence uses and harvests in the EVOS area. These were Akhiok, Chenega Bay, Chignik, Chignik Lagoon, Chignik Lake, Cordova, Karluk, Larsen Bay, Nanwalek, Old Harbor, Ouzinkie, Perryville, Port Graham, Port Lions, and Tatitlek. The Trustee Council approved this project in November 2003. Except for Cordova, where a stratified random design was used, the project attempted to census all households in these communities. Fieldwork commenced in mid February 2004**.**

In these EVOS study communities, harvest and use information for halibut was collected as part of the face-to-face survey. At the completion of the survey, the respondent was asked if household members who fished for halibut received and returned a mailed survey form. If they said that they had already returned the forms, they were not interviewed again. If they had not returned the forms, the interviewer, with the consent of the persons being interviewed, used the earlier household-level responses to the EVOS survey to assist the respondent to fill out the halibut survey form for each person in the household who obtained a SHARC in 2003. In a few cases, persons interviewed for the EVOS project indicated a subsistence harvest of halibut but had not obtained a SHARC. These individuals were encouraged to enroll, and in some cases

staff assisted them in completing a SHARC application at the completion of the EVOS interview. These harvests are not included in the estimates presented in this report.

In a few cases (48 SHARC holders), SHARC surveys were not received in the mail from individuals who after the EVOS survey had said they had mailed them. Project staff completed a SHARC survey for these individuals based on their EVOS survey responses. These harvests are included in the estimates in this report.

A. 2. Marine Mammal Harvest Surveys. 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 2003 study year, most of these interviews took place in late January, February, and March 2004. In many of the study communities (especially in Southeast Alaska), only known marine mammal hunters are interviewed, but in others (primarily the smaller communities), the goal is to interview all Alaska Native households.[3] For communities in the latter category (Akutan, Alegnagik, Atka, False Pass, Nikolski, Saint George, Egegik, Levelock, Pilot Point, Port Heiden, South Naknek, and Twin Hills, and some smaller Southeast Alaska communities), the plan was for local research assistants to contact all households in the community (Alaska Native and others) to determine if household members harvested halibut in 2003 and if so, if they obtained a SHARC. In practice, few individuals other than marine mammal hunters and members of Alaska Native households were contacted. Individuals who said they had obtained a SHARC, and who had also received and returned the mailed survey, were not interviewed about their halibut harvests. If individuals who had obtained a SHARC indicated that the survey was not received or returned, they, with their consent, were to be interviewed using the survey form. In larger communities, and those Southeast Alaska communities where marine mammal surveys are only conducted with hunters, respondents were asked about their involvement in halibut fishing, following the procedure just described.

B. Category B Communities: Plan to Conduct Interviews

This category included selected communities for which SHARC registrations appeared unexpectedly low or unexpectedly high, or for which prior data on subsistence halibut harvests were lacking, making it difficult to evaluate the mailed survey returns. This included Gambell, Savoonga, Toksook Bay, Tununak, Sitka, and Hydaburg. Sitka was included in this category because prior studies suggested that residents of this community account for a very large portion of the total Alaska subsistence halibut harvests and a good estimate for this community was important for success of the project overall. Also, the Sitka Tribe was an experienced and interested partner for the project. Because of the large number of SHARCs issued in Sitka and Hydaburg, tribal staff reviewed the lists of SHARC holders and attempted to contact those which they believed fished for halibut. Contacts were primarily face-to-face. In Gambell and Savoonga, a large sampling fraction of SHARC holders was achievable without selecting a random sample.

[3] For a description of this project, including a complete list of study communities and sampling goals, see Wolfe et al. 2003.

In Toksook Bay, the number of SHARCs issued (533) appeared to approximate the community's total population. Therefore, Division of Subsistence staff member Mike Koskey visited the community in March and April 2004. He consulted with tribal leaders and determined that there are about 90 to 100 active halibut fishers in Toksook Bay, but only about a third to one-half fish in a particular year. Most of these fishers returned SHARC surveys through the mail or were interviewed by Koskey in Toksook Bay.

Koskey also visited Tununak in April 2004. Although residents of this community harvest halibut for subsistence purposes (Scott et al. 2001), no one in the community had obtained a SHARC in 2003. The goal of the community visit was to identify subsistence fishers, encourage them to obtain SHARCs, and conduct harvest interviews. However, the Tununak Traditional Elders' Council did not grant approval for the research, and therefore no interviewing took place.

C. Category C Communities: Evaluate for Possible Interviewing

Division staff assessed response rates by community and tribe after the second mailing. The plan was to travel to selected communities to administer the surveys and enroll fishers. It was determined that this was unnecessary in most communities because they were already covered in Categories A and B, above, or had high response rates and SHARC enrollments. An exception was Unalaska/Dutch Harbor, where SHARC enrollments appeared lower than expected (see Chapter Three). Although the Division offered to contract with the Qawalingin Tribe in Unalaska, the tribe could not locate anyone who was interested in contacting and surveying local households. Therefore no supplemental interviewing took place in Unalaska.

D. Category D Communities: Plan to rely on mail-out response only

Category D included most eligible communities and about half of the SHARC holders. These communities were either too large to consider for face-to-face interviewing (such as Ketchikan, Petersburg, and Wrangell) or were unlikely to harvest a large portion of the statewide total subsistence harvest based on the results of previous surveys or because of their relatively small population In Chapter Four, there are recommendations regarding communities in which outreach and/or in-person interviewing should be considered for subsequent study years.

SAMPLE ACHIEVEMENT

Table 3 reports sample achievement by tribe and rural community. Overall, 7,593 surveys were returned, a response rate of 65.3 percent (Fig. 2). For the 117 eligible rural communities, 4,697 of 6,057 surveys were returned (77.5 percent). As shown in Figure 3, there were nine communities with more than 100 SHARC holders, accounting in total for 79.3 percent of all SHARCs issued in rural communities. Return rates were approximately 70 percent or better in all nine of these communities.

Of the 5,578 individual tribal members who obtained SHARCs in 2003, 2,896 (51.9 percent) returned surveys. As shown in Figure 3, there were 14 tribes with more than 100 members who obtained SHARCs. Return rates for these 14 tribes varied widely, from 83.9 percent in Hydaburg (where a contract between the Division of Subsistence and Hydaburg Cooperative

Association [the tribal governing body] facilitated survey returns) to 16.7 percent in St. Paul (where no outreach efforts took place other than the initial letter to the tribal government). In total, these 14 tribes accounted for 71.5 percent of all Tribal SHARCs.

Figure 4 illustrates the survey return rate by response category. After the first mailing, 3,830 surveys were returned, for a response rate of 32.9 percent. Responses to the second mailing added 2,160 surveys, a total response rate of 51.5 percent. Responses to the third and final mailing added 1,211 surveys, for a total response to the mailout of 7,201 surveys, 61.9 percent of the 11,635 surveys initially mailed. In addition, surveys administered by staff, either ADF&G personnel or representatives of tribal organizations under contract to ADF&G, added 392 surveys. Most of these were in Hydaburg, Savoonga, Toksook Bay, and Sitka. This brought the total response to 7,593 surveys, 65.3 percent of all SHARC holders through December 31, 2003.

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

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 the EVOS surveys, halibut harvest data were only collected in pounds. Therefore, pounds of fish derived from individual EVOS household surveys were divided by average weights of fish from the SHARC returns from their community or tribe to determine number of fish for these SHARC holders.

In general, subsistence halibut harvest estimates 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 A-1 for the reported harvests for each tribe and community.) The formula for standard expansion of community harvests is:

$$H_i = \bar{h}_i S_i$$

where $\bar{h}_i = \frac{h_i}{n_i}$ (mean harvest per returned survey)

H_i = the total harvest (numbers of fish or pounds) for tribe or community i,
h_i = the total harvest reported in returned surveys
n_i = the number of returned surveys, and
S_i = the number of SHARCs issued.

Rounding to two significant digits also occurs at every stage of the operation.

There were two exceptions. As discussed above, 533 SHARCs were issued to 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 (109 returns, or 20.5 percent of all SHARCs issued) 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, 170 SHARCs were issued to eligible tribal members living outside of Alaska. Less than half of the mailed surveys were returned from this group, and only four of these returned surveys indicated any 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."

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 A-4, A-5, and A-6 report study results by place of residence of the SHARC holders.

As an interim step in the data analysis, the standard deviation (SD) (or Variance [V], which is the SD squared) was also calculated with the raw, unexpanded data. The Standard Error (SE), or SD of the mean, was also calculated for each community or tribe.

It also important to note 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 percent 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%):

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

s = sample standard deviation
n = sample size
N = population size
$t_{\alpha/2}$ = *Student's t* statistic for alpha level (α=.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 mail out, the third mail out, and staff administered surveys) (see Appendix Table A-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.[4]

[4] 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 Profile Database (Scott et. al 2001), generally use a factor of .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 percent of the round weight, with a range of 68 percent to 80 percent. In Division reports, "net" weight (dressed, head off) is usually referred to as "usable weight."

Products

A presentation with an update on survey progress was provided to the ANSHWG on May 6, 2004 in Anchorage and at a joint meeting of the NPFMC and Alaska Board of Fisheries (BOF) in Anchorage on March 30, 2004. The public review draft of the final report was completed in mid September 2004 and circulated for review and comments. Presentations of study findings and recommendations took place at the October 2004 meeting of the NPFMC and the ANSHWG in Sitka, Alaska; and at a meeting of the BOF in Anchorage in November 2004. 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 I). 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 TWO: FINDINGS

SUBSISTENCE HALIBUT HARVESTS IN 2003

Estimated Number of Subsistence Halibut Fishers

Of the 11,635 individuals who obtained SHARCs in 2003, an estimated 4,942 (42.5 percent) subsistence fished for halibut in 2003 (Table 4). Of the 5,578 individuals who obtained SHARCs as members of an eligible tribe, an estimated 1,836 subsistence fished for halibut (32.9 percent). Of the 6,057 individuals who obtained SHARCs as residents of qualifying rural communities, an estimated 3,106 (51.3 percent) subsistence fished for halibut in 2003.

Demography may account for the difference between tribal SHARC holders and rural SHARC holders regarding participation in the fishery. As shown in Table 5 and illustrated in Figure 5, 17.5 percent of tribal SHARC holders were younger than 20 years of age, compared to 7.3 percent 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 subsistence fish than adults. For example, 533 members of the Native Village of Toksook Bay obtained SHARCs; of these, 44.2 percent were younger than 20 years of age (Table 5).

As illustrated in Figure 6 (see also Table 4), the largest number of Alaska subsistence halibut fishers in 2003 were from tribes and rural communities in Regulatory Area 2C (Southeast Alaska), 3,082 (62.4 percent). There were 1,185 halibut fishers (24.0 percent) from tribes and communities in Regulatory Area 3A (Southcentral Alaska) and 304 (6.2 percent) from Regulatory Area 4E (East Bering Sea Coast) tribes and communities. Additionally, there were 371 (7.5 percent) halibut fishers who were members of tribes and residents of communities in the five other regulatory areas.

Tribes with the most subsistence halibut fishers in 2003 included the Central Council of Tlingit and Haida Indians (166 subsistence halibut fishers), the Sitka Tribe of Alaska (132), the Ketchikan Indian Corporation (127), the Metlakatla Indian Community (111), the Pribilof Islands Aleut Community of St. Paul (88), Hoonah Indian Association (71), and the Shoonaq' Tribe of Kodiak (71). Of the SHARC holders who registered as residents of eligible rural communities, the most subsistence fishers lived in Sitka (679) followed by Kodiak (569), Petersburg (368), Haines (234), Wrangell (189), and Craig (141). Appendix Table A-3 provides details for each tribe and community regarding participation in the subsistence fishery and subsistence halibut harvests in 2003.

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 2003 by community can be obtained. Appendix Table A-4 provides study findings based on place of residence. Communities with 100 or more SHARC holders who participated in the subsistence halibut fishery in 2003 were Sitka (821), Kodiak (646), Petersburg (415), Haines (269), Wrangell (223), Craig (210), Ketchikan (187), Hoonah (138), Metlakatla (121), Cordova (102), and Klawock (101).

Estimated Alaska Subsistence Halibut Harvests in 2003 by Regulatory Area

Table 4 reports estimated Alaska subsistence halibut harvests for 2003 by SHARC type, regulatory area, and gear type. The total estimated subsistence halibut harvest in Alaska in 2003 was 43,926 fish (+/- 3.6 percent) for 1,041,330 pounds (+/- 3.9 percent) net weight.[5] As estimated in pounds net weight, 60.3 percent of the subsistence halibut harvest (627,959 pounds [+/- 5.5%]) was taken by fishers registered with tribes or rural communities in Regulatory Area 2C (Fig. 7, Fig 8). Fishers from Area 3A tribes and rural communities harvested 279,613 pounds (+/- 5.0 percent) (26.9 percent). Harvests totaled 54,458 pounds (+/- 14.2 percent) (5.2 percent) for communities and tribes in Regulatory Area 4E.[6] Tribes and communities in the remaining five regulatory areas harvested 79,300 pounds (7.6 percent).

As shown in Figure 9, 12 rural communities accounted for 83.5 percent of the subsistence halibut harvest by the holders of rural SHARCs in 2003. These communities accounted for 83.6 percent of the rural SHARCs. Residents of the remaining 105 communities harvested 16.5 percent of the total. Residents of 65 eligible rural communities harvested subsistence halibut in 2003. In two others, SHARC holders fished, but had no harvest. In 13 others, individuals obtained SHARCs but no one fished. No one in the remaining 35 eligible rural communities obtained a SHARC in 2003. Most of these communities (30) were in Regulatory Area 4E (East Bering Sea Coast).

As also shown in Figure 9, rural SHARC holders from two communities accounted for just under half the total harvest by this group: Kodiak (23.6 percent) and Sitka (22.2 percent). Adding Petersburg, the next highest rural community harvest at 8.8 percent, the top three rural communities accounted for 54.6 percent of the rural community (non-tribal) subsistence halibut harvest in Alaska in 2003.

As shown in Figure 10, members of 12 tribes accounted for 70.5 percent of the total subsistence halibut harvest by tribal SHARC holders in 2003. These 12 tribes accounted for 64.8 percent of the tribal SHARCs (3,613 of 5,578). Members of the remaining 111 tribes harvested 29.5 percent of the total. Members of 74 Alaska tribes harvested subsistence halibut in 2003. In three others, SHARC holders fished but had no subsistence harvest. In 15 others, tribal members obtained SHARCs, but no one fished. No one in the remaining 31 eligible tribes obtained a SHARC in 2003. Most of these tribes (28) were in Regulatory Area 4E (East Bering Sea Coast).

Figure 11 illustrates the average subsistence halibut harvest in pounds net weight for those SHARC holders who subsistence fished in 2003. Figure 12 illustrates the average harvest per fisher in number of halibut. For the state overall, the average subsistence halibut fisher harvested 211 pounds net weight or about 8.9 halibut in 2003. Average harvests per fisher at the

[5] This approximates 1,388,440 pounds round (live or whole) weight.

[6] 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 2003, a total of 14,341 pounds net weight of halibut was retained by three organizations: Coastal Villages Regional Fund (5,034 pounds), Bristol Bay Economic Development Corporation (6,346 pounds), and Norton Sound Economic Development Corporation (2,961 pounds) (Williams 2004b). In the past, the IPHC has included these fish within the "personal use" removal category, a category that also includes subsistence harvests (Williams 2004c:57). See also the section in Chapter Three, "Comparisons with Non-Subsistence Harvests."

regulatory area level ranged from 168 pounds net weight in Area 4D to 236 pounds per fisher in Area 3A**.**

Subsistence Harvests by Gear Type

Table 4 reports the estimated subsistence harvests of halibut in Alaska in 2003 by gear type and regulatory area. In total, 752,858 pounds (72.3 percent) of halibut (net weight) were harvested using setline (fixed) gear (longlines or skates) and 288,474 pounds (27.7 percent) were harvested using handlines or lines attached to a rod or pole (hand-operated gear). There were notable differences between regulatory areas (Table 4, Fig. 13). Harvests using setline (fixed) gear predominated in Area 4D (89.9 percent of the total subsistence harvest), 2C (85.8 percent), 3A (60.0 percent), and 4B (59.9 percent). In contrast, hand-operated gear accounted for most of the subsistence halibut harvests in Area 4E (80.8 percent) and 4A (68.8 percent). Harvests were more evenly split between setline (fixed) gear and hand-operated gear in Area 3B (45.4 percent with setline gear, 54.6 percent with hand-operated gear) and Area 4C (49.2 percent with setline gear, 50.8 percent with hand-operated gear).

Number of Hooks Fished with Setline Gear

Respondents who fished with setline (fixed) gear (longline or skate) were asked to report how many hooks they "usually set." The findings by regulatory area are reported in Table 6. For the fishery overall, most setline fishers (43.1 percent) used 30 hooks, the maximum number allowed by regulation (Figure 14). The next most frequently reported number was 20 hooks, usually used by 20.2 percent of the fishers who used setline gear. Ten hooks (8.4 percent) ranked third, followed by 15 hooks (7.0 percent) and 25 hooks (6.8 percent).

Thirty was the most frequently used number of hooks with setline gear in seven of the eight regulatory areas (Table 6): 4C (Pribilof Islands), 45.8 percent; 2C (Southeast Alaska), 46.3 percent; 3B (Alaska Peninsula), 39.5 percent; 4D (Central Bering Sea), 36.0 percent; 4E (East Bering Sea Coast), 38.0 percent; 4A (Eastern Aleutian Islands), 34.4 percent; and 3A (Southcentral Alaska), 33.6 percent). In Area 4B (Western Aleutians), 36.1 percent of fishers who used set hook gear used one hook and 20.8 percent used 15 hooks. Setting a single hook was also frequent in Area 4E (30.4 percent), Area 4C (26.6 percent), and Area 3B (23.8 percent).

Subsistence Halibut Harvests by Place of Residence

As shown in Figure 15, there were 29 Alaska communities whose residents had combined estimated subsistence halibut harvests of more than 7,000 pounds net weight (over 10,000 pounds round weight) in 2003. 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. Residents of these communities accounted for 88.4 percent of the total Alaska subsistence halibut harvest in 2003. Residents of Sitka accounted for 16.8 percent of the total harvest and Kodiak (Kodiak includes Kodiak city and other portions of the Kodiak Island Borough connected to it by roads) ranked second with 14.7 percent. With 8,835 and 12,973 residents, respectively, these two communities included about 26.9 of the population of rural communities eligible to participate in the subsistence fishery. There were 67 other Alaska

communities with at least one resident who participated in the subsistence halibut fishery in 2003. The total harvest for these other communities represented 11.6 percent of the state total.

A total of 170 SHARC holders provided out of state addresses, including 115 communities in 27 states.[7] Seattle was the non-Alaska community with the most SHARC holders, with nine. Only 5.1 percent of non-Alaska resident SHARC holders (an estimated five individuals) subsistence fished for halibut in 2003, with an estimated total harvest of 5 fish and 122 pounds net weight.

Average Net Weights of Subsistence Halibut

Table 7 reports the average net weight of subsistence and sport-caught halibut by SHARC holders in 2003. (See below for further discussion of sport harvests of halibut by SHARC holders.) For the state, the average net weight of subsistence caught halibut was 23.7 pounds and the average net weight of sport-harvested halibut by SHARC holders was 22.8 pounds. For all halibut harvested by SHARC holders in 2003, the average net weight per harvested halibut was 23.5 pounds. There was not a great deal of difference between regulatory areas in average weight per halibut, with two exceptions. The halibut harvested by the two communities of Area 4D (the Saint Lawrence Island communities of Savoonga and Gambell), averaged 58.4 pounds per fish, more than twice the statewide average. In Area 4E, halibut averaged 15.2 pounds net weight, about a third lower than the statewide average.

Harvest Locations

Survey respondents were asked to report the "water body, bay, or sound usually fished" for subsistence halibut in 2003. In Table 8, 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 8 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. These differences are very minor, however.

The three geographic subareas with the largest subsistence halibut harvests in 2003 were all in Regulatory Area 2C, Southeast Alaska: southern Southeast Alaska (290,441 pounds net weight; 27 percent of the state total); the Sitka Local Area Management Plan (LAMP) area (173,322 pounds; 17 percent); and the remainder of northern Southeast Alaska (159,771 pounds; 15 percent) as shown in Table 8, Figure 16, and Figure 17. Waters bordering the Kodiak Island road system (including Chiniak Bay) ranked fourth, with a subsistence halibut harvest of 114,027 pounds (11 percent), followed by the remainder of the Kodiak Island area (79,255 pounds; 8 percent). Combined, Bristol Bay and the Yukon/Kuskokwim Delta area contributed about 5 percent of the state harvest. Harvests within Cook Inlet waters accounted for 5 percent of the state total (52,609 pounds) and those within Prince William Sound added 28,409 pounds (3 percent of the statewide total). All other areas (Yakutat Area, Chignik Area, Alaska Peninsula, Aleutian Islands, Pribilof Islands, Saint Lawrence Island, and Norton Sound) accounted for the remaining 9 percent of the statewide subsistence halibut harvest in 2003.

[7] Note that members of eligible tribes could obtain SHARCs regardless of their place of residence.

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 2003." 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 hook and rod) 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 2003, 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 2003, because individuals from these tribes and communities who did not obtain SHARCs could have sport fished.

As shown in Table 9, the estimated total sport halibut harvest by holders of SHARCs in 2003 was 10,784 fish and 245,947 pounds net weight. Of the total harvest, most was taken by SHARC holders from Area 2C (Southeast Alaska) (111,502 pounds; 45.3 percent) and Area 3A (southcentral Alaska) (103,804 pounds; 42.2 percent). In total, an estimated 2,580 SHARC holders (22.2 percent) reported that they sport fished for halibut in 2003. A very large majority of these fishers were from either Area 2C (1,591; 61.7 percent) or Area 3A (853; 33.1 percent).

The study did not investigate the criteria by which survey respondents classified their rod and reel halibut harvests as subsistence or sport. One possibility is that respondents viewed their rod and reel halibut harvests prior to May 15, 2003 (when the new regulations allowing rod and reel as a subsistence gear came into effect) as sport-caught, and as subsistence harvests after that date or after they obtained their SHARC. If so, in future years these respondents may classify more or all of their halibut harvest in the subsistence category. Also, most tribal SHARC holders who live in nonrural places are required by the regulations to subsistence fish for halibut only "in his or her area of tribal membership" (50 CFR 300.65(g)(4)(ii)). Tribal members who halibut fished in other locations (for example, a SHARC holder who is a member of the Sitka Tribe living in Anchorage and halibut fishing in Cook Inlet) would need to abide by sport fishing regulations and report any harvests from these locations as sport-caught on the SHARC survey.

ROCKFISH HARVESTS

Survey respondents were asked to estimate the number of rockfish they harvested while subsistence fishing for halibut. 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 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

fished for or harvested rockfish. The Division of Subsistence Community Profile Database (Scott et al. 2001) 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.[8] Rockfish are used for subsistence purposes in rural communities throughout their range in Alaska. 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 2003 was 14,870 fish by 1,239 fishers. This is an average of about 3 rockfish per fisher for all subsistence halibut fishers and about 12 rockfish per fisher for those who had a rockfish harvest. Most of the subsistence halibut fishers who caught rockfish lived in Area 2C (919 fishers; 74.2 percent) and Area 3A (245 fishers; 19.8 percent). Of all SHARC holders who subsistence fished for halibut in 2003, 25.1 percent harvested at least one rockfish while fishing. The highest percentage of subsistence halibut fishers who incidentally harvested rockfish was in Area 2C (Southeast Alaska), at 29.8 percent.

As illustrated in Figure 18 and Figure 19, most of the incidental rockfish harvest was harvested by fishers from Area 2C tribes and communities: 9,967 rockfish, 67.0 percent of the statewide total. Area 3A tribes and communities accounted for the second-highest total: 3,498 rockfish, 23.5 percent of the total. Harvests were relatively small in the other regulatory areas, which combined harvested 1,405 rockfish, 9.4 percent of the statewide total.

Table 11 reports the estimated incidental rockfish harvest in 2003 by SHARC holders by geographic subarea. Most of the harvest occurred in southern Southeast Alaska (4,366 fish), the Sitka LAMP area (4,355 rockfish), and northern Southeast Alaska (1,194 rockfish). Incidental rockfish harvests totaled 752 fish in Prince William Sound, 815 rockfish in Cook Inlet, 955 rockfish in Kodiak road system waters, and 833 rockfish in other Kodiak waters. In Aleutian Islands waters, there was an incidental harvest of 952 rockfish.

LINGCOD HARVESTS

Survey respondents were asked to estimate the number of lingcod they harvested while subsistence fishing for halibut. Note that these survey results do not provide an estimate of the total subsistence lingcod harvest by SHARC holders 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 harvest. The Division of Subsistence Community Profile

[8] 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.

Database (Scott et al. 2001) 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.[9] Lingcod are used for subsistence purposes throughout their range in rural Alaska. 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 2003 was 3,298 fish by 699 fishers (Table 10). This is an average of about 0.7 lingcod per fisher for all subsistence halibut fishers and 4.7 lingcod per fisher for those who had a lingcod harvest. Of all SHARC holders who subsistence fished for halibut in 2003, 14.1 percent harvested at least one lingcod while halibut fishing. Most of the subsistence halibut fishers who harvested lingcod lived in Area 2C (Southeast Alaska) (452; 64.7 percent) and Area 3A (Southcentral Alaska) (160; 22.9 percent).

As illustrated in Figure 20 and Figure 21, most of the incidental lingcod were harvested by fishers from Area 2C tribes and communities: 1,685 lingcod, 51.1 percent. Area 3A tribes and communities accounted for the second-highest total: 611 lingcod, 18.5 percent.

Table 11 reports the incidental harvest of lingcod in 2003 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 (993 lingcod), southern Southeast Alaska (551 lingcod), and the remainder of northern Southeast Alaska (138 lingcod). Incidental lingcod harvests totaled 447 fish in the eastern Aleutian Islands (Area 4A). Harvests totaled less than 200 lingcod in each of the other geographic subareas.

[9] See footnote 8 for definitions of bycatch.

CHAPTER THREE: DISCUSSION

COMPARISONS WITH OTHER HARVEST ESTIMATES

Comparing the statewide harvest estimate for the Alaska subsistence halibut fishery for 2003 presented in this report 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 was the first year 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 differing harvest years. There are many communities, especially in western Alaska, where such surveys have not been conducted. Also, 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 estimate of subsistence halibut harvests for 2003 based on the SHARC mailed survey includes only subsistence harvests by individuals who obtained SHARCs. The estimate does not include harvests accomplished under sport fishing regulations or halibut removed by commercial fishers for their households' use or for noncommercial sharing. Thus it is only a partial estimate of the total harvest of halibut for home use by rural Alaska residents and is not directly comparable to previous estimates from Division of Subsistence studies.

Despite these limitations, it is instructive to compare the 2003 estimate with previous attempts to estimate the annual statewide subsistence halibut harvest. For 2000, the IPHC estimated 439,000 pounds net weight for Alaska "personal use" (noncommercial, non-recreational) harvests (*in* Wolfe 2001). This represented about 0.5 percent of the total halibut removals in Alaska in that year. The IPHC estimate is based upon a methodology described by Trumble (1999). The estimate used household survey data collected by the Division of Subsistence, ADF&G (Scott et al. 2001), which, as noted above, do not distinguish between subsistence and sport harvests. The IPHC method assumed that 50 percent of Alaska Native rod and reel halibut harvests as reported in ADF&G household surveys are "sport" and 50 percent "personal use," and that 75 percent of the non-native rod and reel harvests are "sport" and 25 percent "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. (Further discussion of data from Wolfe [2001] will be based on converting his data in round weights to net weights to facilitate comparisons.)

Wolfe calculated per capita halibut harvest estimates from these community studies pertaining to different years and then applied these values to the population of the communities in 2000 to estimate the harvest. For communities in which no harvest surveys had been done, he applied the per capita harvest value for a similar community in the regulatory area. Wolfe noted, as did the IPHC analysis, that subsistence harvest estimates based on CPDB data are affected by how harvests by gear type are classified, including rod and reel harvests and retention from commercial catches. As shown in Table 12, Wolfe estimated that Alaska rural residents and members of tribes with traditional uses of halibut harvested 1,078,486 pounds of halibut (net weight) in 2000. Of this, 739,546 pounds (63.3 percent) was harvested with rod and reel, 185,266 pounds (23.7 percent) with "other gear" (likely handline and longline); and 153,674 pounds (13.0 percent) were retained for home use by commercial fishers in these communities. Excluding the latter as not a subsistence harvest gives a total estimated harvest of 924,811 pounds net weight. Wolfe adjusted this estimate downward to his range of 300,000 to 750,000 pounds to account for rod and reel harvests in larger communities that might be better classified as sport harvests. As with the IHPC estimate, the separation of sport and subsistence harvests in Wolfe's analysis is speculative. Two further limitations pertaining to Wolfe's estimate are: 1) household surveys in Southeast Alaska did not ask about subsistence harvests with "other noncommercial gear" and 2) harvest estimates were lacking for most communities in Regulatory Area 4E. These limitations likely lead to an underestimate of the halibut harvests in Alaska rural communities.

An added limitation for both the IPHC estimate and the estimate by Wolfe is that both rely on CPDB data for different single years to develop a hypothetical "typical year" harvest estimate. However, the range of variation from year to year in subsistence halibut harvests is undocumented. It is unknown how representative any single harvest estimate in the CPDB is of each community's range of harvest over several years.

The estimated Alaska subsistence harvest of halibut of 1,041,330 pounds (+/- 3.9 percent) for 2003 based on the SHARC mailed survey approximates Wolfe's unadjusted estimate of harvests for home use for 2000 based on CPDB data of 1,078,486 pounds (Table 12). However, adding the "sport harvests" by SHARC holders gives a 2003 total of 1,287,277 pounds, which is about 20 percent higher than the upper bound of Wolfe's unadjusted estimate. Further, the total harvest of halibut for home use in rural Alaska in 2003 also certainly included an unknown number of fish harvested in the sport fishery by community residents who did not obtain SHARCs, and removals from the commercial fishery. (Recall that the CPDB estimates used by Wolfe include all rod and reel harvests, including any that might be classified as "sport," and also include commercial removals.) One evident difference between the harvest estimate for 2003 and those for earlier years is the estimated harvest of about 753,000 pounds of halibut with setline gear in 2003, compared to just 185,266 pounds for 2000 (and an estimate of zero for Southeast Alaska). Some additional potential reasons for the differences between the two estimates can be discerned by comparing the data at the regulatory area level (Table 12 and Figure 22). Estimates for Area 2C (Southeast Alaska) and Area 3B (Southcentral Alaska) are higher for 2003 than those developed for 2000. Setline gear harvests in 2003 account for most of the difference in the estimates. On the other hand, the 2003 estimate for Area 4A (eastern Aleutian Islands) is much lower than that for 2000, because of a lower estimate for Unalaska/Dutch Harbor (see below). The 2003 estimate for Area 4E (East Bering Sea Coast) is

lower than that for 2000; this is likely the result of the relatively low enrollment of subsistence fishers in the SHARC program in some key halibut fishing communities in this area (see, for example, the discussion of Tununak, below).

Expressed as a percentage of the statewide harvest, the rankings of most regulatory areas are similar in the subsistence halibut harvest estimates for 2000 and 2003 (Fig. 23). Southeast Alaska (Area 2C) ranked first for both years, at 54.1 percent of the total for 2000 and 57.4 percent for 2003 (when subsistence and sport harvests by SHARC holders are combined). Southcentral Alaska (Area 3A) ranked second (19.0 percent and 29.8 percent respectively), although its percentage of the total harvest was higher in 2003 due to the lower harvest estimate for Area 4A (eastern Aleutians), which dropped in ranking (see above). District 4E (East Bering Sea Coast) had a higher percentage of the statewide estimate for 2000 (7.5 percent) than 2003 (4.3 percent).

Further, when comparing the 2003 estimate with those of previous years, in addition to considering differing research methods, the possible effects of the new subsistence halibut regulation on fishing patterns must also be taken into account. Presently, these effects are largely unknown because systematic research has not focused on this topic, including the following questions:

1. Did the new subsistence halibut regulations encourage new participants in the fishery, especially in the larger communities? If so, estimated harvests will likely increase.
2. Did legalization of setline gear (longlines) in the subsistence fishery lead to less retention of halibut from commercial fisheries? If so, the 2003 estimates for the subsistence fishery would exceed community estimates for previous years that are adjusted to exclude commercial retention.
3. Was there a shift in gear used in fishing for halibut for home use from rod and reel to setline gear? If so, the 2003 setline harvest is not an increment to the previous levels of rod and reel harvests.
4. Did the new subsistence halibut regulations result in less participation in the "sport fishery"? That is, since May 15, 2003, when rod and reel became a legal gear in the subsistence fishery, are rod and reel fishers with SHARCs likely to classify their harvests as subsistence rather than recreational? And did some rod and reel halibut fishers begin using setlines instead of rod and reel? If either is the case, estimates of recreational harvests in the larger communities, such as Sitka, Cordova, and Kodiak, as developed through the statewide sport fish harvest survey of sport license holders, are likely to decline.
5. On the other hand, will SHARC holders who fished for the first time with longlines in 2003 continue to use this gear? If not, the harvests by gear type documented for 2003 may not persist in future years.
6. Did more liberal gear limits (from two hooks to thirty hooks) and daily harvest limits (from two fish to twenty fish) encourage more fishing effort and harvest by those who had already been involved in the subsistence fishery? If so, comparisons with harvest estimates from previous years should reveal increased harvests in 2003 and future years.

Regarding the sixth point above, it should be noted that changes in the magnitude of the Alaska subsistence halibut harvest resulting from liberalized regulations cannot be demonstrated using the results of the SHARC survey for 2003, given the limitations of the earlier harvest estimates. Also relevant is the point made by Wolfe and Walker (1987:68; see also Lonner 1980) that:

> Subsistence activities, while often highly productive, are not oriented toward sale or accumulated profit as is commercial market production. Rather, they are directed toward meeting the self-limiting needs of families and small communities.

Given the self-limiting characteristic of subsistence fisheries in rural Alaska, the new regulations could have provided for more efficient subsistence harvesting (with setline gear and higher daily bag limits) without necessarily increasing the annual harvest of halibut. That is, annual harvest levels that were previously regulated as a recreational activity that required a sport-fishing license are now being achieved under subsistence regulations. On the other hand, the new opportunities for subsistence fishing for halibut might result in an increased harvest that is more consistent with levels needed to provide for local subsistence uses. Under that scenario, reported harvests might increase in some communities as participants adjust to the new regulations. Investigating these and the other questions listed above will require additional research using a combination of survey and ethnographic methods and, especially, the development of a time series of harvest data (see Recommendations in Chapter Four). Because of the limitations associated with the previous subsistence harvest estimates at the statewide level, until that time series is developed, discussion of harvest trends in the subsistence halibut fishery will remain speculative.

COMMUNITY CASE STUDIES

To evaluate the subsistence halibut harvest estimate for 2003, 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 the same limitations as discussed above for the statewide estimates, 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 Two, a small number of large communities accounted for most of the statewide subsistence halibut harvest in 2003. 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 One, 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 13 reports selected study findings for the case study communities discussed below. Appendix Tables A-4, A-5, and A-6 report study results 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. Sitka was the second largest rural community eligible to participate in the subsistence halibut fishery in 2003. According to survey results, residents of Sitka harvested more subsistence halibut in 2003 than any other community and accounted for 16.8 percent of the statewide total. Developing a reliable subsistence harvest estimate for Sitka is essential for the success of the subsistence harvest assessment program.

Based on Division of Subsistence research, there are two previous estimates of halibut harvests for home use for Sitka (Table 14). For 1987, the estimated total 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 rod and reel harvests, because data on any harvests using "other methods" such as longlines (not then allowed in the 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.

The estimated subsistence harvest of halibut by Sitka Tribal members who live in Sitka and other residents of Sitka for 2003 (1,639 SHARC holders) was 174,880 pounds net weight. Of this, 155,276 pounds (88.8 percent) was taken with setline gear, and 19,604 pounds (11.2 percent) was taken with hand-operated gear. Adding sport harvests by SHARC holders (32,408 pounds) increases the estimate to 207,288 pounds net weight. Eight hundred twenty one SHARC holders from Sitka subsistence fished for halibut in 2003. Of these, 760 used setline gear and 160 used hand-operated gear. Also, 401 SHARC holders from Sitka sport-fished for halibut in 2003 (Table 13).

Halibut harvest estimates for the three study years for Sitka are generally similar to each other. The 2003 estimate is probably a minimum, since it is likely that some Sitka residents sport-fished for halibut but did not have a SHARC. This number of fishers is likely to be relatively small, given that about 956 SHARC holders fished for halibut in 2003 (either subsistence or sport) (Table 13), very similar to estimates of Sitka halibut-fishing households for 1987 and 1996. On the other hand, as noted in Chapter One, the Sitka Tribe prioritized interviewing SHARC holders who were likely subsistence fishers. This may have introduced some bias into the sample resulting in a higher harvest estimate. In short, however, this comparison, although it has limitations, suggests that the 2003 subsistence halibut harvest estimate for Sitka appears reasonable based on previous household surveys in the community.

Petersburg (Regulatory Area 2C)

In 2000, Petersburg had population of 3,224, including 388 Alaska Natives. There are two prior estimates for halibut harvests by Petersburg residents available, pertaining to 1987 and 2000 (Table 15). In the 1987 study, a random sample of 49 of the 1,123 households in Petersburg were interviewed (4.4 percent). In that year, Petersburg residents harvested an estimated 119,176 pounds of halibut (net weight) (+/-51%); of this, 11,723 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, 53.8 had at least one member that fished for halibut non-commercially, 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 2003, the estimated subsistence harvest of halibut by Petersburg residents with SHARCs (1,047 SHARC holders) was 55,718 pounds net weight. Of this, 41,704 pounds (74.8 percent) was harvested with setline gear, and 14,013 pounds (25.2 percent) with hand operated gear. Petersburg SHARC holders also harvested 19,611 pounds net weight of halibut they classified as sport harvested. This gives a total harvest by Petersburg SHARC holders of 75,329 pounds (Table 13). A total of 415 Petersburg SHARC holders harvested halibut in the subsistence fishery (330 used setline gear, 138 used hand operated gear); 268 participated in the sport fishery; and 523 harvested halibut either with subsistence gear or while sport fishing. Given that some Petersburg residents without SHARC cards likely sport fished for halibut, the 2003 estimate of noncommercial halibut harvests in the community based on the SHARC survey appears consistent with the 1987 estimate based on household interviews, but is 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 (Table 13, Table 15).

Cordova (Regulatory Area 3A)

In 2000, Cordova had a population of 2,454 people, including 368 Alaska Natives. There are six Division of Subsistence household surveys that estimate home-use halibut harvests for previous years (Table 16). After subtracting fish removed from commercial harvests for home use, estimated noncommercial halibut harvests by Cordova residents ranged from 32,754 pounds (+/-29%) net weight in 1985 to 120,221 pounds (+/- 62%) in 1988, with an average over the six study years of 57,285 pounds. The estimated number of Cordova household with at least one member fishing non-commercially for halibut ranged from 228 in 1985 to 401 in 1992, with a mean of 325 households.

Subsistence halibut harvest estimates and participation estimates for Cordova residents for 2003 are lower than might be expected from previous research. The estimated subsistence harvest was 15,498 pounds net weight (7,613 pounds [49.1 percent] with setline gear, 7,885 pounds [50.9 percent] with hand operated gear), with an additional 11,534 pounds taken by SHARC holders while sport fishing (Table 13). The total of 27,032 pounds is about 47.2 percent of the average for previous study years. In 2003, 358 residents of Cordova obtained SHARCs. 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 (Table 13). This is a lower number of halibut fishers than might be expected from the earlier household survey results.

Based on these comparisons, it is possible that the SHARC survey underestimated the amount of halibut harvested by Cordova residents for home use in 2003. One explanation for this possible underestimate is that perhaps not all subsistence fishers in Cordova obtained SHARCs in 2003. Another possible factor is that many Cordova residents might prefer to harvest halibut under sport fishing regulations and did not obtain SHARCs to subsistence fish. A third factor is that until 2003, noncommercial halibut fishers were limited to fishing with hand-operated gear with no more than two hooks; it may take some time for Cordova residents to adapt to the new subsistence fishing opportunities with setline gear (as just noted, only 68 fished with setline gear in 2003). It appears that additional public outreach in Cordova is advisable, along with further analysis of sport and subsistence harvest data for future years so that noncommercial use patterns in the community can be better understood.

Port Graham (Regulatory Area 3A)

Located in lower Cook Inlet, Port Graham had a population of 171 in 2000, including 151 Alaska Natives. It is included here as a case example to represent the other 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 for seven previous study years (Table 17). 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) (Fig. 24). 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.

In 2003, a total of 52 Port Graham residents obtained SHARCs. (Recall that this does not include Port Graham tribal members who do not live in Port Graham.) Of these, 35 subsistence fished for halibut in 2003 (10 used setline gear, 28 used hand operated gear), and 3 said they sport fished for halibut. Thirty-six fished for halibut under subsistence or sport fishing rules (Table 13). This finding is consistent with levels of participation in the halibut fishery that could be expected from the previous studies. Given the long tradition of subsistence halibut fishing in Port Graham, it is not surprising that very few residents of this community classified any of their halibut fishing as "sport."

The subsistence halibut harvest estimate for Port Graham for 2003 was 11,454 pounds net weight. Of this, 4,398 pounds (38.4 percent) was harvested with setline gear, and 7,056 pounds (61.6 percent) with hand operated gear. Adding 156 pounds of halibut taken while sport fishing gives a community total of 11,610 pounds of halibut harvested for home use by Port Graham residents in 2003 (Table 13). While this total is very similar to the previous highest estimate (11,232 pounds in 1992), it exceeds the average of previous study years of 7,591 pounds. This is 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 in 2003 consistent with traditional harvest methods, residents of Port Graham and other communities with similar traditions fished with setline gear and hand operated gear, and reported subsistence halibut harvests that are likely similar to historic levels.

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. This is the largest rural community eligible to participate in the Alaska subsistence halibut fishery in 2003.

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. 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 18). Excluding fish removed from commercial catches for home use, halibut harvests by Kodiak 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 (92.3 percent) 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.

Kodiak residents obtained 1,320 SHARCs in 2003. Of these, an estimated 646 subsistence fished for halibut with most (438 or 67.8 percent) using setline (fixed) gear. Also, an estimated 498 fished for halibut under sport fishing regulations. A total of 858 Kodiak resident SHARC holders fished for halibut either in the subsistence fishery or sport fishery (Table 13). Given that it is likely that many Kodiak residents continued to fish for halibut under sport fishing regulations in 2003, the estimated level of participation in the subsistence fishery based on the SHARC survey appears reasonable.

The estimated subsistence harvest of halibut in 2003 for Kodiak road system area residents was 153,254 pounds; of this, 101,575 pounds were taken with setline gear (66.3 percent) and the rest (51,678 pounds; 33.7 percent) with hand-operated gear (handline or rod and reel). In addition, Kodiak road system SHARC holders harvested an estimated 68,170 pounds net weight of halibut they classified as sport-caught. This gives a total estimated halibut harvest by Kodiak road system SHARC holders of 221,424 pounds net weight (Table 13). Not surprisingly, this total is lower than totals based on household surveys for previous years because, as just noted, many Kodiak road system residents who fish for halibut likely did not obtain SHARCs and harvested halibut under sport fishing rules in 2003. Overall, the 2003 subsistence harvest estimate for Kodiak appears reasonable, although it needs to be further evaluated when findings from the 2003 sport fishing survey become available and with additional years of subsistence harvest survey data.

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. 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 (55.8 percent) had at least one member who fished for halibut in 1994. Most of the noncommercial harvest, 88,142 pounds (90.3 percent), was taken with rod and reel.

In 2003, 92 residents of Unalaska and Dutch Harbor obtained SHARCs (Table 13). Notably, only 14 members of the Qawalingin Tribe of Unalaska registered to subsistence fish for halibut (see Table 3). For the community overall and for the tribe, this is far fewer registrants than might have been predicted from the 1994 survey results. Fifty Unalaska/Dutch Harbor SHARC holders subsistence fished for halibut in 2003 and 33 sport fished; 70 fished in either fishery (Table 13).

The estimated subsistence harvest for Unalaska and Dutch Harbor residents with SHARCs (including tribal members who live in Unalaska or Dutch Harbor) 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 (Table 13). This is just 16.8 percent of the harvest estimate for 1994. There are at least four possible explanations for this difference. 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 did not obtain a SHARC from RAM. 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 combination of all four factors could be responsible for the unexpectedly low subsistence halibut harvest estimated for Unalaska from the SHARC survey for 2003. 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, 533 Toksook Bay tribal members (population 532 in 2000) obtained SHARCs in 2003. 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 above, 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 provided harvest data through the SHARC survey. The estimated harvest for Toksook Bay for 2003 was 24,500 pounds net weight by 54 fishers (Table 13). In the assessment by project staff, this is a very reliable subsistence harvest estimate for the community. It should be noted that Toksook Bay is a member of the Coastal Villages Regional Fund CDQ organization. The majority of the 5,034 pounds of sublegal halibut retained for home use by members of this CDQ organization was landed at Toksook Bay and Mekoryuk (Williams 2004b:59-60).

Tununak (Regulatory Area 4E)

Tununak had a population of 325 in 2000, 315 of whom were Alaska Native. The Division of Subsistence conducted a comprehensive household harvest survey in the community in 1986, which provides the only estimate of subsistence halibut harvests. The estimate was 1,532 fish and 30,643 pounds net (dressed) weight, with a 95% confidence limit of +/-26%. The harvest per capita was 93.49 pounds net weight (Scott et al. 2001).

No residents of Tununak obtained SHARCs in 2003.[10] As discussed in Chapter One, the Traditional Elders' Council in Tununak did not approve Division of Subsistence plans to conduct interviews with potential subsistence halibut fishers. Therefore, there is no subsistence halibut harvest estimate for this community for 2003. Given the importance of subsistence halibut fishing in Tununak, this means that the harvest estimate for 2003 for Area 4E is probably low. It should be noted that as of November 24, 2004, 73 members of the Native Village of Tununak tribe had obtained SHARCs. Assuming that an acceptable percentage of these SHARC holders respond to the harvest survey for 2004, it should be possible to develop a harvest estimate for the community for future years.

COMPARISONS WITH NON-SUBSISTENCE HARVESTS IN 2003

As reported in Table 19, the preliminary estimated total halibut removal in Alaskan waters in 2003 was 83,064,671 pounds (net weight). In this total, the removal of 14,341 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 73.0 percent of halibut removals in Alaska in 2003 (Fig. 25). Bycatch of halibut in various other commercial fisheries ranked second, with 14.5 percent of the statewide removals. Sport harvests ranked third, with 9.2 percent. Wastage in commercial fisheries added 2.0 percent to the total halibut removals. Finally, the subsistence fishery accounted for 1.3 percent of the total removals of halibut in Alaska waters in 2003.

Halibut harvests by fishery in 2003 at the regulatory area level did not differ substantially from the statewide pattern (Table 19, Fig. 26). In all regulatory areas, commercial harvests accounted for 60 percent or more of the total pounds net weight. In Area 2C (Southeast Alaska) and Area 3A (Southcentral Alaska), sport fisheries took 21.4 percent and 15.7 percent, respectively, of the halibut harvest in 2003, but sport fisheries were smaller than the subsistence harvests in Area 3B and Area 4. Commercial bycatch accounted for 35.4 percent of halibut removals in Area 4. As a percentage of the total removal, subsistence halibut harvests were largest in Area 2C at 5.2 percent of the total (although they were still about a quarter of the sport harvest and about 7.5 percent of the commercial harvest) and 0.9 percent in Area 3A.

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

CHAPTER FOUR: CONCLUSIONS AND RECOMMENDATIONS

SUMMARY AND CONCLUSIONS

New federal regulations governing subsistence halibut fishing in Alaska came into effect in May 2003. By December 2003, 11,625 members of tribes with traditional uses of halibut and residents of eligible rural communities obtained subsistence halibut registration cards (SHARCs) from NMFS. In 2004, 7,593 of these SHARC holders (65.3 percent) voluntarily provided information about their subsistence halibut fishing activities in 2003 by responding to a survey administered by the Division of Subsistence of ADF&G (see Table 3). Based on these survey returns, an estimated 4,942 individuals subsistence fished for halibut in Alaska in 2003. They harvested an estimated 43,926 halibut for 1,041,330 pounds (+/- 3.9 percent) (net weight), with most of this harvested with setline gear (72.3 percent) and the remainder with hand-operated gear (hook and rod or handline) (27.7 percent). The largest portion of the Alaska subsistence halibut harvest in 2003 occurred in Regulatory Area 2C (Southeast Alaska), 60.3 percent; followed by Area 3A (Southcentral Alaska), 26.9 percent; and Area 4E (east Bering Sea Coast), 5.2 percent. The remaining five regulatory areas (3B, Alaska Peninsula; 4A, eastern Aleutian Islands; 4B, western Aleutian Islands; 4C, Pribilof Islands; and 4D, Central Bering Sea) accounted for 7.6 percent of the statewide total (see Table 4). Subsistence harvests accounted for 1.3 percent of the total halibut removals in Alaska waters in 2003 (see Fig. 25).

The 2003 calendar year was the first for which a program was implemented to attempt to estimate the statewide subsistence harvest of halibut in Alaska. By several measures, the program was a success. Overall, there was a very high response rate of 65.3 percent. Response rates were 70 percent or higher in the nine rural communities with the largest number of SHARCs issued. This is especially encouraging given that this was the first year of a voluntary program. Through contracts and outreach, high levels of involvement in the research were achieved in many key communities and tribes, including Sitka, Hydaburg, Toksook Bay, Gambell, and Savoonga. On the other hand, return rates were lower in some other communities and tribes, raising questions about the thoroughness and precision of the harvest estimates in those places.

As discussed above, comparisons of the 2003 harvest estimates with those from previous research by the Division of Subsistence are complicated by different research methods, but such comparisons are still instructive. It appears that subsistence harvest estimates for most of the larger communities (combining tribal and rural SHARC holders) such as Sitka, Petersburg, and Kodiak for 2003 are not markedly different from earlier estimates based on household surveys. This is significant in that these communities account for a very large percentage of the total harvest. In some cases, such as Cordova and Unalaska/Dutch Harbor, it appears that participation in the SHARC program by subsistence fishers may be more incomplete than in other communities, suggesting that further community outreach is necessary. We conclude that the first year of the survey of SHARC holders produced a reliable estimate of subsistence harvests of halibut in Alaska for 2003. The estimate 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.

1. The harvest assessment program for the Alaska subsistence halibut fishery should continue for at least two more years, using methods similar to those employed for 2003. This will begin to develop a time series for assessment of trends in the fishery as well as assessment of information for the early years of the harvest assessment program, such as this first year of the program just completed. As discussed above, the methods used for 2003 (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.

2. Outreach is needed in several communities, including Unalaska/Dutch Harbor, St. Paul, Ketchikan, and Angoon, and perhaps Cordova, based on relatively low response rates or unexpectedly low numbers of SHARCs issued. Contracts with tribal governments in Sitka and Hydaburg should be renewed for at least a second year to build upon the successful work in those communities in accomplishing the 2003 harvest estimate.

3. Further community outreach should also occur in Area 4E. There are many communities in this very large geographic area but relatively few SHARCs were issued and, as discussed above, the 2003 harvest estimate was likely low. The focus of this outreach should be 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 communities would be expensive and unnecessary, communications with tribal governments could result in more enrollments in the SHARC program and more confidence in the survey results.

4. Regulations likely to be adopted by NMFS in late 2004 will create a community harvester program for subsistence halibut fishing. It will be essential to integrate this program into the SHARC harvest assessment program. This will entail further cooperative work with tribal governments.

5. Consideration should be given to dropping from the mailed survey the questions about incidental harvests of lingcod and rockfish if it is determined, based upon consultations with fishery managers, that these harvests are not of regulatory or conservation concern. An alternative is to include these questions only for areas with potential management concerns for rockfish or lingcod or where stock assessments may occur. The harvest estimates for lingcod and rockfish developed through the SHARC survey represent only a portion of the total subsistence harvest of these resources in the study communities and are therefore not useful other than for the specific purpose of assessing incidental harvests in the subsistence halibut fishery. If an assessment of these incidental harvests is not necessary, there is no value in collecting rockfish and lingcod harvest data through the SHARC survey.

6. 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.

7. Evaluation of sport fish harvest data, achieved through the mailed survey administered by the Division of Sport Fish of ADF&G, should take place systematically for the larger rural communities participating in the subsistence halibut fishery for at least several years. As discussed in Chapter Two and Chapter Three, many SHARC holders also reported that they sport fished for halibut in 2003. Whether this was due to the subsistence fishing regulations not being in effect until May, or for some other reason, it will be important 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 Three, 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.

8. 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, or other fishing activities that have resulted from the regulatory changes. These interviews could also investigate traditional knowledge about local halibut stocks that might prove useful to management agencies, communities, and tribes for future management of the subsistence, sport, and commercial halibut fisheries in Alaska.

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REPORT TABLES

Table 1. Population of Rural Communities Eligible to Participate in the Alaska Subsistence Halibut Fishery, 2000

Community[1]	Regulatory Area	Population	
		Total	Alaska Native
ANGOON	2C	572	419
COFFMAN COVE	2C	199	12
CRAIG	2C	1,397	432
EDNA BAY	2C	49	2
ELFIN COVE	2C	32	0
GUSTAVUS	2C	429	32
HAINES	2C	1,811	332
HOLLIS	2C	139	13
HOONAH	2C	860	597
HYDABURG	2C	382	342
HYDER	2C	97	4
KAKE	2C	710	530
KASAAN	2C	39	19
KLAWOCK	2C	854	496
KLUKWAN	2C	139	123
METLAKATLA	2C	142	101
MEYERS CHUCK	2C	21	2
PELICAN	2C	163	42
PETERSBURG	2C	3,224	388
POINT BAKER	2C	35	3
PORT ALEXANDER	2C	81	11
PORT PROTECTION	2C	63	7
SAXMAN	2C	431	302
SITKA	2C	8,835	2,178
SKAGWAY	2C	862	44
TENAKEE SPRINGS	2C	104	5
THORNE BAY	2C	552	27
WHALE PASS	2C	58	2
WRANGELL	2C	2,308	550
Regulatory Area 2C Subtotals		24,588	7,015
AKHIOK	3A	80	75
CHENEGA BAY	3A	86	67
CORDOVA	3A	2,454	368
KARLUK	3A	27	26
KODIAK[2]	3A	12,973	1,697
LARSEN BAY	3A	115	91
NANWALEK	3A	177	165
OLD HARBOR	3A	237	203
OUZINKIE	3A	225	197
PORT GRAHAM	3A	171	151
PORT LIONS	3A	253	163
SELDOVIA	3A	286	66
TATITLEK	3A	107	91
YAKUTAT	3A	680	375
Regulatory Area 3A Subtotals		17,871	3,735

[continued]

Table 1. [continued]

Community[1]	Regulatory Area	Population	
		Total	Alaska Native
CHIGNIK	3B	79	48
CHIGNIK LAGOON	3B	103	85
CHIGNIK LAKE	3B	145	127
COLD BAY	3B	88	15
FALSE PASS	3B	64	42
IVANOF BAY	3B	22	21
KING COVE	3B	792	379
NELSON LAGOON	3B	83	68
PERRYVILLE	3B	107	105
SAND POINT	3B	952	421
Regulatory Area 3B Subtotals		2,435	1,311
AKUTAN	4A	713	117
NIKOLSKI	4A	39	27
UNALASKA	4A	4,283	397
Regulatory Area 4A Subtotals		5,035	541
ADAK	4B	316	118
ATKA	4B	92	84
Regulatory Area 4B Subtotals		408	202
ST GEORGE ISLAND	4C	152	140
ST PAUL ISLAND	4C	532	460
Regulatory Area 4C Subtotals		684	600
GAMBELL	4D	649	622
SAVOONGA	4D	643	614
Regulatory Area 4D Subtotals		1,292	1,236
ALAKANUK	4E	652	638
ALEKNAGIK	4E	221	187
BREVIG MISSION	4E	276	254
BETHEL	4E	5,471	3,719
CHEFORNAK	4E	394	386
CHEVAK	4E	765	734
CLARK'S POINT	4E	75	69
COUNCIL ANVSA[3]	4E	0	0
DILLINGHAM	4E	2,466	1,503
EEK	4E	280	271
EGEGIK	4E	116	89
ELIM	4E	313	297
EMMONAK	4E	767	720
GOLOVIN	4E	144	133
GOODNEWS BAY	4E	230	216
HOOPER BAY	4E	1,014	971

[continued]

Table 1. [continued]

Community[1]	Regulatory Area	Population	
		Total	Alaska Native
KING SALMON	4E	442	133
KIPNUK	4E	644	631
KONGIGANAK	4E	359	349
KOTLIK	4E	591	568
KOYUK	4E	297	280
KWIGILLINGOK	4E	338	331
LEVELOCK	4E	122	116
MANOKOTAK	4E	399	378
MEKORYUK	4E	210	203
NAKNEK	4E	678	319
NAPAKIAK	4E	353	341
NAPASKIAK	4E	390	383
NEWTOK	4E	321	311
NIGHTMUTE	4E	208	197
NOME	4E	3,505	2,057
OSCARVILLE	4E	61	61
PILOT POINT	4E	100	86
PLATINUM	4E	41	38
PORT HEIDEN	4E	119	93
QUINHAGAK	4E	555	540
SCAMMON BAY	4E	465	453
SAINT MICHAEL	4E	368	343
SHAKTOOLIK	4E	230	218
SHELDON POINT	4E	164	154
SHISHMAREF	4E	562	531
SOLOMON ANVSA	4E	4	3
SOUTH NAKNEK	4E	137	115
STEBBINS	4E	547	518
TELLER	4E	268	248
TOGIAK	4E	809	750
TOKSOOK BAY	4E	532	519
TUNTUTULIAK	4E	370	366
TUNUNAK	4E	325	315
TWIN HILLS	4E	69	65
UGASHIK	4E	11	9
UNALAKLEET	4E	747	655
WALES	4E	152	137
WHITE MOUNTAIN	4E	203	175
Regulatory Area 4E Subtotals		28,880	23,176
Grand Total		81,193	37,816

Source: U.S. Census Bureau 2001

[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 municiplaity. The Council ANVSA table indicated that all 40 housing units were vacant.

Table 2. Project Chronology

Date	Event/Action
May 2003	Adoption of Final Rule, Subsistence Halibut Fishing in Alaska, by NMFS
October 9, 2003	Review of study design at ANSHWG meeting, Anchorage
Mid January 2004	Running of newspaper ads
January 20, 2004	ADF&G news release regarding mailing of SHARC surveys
11-Feb-04	First Mailing of Survey Forms
February and March 2004	Administration of EVOS Surveys in 15 southcentral and southwest Alaska communities
March 8, 2004	Second Mailing of Survey Forms
March 13 - 17, 2004	Survey administration in Gambell and Savoonga
March 29 - April 6, 2004	Meetings in Toksook Bay and Tununak; Survey administration in Toksook Bay
March 30, 2004	Briefing to the NPFMC and Alaska Board of Fisheries regarding project progress
April 9, 2004	Third Mailing of Survey Forms
May 6, 2004	Review of some preliminary results at ANSHWG meeting, Anchorage
September 22, 2004	Release of public review draft of final report
October 6, 2004	Presentation of Study Findings, NPFMC, Sitka
December 2004	Completion of revised, final report

Table 3. Sample Achievement, Alaska Subsistence Halibut Survey for 2003

Tribe/Community[1]	First Mailing			Second Mailing			Third Mailing			Totals					
	Mailed	Returned	Undeliverable	Mailed	Returned	Undeliverable	Mailed	Returned	Undeliverable	SHARCs Issued[2]	Returned by Mail	Returned through Staff	Response	Response Rate	Undeliverable
AGDAAGUX TRIBE OF KING COVE	28	8	0	20	10	0	10	3	0	28	21	0	21	75.0%	0
ANGOON COMMUNITY ASSOCIATION	118	29	0	89	14	0	74	12	0	118	55	2	57	48.3%	0
AUKQUAN TRADITIONAL COUNCIL	2									2					
CENTRAL COUNCIL TLINGIT AND HAIDA INDIAN TRIBES	537	115	18	404	100	7	297	65	5	537	280	7	287	53.4%	30
CHEVAK NATIVE VILLAGE (KASHUNAMIUT)	5									5					
CHIGNIK LAKE VILLAGE	4									4					
CHILKAT INDIAN VILLAGE	42	5	0	37	16	0	21	13	1	42	34	0	34	81.0%	1
CHILKOOT INDIAN ASSOCIATION	41	19	1	21	10	0	11	4	0	41	33	0	33	80.5%	1
CHINIK ESKIMO COMMUNITY	1									1					
CRAIG COMMUNITY ASSOCIATION	52	23	0	29	10	0	19	4	0	52	37	1	38	73.1%	0
DOUGLAS INDIAN ASSOCIATION	22	4	1	17	7	0	10	0	0	22	11	2	13	59.1%	1
EGEGIK VILLAGE	6	5	0	1	1	0	0	0	0	6	6	0	6	100.0%	0
HOONAH INDIAN ASSOCIATION	199	51	0	147	38	0	109	29	0	199	118	4	122	61.3%	0
HYDABURG COOPERATIVE ASSOCIATION	174	18	0	153	28	4	121	6	2	174	52	94	146	83.9%	6
KENAITZE INDIAN TRIBE	48	15	2	31	14	0	17	5	0	48	34	1	35	72.9%	2
KETCHIKAN INDIAN CORPORATION	639	108	7	523	111	5	406	71	3	639	290	2	292	45.7%	15
KING ISLAND NATIVE COMMUNITY	2									2					
KLAWOCK COOPERATIVE ASSOCIATION	159	27	0	132	36	1	95	32	0	159	95	6	101	63.5%	1
LESNOI VILLAGE (WOODY ISLAND)	259	58	17	184	42	3	139	23	2	259	123	0	123	47.5%	22
METLAKATLA INDIAN COMMUNITY, ANNETTE ISLAND RESERVE	343	42	0	301	47	0	254	40	2	343	129	1	130	37.9%	2
NAKNEK NATIVE VILLAGE	2									2					
NATIVE VILLAGE OF AFOGNAK	22	9	0	13	3	0	10	4	0	22	16	0	16	72.7%	0
NATIVE VILLAGE OF AKHIOK	16	5	0	11	1	1	9	4	0	16	10	2	12	75.0%	1
NATIVE VILLAGE OF AKUTAN	44	4	0	40	8	0	32	2	0	44	14	2	16	36.4%	0
NATIVE VILLAGE OF ALEKNAGIK	2									2					
NATIVE VILLAGE OF ATKA	6	4	0	2	1	0	1	0	0	6	5	0	5	83.3%	0
NATIVE VILLAGE OF BELKOFSKI	2									2					
NATIVE VILLAGE OF CHENEGA	27	5	0	21	3	0	18	6	0	27	14	1	15	55.6%	0
NATIVE VILLAGE OF CHIGNIK	11	0	0	10	4	1	5	3	0	11	7	1	8	72.7%	1
NATIVE VILLAGE OF CHIGNIK LAGOON	33	8	0	24	8	0	16	5	0	33	21	1	22	66.7%	0
NATIVE VILLAGE OF DILLINGHAM (CURYUNG)	16	6	0	10	3	0	7	2	0	16	11	0	11	68.8%	0
NATIVE VILLAGE OF EEK	21	1	0	20	4	0	16	3	0	21	8	0	8	38.1%	0
NATIVE VILLAGE OF EKUK	3									3					
NATIVE VILLAGE OF ELIM	1									1					
NATIVE VILLAGE OF EYAK	46	18	1	27	10	0	17	4	0	46	32	0	32	69.6%	1
NATIVE VILLAGE OF FALSE PASS	13	2	0	11	1	0	10	1	0	13	4	2	6	46.2%	0
NATIVE VILLAGE OF GAMBELL	6	1	0	5	0	0	5	0	0	6	1	2	3	50.0%	0
NATIVE VILLAGE OF GOODNEWS BAY (MUMTRAQ)	15	1	0	14	3	0	11	5	0	15	9	0	9	60.0%	0
NATIVE VILLAGE OF HOOPER BAY	90	11	0	79	12	0	67	13	0	90	36	0	36	40.0%	0
NATIVE VILLAGE OF KARLUK	4									4					
NATIVE VILLAGE OF KIPNUK	89	9	0	80	3	0	77	4	0	89	16	0	16	18.0%	0
NATIVE VILLAGE OF KONGIGANAK	8	3	0	5	3	0	2	0	0	8	6	0	6	75.0%	0
NATIVE VILLAGE OF KWIGILLINGOK	1									1					
NATIVE VILLAGE OF KWINHAGAK	10	2	0	8	1	0	7	1	0	10	4	1	5	50.0%	0
NATIVE VILLAGE OF LARSEN BAY	25	6	0	19	7	1	11	3	1	25	16	0	16	64.0%	2
NATIVE VILLAGE OF MEKORYUK	15	5	0	10	2	0	8	1	0	15	8	0	8	53.3%	0
NATIVE VILLAGE OF NANWALEK	32	7	0	25	8	0	17	0	0	32	15	8	23	71.9%	0
NATIVE VILLAGE OF NAPAKIAK	3									3					
NATIVE VILLAGE OF NIGHTMUTE	4									4					
NATIVE VILLAGE OF NIKOLSKI	12	6	0	6	0	0	6	0	0	12	6	0	6	50.0%	0
NATIVE VILLAGE OF OUZINKIE	30	10	0	20	4	0	16	4	0	30	18	2	20	66.7%	0
NATIVE VILLAGE OF PERRYVILLE	12	2	0	10	2	0	8	3	0	12	7	4	11	91.7%	0
NATIVE VILLAGE OF PORT GRAHAM	42	14	0	21	0	0	21	8	0	42	22	14	36	85.7%	0

Continued

Table 3. Sample Achievement, Alaska Subsistence Halibut Survey for 2003

Tribe/Community[1]	First Mailing			Second Mailing			Third Mailing			Totals					
	Mailed	Returned	Undeliverable	Mailed	Returned	Undeliverable	Mailed	Returned	Undeliverable	SHARCs Issued[2]	Returned by Mail	Returned through Staff	Response	Response Rate	Undeliverable
NATIVE VILLAGE OF PORT LIONS	53	7	1	45	11	0	34	15	0	53	33	5	38	71.7%	1
NATIVE VILLAGE OF SAVOONGA	41	7	0	33	2	0	27	1	0	41	10	26	36	87.8%	0
NATIVE VILLAGE OF SCAMMON BAY	5									5					
NATIVE VILLAGE OF SHAKTOOLIK	1									1					
NATIVE VILLAGE OF SHISHMAREF	1									1					
NATIVE VILLAGE OF TATITLEK	16	5	0	11	3	0	8	0	0	16	8	6	14	87.5%	0
NATIVE VILLAGE OF TOKSOOK BAY (NUNAKAUYAK)	533	21	0	512	16	3	493	26	1	533	63	46	109	20.5%	4
NATIVE VILLAGE OF TUNUNAK	1									1					
NATIVE VILLAGE OF UNALAKLEET	6	2	0	4	1	0	3	2	0	6	5	0	5	83.3%	0
NATIVE VILLAGE OF UNGA	10	2	0	8	2	0	6	5	0	10	9	0	9	90.0%	0
NATIVE VILLAGE OF WHITE MOUNTAIN	1									1					
NEWTOK VILLAGE	3									3					
NINILCHIK VILLAGE	78	26	0	52	18	0	34	9	0	78	53	0	53	67.9%	0
NOME ESKIMO COMMUNITY	13	0	0	12	4	0	8	2	0	13	6	1	7	53.8%	0
ORGANIZED VILLAGE OF KAKE	119	28	1	90	21	0	69	22	0	119	71	1	72	60.5%	1
ORGANIZED VILLAGE OF KASAAN	3									3					
ORGANIZED VILLAGE OF SAXMAN	58	9	1	47	6	0	41	5	0	58	20	1	21	36.2%	1
ORUTSARARMUIT NATIVE VILLAGE	6	2	0	4	0	0	4	2	0	6	4	0	4	66.7%	0
PAULOFF HARBOR VILLAGE	57	2	0	55	7	0	48	10	0	57	19	0	19	33.3%	0
PETERSBURG INDIAN ASSOCIATION	119	32	4	77	22	1	54	15	0	119	69	13	82	68.9%	5
PLATINUM TRADITIONAL VILLAGE	2									2					
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST GEORGE	26	4	0	22	6	0	16	2	0	26	12	0	12	46.2%	0
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST PAUL	251	20	3	228	9	2	217	13	0	251	42	0	42	16.7%	5
QAGAN TOYAGUNGIN TRIBE OF SAND POINT VILLAGE	34	3	0	31	5	0	26	9	0	34	17	0	17	50.0%	0
QAWALINGIN TRIBE OF UNALASKA	14	3	0	11	4	0	7	3	0	14	10	0	10	71.4%	0
SELDOVIA VILLAGE TRIBE	35	18	1	16	8	1	7	2	0	35	28	0	28	80.0%	2
SHOONAQ' TRIBE OF KODIAK	132	50	0	82	19	0	63	25	0	132	94	0	94	71.2%	0
SITKA TRIBE OF ALASKA	409	107	7	284	73	5	200	25	1	409	205	78	283	69.2%	13
SKAGWAY VILLAGE	1									1					
SOUTH NAKNEK VILLAGE	1									1					
TRADITIONAL VILLAGE OF TOGIAK	6	1	0	5	0	0	5	0	0	6	1	0	1	16.7%	0
UGASHIK VILLAGE	4									4					
VILLAGE OF CHEFORNAK	16	0	0	16	2	0	14	0	0	16	2	0	2	12.5%	0
VILLAGE OF CLARK'S POINT	2									2					
VILLAGE OF KANATAK	11	0	1	10	0	0	10	0	0	11	0	0	0	0.0%	1
VILLAGE OF OLD HARBOR	16	6	0	10	3	0	7	3	0	16	12	2	14	87.5%	0
VILLAGE OF SALAMATOFF	2									2					
WRANGELL COOPERATIVE ASSOCIATION	95	38	3	54	17	0	37	12	0	95	67	0	67	70.5%	3
YAKUTAT TLINGIT TRIBE	53	19	1	33	11	0	22	7	0	53	37	0	37	69.8%	1
Tribal Subtotals	5,578	1,093	70	4,380	854	36	3,478	610	19	5,578	2,557	339	2,896	51.9%	125
ADAK	5									5					
AKHIOK	1									1					
AKUTAN	5									5					
ALEKNAGIK	1									1					
ANGOON	24	8	0	16	7	0	9	4	0	24	19	0	19	79.2%	0
ATKA	13	2	0	11	1	0	10	0	0	13	3	0	3	23.1%	0
BETHEL	4									4					
CHEFORNAK	4									4					
CHENEGA BAY	6	3	0	3	0	0	3	0	0	6	3	0	3	50.0%	0
CHEVAK	4									4					
CHIGNIK	5									5					
CHIGNIK LAGOON	7	2	0	4	0	0	4	4	0	7	6	1	7	100.0%	0

Continued

Table 3. Sample Achievement, Alaska Subsistence Halibut Survey for 2003

Tribe/Community[1]	First Mailing			Second Mailing			Third Mailing			Totals					
	Mailed	Returned	Undeliverable	Mailed	Returned	Undeliverable	Mailed	Returned	Undeliverable	SHARCs Issued[2]	Returned by Mail	Returned through Staff	Response	Response Rate	Undeliverable
CHIGNIK LAKE	7	3	0	4	1	1	2	2	0	7	6	0	6	85.7%	1
CHINIAK	5									5					
COFFMAN COVE	39	26	0	13	5	0	8	4	0	39	35	0	35	89.7%	0
COLD BAY	18	7	0	11	6	0	5	2	0	18	15	0	15	83.3%	0
CORDOVA	316	154	0	162	77	2	83	26	0	316	257	0	257	81.3%	2
CRAIG	281	136	1	144	59	0	85	33	1	281	228	0	228	81.1%	2
DILLINGHAM	22	17	0	5	2	0	3	2	0	22	21	0	21	95.5%	0
EDNA BAY	43	17	1	25	20	0	5	4	0	43	41	0	41	95.3%	1
EEK	1									1					
ELFIN COVE	16	3	0	13	10	0	3	0	0	16	13	0	13	81.3%	0
ELLAMAR	1									1					
FALSE PASS	6	5	0	1	0	0	1	1	0	6	6	0	6	100.0%	0
GAMBELL	1									1					
GOODNEWS BAY	2									2					
GUSTAVUS	52	25	1	26	9	0	17	6	0	52	40	0	40	76.9%	1
HAINES	380	213	4	163	87	0	76	32	1	380	332	2	334	87.9%	5
HOLLIS	41	15	0	26	11	0	15	9	0	41	35	2	37	90.2%	0
HOONAH	120	53	1	66	20	1	45	10	0	120	83	0	83	69.2%	2
HOOPER BAY	8	0	0	8	0	0	8	4	0	8	4	0	4	50.0%	0
HYDABURG	11	7	0	4	0	0	4	2	0	11	9	2	11	100.0%	0
HYDER	37	9	0	28	9	0	19	11	0	37	29	0	29	78.4%	0
KAKE	61	20	0	41	8	0	33	13	0	61	41	4	45	73.8%	0
KASAAN	16	6	0	10	1	0	9	4	0	16	11	0	11	68.8%	0
KING COVE	11	5	0	6	0	0	6	3	0	11	8	0	8	72.7%	0
KING SALMON	4									4					
KIPNUK	1									1					
KLAWOCK	115	43	1	71	30	0	41	7	0	115	80	0	80	69.6%	1
KLUKWAN	3									3					
KODIAK	1,100	466	20	612	222	2	388	124	2	1,100	812	6	818	74.4%	24
KONGIGANAK	4									4					
KOTLIK	1									1					
KOYUK	1									1					
LARSEN BAY	12	4	1	7	3	0	4	2	0	12	9	0	9	75.0%	1
MEKORYUK	2									2					
METLAKATLA	31	11	0	20	2	0	18	3	0	31	16	0	16	51.6%	0
MEYERS CHUCK	10	4	0	6	4	0	2	0	0	10	8	0	8	80.0%	0
NAKNEK	4									4					
NANWALEK	7	3	0	4	0	0	4	1	0	7	4	2	6	85.7%	0
NEWTOK	1									1					
NIGHTMUTE	25	2	0	23	2	0	21	3	0	25	7	0	7	28.0%	0
NIKOLSKI	5									5					
NOME	7	2	0	5	2	0	3	1	0	7	5	0	5	71.4%	0
OLD HARBOR	37	16	0	21	6	0	15	0	0	37	22	7	29	78.4%	0
OUZINKIE	17	9	1	7	1	0	6	5	0	17	15	0	15	88.2%	1
PELICAN	41	20	0	21	12	0	9	4	0	41	36	0	36	87.8%	0
PETERSBURG	908	451	6	451	188	2	260	82	3	908	721	1	722	79.5%	11
PLATINUM	2									2					
PORT ALEXANDER	20	4	0	16	4	0	12	4	0	20	12	0	12	60.0%	0
PORT GRAHAM	15	3	0	6	0	0	6	0	0	15	3	11	14	93.3%	0
PORT LIONS	24	14	0	10	3	0	7	1	0	24	18	2	20	83.3%	0

Continued

Table 3. Sample Achievement, Alaska Subsistence Halibut Survey for 2003

Tribe/Community[1]	First Mailing			Second Mailing			Third Mailing			Totals					
	Mailed	Returned	Undeliverable	Mailed	Returned	Undeliverable	Mailed	Returned	Undeliverable	SHARCs Issued[2]	Returned by Mail	Returned through Staff	Response	Response Rate	Undeliverable
PORT PROTECTION	13	8	0	5	3	0	2	1	0	13	12	0	12	92.3%	0
PT. BAKER	20	11	0	9	6	0	3	2	0	20	19	0	19	95.0%	0
QUINHAGAK	4														
SAND POINT	5														
SAVOONGA	2														
SAXMAN	30	14	0	16	1	0	15	4	0	30	19	0	19	63.3%	0
SCAMMON BAY	5														
SELDOVIA	89	42	2	45	31	0	14	6	0	89	79	0	79	88.8%	2
SHELDON POINT	1														
SITKA	1,224	544	7	673	266	5	402	105	1	1,224	915	6	921	75.2%	13
SKAGWAY	40	23	0	17	10	0	7	2	0	40	35	0	35	87.5%	0
SOUTH NAKNEK	1														
ST GEORGE ISLAND	7	1	0	6	1	0	5	2	0	7	4	0	4	57.1%	0
ST PAUL ISLAND	5														
STERLING	1														
TATITLEK	7	2	0	5	3	0	2	1	0	7	6	0	6	85.7%	0
TENAKEE SPRINGS	36	24	0	12	5	0	7	2	0	36	31	0	31	86.1%	0
THORNE BAY	97	52	0	45	26	0	19	5	0	97	83	0	83	85.6%	0
TOKSOOK BAY	3														
UNALASKA	74	32	1	41	12	1	28	12	0	74	56	0	56	75.7%	2
WHALE PASS	24	17	0	7	6	0	1	0	0	24	23	0	23	95.8%	0
WRANGELL	362	142	6	214	100	1	113	34	1	362	276	2	278	76.8%	8
YAKUTAT	36	9	2	25	10	0	15	4	0	36	23	1	24	66.7%	2
Rural Community Subtotals	6,057	2,737	57	3,252	1,306	15	1,930	601	11	6,057	4,644	53	4,697	77.5%	83
Grand Totals	11,635	3,830	127	7,632	2,160	51	5,408	1,211	30	11,635	7,201	392	7,593	65.3%	208

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

[2] SHARC = Subsistence Halibut Registration Certificate

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC survey, 2004

Table 4. Estimated Alaska Subsistence Harvests of Halibut by SHARC Type, Regulatory Area, and Gear Type, 2003[1]

SHARC Type	Halibut Regulatory Area	Number of SHARCs Issued	Estimated Harvest by Gear Type[2]										
			Setline (Fixed) Gear			Hand-Operated Gear			All Gear				
			Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	95% C.I. Percent (Number)	Estimated Pounds Harvested	95% C.I. Percent (Pounds)
Tribal	2C	3,132	793	8,085	239,225	264	1,434	32,193	968	9,518	10.3%	271,416	11.8%
Tribal	3A	936	208	2,102	51,085	191	1,727	35,477	358	3,828	8.3%	86,563	10.7%
Tribal	3B	204	43	502	9,293	59	380	9,035	90	884	26.1%	18,328	26.6%
Tribal	4A	70	9	31	376	42	323	11,269	45	353	52.7%	11,645	46.3%
Tribal	4B	6	2	11	198	2	8	180	4	19	73.7%	378	79.1%
Tribal	4C	277	44	707	11,698	73	504	11,690	101	1,211	60.2%	23,388	46.8%
Tribal	4D	47	19	67	3,936	2	8	444	25	75	26.7%	4,380	24.6%
Tribal	4E	906	69	803	10,116	183	2,244	36,528	245	3,046	17.0%	46,640	12.9%
Tribal	All	5,578	1,187	12,308	325,927	816	6,628	136,816	1,836	18,934	7.3%	462,738	7.8%
Rural	2C	4,095	1,832	12,027	299,259	489	2,938	57,283	2,114	14,963	3.5%	356,543	3.7%
Rural	3A	1,674	534	4,854	116,582	397	3,634	76,467	827	8,485	5.4%	193,050	5.5%
Rural	3B	59	22	162	3,391	34	289	6,247	44	450	13.1%	9,637	18.3%
Rural	4A	84	33	324	6,082	25	153	3,000	48	476	24.0%	9,082	20.4%
Rural	4B	18	9	37	1,281	4	17	812	9	55	172.7%	2,094	194.6%
Rural	4C	12	0	0	0	4	23	368	4	23	147.8%	368	140.4%
Rural	4D	3	0	0	0	0	0	0	1	0	0.0%	0	0.0%
Rural	4E	112	11	33	336	39	506	7,481	59	540	56.9%	7,818	62.7%
Rural	All	6,057	2,441	17,437	426,931	992	7,560	151,658	3,106	24,992	3.1%	578,592	3.1%
All	2C	7,227	2,625	20,112	538,484	753	4,372	89,476	3,082	24,481	4.5%	627,959	5.5%
All	3A	2,610	742	6,956	167,667	588	5,361	111,944	1,185	12,313	4.5%	279,613	5.0%
All	3B	263	65	664	12,684	93	669	15,282	134	1,334	17.9%	27,965	18.5%
All	4A	154	42	355	6,458	67	476	14,269	93	829	25.8%	20,727	26.9%
All	4B	24	11	48	1,479	6	25	992	13	74	105.4%	2,472	134.8%
All	4C	289	44	707	11,698	77	527	12,058	105	1,234	59.1%	23,756	46.1%
All	4D	50	19	67	3,936	2	8	444	26	75	26.7%	4,380	24.6%
All	4E	1,018	80	836	10,452	222	2,750	44,009	304	3,586	16.8%	54,458	14.2%
All	All	11,635	3,628	29,745	752,858	1,808	14,188	288,474	4,942	43,926	3.6%	1,041,330	3.9%

[1] SHARC = Subsistence halibut registration certificate.

[2] Pounds are net (dressed) weight. Net weight = 75% of round weight. Setline = longline or skate. Hand-operated gear = rod and reel or handline.

Source: Alaska Department of Fish and Game, Division of Subsistence Survey, 2004

Table 5. Age of Subsistence Halibut Registration Certificate Holders by SHARC Type, 2003

SHARC Type	Age in Years (Number of SHARC Holders)																				
	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	totals
Tribal	102	219	322	336	358	364	409	539	660	580	536	372	311	215	143	70	26	10	5	1	5578
	1.8%	3.9%	5.8%	6.0%	6.4%	6.5%	7.3%	9.7%	11.8%	10.4%	9.6%	6.7%	5.6%	3.9%	2.6%	1.3%	0.5%	0.2%	0.1%	0.0%	
Rural	33	90	141	181	226	271	431	528	784	890	839	655	453	258	150	81	38	4	2	2	6057
	0.5%	1.5%	2.3%	3.0%	3.7%	4.5%	7.1%	8.7%	12.9%	14.7%	13.9%	10.8%	7.5%	4.3%	2.5%	1.3%	0.6%	0.1%	0.0%	0.0%	
Grand Totals	135	309	463	517	584	635	840	1067	1444	1470	1375	1027	764	473	293	151	64	14	7	3	11635
	1.2%	2.7%	4.0%	4.4%	5.0%	5.5%	7.2%	9.2%	12.4%	12.6%	11.8%	8.8%	6.6%	4.1%	2.5%	1.3%	0.6%	0.1%	0.1%	0.0%	
Toksook Bay	14	70	95	57	37	35	41	47	37	17	20	17	25	8	3	6	0	2	1	1	533
	2.6%	13.1%	17.8%	10.7%	6.9%	6.6%	7.7%	8.8%	6.9%	3.2%	3.8%	3.2%	4.7%	1.5%	0.6%	1.1%	0.0%	0.4%	0.2%	0.2%	

Source: SHARC database, Restricted Access Management Program, NMFS, Juneau

Table 6. Number of Hooks Usually Fished, Setline (Fixed) Gear, Alaska Halibut Subsistence Fishery, 2003

Regulatory Area	SHARC holders	Number of Hooks																														Grand Total[1]
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	21	22	23	24	25	26	27	28	29	30	Missing	
2C	7,227	16	40	24	17	19	31	5	10	5	190	1	38	6	3	185	4	3	14	541	2	6	2	9	171	4	8	19	20	1,215	20	2,627
		0.6%	1.5%	0.9%	0.6%	0.7%	1.2%	0.2%	0.4%	0.2%	7.2%	0.0%	1.4%	0.2%	0.1%	7.0%	0.1%	0.1%	0.5%	20.6%	0.1%	0.2%	0.1%	0.4%	6.5%	0.1%	0.3%	0.7%	0.8%	46.3%	0.8%	
3A	2,610	9	8	1	5	18	7	0	4	0	100	0	9	1	0	58	0	1	5	164	0	0	0	2	72	0	0	9	3	251	18	747
		1.2%	1.1%	0.2%	0.6%	2.4%	0.9%	0.0%	0.6%	0.0%	13.4%	0.0%	1.2%	0.2%	0.0%	7.7%	0.0%	0.2%	0.7%	22.0%	0.0%	0.0%	0.0%	0.2%	9.7%	0.0%	0.0%	1.3%	0.4%	33.6%	2.4%	
3B	263	16	0	1	0	0	0	0	0	0	6	0	0	0	0	3	0	0	0	9	0	1	1	0	1	0	0	0	1	26	1	67
		23.8%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%	0.0%	0.0%	0.0%	3.7%	0.0%	0.0%	0.0%	13.4%	0.0%	1.7%	2.1%	0.0%	1.8%	0.0%	0.0%	0.0%	1.8%	39.5%	1.6%	
4A	154	6	0	0	1	0	0	0	0	0	1	0	4	0	0	4	0	0	1	5	0	0	0	0	4	0	0	0	0	14	0	42
		13.7%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3.1%	0.0%	9.6%	0.0%	0.0%	9.7%	0.0%	0.0%	3.1%	12.6%	0.0%	0.0%	0.0%	0.0%	9.6%	0.0%	0.0%	0.0%	0.0%	34.4%	0.0%	
4B	24	4	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	1	1	12
		36.1%	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%	20.8%	0.0%	0.0%	0.0%	20.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	10.0%	
4C	289	12	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	6	45
		26.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.3%	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%	0.0%	0.0%	45.8%	13.3%	
4D	50	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	7	0	19
		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.0%	0.0%	0.0%	0.0%	0.0%	18.0%	0.0%	0.0%	0.0%	28.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	36.0%	0.0%	
4E	1,018	24	3	3	2	0	3	0	0	0	4	0	0	0	2	0	0	0	0	7	0	0	0	0	0	0	0	0	0	30	2	80
		30.4%	3.8%	3.1%	2.1%	0.0%	4.2%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	8.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	38.0%	2.1%	
Alaska	11,635	87	51	29	24	37	42	5	14	5	305	1	51	13	4	255	4	4	21	734	2	7	4	11	249	4	8	29	24	1,566	48	3,637
		2.4%	1.4%	0.8%	0.7%	1.0%	1.1%	0.1%	0.4%	0.1%	8.4%	0.0%	1.4%	0.4%	0.1%	7.0%	0.1%	0.1%	0.6%	20.2%	0.1%	0.2%	0.1%	0.3%	6.8%	0.1%	0.2%	0.8%	0.7%	43.1%	1.3%	

[1] Number of fishers using setline (fixed) gear. Due to rounding, totals do not exactly match Table 4.

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2004

Table 7. Average Net Weight of Subsistence and Sport Harvested Halibut, 2003, by Regulatory Area

Area	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	24,481	627,959	25.7	5,226	111,502	21.3	29,707	739,461	24.9
3A	12,313	279,613	22.7	4,597	103,804	22.6	16,910	383,417	22.7
3B	1,334	27,965	21.0	139	3,844	27.7	1,473	31,809	21.6
4A	829	20,727	25.0	216	6,068	28.1	1,045	26,795	25.6
4B	74	2,472	33.4	44	1,232	28.0	118	3,704	31.4
4C	1,234	23,756	19.3	502	18,387	36.6	1,736	42,143	24.3
4D	75	4,380	58.4	0	0	0.0	75	4,380	58.4
4E	3,586	54,458	15.2	60	1,110	18.5	3,646	55,568	15.2
Alaska	43,926	1,041,330	23.7	10,784	245,947	22.8	54,710	1,287,277	23.5

[1] Sport harvest of halibut by SHARC holders.

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2004

Table 8. Estimated Alaska Subsistence Harvests of Halibut by Halibut Regulatory Area and Subarea, 2003.

Subarea	Halibut Regulatory Area	Number of SHARCs Issued	Estimated Harvest by Gear Type[1]								
			Setline (fixed) Gear			Hand-Operated Gear			All 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]
Southern Southeast Alaska	2C	3,928	1,253	8,667	243,117	392	2,288	47,322	1,527	10,956	290,441
Northern Southeast Alaska	2C	1,660	623	5,431	138,542	196	1,095	21,234	739	6,522	159,771
Sitka LAMP Area	2C	1,631	746	5,846	153,473	156	941	19,848	808	6,789	173,322
Subtotal	2C	7,219	2,622	19,944	535,132	744	4,324	88,404	3,074	24,267	623,534
Yakutat Area	3A	89	36	362	8,778	15	134	2,420	42	494	11,198
Prince William Sound	3A	420	104	604	16,824	56	557	11,585	150	1,162	28,409
Cook Inlet	3A	360	78	1,333	24,747	131	1,622	27,861	187	2,955	52,609
Kodiak Island Road System	3A	1,349	316	2,866	71,851	206	1,647	42,177	463	4,511	114,027
Kodiak Island Other	3A	405	222	2,001	50,083	188	1,447	29,171	362	3,447	79,255
Subtotal	3A	2,623	756	7,166	172,283	596	5,407	113,214	1,204	12,569	285,498
Chignik Area	3B	172	29	194	5,397	45	271	5,102	69	468	10,500
Lower Alaska Peninsula	3B	90	35	473	7,512	46	384	9,467	63	857	16,977
Subtotal	3B	262	64	667	12,909	91	655	14,569	132	1,325	27,477
Eastern Aleutians - East	4A	141	44	360	6,255	65	465	13,090	89	825	19,345
Eastern Aleutians - West	4A	16	0	0	0	7	30	1,852	7	30	1,852
Subtotal	4A	157	44	360	6,255	72	495	14,942	96	855	21,197
Western Aleutians - East	4B	24	11	50	1,634	5	23	947	12	74	2,582
Western Aleutians - Other	4B	0	0	0	0	0	0	0	0	0	0
Subtotal	4B	24	11	50	1,634	5	23	947	12	74	2,582
St. George Island	4C	33	9	100	1,235	13	60	807	17	160	2,042
St. Paul Island	4C	255	29	595	9,588	64	467	11,251	82	1,062	20,839
Subtotal	4C	288	38	695	10,823	77	527	12,058	99	1,222	22,881
St. Lawrence Island	4D	50	19	67	3,936	2	8	444	26	75	4,380
Area 4D, Other	4D	0	0	0	0	0	0	0	0	0	0
Subtotal	4D	50	19	67	3,936	2	8	444	26	75	4,380
Bristol Bay	4E	81	8	21	342	2	3	93	18	24	435
YK Delta	4E	898	60	773	9,537	214	2,739	43,746	266	3,513	53,284
Norton Sound	4E	33	5	0	0	2	2	56	10	2	56
Subtotal	4E	1,012	73	794	9,879	218	2,744	43,895	294	3,539	53,775
Grand totals[1]	Alaska	11,635	3,627	29,743	752,851	1,805	14,183	288,473	4,937	43,926	1,041,324

[1] Due to rounding, the column totals may differ slightly from those reported in Table 4. Setline = longline or skate. Hand-operated gear = rod and reel or handline.

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

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2004

Table 9. Estimated Sport Harvests of Halibut by SHARC Type and Halibut Regulatory Area, 2003[1]

Habibut Regulatory Area	Number of SHARCs Issued	Sport Fished?		Sport Harvest	
		Estimated Number	Percent	Estimated Number	Estimated Pounds, Net Weight
Tribal SHARCs:					
Area 2 C Subtotal	3,132	447	14.3%	1,206	30,017
Area 3 A Subtotal	936	169	18.1%	714	16,477
Area 3B Subtotal	204	25	12.3%	98	2,939
Area 4A Subtotal	70	13	18.6%	27	1,073
Area 4B Subtotal	6	1	16.7%	2	45
Area 4C Subtotal	277	18	6.5%	502	18,387
Area 4D Subtotal	47	0	0.0%	0	0
Area 4E Subtotal	906	17	1.9%	47	863
Tribal Subtotals	5,578	690	12.4%	2,596	69,801
Rural SHARCs:					
Area 2C Subtotal	4,095	1,144	27.9%	4,020	81,485
Area 3A Subtotal	1,674	684	40.9%	3,883	87,327
Area 3B Subtotal	59	13	22.0%	41	905
Area 4A Subtotal	84	34	40.5%	189	4,995
Area 4B Subtotal	18	7	38.9%	42	1,187
Area 4C Subtotal	12	0	0.0%	0	0
Area 4D Subtotal	3	0	0.0%	0	0
Area 4E Subtotal	112	8	7.1%	13	247
Rural Subtotals	6,057	1,890	31.2%	8,188	176,146
Alaska Totals	11,635	2,580	22.2%	10,784	245,947
Tribal and Rural SHARCs Combined:					
Area 2C Total	7,227	1,591	31.8%	5,226	111,502
Area 3A Total	2,610	853	43.2%	4,597	103,804
Area 3B Total	263	38	21.7%	139	3,844
Area 4A Total	154	47	49.5%	216	6,068
Area 4B Total	24	8	80.0%	44	1,232
Area 4C Total	289	18	30.5%	502	18,387
Area 4D Total	50	0	0.0%	0	0
Area 4E Total	1,018	25	7.8%	60	1,110
Alaska Totals	11,635	2,580	22.2%	10,784	245,947

[1] SHARC = Subsistence Halibut Registration Certificate, issued by the National Marine Fisheries Service

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2004

Table 10. Estimated Incidental Harvests of Lingcod and Rockfish by SHARC Type and Halibut Regulatory Area, 2003[1]

Habibut Regulatory Area	Number of SHARCs Issued	Subsistence Fished for Halibut?		Lingcod Incidental Harvest			Rockfish Incidental Harvest		
		Estimated Number	Percent	Estimated Number with Harvest	Percent of Those Who Subsistence Fished for Halibut	Estimated Number of fish	Estimated Number with Harvest	Percent of Those Who Subsistence Fished for Halibut	Estimated Number of fish
Tribal SHARCs:									
Area 2 C Subtotal	3,132	968	30.9%	124	12.8%	557	276	28.5%	2,962
Area 3 A Subtotal	936	358	38.2%	50	14.0%	221	69	19.3%	1,211
Area 3B Subtotal	204	90	44.1%	4	4.4%	60	6	6.7%	154
Area 4A Subtotal	70	45	64.3%	9	20.0%	419	20	44.4%	846
Area 4B Subtotal	6	4	66.7%	0	0.0%	0	0	0.0%	0
Area 4C Subtotal	277	101	36.5%	18	17.8%	99	12	11.9%	93
Area 4D Subtotal	47	25	53.2%	3	12.0%	61	2	8.0%	4
Area 4E Subtotal	906	245	27.0%	33	13.5%	101	13	5.3%	75
Tribal Subtotals	5,578	1,836	32.9%	241	13.1%	1,518	398	21.7%	5,345
Rural SHARCs:									
Area 2C Subtotal	4,095	2,114	51.6%	328	15.5%	1,128	643	30.4%	7,005
Area 3A Subtotal	1,674	827	49.4%	110	13.3%	390	176	21.3%	2,287
Area 3B Subtotal	59	44	74.6%	9	20.5%	142	5	11.4%	86
Area 4A Subtotal	84	48	57.1%	3	6.3%	29	7	14.6%	106
Area 4B Subtotal	18	9	50.0%	4	44.4%	43	3	33.3%	5
Area 4C Subtotal	12	4	33.3%	0	0.0%	0	0	0.0%	0
Area 4D Subtotal	3	1	33.3%	0	0.0%	0	0	0.0%	0
Area 4E Subtotal	112	59	52.7%	4	6.8%	48	7	11.9%	36
Rural Subtotals	6,057	3,106	51.3%	458	14.7%	1,780	841	27.1%	9,525
Totals	11,635	4,942	42.5%	699	14.1%	3,298	1,239	25.1%	14,870
Tribal and Rural SHARCs Combined:									
Area 2C Total	7,227	3,082	42.6%	452	14.7%	1,685	919	29.8%	9,967
Area 3A Total	2,610	1,185	45.4%	160	13.5%	611	245	20.7%	3,498
Area 3B Total	263	134	51.0%	13	9.7%	202	11	8.2%	240
Area 4A Total	154	93	60.4%	12	12.9%	448	27	29.0%	952
Area 4B Total	24	13	54.2%	4	30.8%	43	3	23.1%	5
Area 4C Total	289	105	36.3%	18	17.1%	99	12	11.4%	93
Area 4D Total	50	26	52.0%	3	11.5%	61	2	7.7%	4
Area 4E Total	1,018	304	29.9%	37	12.2%	149	20	6.6%	111
Totals	11,635	4,942	42.5%	699	14.1%	3,298	1,239	25.1%	14,870

[1] SHARC = Subsistence Halibut Registration Certificate, issued by the National Marine Fisheries Service

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2004

Table 11. Estimated Harvests of Lingcod and Rockfish by SHARC Holders while Subsistence Fishing for Halibut, by Geographic Area, 2003

Subarea	Regulatory Area	Number of SHARCs Issued	Estimated Harvest[1]			
			Lingcod		Rockfish	
			Estimated Number Fished	Estimated Number Harvested	Estimated Number Fished	Estimated Number Harvested
Southern Southeast Alaska	2C	3,928	146	551	432	4,366
Northern Southeast Alaska	2C	1,660	47	138	136	1,194
Sitka LAMP Area	2C	1,631	258	993	348	4,355
Subtotal	2C	7,219	451	1,682	916	9,915
Yakutat Area	3A	89	20	77	12	192
Prince William Sound	3A	420	35	143	62	752
Cook Inlet	3A	360	20	117	37	815
Kodiak Island Road System	3A	1,349	51	144	92	955
Kodiak Island Other	3A	405	33	131	50	833
Subtotal	3A	2,623	159	612	253	3,547
Chignik Area	3B	172	8	24	3	43
Lower Alaska Peninsula	3B	90	5	178	8	197
Subtotal	3B	262	13	202	11	240
Eastern Aleutians - East	4A	141	12	447	25	912
Eastern Aleutians - West	4A	16	0	0	2	40
Subtotal	4A	157	12	447	27	952
Western Aleutians - East	4B	24	4	43	2	5
Subtotal	4B	24	4	43	2	5
St. George Island	4C	33	0	0	0	0
St. Paul Island	4C	255	18	99	12	93
Subtotal	4C	288	18	99	12	93
St. Lawrence Island	4D	50	3	61	2	4
Subtotal	4D	50	3	61	2	4
Bristol Bay	4E	81	0	0	1	10
YK Delta	4E	898	37	148	17	73
Norton Sound	4E	33	0	0	2	28
Subtotal	4E	1,012	37	148	20	111
Grand Total[1]	Alaska	11,635	697	3,294	1,243	14,867

[1] Due to rounding, the column totals differ slightly from those reported in Table 10.

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2004

Table 12. Comparison of "Subsistence" Halibut Harvest Estimates by Regulatory Area, Pounds Net Weight

	Estimated Pounds, 2000[1]					Estimated Pounds, 2003[2]				
Regulatory Area	Removed from Commercial Gear	Other Non-Commercial Gear[3]	Rod and Reel	Total	w/o Commercial retention	Setline (Fixed) Gear	Rod and Reel or Handline	All Subsistence Methods	"Sport"[5]	Total
District 2C	82,632		500,095	582,727	500,095	538,484	89,476	627,959	111,502	739,461
District 3A	25,775	29,359	146,321	201,454	175,679	167,667	111,944	279,613	103,804	383,417
District 3B	17,008	18,174	4,027	39,209	22,201	12,684	15,282	27,965	3,844	31,809
District 4A	12,774	24,374	88,330	125,477	112,704	6,458	14,269	20,727	6,068	26,795
District 4B	320	2,961	413	3,695	3,375	1,479	992	2,472	1,232	3,704
District 4C	14,907	40,958	94	55,959	41,051	11,698	12,058	23,756	18,387	42,143
District 4D[4]						3,936	444	4,380	0	4,380
District 4E	259	69,440	267	69,966	69,707	10,452	44,009	54,458	1,110	55,568
Totals	153,674	185,266	739,546	1,078,486	924,811	752,858	288,474	1,041,330	245,947	1,287,277

[1] As estimated by R. Wolfe in a report to the Alaska Board of Fisheries, May 2001. Based on data in the Community Profile Database (Scott et al. 2001)
This estimate is based on household surveys for varying harvest years. Per capita harvests from those studies are applied to the 2000 population of communities to develop a harvest estimate. Wolfe reported the data in round weight. Weights have been converted to net weight (net weight = 75% round weight)

[2] ADF&G Division of Subsistence SHARC survey, 2004

[3] In 2C and Yakutat in 3A, surveys did not ask about "other non-commercial gear." This category primarily includes setlines (longlines or skate).

[4] No harvest data available prior to 2003

[5] By holders of SHARCs only.

Table 13. Estimated Harvests of Halibut by Gear Type and Partipication in the Subsistence and Sport Fisheries, Selected Alaska Communities, 2003[1]

Community	Number of SHARCs Issued[2]	Subsistence Harvests						Sport Harvest		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	358	68	7,613	40	7,885	102	15,498	144	11,534	194	27,032
Kodiak	1,320	438	101,575	278	51,678	646	153,254	498	68,170	858	221,424
Petersburg	1,047	330	41,704	138	14,013	415	55,718	268	19,611	523	75,329
Port Graham	52	10	4,398	28	7,056	35	11,454	3	156	36	11,610
Sitka	1,639	760	155,276	160	19,604	821	174,880	401	32,408	956	207,288
Toksook Bay	532	8	3,790	47	20,709	54	24,500	0	0	54	24,500
Unalaska[3]	92	39	6,713	31	4,146	50	10,860	33	5,519	70	16,379

1 For data on all communities, see Appendix Tables A-4, A-5, and A-6
2 SHARC = Subsistence halibut registration certificate; includes all SHARC holders living in the community
3 Includes Dutch Harbor

Source: Alaska Department of Fish and Game, Division of Subsistence SHARC Survey, 2004

Table 14. Estimated Harvests of Halibut for Home Use, Sitka

Year	Number of Fishing Households	Pounds Usable (Net) Weight: Removed from Commercial Harvests	Rod and Reel	Other Methods[1]	Total	Total w/o Commercial Removal	95% confidence range (+/-%)
1987	1252	12,353	180,982		193,335	180,982	22
1996	943	16,528	135,048	14,196	165,772	149,244	28
Annual average	1098	14,441	158,015	14,196	179,554	165,113	

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

Source: Scott et al. 2001

Table 15. Estimated Harvests of Halibut for Home Use, Petersburg

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

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

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

Table 16. Estimated Harvests of Halibut for Home Use, Cordova

Year	Number of Fishing Households	Pounds Usable (Net) Weight: Removed from Commercial Harvests	Rod and Reel	Other Methods	Total	Total w/o Commercial Removal	95% confidence range (+/-%)
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 average[1]	325	11,047	55,864	1,421	68,331	57,285	

Source: Scott et al. 2001

Table 17. Estimated Harvests of Halibut for Home Use, Port Graham

Year	Number of Fishing Households	Pounds Usable (Net) Weight: Removed from Commercial Harvests	Rod and Reel	Other Methods	Total	Total w/o Commercial Removal	95% confidence range (+/-%)
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

Source: Scott et al. 2001

Table 18. Estimated Harvests of Halibut for Home Use, Kodiak Road System

Year	Number of Fishing Households	Pounds Usable (Net) Weight: Removed from Commercial Harvests	Rod and Reel	Other Methods	Total	Total w/o Commercial Removal	95% confidence range (+/-%)
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.

Source: Scott et al. 2001

Table 19. Halibut Removals in Alaska by Regulatory Area, 2003

Area	Pounds Net Weight: Commercial[1]	Sport[2]	Subsistence[3]	Wastage	Bycatch	Total
2C	8,451,000	2,596,000	627,959	130,000	341,000	12,145,959
3A	22,683,000	5,002,000	279,613	705,000	3,180,000	31,849,613
3B	17,407,000	12,000	27,965	643,000	1,734,000	19,823,965
4	12,085,000	43,000	120,134	175,000	6,822,000	19,245,134
Alaska	60,626,000	7,653,000	1,055,671	1,653,000	12,077,000	83,064,671

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

[2] Projected harvests

[3] Includes 14,341 pounds of sublegal halibut legally retainedy by CDQ organizations in areas 4D and 4E for personal use. The subsistence harvest by SHARC holders was 1,041,330 pounds, including 105,793 pounds in Area 4.

Sources: International Pacific Halibut Commission 2004; Gilroy et al. 2004, Blood 2004, Gilroy 2004, Williams 2004a, Williams 2004b; Williams, personal communication, 2004; Division of Subsistence, ADF&G,SHARC Survey, 2004.

REPORT FIGURES

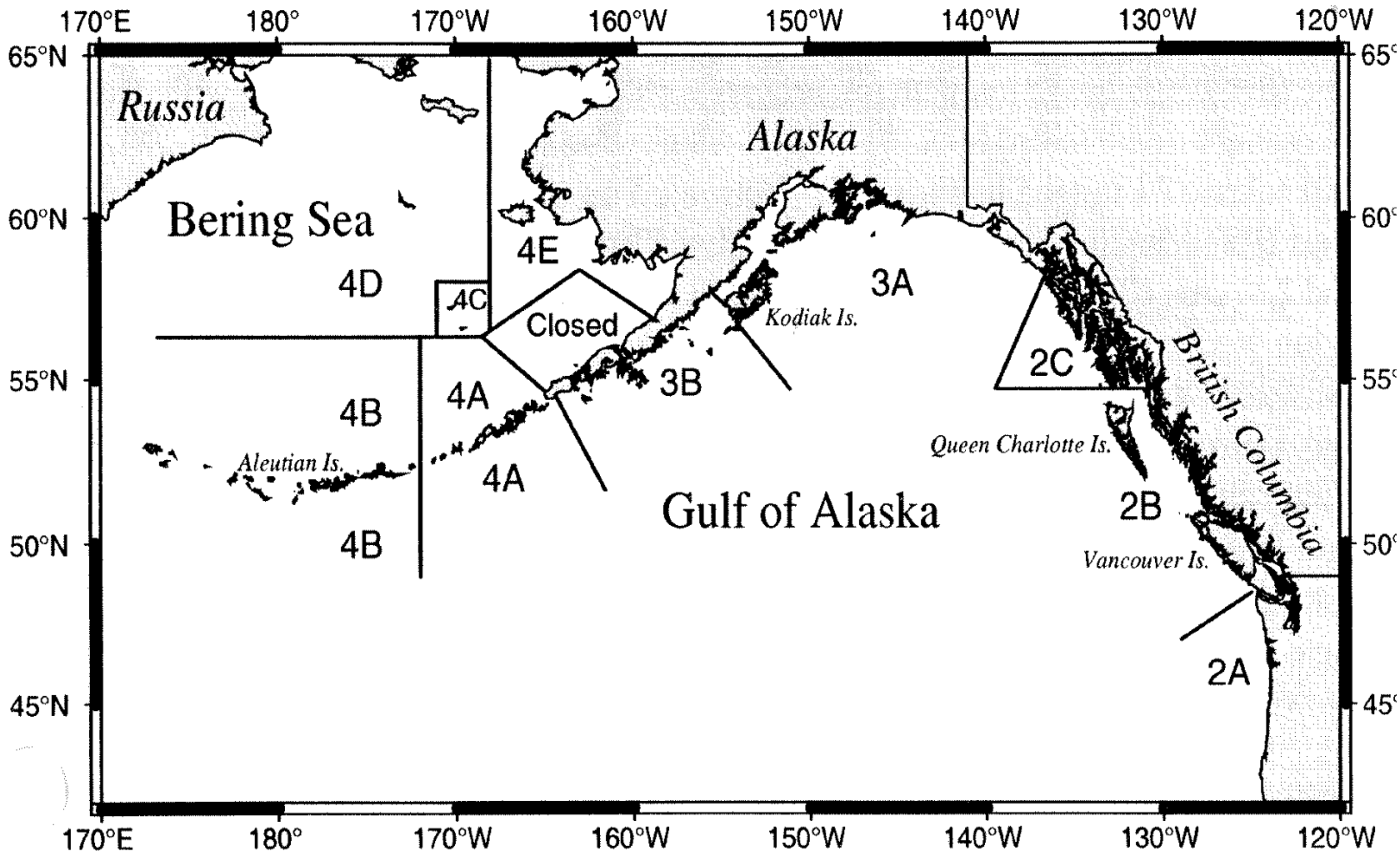


Figure 1. Regulatory areas for the Pacific halibut fishery.

Figure 2. Return Rates for Subsistence Halibut Surveys by SHARC Type, 2003

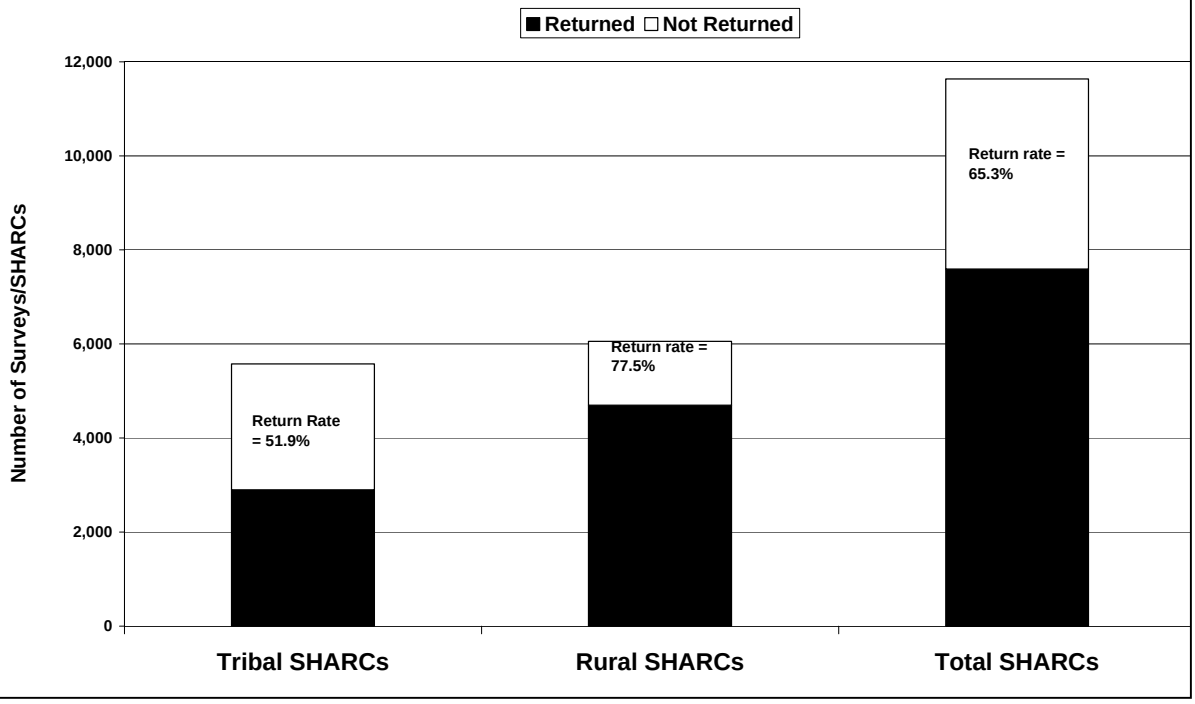


Figure 3. Subsistence Halibut Harvest Survey Return Rates, Communities and Tribes with More than 100 SHARCs Issued, 2003

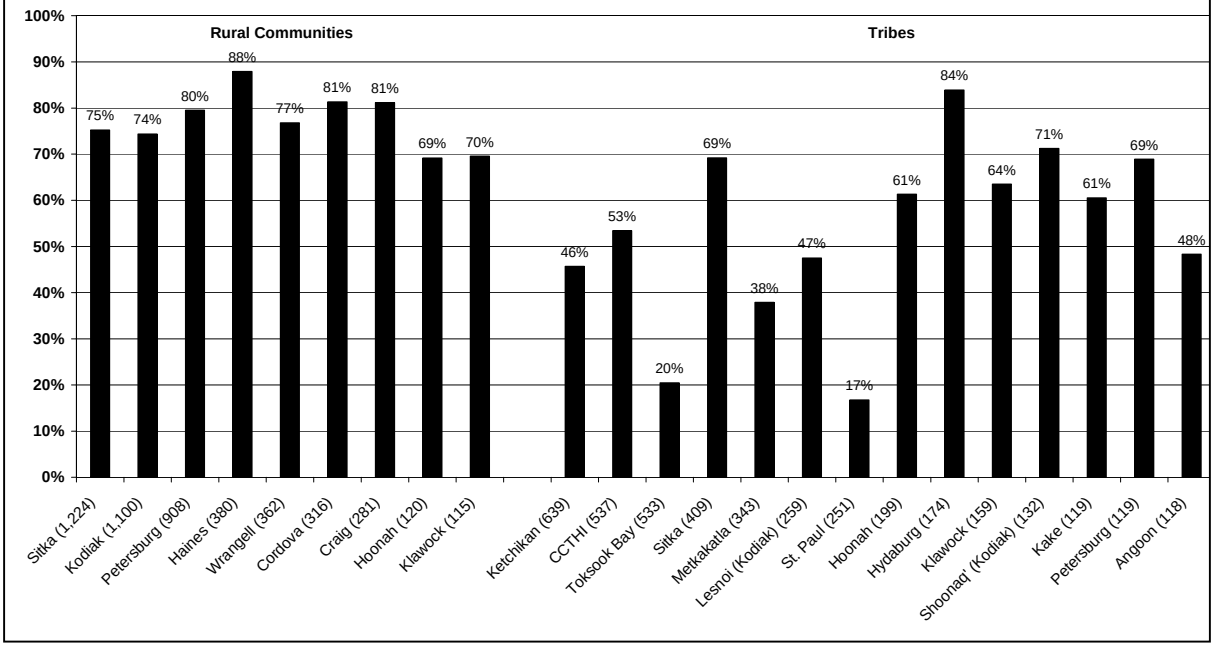


Figure 4. Number of Survey Responses by Response Category

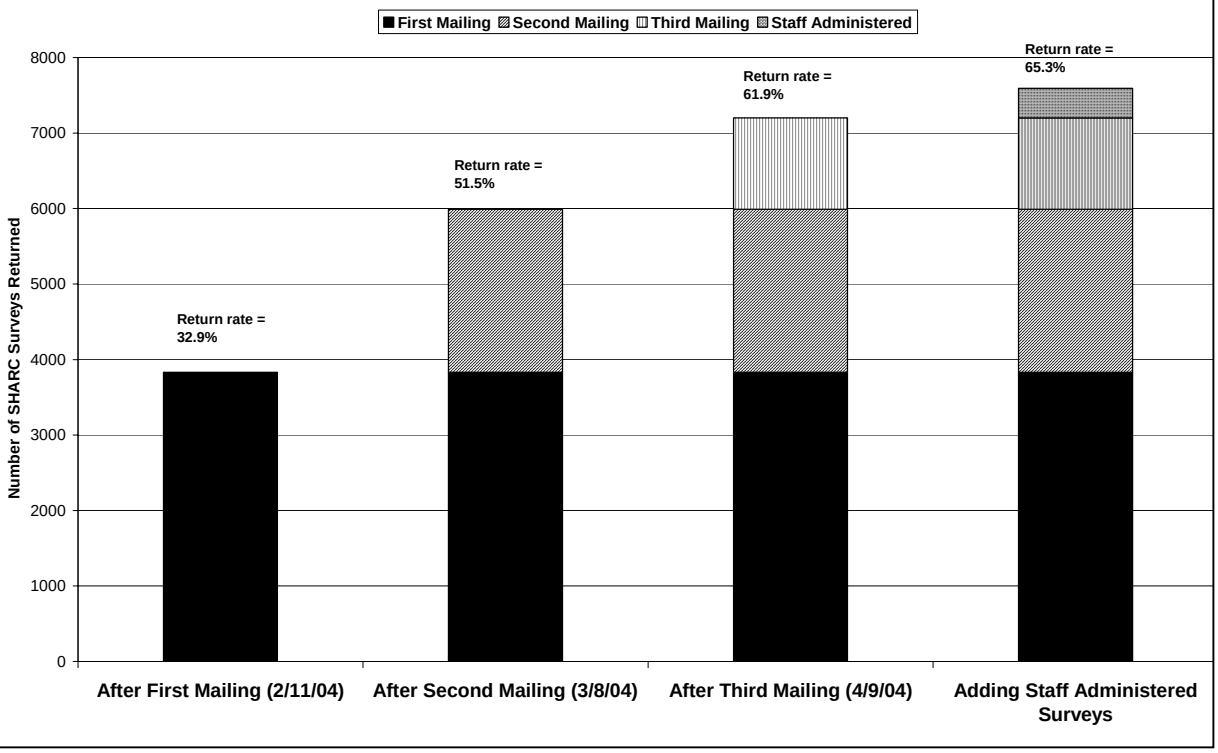


Figure 5. Age of Subsistence Halibut Registration Certificate Holders by SHARC Type, 2003

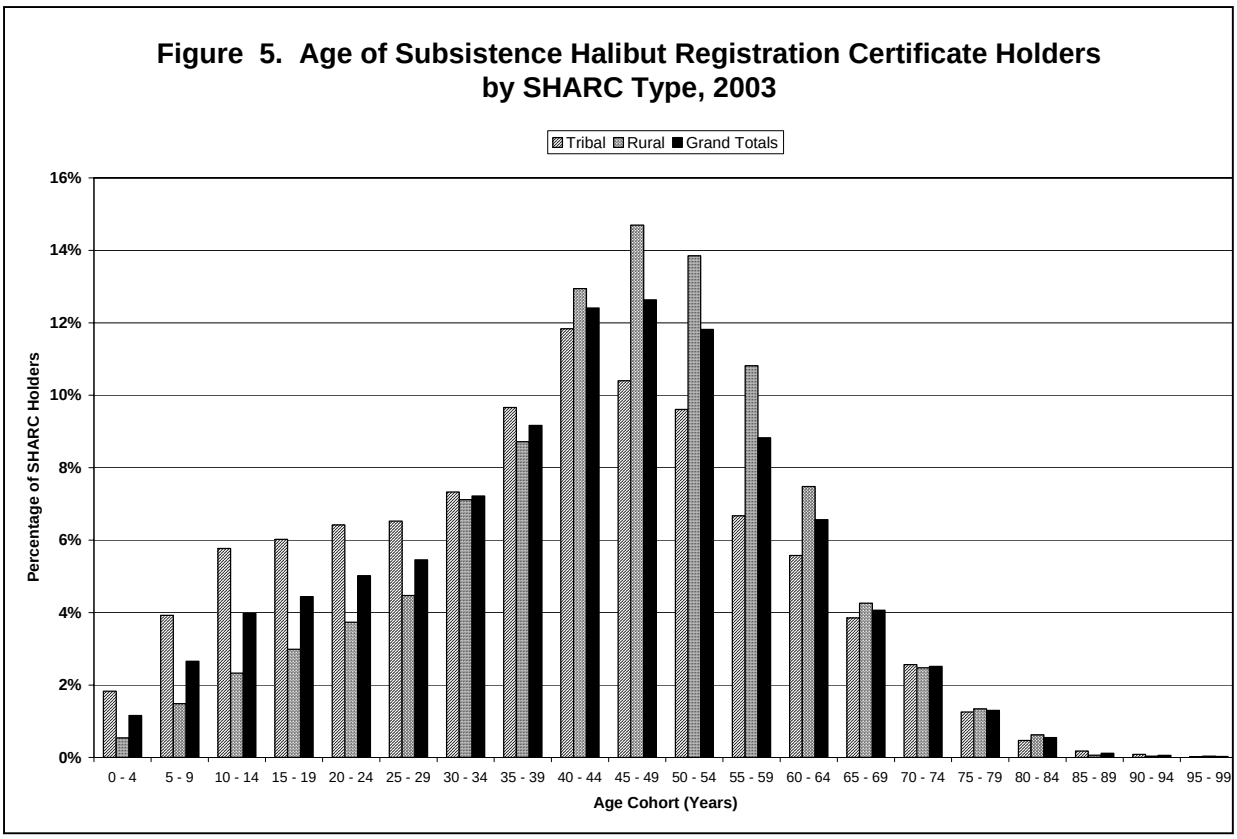


Figure 6. Estimated Number of Subsistence Halibut Fishers in Alaska, 2003, by Regulatory Area

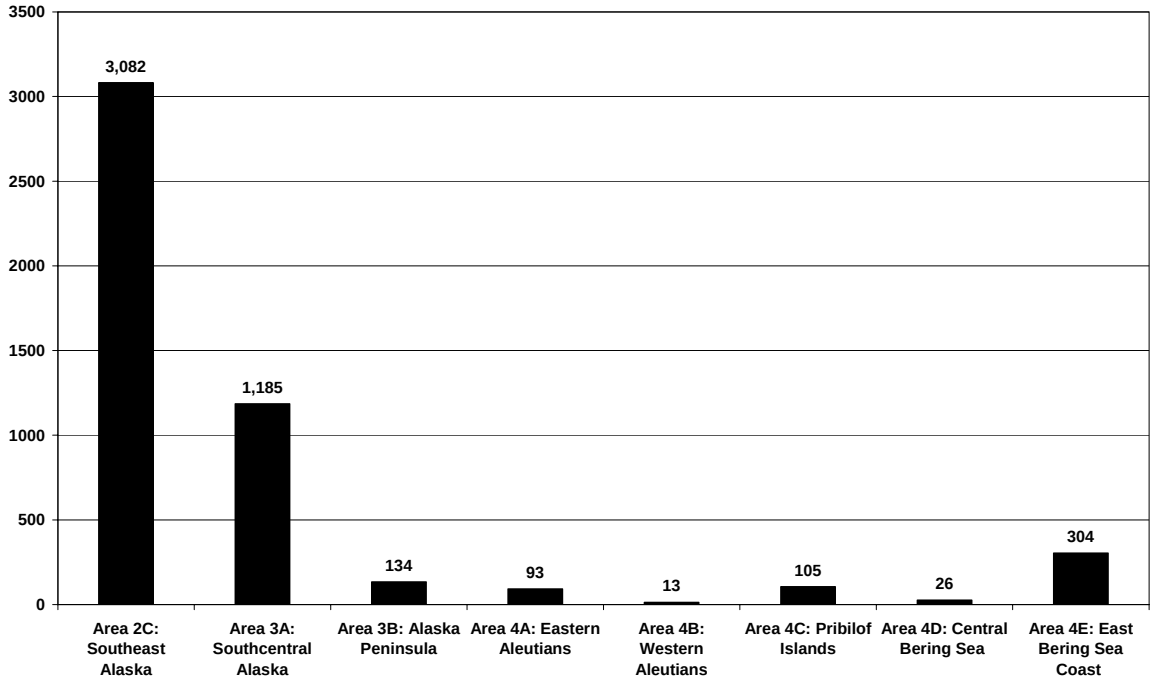


Figure 7. Estimated Subsistence Harvest of Halibut in Alaska, 2003, by Regulatory Area, in Pounds Net Weight

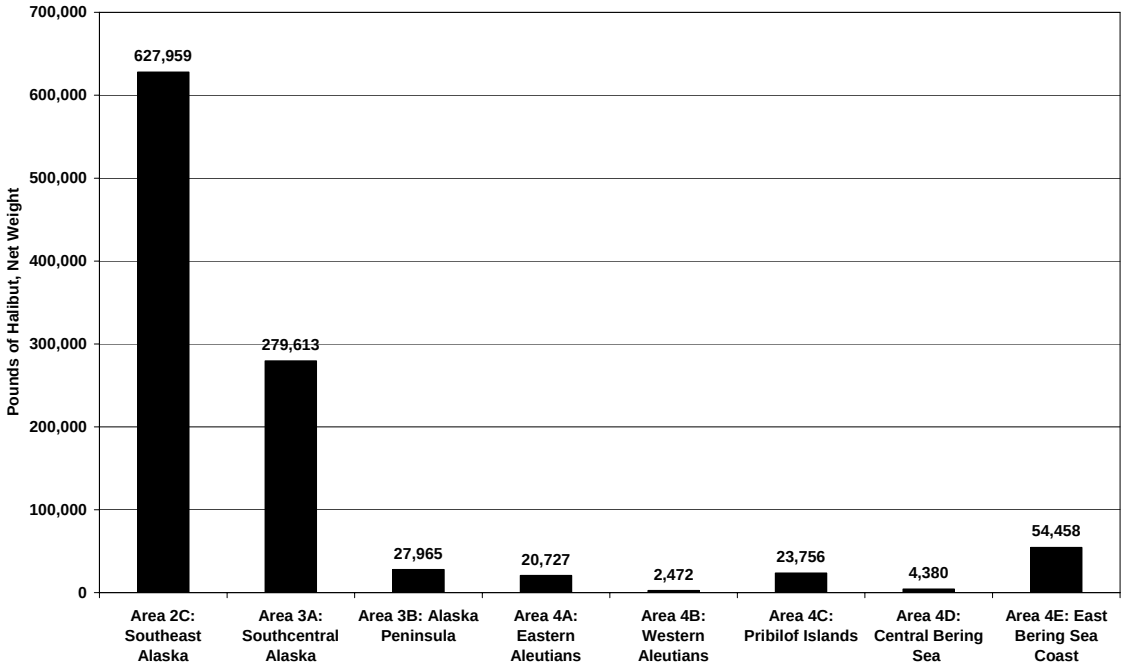
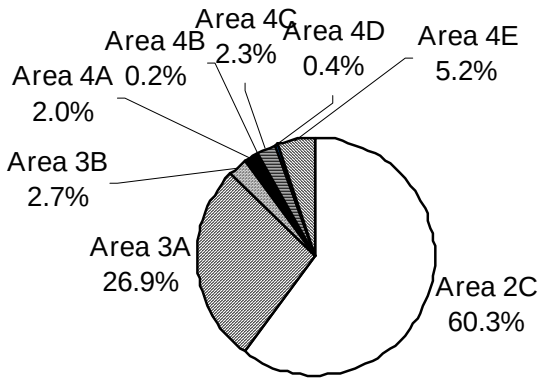


Figure 8. Percentage of Subsistence Halibut Harvest by Regulatory Area, 2003



N= 1.041 million lbs net weight

Figure 9. Percentage of Rural Community Subsistence Halibut Harvest by Community, 2003

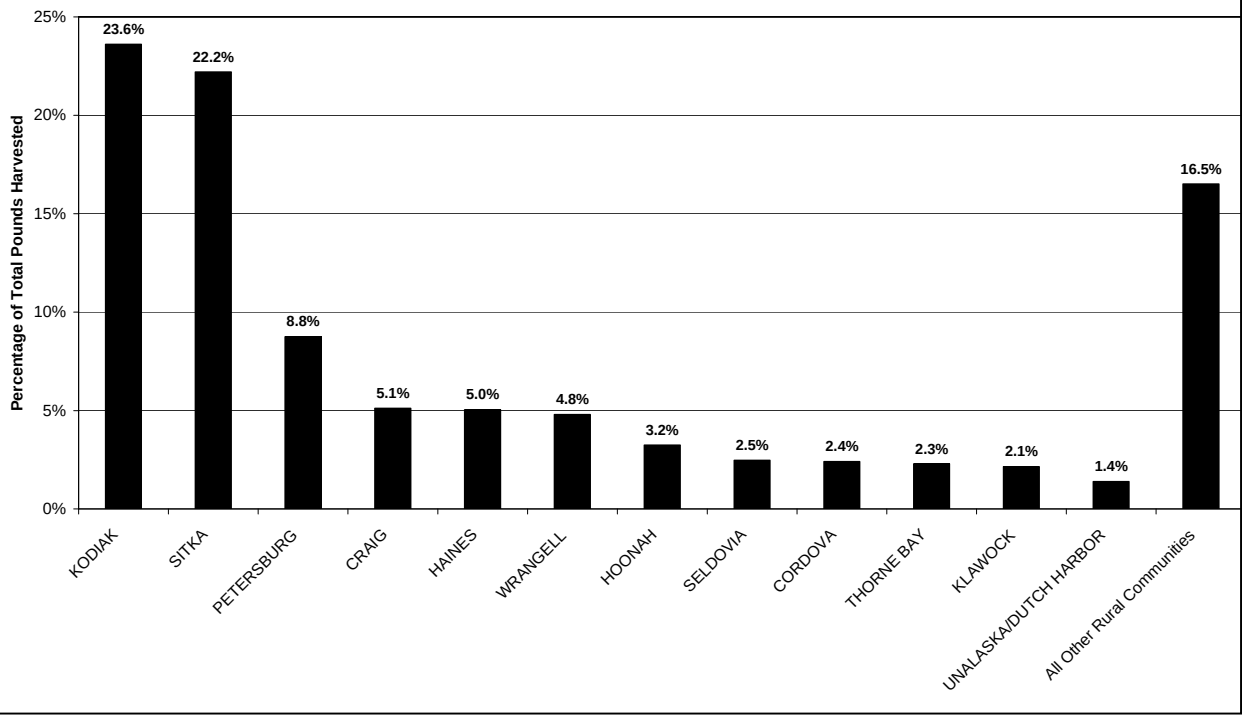


Figure 10. Percentage of Tribal Subsistence Halibut Harvest by Tribe, 2003

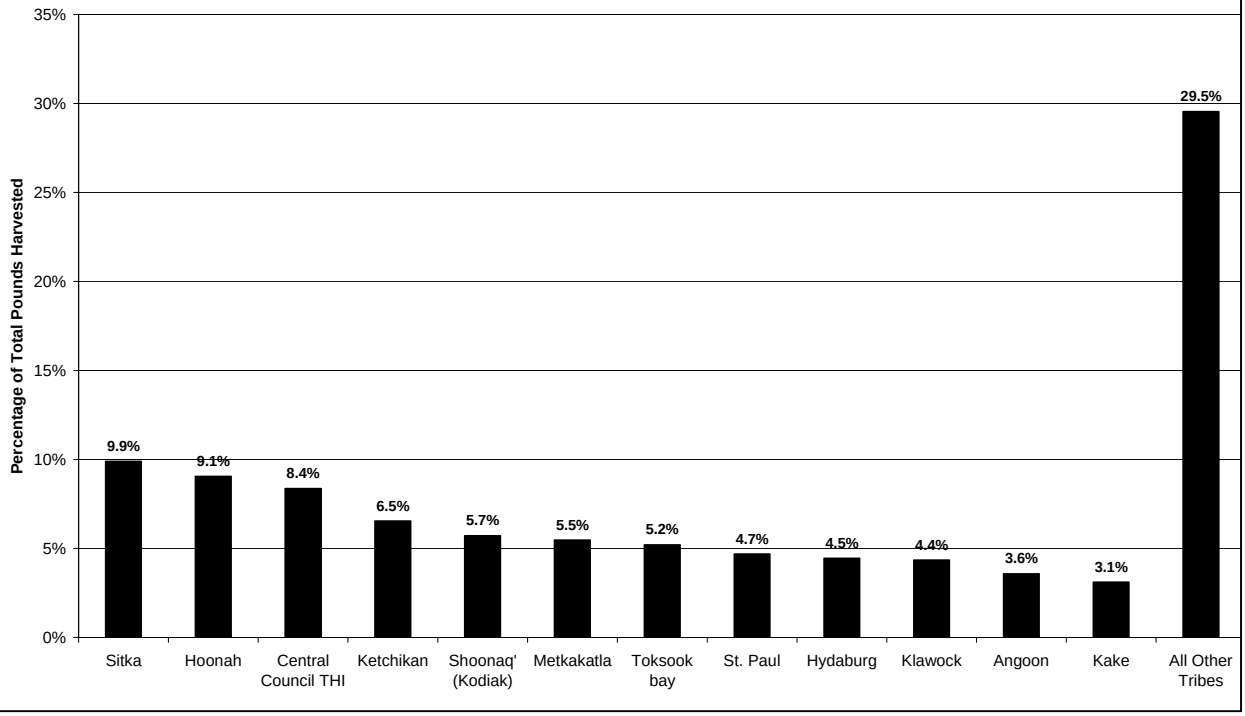


Figure 11. Average Subsistence Harvest of Halibut per Fisher in Alaska, 2003, by Regulatory Area, in Pounds Net Weight

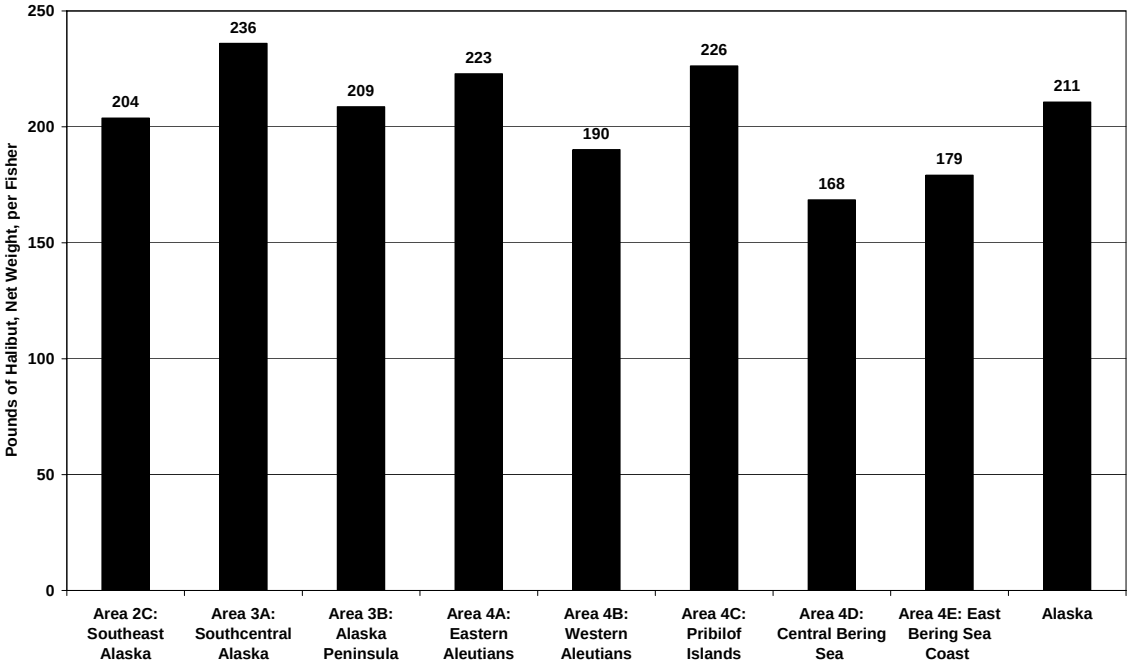


Figure 12. Average Subsistence Harvest of Halibut per Fisher in Alaska, 2003, by Regulatory Area, in Number of Fish

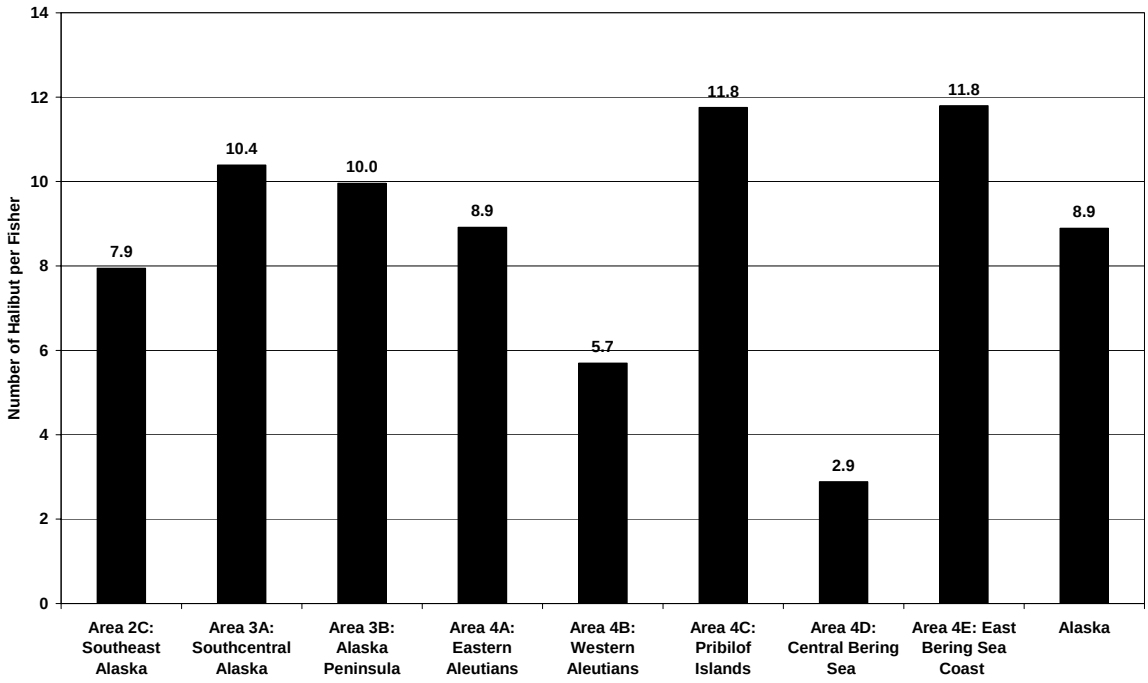


Figure 13. Percentage of Subsistence Halibut Harvest by Gear Type by Regulatory Area, 2003

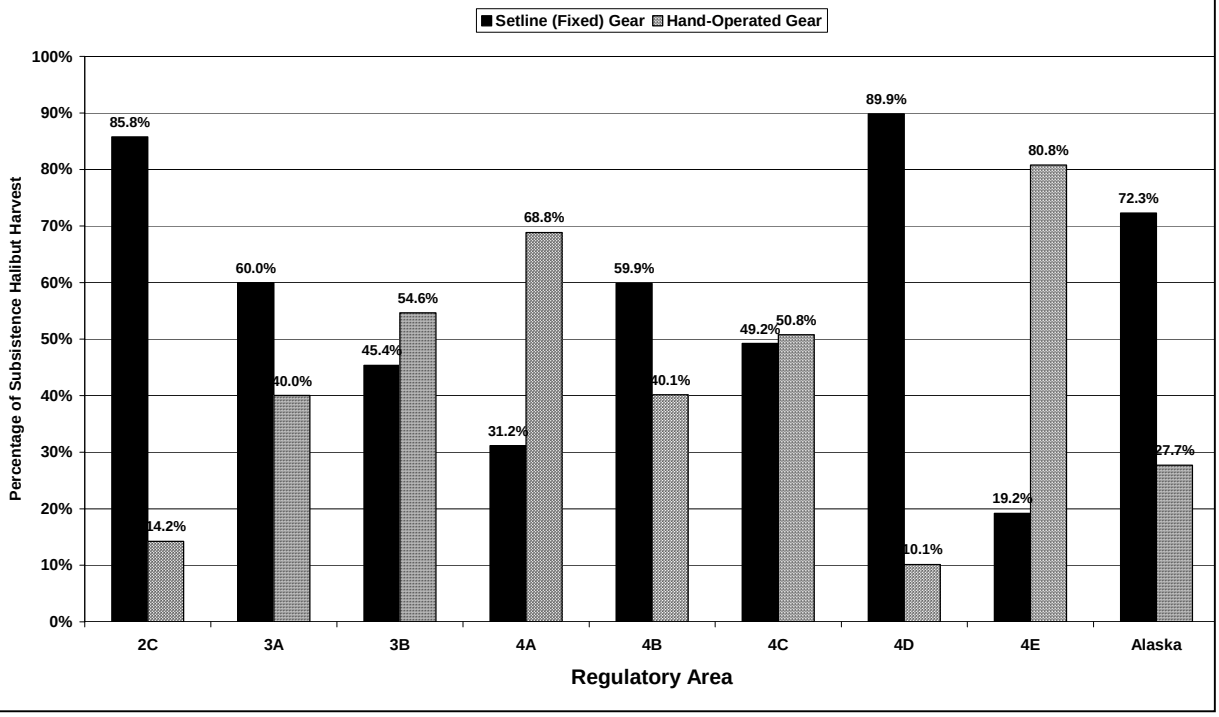


Figure 14. Number of Hooks Usually Fished, Percentage of Fishers Using Setline (Fixed) Gear, Alaska Subsistence Halibut Fishery, 2003

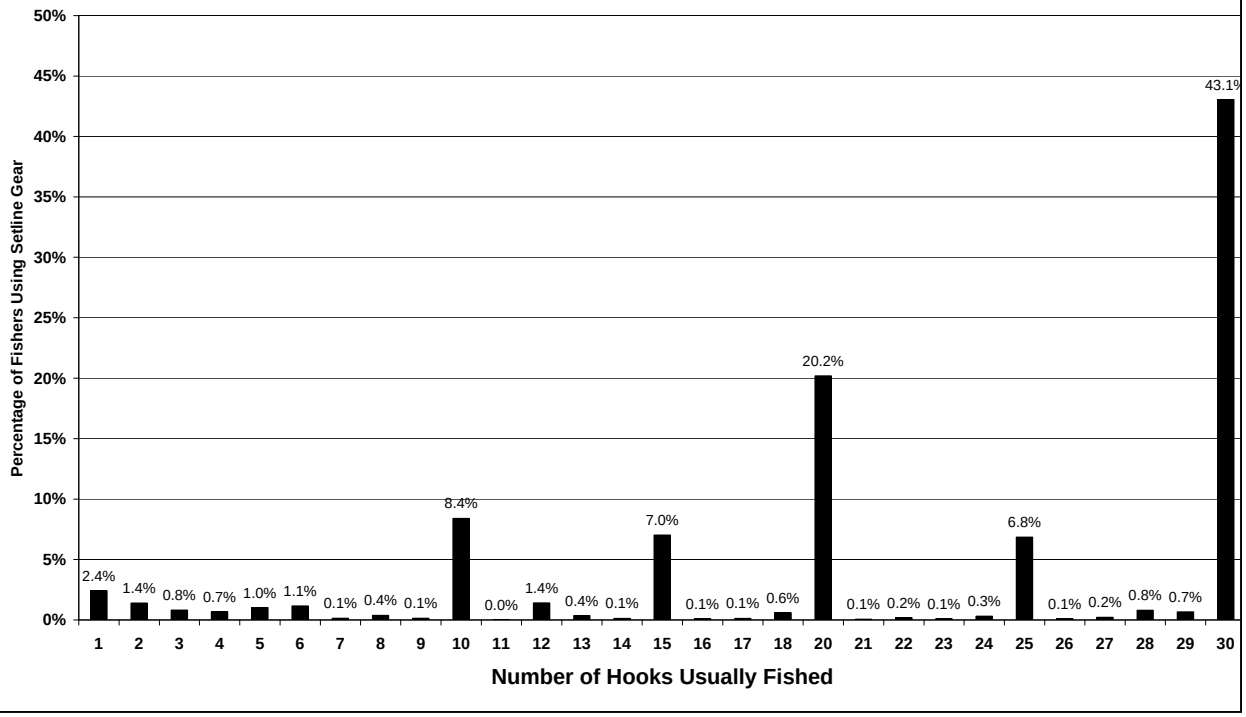


Figure 15. Alaska Subsistence Halibut Harvests by Place of Residence, 2003

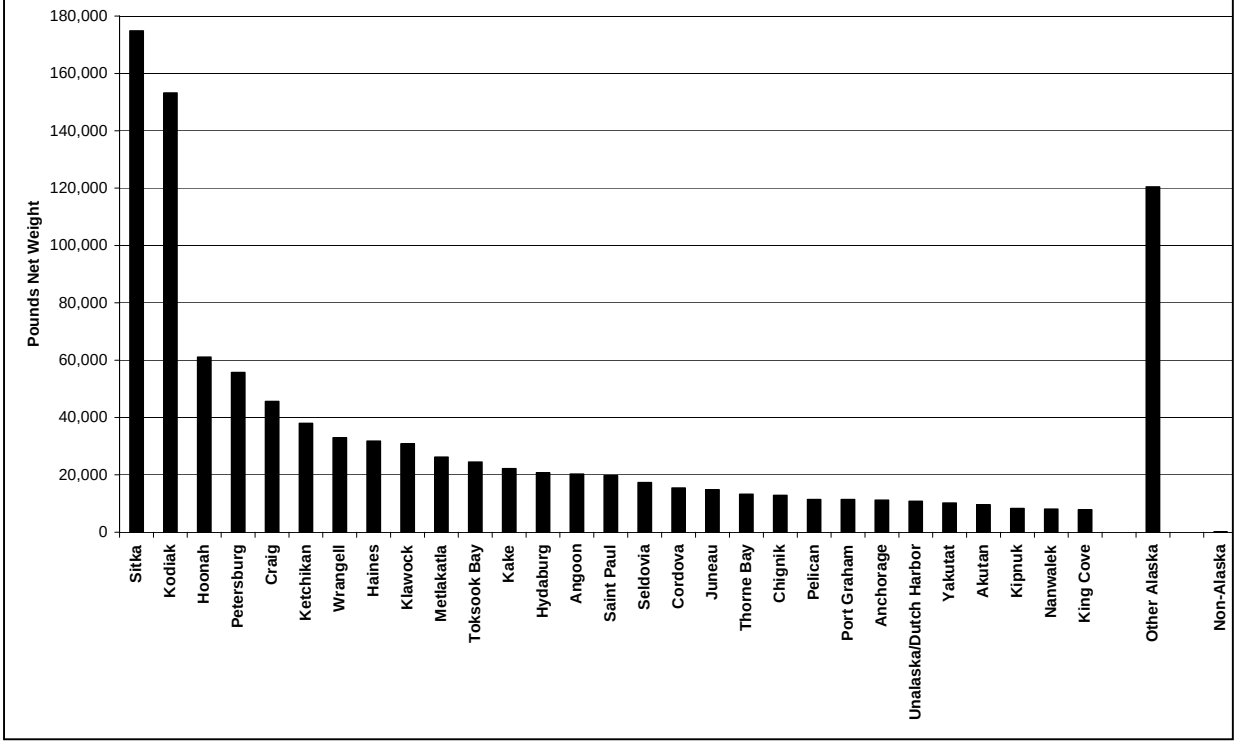


Figure 16. Alaska Subsistence Halibut Harvests by Geographic Area, 2003

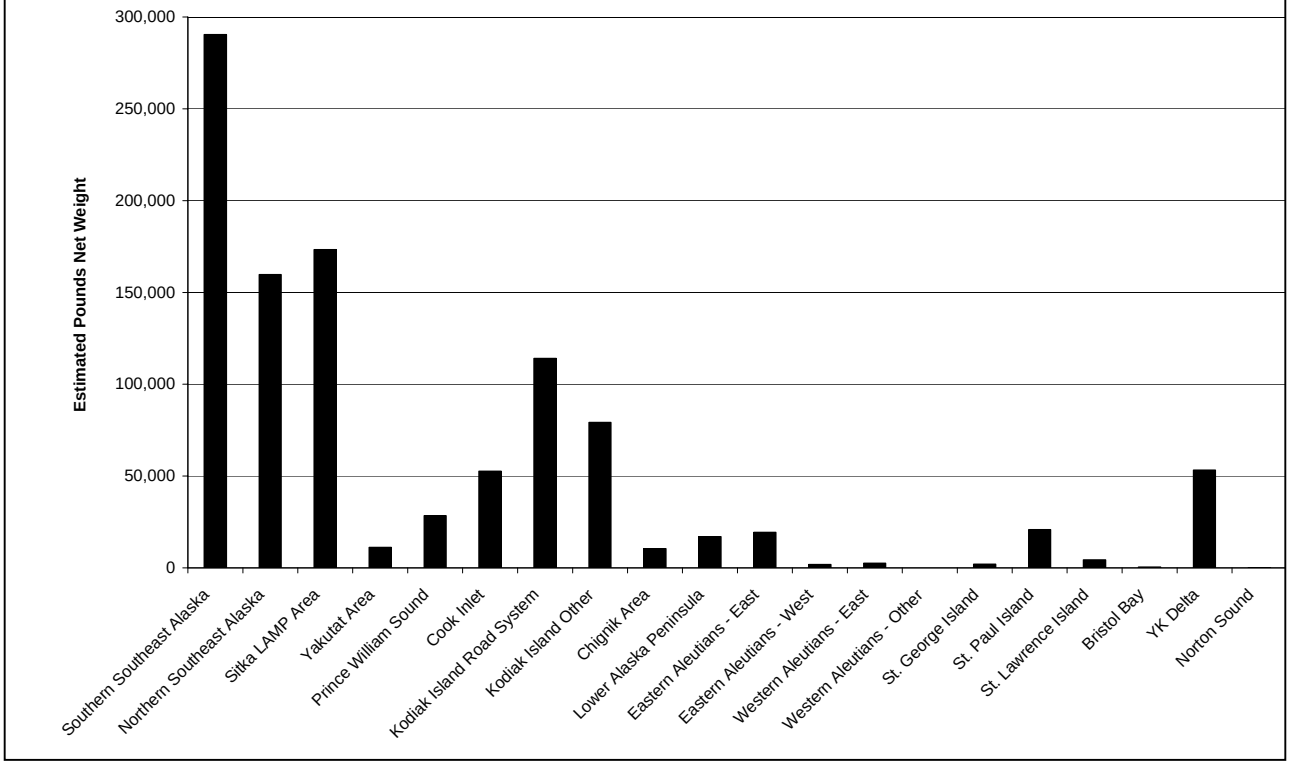
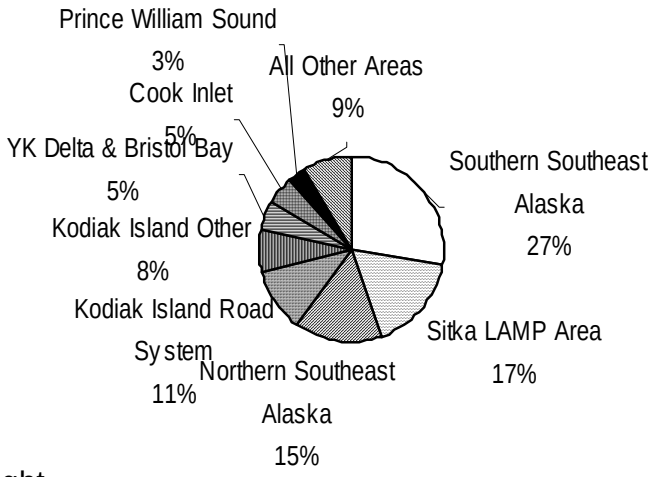


Figure 17. Percentage of Alaska Subsistence Halibut Harvest by Geographic Area, 2003



N = 1,041,330
pounds net weight

Figure 18. Estimated Incidental Harvest of Rockfish in the Alaska Subsistence Halibut Fishery, 2003, by Regulatory Area

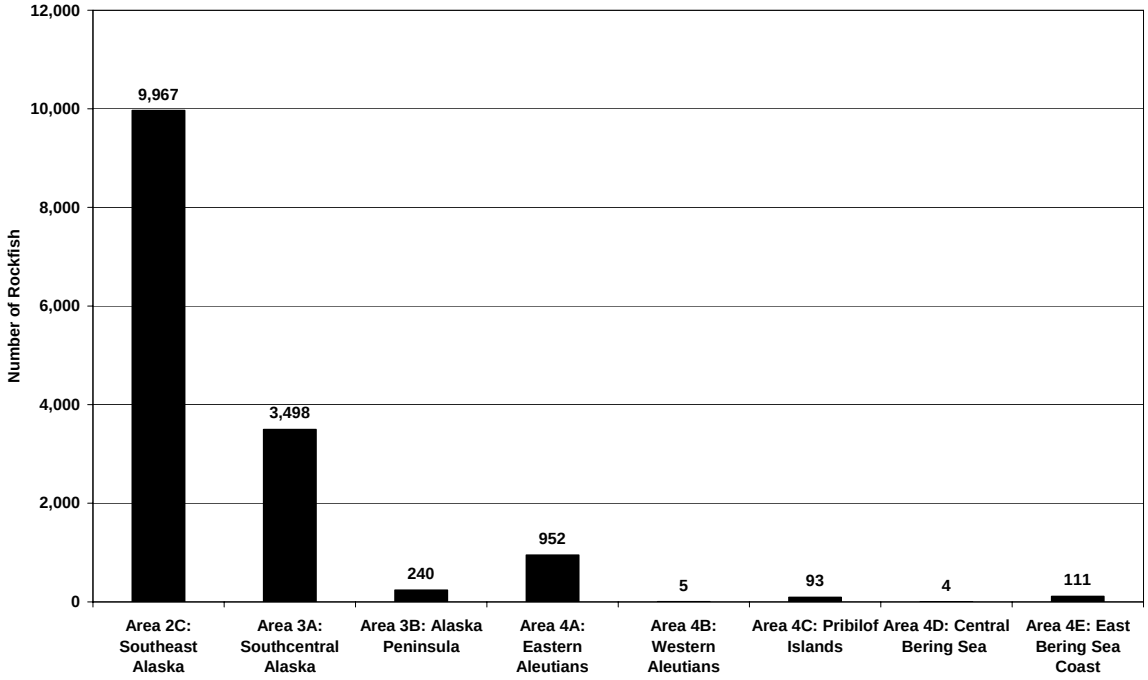
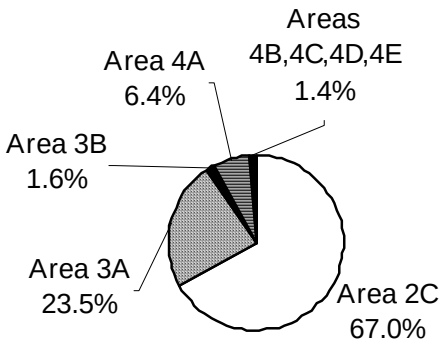


Figure 19. Percentage of Incidental Harvest of Rockfish by Regulatory Area, 2003



N = 14,870 rockfish

Figure 20. Estimated Incidental Harvest of Lingcod in the Alaska Subsistence Halibut Fishery, 2003, by Regulatory Area

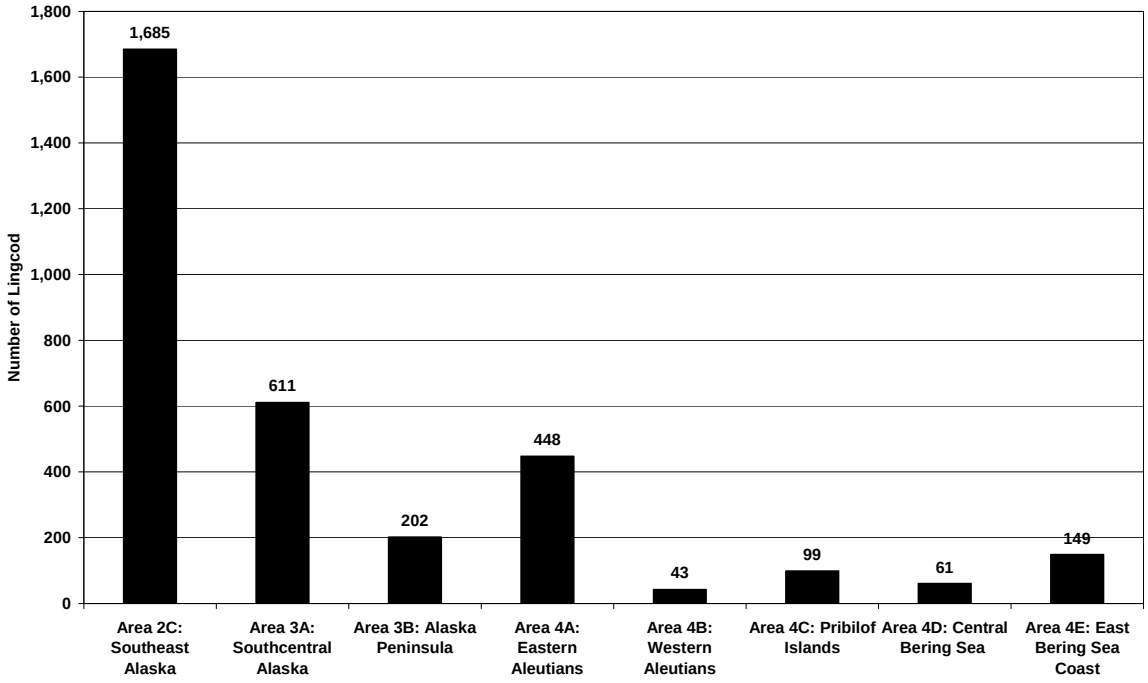
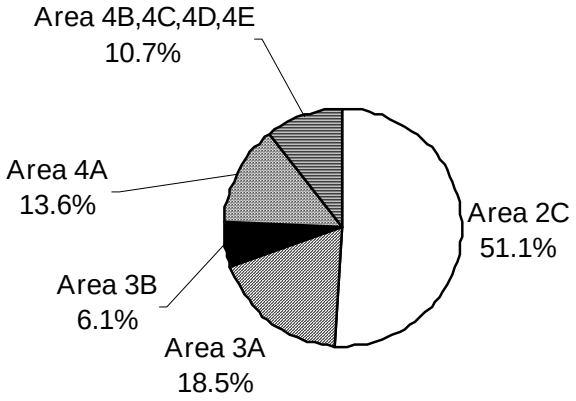


Figure 21. Percentage of Incidental Harvest of Lingcod by Regulatory Area, 2003



N = 3,298 lingcod

Figure 22. Comparison of Subsistence Halibut Harvest Estimates by Regulatory Area, 2000 and 2003

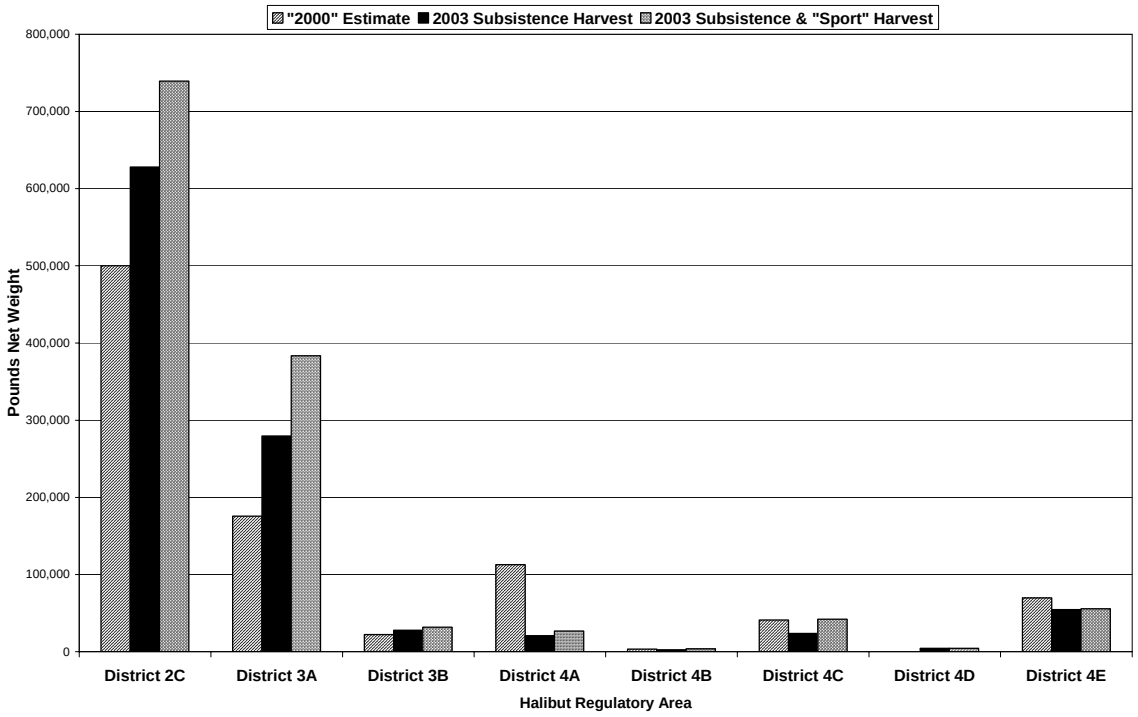


Figure 23. Percentage of Estimated Subsistence Halibut Harvests by Regulatory Area, 2000 and 2003

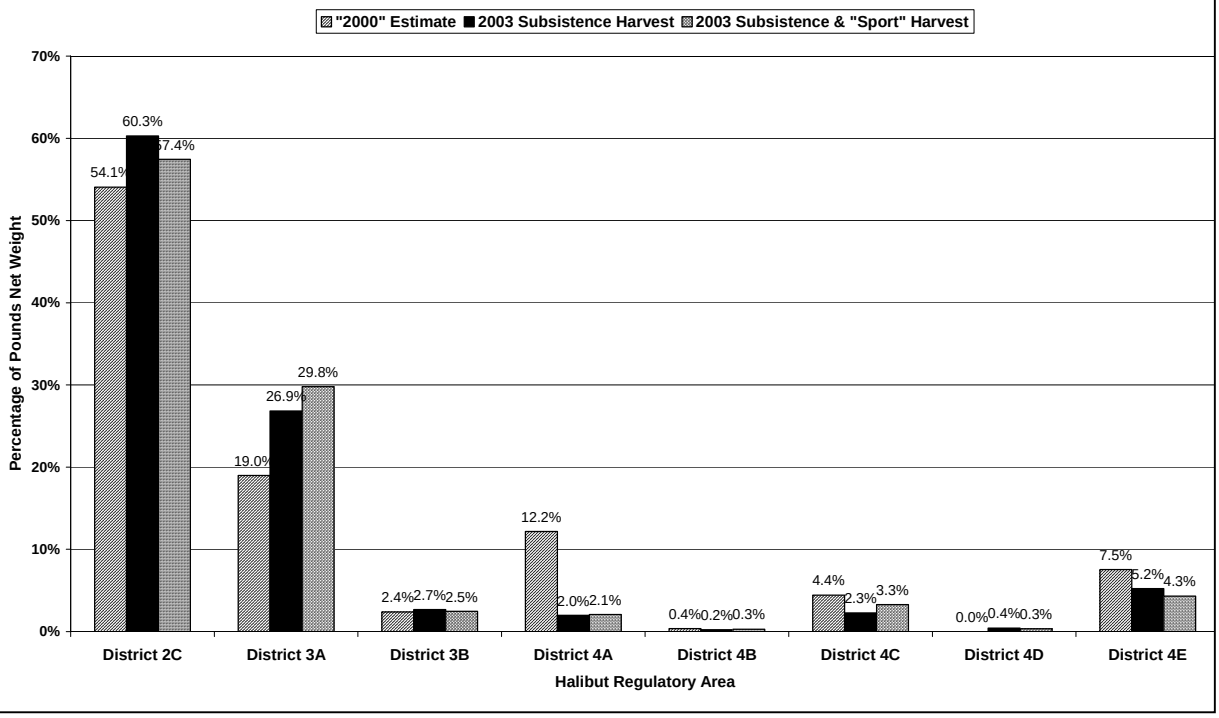


Figure 24. Estimated Harvests of Halibut for Home Use, Port Graham

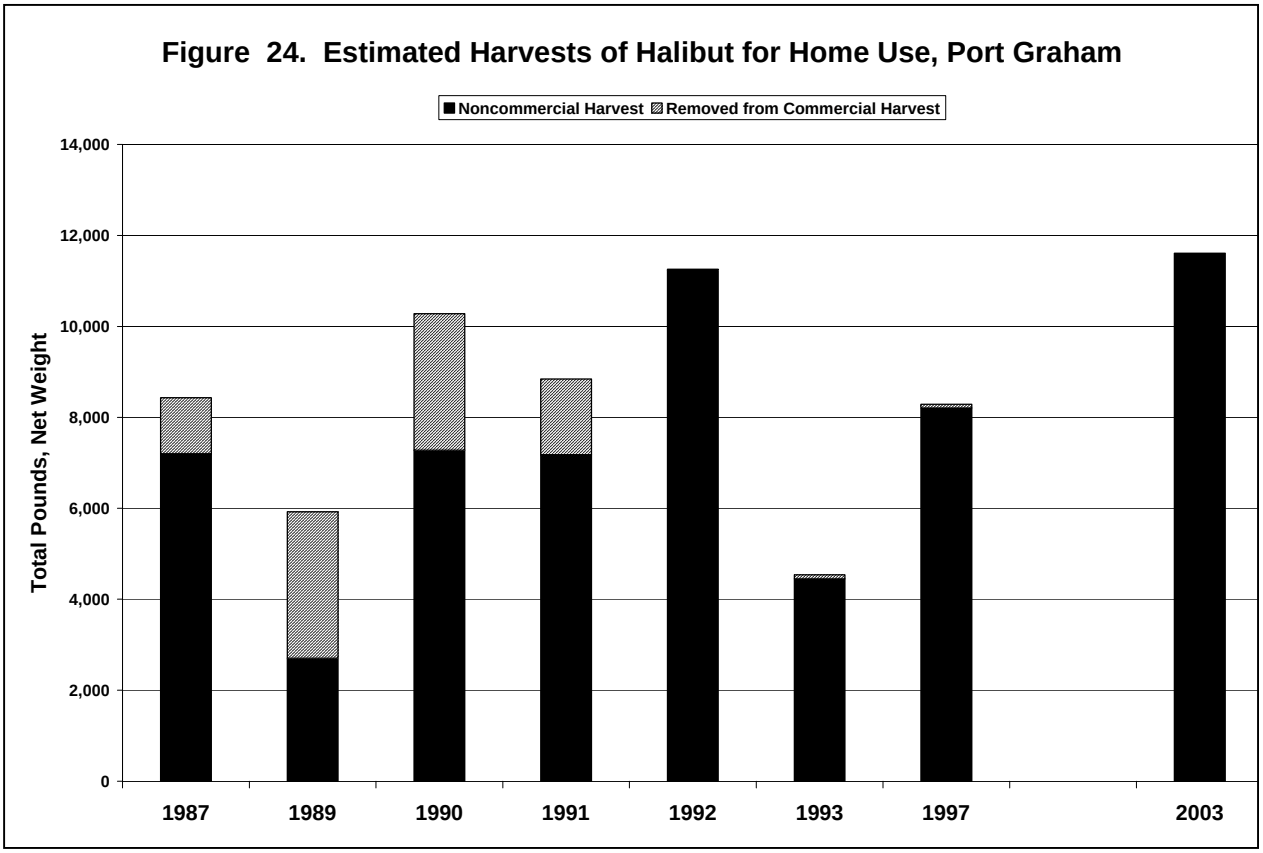
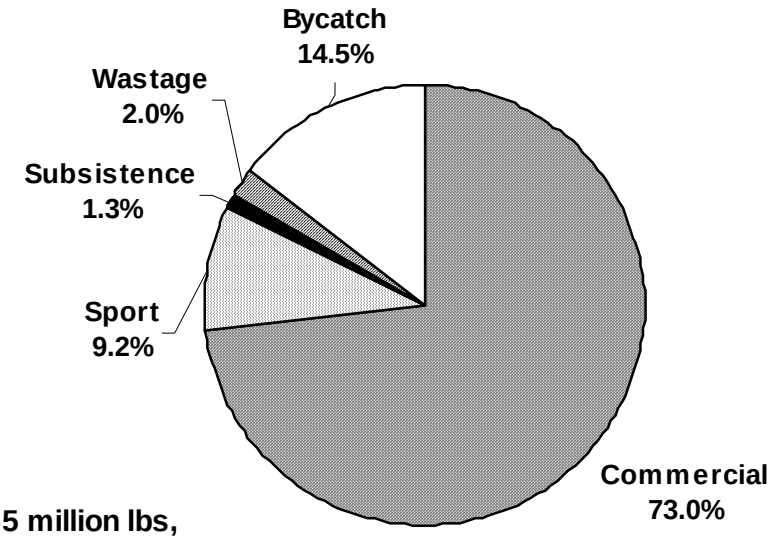
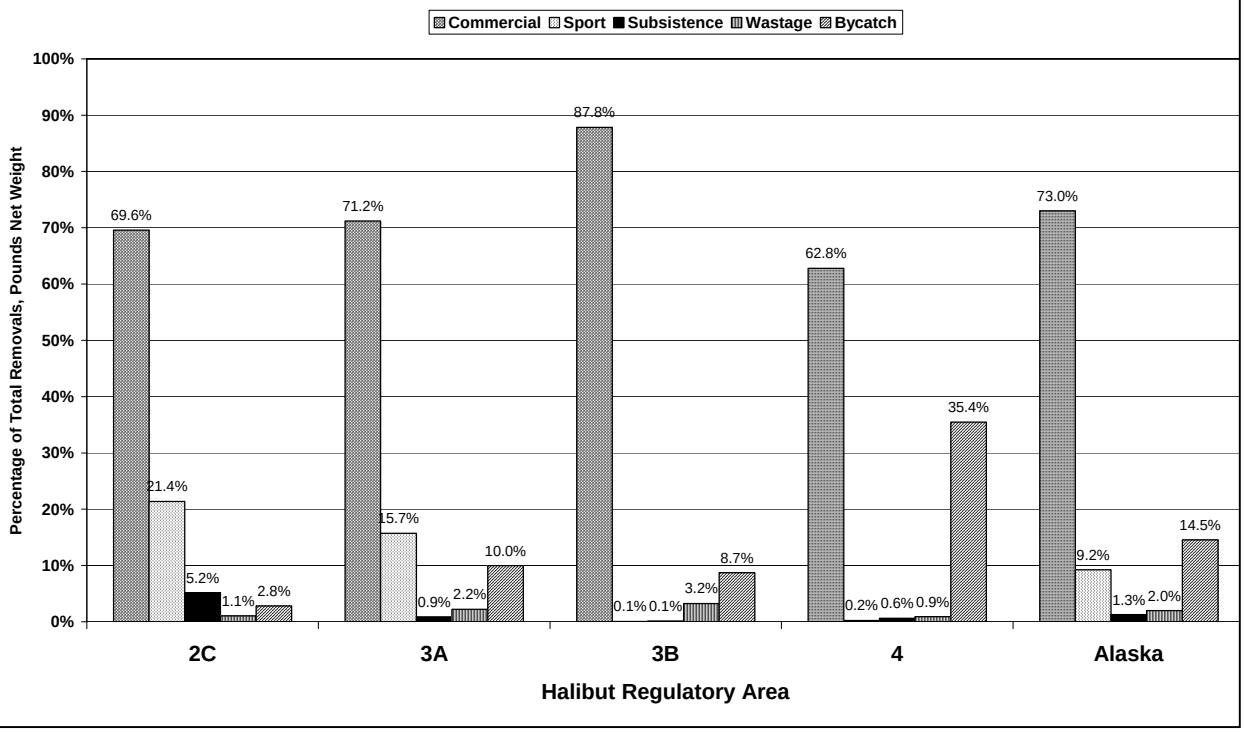


Figure 25. Halibut Removals, Alaska, 2003



N = 83.065 million lbs, net weight

Figure 26. Halibut Removals in Alaska by Regulatory Area and Removal Category, 2003



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°49'34" W. long., to Hanus Point at 56°51'55" N. lat., 135°30'30" 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
Angoon	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
Metlakatla	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
Akhiok	Municipality
Chenega Bay	Census Designated Place
Cordova	Municipality
Karluk	Census Designated Place
Kodiak 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
Chefornak	Municipality
Chevak	Municipality
Clark's Point	Municipality
Council	Census Designated Place
Dillingham	Municipality
Eek	Municipality
Egegik	Municipality
Elim	Municipality
Emmonak	Municipality
Golovin	Municipality
Goodnews Bay	Municipality
Hooper Bay	Municipality
King Salmon	Census Designated Place
Kipnuk	Census Designated Place
Kongiganak	Census Designated Place
Kotlik	Municipality
Koyuk	Municipality
Kwigillingok	Census Designated Place
Levelock	Census Designated Place
Manokotak	Municipality
Mekoryak	Municipality
Naknek	Census Designated Place
Napakiak	Municipality
Napaskiak	Municipality
Newtok	Census Designated Place
Nightmute	Municipality
Nome	Municipality
Oscarville	Census Designated Place
Pilot Point	Municipality
Platinum	Municipality
Port Heiden	Municipality
Quinhagak	Municipality
Scammon Bay	Municipality
Shaktoolik	Municipality
Sheldon Point (Nunam Iqua).	Municipality
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 Chanega

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 Tribe
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	Ivanoff 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

Place with Tribal Headquarters	Organized Tribal Entity
Akutan	Native Village of Akutan
Nikolski	Native Village of Nikolski
Unalaska	Qawalingin Tribe of Unalaska

HALIBUT REGULATORY AREA 4B

Place with Tribal Headquarters	Organized Tribal Entity
Atka	Native Village of Atka

HALIBUT REGULATORY AREA 4C

Place with Tribal Headquarters	Organized Tribal Entity
St. George	Pribilof Islands Aleut Communities of St. Paul Island and St. George Island
St. Paul	

HALIBUT REGULATORY AREA 4D

Place with Tribal Headquarters	Organized Tribal Entity
Gambell	Native Village of Gambell
Savoonga	Native Village of Savoonga
Diomede (Inalik)	Native Village of Diomede (Inalik)

HALIBUT REGULATORY AREA 4E

Place with Tribal Headquarters	Organized Tribal Entity
Alakanuk	Village of Alakanuk
Aleknagik	Native Village of Aleknagik
Bethel	Orutsararmuit Native Village
Brevig Mission	Native Village of Brevig Mission
Chefornak	Village of Chefornak
Chevak	Chevak Native Village
Clark's Point	Village of Clark's Point
Council	Native Village of Council
Dillingham	Native Village of Dillingham
	Native Village of Ekuk
	Native Village of Kanakanak
Eek	Native Village of Eek
Egegik	Egegik Village
	Village of Kanatak
Elim	Native Village of Elim
Emmonak	Chuloonawick Native Village
	Emmonak Village
Golovin	Chinik Eskimo Community
Goodnews Bay	Native Village of Goodnews Bay
Hooper Bay	Native Village of Hooper Bay
	Native Village of Paimiut
King Salmon	King Salmon Tribal Council
Kipnuk	Native Village of Kipnuk
Kongiganak	Native Village of Kongiganak
Kotlik	Native Village of Hamilton
	Village of Bill Moore's Slough
	Village of Kotlik
Koyuk	Native Village of Koyuk
Kwigillingok	Native Village of Kwigillingok
Levelock	Levelock Village
Manokotak	Manokotak Village
Mekoryak	Native Village of Mekoryak
Naknek	Naknek Native Village
Napakiak	Native Village of Napakiak
Napaskiak	Native Village of Napaskiak
Newtok	Newtok Village
Nightmute	Native Village of Nightmute
	Umkumiute Native Village
Nome	King Island Native Community
	Nome Eskimo Community
Oscarville	Oscarville Traditional Village
Pilot Point	Native Village of Pilot Point
Platinum	Platinum Traditional Village
Port Heiden	Native Village of Port Heiden
Quinhagak	Native Village of Kwinhagak
Scammon Bay	Native Village of Scammon Bay
Shaktoolik	Native Village of Shaktoolik
Sheldon Point (Nunalqua).	Native Village of Sheldon's Point
Shishmaref	Native Village of Shishmaref
Solomon	Village of Solomon
South Naknek	South Naknek Village
St. Michael	Native Village of Saint Michael
Stebbins	Stebbins Community Association
Teller	Native Village of Mary's Igloo
	Native Village of Teller
Togiak	Traditional Village of Togiak
Toksook Bay	Native Village of Toksook Bay
Tuntutuliak	Native Village of Tuntutuliak
Tununak	Native Village of Tununak
Twin Hills	Twin Hills Village
Ugashik	Ugashik Village
Unalakleet	Native Village of Unalakleet
Wales	Native Village of Wales
White Mountain	Native Village of White Mountain

(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

FRANK MURKOWSKI, GOVERNOR

DEPARTMENT OF FISH AND GAME

DIVISION OF SUBSISTENCE

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

November 28, 2003

TO:

SUBJECT: Subsistence Halibut Fishing and Harvest Survey

As you are probably aware, in May 2003, new federal subsistence halibut fishing regulations came into effect. Under these rules, residents of 118 rural communities and 123 Alaska Native tribes with customary and traditional uses of halibut are eligible to participate in the subsistence fishery. Enclosed is a short (four-page) overview entitled "Alaska Subsistence Halibut Program Information" prepared by the National Marine Fisheries Service (NMFS). Please note that 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 Assess Management (RAM) Program PO Box 21668 Juneau, AK 99802

One very important feature of the new regulations is that eligible people who want to subsistence fish for halibut need to obtain a "Subsistence Halibut Registration Certificate" (called a "SHARC" for short). Applications are available from NMFS at the address above. 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. So far, about 6,000 residents of rural communities and 5,500 tribal members have obtained "SHARCs." We encourage you to get the word out about this program to your tribal members who subsistence fish for halibut.

Under a contract with NMFS, the Division of Subsistence of the Alaska Department of Fish and Game will be responsible for collecting harvest information for the halibut subsistence fishery. In January 2004, we will mail a short (one-page) survey form to every person who has obtained a

SHARC. We will ask them to voluntarily fill out the form and return it to us. We will be collecting the following information:

- If the person subsistence fished for halibut in 2003
- Harvests of halibut in numbers of fish and pounds with set hook gear and with hook and line gear
- Harvests of rockfish and lingcod taken while subsistence halibut fishing

In addition to mailing out the survey forms, Division of Subsistence staff plan to visit some communities in early 2004 to provide information about the subsistence halibut fishery program and encourage subsistence fishers to obtain registration cards (SHARCs) and provide harvest information. 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.

The Division of Subsistence will compile the harvest information in a report to NMFS that will be available to tribes and to the public. The information will be summarized at a community level. In our view, collecting and reporting accurate information about subsistence halibut harvests is important in supporting this fishery.

We will develop public notices about the harvest survey within the next month, and will be contacting tribes in communities that we plan to visit. Again, the survey form itself will be mailed in early 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 Douglas 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

Enclosure ("Alaska Subsistence Halibut Program Information")

cc: Jim Simon, Mike Turek

APPENDIX C: NEWS RELEASE

STATE OF ALASKA
DEPARTMENT OF FISH AND GAME
Kevin C Duffy, Commissioner

Division of Subsistence
333 Raspberry Road
Anchorage, Alaska 99518

News For Immediate Release... **January 20, 2004**
Contact: James Fall (907) 267-2359, in SE AK Mike Turek (907) 465-3617

Subsistence Halibut Fishery Mail Survey

The Alaska Department of Fish & Game (ADF&G), Division of Subsistence, will soon mail a one-page survey form to everyone who registered and received a Subsistence Halibut Registration Certificate (SHARC) from the National Marine Fisheries Service (NMFS). Survey recipients will be asked to indicate if they fished in 2003, how many halibut they harvested, and to return the form to ADF&G.

ADF&G and NMFS are encouraging everyone who receives the survey to take a few minutes to fill it out and return it to ADF&G; ensuring that future subsistence halibut fishery decisions are based on reliable information. Accurate harvest information is essential for effective management and for providing future subsistence fishing opportunities.

NMFS requested the ADF&G Division of Subsistence to conduct this survey because of the division's experience and expertise in performing subsistence research. The study findings will be summarized at a community level and presented in a final written report available to the public.

NMFS issued the subsistence halibut fishery regulations for the first time in April 2003. This management program provides opportunities for residents in 118 rural Alaska communities and 123 Alaska Native tribes with customary and traditional uses of halibut to participate in the fishery after obtaining a SHARC from NMFS.

Questions about subsistence halibut fishing regulations, including how to obtain a SHARC, should be addressed to the NMFS at 1-800-304-4846 (option #2).

Questions about the survey should be addressed to the Division of Subsistence of ADF&G in Anchorage (907-267-2353) or Douglas (907-465-3617).

For more information, contact:
James Fall
Regional Program Manager
Division of Subsistence
907-267-2359
jim_fall@fishgame.state.ak.us

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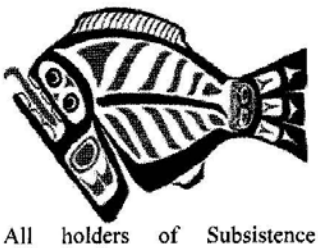
APPENDIX D: NEWSPAPER NOTICE



NOTICE TO SUBSISTENCE HALIBUT FISHERS regarding MAIL-OUT HARVEST SURVEY

All holders of Subsistence Halibut Registration Certificates (SHARCs) will receive a one-page harvest survey in the mail from the Division of Subsistence of the Alaska Department of Fish and Game on approximately January 26, 2004. The Division of Subsistence is collecting subsistence halibut information under contract to the National Marine Fisheries Service (NMFS). If you receive a survey form, you will be asked whether you subsistence fished for halibut in 2003 and how many halibut you harvested. Even if you did not fish, it is very important that you complete the survey and return it to ADF&G.

In April 2003, NMFS issued regulations that allow the harvest of halibut for subsistence purposes. Residents of 118 rural Alaska communities and 123 Alaska Native tribes with customary and traditional uses of halibut are eligible to participate once 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. Thank you for support of this program!

Questions?

Contact NMFS:

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

Alaska Region, NMFS
Restricted Access Management Program
PO Box 21668
Juneau, Alaska 99518

Contact ADF&G, Division of Subsistence:

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

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

APPENDIX E: SURVEY FORM

Revised 11/17/03

Subsistence Halibut Harvest Survey

OMB No. 0648-0486, Expiration date 12/31/2004

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

(Please make address changes as needed)

Fisher's Name
First name | M.I. | Last name

Date of Birth
Mo. / Day / Year

Mailing Address
Number and street or PO Box | City | State | Zip code

Community of Residence

Daytime Telephone

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 2003? (Please check one) ☐ Yes ☐ No

2. How many halibut did you harvest with set hook gear (longline, skate) while subsistence fishing during 2003?
("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 2003?
(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 2003?
(Please write in numbers of fish only.)

4a. Number of lingcod | 4b. Number of rockfish

5. Did you sport fish for halibut during 2003? (Please check one) ☐ Yes ☐ No

6. How many halibut did you harvest while sport fishing during 2003?
(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

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

PUBLIC REPORTING BURDEN STATEMENT

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Sue Salveson, Assistant Regional Administrator, Sustainable Fisheries Division, Alaska Region, NMFS, P.O. Box 21668, Juneau, AK 99802-1668 (Attn: Lori Durall).

ADDITIONAL INFORMATION

Before completing this form, please note the following: 1) The NMFS may not conduct or sponsor this information request, and you are not required to respond to this information request, unless the form displays a currently valid OMB control number; 2) This information is being used to implement the Alaska Subsistence Halibut Program; 3) Federal law and regulations require and authorize NMFS to manage the subsistence halibut program in Alaska; 4) Submission of this information is voluntary for all persons participating in directed fishing for Pacific halibut under the subsistence halibut program; 5) This information is used to monitor the subsistence halibut program under the Northern Pacific Halibut Act of 1982; 6) Responses to this information request are not confidential except for birthdate, which is confidential under the Privacy Act. We will not report individual responses in public data summaries. Data from this survey will be summarized at a community level.

1247150280

APPENDIX F: SURVEY INSTRUCTIONS

Instructions for Subsistence Halibut Harvest Survey, 2003

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 72% 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 G:

LETTER FROM NMFS ADMINISTRATOR JAMES BALSIGER

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

January 9, 2004

Dear Subsistence Halibut Fisher:

All subsistence halibut fishers who registered and received a Subsistence Halibut Registration Certificate (SHARC) are being sent the enclosed survey. We are asking for your help in managing the subsistence fishery for halibut by indicating if you subsistence fished for halibut in 2003 and how many halibut you harvested. Even if you did not fish, completing the survey and returning it is very important. Reading the instructions and completing the survey will take just a short amount of your time.

In April of 2003, the National Marine Fisheries Service (NMFS) issued regulations to authorize and manage a subsistence fishery for halibut in Alaska. The success of this program depends heavily on a good estimate of the amount of subsistence halibut and by-catch species harvested. Your participation in providing accurate information and returning the survey in a timely manner is critical to the monitoring of this fishery.

Because of its experience and expertise in conducting subsistence surveys, we asked the Division of Subsistence of the Alaska Department of Fish and Game (ADF&G) to conduct this survey for NMFS under Federal Rules. Although responding to the survey is voluntary, both agencies encourage you to complete and return the survey to ADF&G. Full participation in this survey will benefit everyone who participates in the subsistence halibut fishery by ensuring that future management measures are based on adequate and accurate information.

If you have any questions about the operation or content of the survey, please contact ADF&G at 907-267-2353. Questions about the regulations governing the subsistence halibut fishery should be directed to NMFS at 907-586-7425.

Thank you for your support of this program.

Sincerely,

James W. Balsiger
Administrator, Alaska Region

APPENDIX H:

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 I: PROJECT SUMMARY

SUBSISTENCE HARVESTS OF PACIFIC HALIBUT IN ALASKA, 2003

Division of Subsistence, Alaska Department of Fish and Game
333 Raspberry Road, Anchorage, AK 99518
December 2004

Under contract to 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 2003. The full results of the study can be found in Division of Subsistence Technical Paper No. 288, "Subsistence Harvests of Pacific Halibut in Alaska, 2003" (December 2004). Key points in the report are 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).
- A one-page survey form was mailed to 11,635 SHARC holders in early 2004. After three mailings and some supplemental community visits, 7,593 surveys (65.3%) were returned. Participation in the survey was voluntary.
- An estimated 4,942 individuals subsistence fished for halibut in 2003 (see Figure 6, below).
- The estimated subsistence harvest was 43,926 fish for 1,041,330 pounds net weight.
- Of this total, 72.3% was harvested with setline gear (longline or skate) and 27.7% was harvested with hand-operated hear (handline or rod and reel).
- The largest subsistence harvests occurred in southeast Alaska (Halibut Regulatory Area 2C), at 60.3% of the total, followed by southcentral Alaska (Area 3A) at 26.9%. Table 4 and Figure 7 from the final report (below) give more details on harvests by gear type and area.
- SHARC holders also harvested an estimated 10,784 halibut (245,947 pounds net weight) while sport fishing in 2003.
- Based on place of residence of SHARC holders, communities with the largest subsistence halibut harvests in 2003 were Sitka and Kodiak (the eligible communities with the largest populations) (see Figure 15, below).
- An estimated 14,870 rockfish were harvested by 1,239 fishers in the subsistence halibut fishery in 2003. Most (67.0%) were harvested in southeast Alaska.
- An estimated 3,298 lingcod were harvested by 699 fishers in the subsistence halibut fishery in 2003. Most (51.1%) 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 2003 was 83.065 million pounds, net weight. Subsistence harvests accounted for 1.3% of this total (see Figure 25, 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 harvest study continue for at least two more 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 4. Estimated Alaska Subsistence Harvests of Halibut by SHARC Type, Regulatory Area, and Gear Type, 2003[1]

SHARC Type	Halibut Regulatory Area	Number of SHARCs Issued	Estimated Harvest by Gear Type[2]										
			Setline (Fixed) Gear			Hand-Operated Gear			All Gear				
			Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	95% C.I. Percent (Number)	Estimated Pounds Harvested	95% C.I. Percent (Pounds)
Tribal	2C	3,132	793	8,085	239,225	264	1,434	32,193	968	9,518	10.3%	271,416	11.8%
Tribal	3A	936	208	2,102	51,085	191	1,727	35,477	358	3,828	8.3%	86,563	10.7%
Tribal	3B	204	43	502	9,293	59	380	9,035	90	884	26.1%	18,328	26.6%
Tribal	4A	70	9	31	376	42	323	11,269	45	353	52.7%	11,645	46.3%
Tribal	4B	6	2	11	198	2	8	180	4	19	73.7%	378	79.1%
Tribal	4C	277	44	707	11,698	73	504	11,690	101	1,211	60.2%	23,388	46.8%
Tribal	4D	47	19	67	3,936	2	8	444	25	75	26.7%	4,380	24.6%
Tribal	4E	906	69	803	10,116	183	2,244	36,528	245	3,046	17.0%	46,640	12.9%
Tribal	All	5,578	1,187	12,308	325,927	816	6,628	136,816	1,836	18,934	7.3%	462,738	7.8%
Rural	2C	4,095	1,832	12,027	299,259	489	2,938	57,283	2,114	14,963	3.5%	356,543	3.7%
Rural	3A	1,674	534	4,854	116,582	397	3,634	76,467	827	8,485	5.4%	193,050	5.5%
Rural	3B	59	22	162	3,391	34	289	6,247	44	450	13.1%	9,637	18.3%
Rural	4A	84	33	324	6,082	25	153	3,000	48	476	24.0%	9,082	20.4%
Rural	4B	18	9	37	1,281	4	17	812	9	55	172.7%	2,094	194.6%
Rural	4C	12	0	0	0	4	23	368	4	23	147.8%	368	140.4%
Rural	4D	3	0	0	0	0	0	0	1	0	0.0%	0	0.0%
Rural	4E	112	11	33	336	39	506	7,481	59	540	56.9%	7,818	62.7%
Rural	All	6,057	2,441	17,437	426,931	992	7,560	151,658	3,106	24,992	3.1%	578,592	3.1%
All	2C	7,227	2,625	20,112	538,484	753	4,372	89,476	3,082	24,481	4.5%	627,959	5.5%
All	3A	2,610	742	6,956	167,667	588	5,361	111,944	1,185	12,313	4.5%	279,613	5.0%
All	3B	263	65	664	12,684	93	669	15,282	134	1,334	17.9%	27,965	18.5%
All	4A	154	42	355	6,458	67	476	14,269	93	829	25.8%	20,727	26.9%
All	4B	24	11	48	1,479	6	25	992	13	74	105.4%	2,472	134.8%
All	4C	289	44	707	11,698	77	527	12,058	105	1,234	59.1%	23,756	46.1%
All	4D	50	19	67	3,936	2	8	444	26	75	26.7%	4,380	24.6%
All	4E	1,018	80	836	10,452	222	2,750	44,009	304	3,586	16.8%	54,458	14.2%
All	All	11,635	3,628	29,745	752,858	1,808	14,188	288,474	4,942	43,926	3.6%	1,041,330	3.9%

[1] SHARC = Subsistence halibut registration certificate.

[2] Pounds are net (dressed) weight. Net weight = 75% of round weight. Setline = longline or skate. Hand-operated gear = rod and reel or handline.

Source: Alaska Department of Fish and Game, Division of Subsistence Survey, 2004

Figure 6. Estimated Number of Subsistence Halibut Fishers in Alaska, 2003, by Regulatory Area

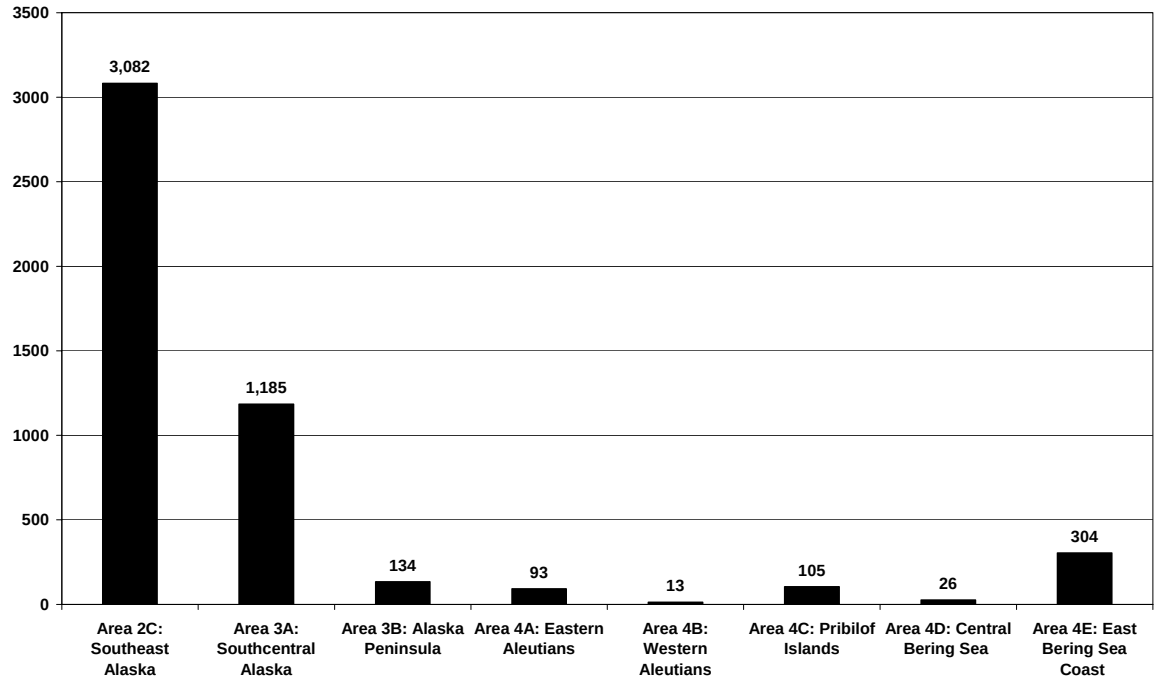


Figure 7. Estimated Subsistence Harvest of Halibut in Alaska, 2003, by Regulatory Area, in Pounds Net Weight

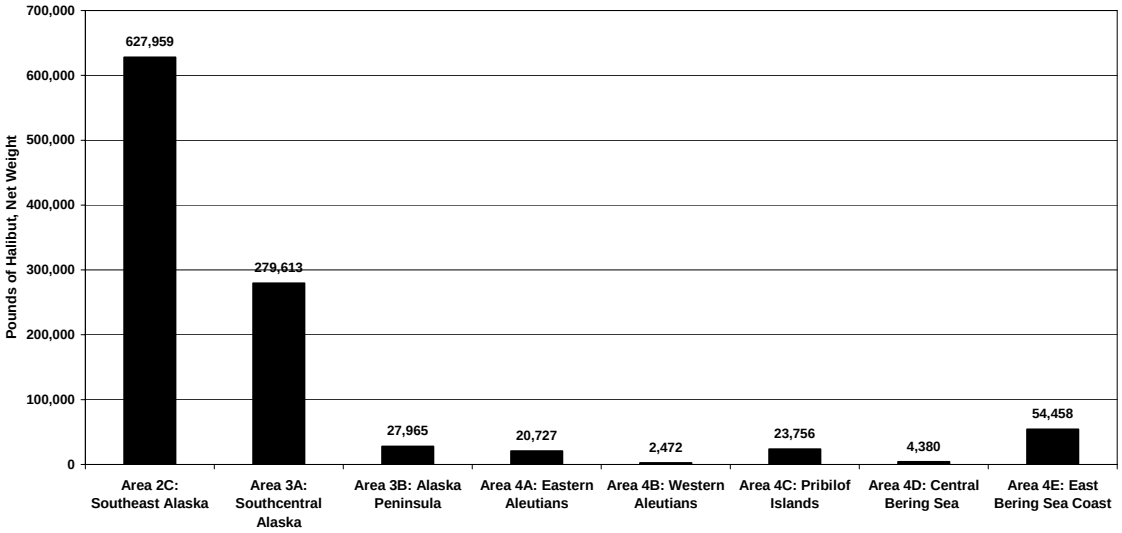


Figure 15. Alaska Subsistence Halibut Harvests by Place of Residence, 2003

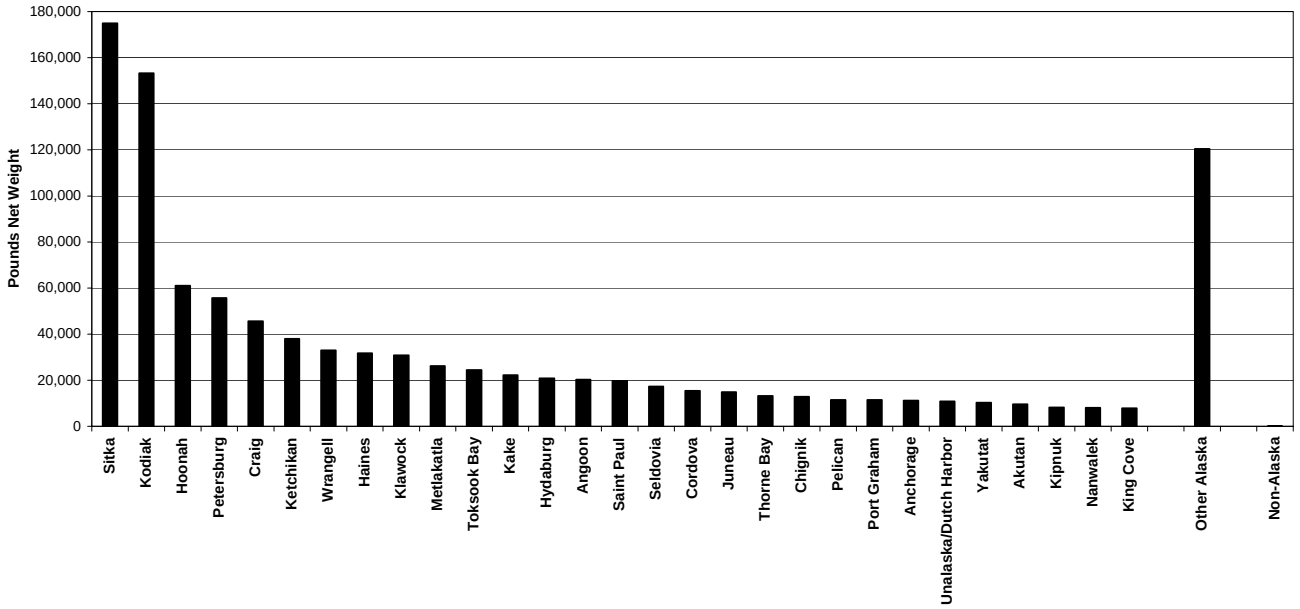
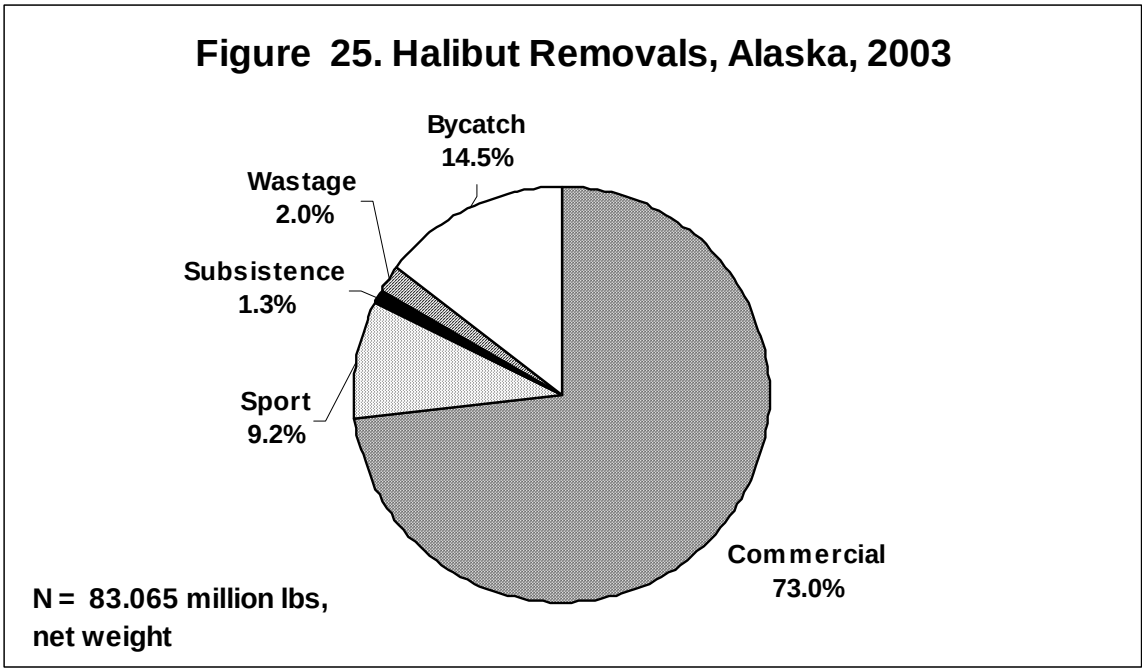


Figure 25. Halibut Removals, Alaska, 2003



APPENDIX J: APPENDIX TABLES

Appendix Table 1. Results from Returned Surveys by Tribe and Rural Community, 2003

Tribe/Community[1]	Return Rate			Subsistence Fished?		Subsistence Harvest		Sport Fished?		Sport Harvest		Lingcod Harvest		Rockfish Harvest	
	SHARCs[2]	Returned	Percent	Number	Percent	Number	Pounds[3]	Number	Percent	Number	Pounds	Number with Harvest	Number of fish	Number with Harvest	Number of fish
AGDAAGUX TRIBE OF KING COVE	28	21	75.0%	14	66.7%	230	3,889	2	9.5%	14	285	1	40	1	100
ANGOON COMMUNITY ASSOCIATION	118	57	48.3%	30	52.6%	456	7,992	9	15.8%	29	399	1	2	4	24
AUKQUAN TRADITIONAL COUNCIL	2														
CENTRAL COUNCIL TLINGIT AND HAIDA INDIAN TRIBES	537	287	53.4%	90	31.4%	834	20,968	49	17.1%	147	3,414	10	30	24	197
CHEVAK NATIVE VILLAGE (KASHUNAMIUT)	5														
CHIGNIK LAKE VILLAGE	4														
CHILKAT INDIAN VILLAGE	42	34	81.0%	13	38.2%	25	638	2	5.9%	4	127	1	4	1	9
CHILKOOT INDIAN ASSOCIATION	41	33	80.5%	10	30.3%	34	1,006	5	15.2%	3	60	0	0	1	4
CHINIK ESKIMO COMMUNITY	1														
CRAIG COMMUNITY ASSOCIATION	52	38	73.1%	14	36.8%	80	2,500	6	15.8%	8	179	0	0	3	25
DOUGLAS INDIAN ASSOCIATION	22	13	59.1%	3	23.1%	40	540	0	0.0%	0	0	0	0	0	0
EGEGIK VILLAGE	6	6	100.0%	0	0.0%	0	0	1	16.7%	6	112	0	0	0	0
HOONAH INDIAN ASSOCIATION	199	122	61.3%	44	36.1%	864	25,884	14	11.5%	73	1,152	2	9	5	138
HYDABURG COOPERATIVE ASSOCIATION	174	146	83.9%	48	32.9%	363	16,888	10	6.8%	20	1,941	12	86	22	451
KENAITZE INDIAN TRIBE	48	35	72.9%	8	22.9%	66	1,168	6	17.1%	28	463	0	0	1	3
KETCHIKAN INDIAN CORPORATION	639	292	45.7%	58	19.9%	490	13,834	52	17.8%	149	2,657	7	37	20	229
KING ISLAND NATIVE COMMUNITY	2														
KLAWOCK COOPERATIVE ASSOCIATION	159	101	63.5%	36	35.6%	275	13,087	6	5.9%	19	557	4	31	7	84
LESNOI VILLAGE (WOODY ISLAND)	259	123	47.5%	13	10.6%	36	956	9	7.3%	9	251	1	1	1	10
METLAKATLA INDIAN COMMUNITY, ANNETTE ISLAND RESERVE	343	130	37.9%	42	32.3%	312	9,593	16	12.3%	11	358	7	13	17	98
NAKNEK NATIVE VILLAGE	2														
NATIVE VILLAGE OF AFOGNAK	22	16	72.7%	6	37.5%	29	670	2	12.5%	4	108	1	1	0	0
NATIVE VILLAGE OF AKHIOK	16	12	75.0%	11	91.7%	40	1,354	1	8.3%	0	0	2	11	0	0
NATIVE VILLAGE OF AKUTAN	44	16	36.4%	12	75.0%	111	3,435	3	18.8%	6	149	3	150	6	288
NATIVE VILLAGE OF ALEKNAGIK	2														
NATIVE VILLAGE OF ATKA	6	5	83.3%	3	60.0%	16	315	1	20.0%	2	37	0	0	0	0
NATIVE VILLAGE OF BELKOFSKI	2														
NATIVE VILLAGE OF CHENEGA	27	15	55.6%	10	66.7%	65	2,797	4	26.7%	1	37	1	2	4	36
NATIVE VILLAGE OF CHIGNIK	11	8	72.7%	5	62.5%	53	2,347	2	25.0%	25	1,125	2	5	0	0
NATIVE VILLAGE OF CHIGNIK LAGOON	33	22	66.7%	19	86.4%	120	2,288	2	9.1%	6	119	0	0	0	0
NATIVE VILLAGE OF DILLINGHAM (CURYUNG)	16	11	68.8%	3	27.3%	11	217	3	27.3%	10	194	0	0	0	0
NATIVE VILLAGE OF EEK	21	8	38.1%	3	37.5%	6	231	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF EKUK	3														
NATIVE VILLAGE OF ELIM	1														
NATIVE VILLAGE OF EYAK	46	32	69.6%	8	25.0%	93	1,650	12	37.5%	77	860	4	19	6	59
NATIVE VILLAGE OF FALSE PASS	13	6	46.2%	2	33.3%	9	164	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF GAMBELL	6	3	50.0%	3	100.0%	2	52	0	0.0%	0	0	1	30	1	2
NATIVE VILLAGE OF GOODNEWS BAY (MUMTRAQ)	15	9	60.0%	7	77.8%	77	2,349	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF HOOPER BAY	90	36	40.0%	10	27.8%	59	257	2	5.6%	2	37	2	5	0	0
NATIVE VILLAGE OF KARLUK	4														
NATIVE VILLAGE OF KIPNUK	89	16	18.0%	12	75.0%	107	1,485	0	0.0%	0	0	2	5	1	1
NATIVE VILLAGE OF KONGIGANAK	8	6	75.0%	6	100.0%	51	946	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF KWIGILLINGOK	1														
NATIVE VILLAGE OF KWINHAGAK	10	5	50.0%	4	80.0%	16	407	0	0.0%	0	0	0	0	0	0
NATIVE VILLAGE OF LARSEN BAY	25	16	64.0%	10	62.5%	96	2,042	7	43.8%	17	381	0	0	0	0
NATIVE VILLAGE OF MEKORYUK	15	8	53.3%	5	62.5%	60	948	1	12.5%	2	52	2	8	0	0
NATIVE VILLAGE OF NANWALEK	32	23	71.9%	18	78.3%	326	4,291	2	8.7%	12	240	2	14	3	212
NATIVE VILLAGE OF NAPAKIAK	3														
NATIVE VILLAGE OF NIGHTMUTE	4														
NATIVE VILLAGE OF NIKOLSKI	12	6	50.0%	3	50.0%	14	843	1	16.7%	2	225	0	0	1	20

Continued

Appendix Table 1. Results from Returned Surveys by Tribe and Rural Community, 2003

Tribe/Community[1]	Return Rate			Subsistence Fished?		Subsistence Harvest		Sport Fished?		Sport Harvest		Lingcod Harvest		Rockfish Harvest	
	SHARCs[2]	Returned	Percent	Number	Percent	Number	Pounds[3]	Number	Percent	Number	Pounds	Number with Harvest	Number of fish	Number with Harvest	Number of fish
NATIVE VILLAGE OF SAVOONGA	41	36	87.8%	17	47.2%	62	3,753	0	0.0%	0	0	1	1	0	0
NATIVE VILLAGE OF SCAMMON BAY	5														
NATIVE VILLAGE OF SHAKTOOLIK	1														
NATIVE VILLAGE OF SHISHMAREF	1														
NATIVE VILLAGE OF TATITLEK	16	14	87.5%	11	78.6%	64	2,552	1	7.1%	2	60	1	10	5	54
NATIVE VILLAGE OF TOKSOOK BAY (NUNAKAUYAK)	533	109	20.5%	51	46.8%	1,337	24,092	0	0.0%	0	0	13	45	5	41
NATIVE VILLAGE OF TUNUNAK	1														
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	10	9	90.0%	3	33.3%	38	580	1	11.1%	2	60	0	0	0	0
NATIVE VILLAGE OF WHITE MOUNTAIN	1														
NEWTOK VILLAGE	3														
NINILCHIK VILLAGE	78	53	67.9%	16	30.2%	134	2,648	17	32.1%	124	2,113	2	6	1	75
NOME ESKIMO COMMUNITY	13	7	53.8%	2	28.6%	1	30	1	14.3%	2	52	0	0	1	15
ORGANIZED VILLAGE OF KAKE	119	72	60.5%	24	33.3%	220	8,702	6	8.3%	9	277	3	15	5	32
ORGANIZED VILLAGE OF KASAAN	3														
ORGANIZED VILLAGE OF SAXMAN	58	21	36.2%	7	33.3%	20	397	3	14.3%	7	86	1	4	3	17
ORUTSARARMUIT NATIVE VILLAGE	6	4	66.7%	1	25.0%	12	315	1	25.0%	2	45	0	0	0	0
PAULOFF HARBOR VILLAGE	57	19	33.3%	6	31.6%	70	1,365	4	21.1%	7	172	0	0	2	9
PETERSBURG INDIAN ASSOCIATION	119	82	68.9%	31	37.8%	251	3,454	17	20.7%	41	703	0	0	5	28
PLATINUM TRADITIONAL VILLAGE	2														
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST GEORGE	26	12	46.2%	6	50.0%	63	770	0	0.0%	0	0	0	0	0	0
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST PAUL	251	42	16.7%	15	35.7%	184	3,718	3	7.1%	86	3,150	3	17	2	16
QAGAN TOYAGUNGIN TRIBE OF SAND POINT VILLAGE	34	17	50.0%	2	11.8%	4	150	1	5.9%	0	0	0	0	0	0
QAWALINGIN TRIBE OF UNALASKA	14	10	71.4%	4	40.0%	14	358	2	20.0%	4	150	1	4	1	10
SELDOVIA VILLAGE TRIBE	35	28	80.0%	13	46.4%	229	5,205	6	21.4%	21	419	0	0	2	42
SHOONAQ' TRIBE OF KODIAK	132	94	71.2%	51	54.3%	655	19,031	29	30.9%	141	5,331	9	21	11	156
SITKA TRIBE OF ALASKA	409	283	69.2%	91	32.2%	1,155	31,673	45	15.9%	151	5,803	27	122	40	451
SKAGWAY VILLAGE	1														
SOUTH NAKNEK VILLAGE	1														
TRADITIONAL VILLAGE OF TOGIAK	6	1	16.7%	1	100.0%	0	0	0	0.0%	0	0	0	0	0	0
UGASHIK VILLAGE	4														
VILLAGE OF CHEFORNAK	16	2	12.5%	2	100.0%	55	412	0	0.0%	0	0	0	0	0	0
VILLAGE OF CLARK'S POINT	2														
VILLAGE OF KANATAK	11	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
VILLAGE OF OLD HARBOR	16	14	87.5%	8	57.1%	37	1,069	2	14.3%	3	45	1	20	2	26
VILLAGE OF SALAMATOFF	2														
WRANGELL COOPERATIVE ASSOCIATION	95	67	70.5%	17	25.4%	116	3,308	10	14.9%	12	303	0	0	2	37
YAKUTAT TLINGIT TRIBE	53	37	69.8%	18	48.6%	204	4,270	3	8.1%	7	62	7	19	4	23
TRIBAL SUBTOTAL	5,578	2,896	51.9%	1,064	36.7%	11,301	281,795	406	14.0%	1,389	36,045	142	832	230	3,217
ADAK	5														
AKHIOK	1														
AKUTAN	5														
ALEKNAGIK	1														
ANGOON	24	19	79.2%	13	68.4%	138	2,605	6	31.6%	31	835	0	0	3	26
ATKA	13	3	23.1%	1	33.3%	8	375	1	33.3%	4	187	1	10	0	0
BETHEL	4														

Continued

Appendix Table 1. Results from Returned Surveys by Tribe and Rural Community, 2003

Tribe/Community[1]	Return Rate			Subsistence Fished?		Subsistence Harvest		Sport Fished?		Sport Harvest		Lingcod Harvest		Rockfish Harvest	
	SHARCs[2]	Returned	Percent	Number	Percent	Number	Pounds[3]	Number	Percent	Number	Pounds	Number with Harvest	Number of fish	Number with Harvest	Number of fish
CHIGNIK LAGOON	7	7	100.0%	5	71.4%	18	332	0	0.0%	0	0	0	0	0	0
CHIGNIK LAKE	7	6	85.7%	5	83.3%	30	307	3	50.0%	12	179	2	8	1	2
CHINIAK	5														
COFFMAN COVE	39	35	89.7%	27	77.1%	172	4,659	16	45.7%	75	1,472	3	4	8	59
COLD BAY	18	15	83.3%	11	73.3%	77	1,886	7	46.7%	21	547	2	46	0	0
CORDOVA	316	257	81.3%	76	29.6%	573	11,328	103	40.1%	476	8,352	19	65	24	239
CRAIG	281	228	81.1%	114	50.0%	1,135	23,992	72	31.6%	352	5,802	17	39	60	594
DILLINGHAM	22	21	95.5%	5	23.8%	6	75	5	23.8%	10	145	0	0	1	10
EDNA BAY	43	41	95.3%	30	73.2%	144	4,626	14	34.1%	30	785	6	18	13	221
EEK	1														
ELFIN COVE	16	13	81.3%	5	38.5%	30	697	1	7.7%	1	37	1	1	1	2
ELLAMAR	1														
FALSE PASS	6	6	100.0%	5	83.3%	109	1,393	1	16.7%	2	37	1	60	1	35
GAMBELL	1														
GOODNEWS BAY	2														
GUSTAVUS	52	40	76.9%	21	52.5%	188	3,357	14	35.0%	61	1,166	0	0	1	5
HAINES	380	334	87.9%	206	61.7%	1,140	25,623	76	22.8%	95	2,148	11	36	31	181
HOLLIS	41	37	90.2%	20	54.1%	97	2,469	12	32.4%	50	701	3	6	10	56
HOONAH	120	83	69.2%	46	55.4%	467	12,980	24	28.9%	223	3,534	2	3	4	24
HOOPER BAY	8	4	50.0%	4	100.0%	6	71	0	0.0%	0	0	0	0	0	0
HYDABURG	11	11	100.0%	5	45.5%	18	675	3	27.3%	9	330	1	10	4	114
HYDER	37	29	78.4%	10	34.5%	32	772	5	17.2%	12	254	0	0	0	0
KAKE	61	45	73.8%	22	48.9%	162	5,427	8	17.8%	23	497	2	8	4	42
KASAAN	16	11	68.8%	5	45.5%	37	930	0	0.0%	0	0	0	0	2	6
KING COVE	11	8	72.7%	5	62.5%	74	2,211	0	0.0%	0	0	0	0	0	0
KING SALMON	4														
KIPNUK	1														
KLAWOCK	115	80	69.6%	36	45.0%	332	8,623	23	28.7%	162	2,610	9	22	17	238
KLUKWAN	3														
KODIAK	1,100	818	74.4%	423	51.7%	4,321	101,505	346	42.3%	2,060	49,583	42	138	75	800
KONGIGANAK	4														
KOTLIK	1														
KOYUK	1														
LARSEN BAY	12	9	75.0%	9	100.0%	95	2,420	6	66.7%	31	576	0	0	2	22
MEKORYUK	2														
METLAKATLA	31	16	51.6%	8	50.0%	31	643	7	43.8%	16	317	1	1	2	13
MEYERS CHUCK	10	8	80.0%	6	75.0%	12	318	1	12.5%	1	13	0	0	0	0
NAKNEK	4														
NANWALEK	7	6	85.7%	5	83.3%	99	1,800	0	0.0%	0	0	0	0	1	30
NEWTOK	1														
NIGHTMUTE	25	7	28.0%	4	57.1%	104	1,718	0	0.0%	0	0	0	0	0	0
NIKOLSKI	5														
NOME	7	5	71.4%	3	60.0%	0	0	0	0.0%	0	0	0	0	0	0
OLD HARBOR	37	29	78.4%	20	69.0%	121	3,076	9	31.0%	16	516	1	4	1	200
OUZINKIE	17	15	88.2%	9	60.0%	47	1,311	3	20.0%	9	149	2	2	3	23
PELICAN	41	36	87.8%	21	58.3%	125	2,721	11	30.6%	8	220	5	12	12	156
PETERSBURG	908	722	79.5%	293	40.6%	2,073	40,221	194	26.9%	644	14,734	9	36	44	300
PLATINUM	2														

Continued

Appendix Table 1. Results from Returned Surveys by Tribe and Rural Community, 2003

Tribe/Community[1]	Return Rate			Subsistence Fished?		Subsistence Harvest		Sport Fished?		Sport Harvest		Lingcod Harvest		Rockfish Harvest	
	SHARCs[2]	Returned	Percent	Number	Percent	Number	Pounds[3]	Number	Percent	Number	Pounds	Number with Harvest	Number of fish	Number with Harvest	Number of fish
PT. BAKER	20	19	95.0%	11	57.9%	79	1,702	3	15.8%	1	22	1	1	4	46
QUINHAGAK	4														
SAND POINT	5														
SAVOONGA	2														
SAXMAN	30	19	63.3%	6	31.6%	25	517	4	21.1%	46	697	0	0	1	1
SCAMMON BAY	5														
SELDOVIA	89	79	88.8%	42	53.2%	702	12,680	32	40.5%	222	3,909	6	28	10	63
SHELDON POINT	1														
SITKA	1,224	921	75.2%	511	55.5%	3,872	96,577	250	27.1%	868	18,071	165	615	219	2,789
SKAGWAY	40	35	87.5%	17	48.6%	24	598	15	42.9%	23	676	1	2	2	14
SOUTH NAKNEK	1														
ST GEORGE ISLAND	7	4	57.1%	2	50.0%	13	210	0	0.0%	0	0	0	0	0	0
ST PAUL ISLAND	5														
STERLING	1														
TATITLEK	7	6	85.7%	6	100.0%	63	1,521	0	0.0%	0	0	1	1	5	55
TENAKEE SPRINGS	36	31	86.1%	18	58.1%	113	3,022	20	64.5%	56	1,136	0	0	9	75
THORNE BAY	97	83	85.6%	52	62.7%	331	11,341	34	41.0%	62	1,780	3	4	19	225
TOKSOOK BAY	3														
UNALASKA	74	56	75.7%	30	53.6%	332	6,090	21	37.5%	134	3,507	2	22	4	61
WHALE PASS	24	23	95.8%	7	30.4%	11	482	7	30.4%	40	860	1	1	2	20
WRANGELL	362	278	76.8%	145	52.2%	863	21,282	75	27.0%	175	4,105	10	46	28	224
YAKUTAT	36	24	66.7%	11	45.8%	135	3,381	9	37.5%	53	1,300	7	33	4	106
RURAL COMMUNITY SUBTOTAL	6,057	4,697	77.5%	2,412	51.4%	19,238	445,370	1,473	31.4%	6,296	134,885	353	1,338	659	7,419

Community/Tribe	Return Rate			Subsistence Fished?		Subsistence Harvest		Sport Fished?		Sport Harvest		Lingcod Harvest		Rockfish Harvest	
	SHARCs	Returned	Percent	Number	Percent	Number	Pounds	Number	Percent	Number	Pounds	Number with Harvest	Number of fish	Number with Harvest	Number of fish
Tribal Subtotals	5,578	2,896	51.9%	1,064	36.7%	11,301	281,795	406	14.0%	1,389	36,045	142	832	230	3,217
Rural Community Subtotals	6,057	4,697	77.5%	2,412	51.4%	19,238	445,370	1,473	31.4%	6,296	134,885	353	1,338	659	7,419
Grand Totals	11,635	7,593	65.3%	3,476	45.8%	30,539	727,165	1,879	45.4%	7,685	170,930	495	2,170	889	10,636

[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 includes 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.

Appendix Table 2. Reported Harvests of Halibut in Number of Fish by Return Category, 2003

Tribe/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
AGDAAGUX TRIBE OF KING COVE	8	4	21	2.6	5.3	10	8	209	20.9	26.1	3	2	0	0.0	0.0	0	0	0	0.0	0.0
ANGOON COMMUNITY ASSOCIATION	29	11	161	5.6	14.6	14	9	107	7.6	11.9	12	8	178	14.8	22.3	2	2	10	0.0	0.0
AUKQUAN TRADITIONAL COUNCIL																				
CENTRAL COUNCIL TLINGIT AND HAIDA INDIAN TRIBES	115	30	340	3.0	11.3	100	36	238	2.4	6.6	65	19	180	2.8	9.5	7	5	76	0.0	0.0
CHEVAK NATIVE VILLAGE (KASHUNAMIUT)																				
CHIGNIK LAKE VILLAGE																				
CHILKAT INDIAN VILLAGE	5	1	10	2.0	10.0	16	8	10	0.6	1.3	13	4	5	0.4	1.3	0	0	0	0.0	0.0
CHILKOOT INDIAN ASSOCIATION	19	7	24	1.3	3.4	10	2	7	0.7	3.5	4	1	3	0.8	3.0	0	0	0	0.0	0.0
CHINIK ESKIMO COMMUNITY																				
CRAIG COMMUNITY ASSOCIATION	23	9	55	2.4	6.1	10	1	12	1.2	12.0	4	3	6	1.5	2.0	1	1	7	0.0	0.0
DOUGLAS INDIAN ASSOCIATION	4	1	3	0.8	3.0	7	1	25	3.6	25.0	0	0	0	0.0	0.0	2	1	12	0.0	0.0
EGEGIK VILLAGE	5	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
HOONAH INDIAN ASSOCIATION	51	18	433	8.5	24.1	38	18	327	8.6	18.2	29	5	31	1.1	6.2	4	3	73	0.0	0.0
HYDABURG COOPERATIVE ASSOCIATION	18	7	72	4.0	10.3	28	13	76	2.7	5.8	6	3	18	3.0	6.0	94	25	197	0.0	0.0
KENAITZE INDIAN TRIBE	15	5	34	2.3	6.8	14	3	32	2.3	10.7	5	0	0	0.0	0.0	1	0	0	0.0	0.0
KETCHIKAN INDIAN CORPORATION	108	17	179	1.7	10.5	111	26	148	1.3	5.7	71	15	163	2.3	10.9	2	0	0	0.0	0.0
KING ISLAND NATIVE COMMUNITY																				
KLAWOCK COOPERATIVE ASSOCIATION	27	7	63	2.3	9.0	36	18	96	2.7	5.3	32	8	49	1.5	6.1	6	3	67	0.0	0.0
LESNOI VILLAGE (WOODY ISLAND)	58	5	9	0.2	1.8	42	2	4	0.1	2.0	23	6	23	1.0	3.8	0	0	0	0.0	0.0
METLAKATLA INDIAN COMMUNITY, ANNETTE ISLAND RESERVE	42	14	64	1.5	4.6	47	17	104	2.2	6.1	40	10	144	3.6	14.4	1	1	0	0.0	0.0
NAKNEK NATIVE VILLAGE																				
NATIVE VILLAGE OF AFOGNAK	9	4	16	1.8	4.0	3	1	3	1.0	3.0	4	1	10	2.5	10.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF AKHIOK	5	5	13	2.6	2.6	1	0	0	0.0	0.0	4	4	14	3.5	3.5	2	2	13	0.0	0.0
NATIVE VILLAGE OF AKUTAN	4	3	8	2.0	2.7	8	6	88	11.0	14.7	2	1	12	6.0	12.0	2	2	3	0.0	0.0
NATIVE VILLAGE OF ALEKNAGIK																				
NATIVE VILLAGE OF ATKA	4	2	6	1.5	3.0	1	1	10	10.0	10.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF BELKOFSKI																				
NATIVE VILLAGE OF CHENEGA	5	4	54	10.8	13.5	3	0	0	0.0	0.0	6	5	7	1.2	1.4	1	1	4	0.0	0.0
NATIVE VILLAGE OF CHIGNIK	0	0	0	0.0	0.0	4	4	3	0.8	0.8	3	1	50	16.7	50.0	1	0	0	0.0	0.0
NATIVE VILLAGE OF CHIGNIK LAGOON	8	8	57	7.1	7.1	8	6	24	3.0	4.0	5	4	29	5.8	7.3	1	1	10	0.0	0.0
NATIVE VILLAGE OF DILLINGHAM (CURYUNG)	6	2	5	0.8	2.5	3	0	0	0.0	0.0	2	1	6	3.0	6.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF EEK	1	0	0	0.0	0.0	4	2	6	1.5	3.0	3	1	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF EKUK																				
NATIVE VILLAGE OF ELIM																				
NATIVE VILLAGE OF EYAK	18	4	8	0.4	2.0	10	3	82	8.2	27.3	4	1	3	0.8	3.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF FALSE PASS	2	1	3	1.5	3.0	1	0	0	0.0	0.0	1	0	0	0.0	0.0	2	1	6	0.0	0.0
NATIVE VILLAGE OF GAMBELL	1	1	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	2	2	2	0.0	0.0
NATIVE VILLAGE OF GOODNEWS BAY (MUMTRAQ)	1	1	9	9.0	9.0	3	3	48	16.0	16.0	5	3	20	4.0	6.7	0	0	0	0.0	0.0
NATIVE VILLAGE OF HOOPER BAY	11	3	50	4.5	16.7	12	3	2	0.2	0.7	13	4	7	0.5	1.8	0	0	0	0.0	0.0
NATIVE VILLAGE OF KARLUK																				
NATIVE VILLAGE OF KIPNUK	9	8	83	9.2	10.4	3	2	15	5.0	7.5	4	2	9	2.3	4.5	0	0	0	0.0	0.0
NATIVE VILLAGE OF KONGIGANAK	3	3	21	7.0	7.0	3	3	30	10.0	10.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF KWIGILLINGOK																				
NATIVE VILLAGE OF KWINHAGAK	2	1	5	2.5	5.0	1	1	6	6.0	6.0	1	1	2	2.0	2.0	1	1	3	0.0	0.0
NATIVE VILLAGE OF LARSEN BAY	6	4	19	3.2	4.8	7	4	69	9.9	17.3	3	2	8	2.7	4.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF MEKORYUK	5	3	39	7.8	13.0	2	2	21	10.5	10.5	1	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF NAMVALEK	7	4	72	10.3	18.0	8	7	183	22.9	26.1	0	0	0	0.0	0.0	8	7	71	0.0	0.0
NATIVE VILLAGE OF NAPAKIAK																				
NATIVE VILLAGE OF NIGHTMUTE																				
NATIVE VILLAGE OF NIKOLSKI	6	3	14	2.3	4.7	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF OUZINKIE	10	7	43	4.3	6.1	4	4	16	4.0	4.0	4	3	12	3.0	4.0	2	1	42	0.0	0.0
NATIVE VILLAGE OF PERRYVILLE	2	1	5	2.5	5.0	2	2	20	10.0	10.0	3	1	21	7.0	21.0	4	3	28	0.0	0.0
NATIVE VILLAGE OF PORT GRAHAM	14	6	216	15.4	36.0	0	0	0	0.0	0.0	8	4	42	5.3	10.5	14	13	225	0.0	0.0
NATIVE VILLAGE OF PORT LIONS	7	3	33	4.7	11.0	11	6	61	5.5	10.2	15	8	47	3.1	5.9	5	1	1	0.0	0.0
NATIVE VILLAGE OF SAVOONGA	7	5	25	3.6	5.0	2	1	2	1.0	2.0	1	0	0	0.0	0.0	26	11	35	0.0	0.0
NATIVE VILLAGE OF SCAMMON BAY																				
NATIVE VILLAGE OF SHAKTOOLIK																				
NATIVE VILLAGE OF SHISHMAREF																				
NATIVE VILLAGE OF TATITLEK	5	4	23	4.6	5.8	3	3	21	7.0	7.0	0	0	0	0.0	0.0	6	4	20	0.0	0.0
NATIVE VILLAGE OF TOKSOOK BAY (NUNAKAUYAK)	21	11	119	5.7	10.8	16	3	108	6.8	36.0	26	2	83	3.2	41.5	46	35	1027	0.0	0.0
NATIVE VILLAGE OF TUNUNAK																				
NATIVE VILLAGE OF UNALAKLEET	2	0	0	0.0	0.0	1	0	0	0.0	0.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF UNGA	2	0	0	0.0	0.0	2	2	22	11.0	11.0	5	1	16	3.2	16.0	0	0	0	0.0	0.0
NATIVE VILLAGE OF WHITE MOUNTAIN																				
NEWTOK VILLAGE																				
NINILCHIK VILLAGE	26	10	43	1.7	4.3	18	5	71	3.9	14.2	9	1	20	2.2	20.0	0	0	0	0.0	0.0
NOME ESKIMO COMMUNITY	0	0	0	0.0	0.0	4	0	0	0.0	0.0	2	1	0	0.0	0.0	1	1	1	0.0	0.0
ORGANIZED VILLAGE OF KAKE	28	8	31	1.1	3.9	21	7	91	4.3	13.0	22	9	98	4.5	10.9	1	0	0	0.0	0.0
ORGANIZED VILLAGE OF KASAAN																				
ORGANIZED VILLAGE OF SAXMAN	9	3	14	1.6	4.7	6	3	3	0.5	1.0	5	1	3	0.6	3.0	1	0	0	0.0	0.0
ORUTSARARMUIT NATIVE VILLAGE	2	0	0	0.0	0.0	0	0	0	0.0	0.0	2	1	12	6.0	12.0	0	0	0	0.0	0.0
PAULOFF HARBOR VILLAGE	2	2	24	12.0	12.0	7	2	24	3.4	12.0	10	2	22	2.2	11.0	0	0	0	0.0	0.0
PETERSBURG INDIAN ASSOCIATION	32	14	70	2.2	5.0	22	7	58	2.6	8.3	15	2	1	0.1	0.5	13	8	122	0.0	0.0
PLATINUM TRADITIONAL VILLAGE																				
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST GEORGE	4	3	30	7.5	10.0	6	3	33	5.5	11.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST PAUL	20	6	123	6.2	20.5	9	3	31	3.4	10.3	13	6	30	2.3	5.0	0	0	0	0.0	0.0
QAGAN TOYAGUNGIN TRIBE OF SAND POINT VILLAGE	3	1	0	0.0	0.0	5	1	4	0.8	4.0	9	0	0	0.0	0.0	0	0	0	0.0	0.0
QAWALINGIN TRIBE OF UNALASKA	3	3	11	3.7	3.7	4	0	0	0.0	0.0	3	1	3	1.0	3.0	0	0	0	0.0	0.0
SELDOVIA VILLAGE TRIBE	18	10	197	10.9	19.7	8	3	32	4.0	10.7	2	0	0	0.0	0.0	0	0	0	0.0	0.0
SHOONAQ' TRIBE OF KODIAK	50	26	329	6.6	12.7	19	16	120	6.3	7.5	25	9	206	8.2	22.9	0	0	0	0.0	0.0
SITKA TRIBE OF ALASKA	107	36	307	2.9	8.5	73	23	315	4.3	13.7	25	8	220	8.8	27.5	78	24	313	0.0	0.0

Continued

Appendix Table 2. Reported Harvests of Halibut in Number of Fish by Return Category, 2003 [continued]

Tribe/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
SKAGWAY VILLAGE																				
SOUTH NAKNEK VILLAGE																				
TRADITIONAL VILLAGE OF TOGIAK	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
UGASHIK VILLAGE																				
VILLAGE OF CHEFORNAK	0	0	0	0.0	0.0	2	2	55	27.5	27.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0
VILLAGE OF CLARK'S POINT																				
VILLAGE OF KANATAK	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
VILLAGE OF OLD HARBOR	6	4	24	4.0	6.0	3	2	4	1.3	2.0	3	0	0	0.0	0.0	2	2	9	0.0	0.0
VILLAGE OF SALAMATOFF																				
WRANGELL COOPERATIVE ASSOCIATION	38	11	91	2.4	8.3	17	2	6	0.4	3.0	12	4	19	1.6	4.8	0	0	0	0.0	0.0
YAKUTAT TLINGIT TRIBE	19	11	126	6.6	11.5	11	3	50	4.5	16.7	7	4	28	4.0	7.0	0	0	0	0.0	0.0
Tribal Subtotals	1,093	395	3,855	3.5	9.8	854	317	3,140	3.7	9.9	610	191	1,929	3.2	10.1	339	161	2,377	7.0	14.8
ADAK																				
AKHIOK																				
AKUTAN																				
ALEKNAGIK																				
ANGOON	8	4	53	6.6	13.3	7	6	56	8.0	9.3	4	3	29	7.3	9.7	0	0	0	0.0	0.0
ATKA	2	1	8	4.0	8.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
BETHEL																				
CHEFORNAK																				
CHENEGA BAY	3	2	19	6.3	9.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
CHEVAK																				
CHIGNIK																				
CHIGNIK LAGOON	2	0	0	0.0	0.0	0	0	0	0.0	0.0	4	4	6	1.5	1.5	1	1	12	0.0	0.0
CHIGNIK LAKE	3	2	7	2.3	3.5	1	1	8	8.0	8.0	2	2	15	7.5	7.5	0	0	0	0.0	0.0
CHINIAK																				
COFFMAN COVE	26	19	100	3.8	5.3	5	5	63	12.6	12.6	4	3	9	2.3	3.0	0	0	0	0.0	0.0
COLD BAY	7	4	20	2.9	5.0	6	5	34	5.7	6.8	2	2	23	11.5	11.5	0	0	0	0.0	0.0
CORDOVA	154	40	244	1.6	6.1	77	28	280	3.6	10.0	26	8	49	1.9	6.1	0	0	0	0.0	0.0
CRAIG	136	68	678	5.0	10.0	59	27	383	6.5	14.2	33	19	74	2.2	3.9	0	0	0	0.0	0.0
DILLINGHAM	17	3	2	0.1	0.7	2	2	4	2.0	2.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0
EDNA BAY	17	12	48	2.8	4.0	20	14	84	4.2	6.0	4	4	12	3.0	3.0	0	0	0	0.0	0.0
EEK																				
ELFIN COVE	3	3	20	6.7	6.7	10	2	10	1.0	5.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
ELLAMAR																				
FALSE PASS	5	4	97	19.4	24.3	0	0	0	0.0	0.0	1	1	12	12.0	12.0	0	0	0	0.0	0.0
GAMBELL																				
GOODNEWS BAY																				
GUSTAVUS	25	14	160	6.4	11.4	9	4	15	1.7	3.8	6	3	13	2.2	4.3	0	0	0	0.0	0.0
HAINES	213	132	668	3.1	5.1	87	56	333	3.8	5.9	32	16	129	4.0	8.1	2	2	10	0.0	0.0
HOLLIS	15	7	37	2.5	5.3	11	8	41	3.7	5.1	9	4	18	2.0	4.5	2	1	1	0.0	0.0
HOONAH	53	30	255	4.8	8.5	20	11	128	6.4	11.6	10	5	84	8.4	16.8	0	0	0	0.0	0.0
HOOPER BAY	0	0	0	0.0	0.0	0	0	0	0.0	0.0	4	4	6	1.5	1.5	0	0	0	0.0	0.0
HYDABURG	7	3	10	1.4	3.3	0	0	0	0.0	0.0	2	2	8	4.0	4.0	2	0	0	0.0	0.0
HYDER	9	2	9	1.0	4.5	9	5	23	2.6	4.6	11	3	0	0.0	0.0	0	0	0	0.0	0.0
KAKE	20	8	63	3.2	7.9	8	5	45	5.6	9.0	13	5	18	1.4	3.6	4	4	36	0.0	0.0
KASAAN	6	3	19	3.2	6.3	1	0	0	0.0	0.0	4	2	18	4.5	9.0	0	0	0	0.0	0.0
KING COVE	5	4	44	8.8	11.0	0	0	0	0.0	0.0	3	1	30	10.0	30.0	0	0	0	0.0	0.0
KING SALMON																				
KIPNUK																				
KLAWOCK	43	24	270	6.3	11.3	30	9	23	0.8	2.6	7	3	39	5.6	13.0	0	0	0	0.0	0.0
KLUKWAN																				
KODIAK	466	229	2108	4.5	9.2	222	131	1543	7.0	11.8	124	59	652	5.3	11.1	6	4	18	0.0	0.0
KONGIGANAK																				
KOTLIK																				
KOYUK																				
LARSEN BAY	4	4	35	8.8	8.8	3	3	16	5.3	5.3	2	2	44	22.0	22.0	0	0	0	0.0	0.0
MEKORYUK																				
METLAKATLA	11	6	23	2.1	3.8	2	0	0	0.0	0.0	3	2	8	2.7	4.0	0	0	0	0.0	0.0
MEYERS CHUCK	4	2	6	1.5	3.0	4	4	6	1.5	1.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0
NAKNEK																				
NANWALEK	3	3	54	18.0	18.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0	2	2	45	0.0	0.0
NEWTOK																				
NIGHTMUTE	2	1	4	2.0	4.0	2	1	50	25.0	50.0	3	2	50	16.7	25.0	0	0	0	0.0	0.0
NIKOLSKI																				
NOME	2	1	0	0.0	0.0	2	2	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
OLD HARBOR	16	11	60	3.8	5.5	6	4	33	5.5	8.3	0	0	0	0.0	0.0	7	5	28	0.0	0.0
OUZINKIE	9	7	39	4.3	5.6	1	0	0	0.0	0.0	5	2	8	1.6	4.0	0	0	0	0.0	0.0
PELICAN	20	13	64	3.2	4.9	12	6	40	3.3	6.7	4	2	21	5.3	10.5	0	0	0	0.0	0.0
PETERSBURG	451	197	1453	3.2	7.4	188	68	411	2.2	6.0	82	28	209	2.5	7.5	1	0	0	0.0	0.0
PLATINUM																				
PORT ALEXANDER	4	3	17	4.3	5.7	4	2	7	1.8	3.5	4	0	0	0.0	0.0	0	0	0	0.0	0.0
PORT GRAHAM	3	3	42	14.0	14.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	11	8	174	0.0	0.0
PORT LIONS	14	11	89	6.4	8.1	3	2	7	2.3	3.5	1	0	0	0.0	0.0	2	0	0	0.0	0.0
PORT PROTECTION	8	5	37	4.6	7.4	3	3	15	5.0	5.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
PT. BAKER	11	6	33	3.0	5.5	6	3	23	3.8	7.7	2	2	23	11.5	11.5	0	0	0	0.0	0.0
QUINHAGAK																				
SAND POINT																				
SAVOONGA																				
SAXMAN	14	2	15	1.1	7.5	1	1	0	0.0	0.0	4	3	10	2.5	3.3	0	0	0	0.0	0.0

Continued

Appendix Table 2. Reported Harvests of Halibut in Number of Fish by Return Category, 2003 [continued]

Tribe/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
SCAMMON BAY																				
SELDOVIA	42	20	416	9.9	20.8	31	21	281	9.1	13.4	6	1	5	0.8	5.0	0	0	0	0.0	0.0
SHELDON POINT																				
SITKA	544	307	2225	4.1	7.2	266	142	1027	3.9	7.2	105	59	570	5.4	9.7	6	3	50	0.0	0.0
SKAGWAY	23	11	16	0.7	1.5	10	5	8	0.8	1.6	2	1	0	0.0	0.0	0	0	0	0.0	0.0
SOUTH NAKNEK																				
ST GEORGE ISLAND	1	0	0	0.0	0.0	1	1	3	3.0	3.0	2	1	10	5.0	10.0	0	0	0	0.0	0.0
ST PAUL ISLAND																				
STERLING																				
TATITLEK	2	2	43	21.5	21.5	3	3	18	6.0	6.0	1	1	2	2.0	2.0	0	0	0	0.0	0.0
TENAKEE SPRINGS	24	14	87	3.6	6.2	5	3	23	4.6	7.7	2	1	3	1.5	3.0	0	0	0	0.0	0.0
THORNE BAY	52	32	178	3.4	5.6	26	17	108	4.2	6.4	5	3	45	9.0	15.0	0	0	0	0.0	0.0
TOKSOOK BAY																				
UNALASKA	32	16	142	4.4	8.9	12	7	131	10.9	18.7	12	7	59	4.9	8.4	0	0	0	0.0	0.0
WHALE PASS	17	5	11	0.6	2.2	6	2	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
WRANGELL	142	80	514	3.6	6.4	100	42	230	2.3	5.5	34	22	109	3.2	5.0	2	1	10	0.0	0.0
YAKUTAT	9	3	47	5.2	15.7	10	4	73	7.3	18.3	4	3	11	2.8	3.7	1	1	4	0.0	0.0
Community Subtotals	2,737	1,402	10,733	3.9	7.7	1,306	674	5,607	4.3	8.3	601	300	2,460	4.1	8.2	53	36	438	8.3	12.2

Community/Tribe	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
Tribal Subtotals	1,093	395	3,855	3.5	9.8	854	317	3,140	3.7	9.9	610	191	1,929	3.2	10.1	339	161	2,377	7.0	14.8
Community Subtotals	2,737	1,402	10,733	3.9	7.7	1,306	674	5,607	4.3	8.3	601	300	2,460	4.1	8.2	53	36	438	8.3	12.2
Grand Totals	3,830	1,797	14,588	3.8	8.1	2,160	991	8,747	4.0	8.8	1,211	491	4,389	3.6	8.9	392	197	2,815	7.2	14.3

[1] To protect confidentiality, data for tribes with 5 or fewer SHARCs issued are not reported in this table. Subtotals and totals include all tribes and communities.

Source: Alaska Department of Fish and Game, Division of Subsistence SHARC survey, 2004

Appendix Table 3. Estimated Alaska Subsistence Harvests of Halibut by Tribe and Rural Community by Gear Type and Regulatory Area in Number of Fish and Pounds Net Weight, 2003.

Community/Tribe[1]	Regulatory Area	Number of SHARCs[2] Issued	Estimated Harvest by Gear Type										
			Set Hook Gear			Hook & Line or Handline			All Gear				
			Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	95% C.I. Percent (Number)	Estimated Pounds Harvested	95% C.I. Percent (Pounds)
ANGOON COMMUNITY ASSOCIATION	2C	118	56	749	13,468	27	195	3,090	62	944	30.0%	16,557	32.1%
AUKQUAN TRADITIONAL COUNCIL	2C	2											
CENTRAL COUNCIL TLINGIT AND HAIDA INDIAN TRIBES	2C	537	118	1,148	30,938	74	391	7,795	166	1,539	22.5%	38,733	25.7%
CHILKAT INDIAN VILLAGE	2C	42	16	31	791	0	0	0	16	31	38.7%	791	37.1%
CHILKOOT INDIAN ASSOCIATION	2C	41	10	39	1,179	1	4	75	12	42	33.3%	1,253	33.6%
CRAIG COMMUNITY ASSOCIATION	2C	52	18	96	2,958	7	14	467	19	109	32.1%	3,425	33.7%
DOUGLAS INDIAN ASSOCIATION	2C	22	3	47	457	2	20	457	5	68	92.6%	914	85.9%
HOONAH INDIAN ASSOCIATION	2C	199	61	1,259	39,239	16	139	2,646	71	1,398	26.5%	41,885	31.2%
HYDABURG COOPERATIVE ASSOCIATION	2C	174	56	379	16,909	14	54	3,228	57	433	20.3%	20,137	28.0%
KETCHIKAN INDIAN CORPORATION	2C	639	94	808	23,607	26	265	6,680	127	1,072	31.4%	30,287	33.4%
KLAWOCK COOPERATIVE ASSOCIATION	2C	159	43	398	19,548	13	35	1,063	57	433	32.1%	20,611	41.5%
METLAKATLA INDIAN COMMUNITY, ANNETTE ISLAND RESERVE	2C	343	82	773	24,643	18	50	689	111	823	57.4%	25,332	69.3%
ORGANIZED VILLAGE OF KAKE	2C	119	38	345	13,849	8	18	539	40	364	31.9%	14,388	35.8%
ORGANIZED VILLAGE OF KASAAN	2C	3											
ORGANIZED VILLAGE OF SAXMAN	2C	58	14	55	1,098	0	0	0	19	55	90.9%	1,098	88.0%
PETERSBURG INDIAN ASSOCIATION	2C	119	33	283	3,888	15	81	1,131	45	364	30.5%	5,019	27.0%
SITKA TRIBE OF ALASKA	2C	409	123	1,513	41,779	38	156	4,017	132	1,669	28.6%	45,796	29.5%
SKAGWAY VILLAGE	2C	1											
WRANGELL COOPERATIVE ASSOCIATION	2C	95	24	153	4,423	4	11	271	24	164	34.1%	4,694	40.1%
SubTotal	2C	3,132	793	8,085	239,225	264	1,434	32,193	968	9,518	10.3%	271,416	11.8%
KENAITZE INDIAN TRIBE	3A	48	5	37	504	5	53	1,101	11	91	46.2%	1,605	51.6%
LESNOI VILLAGE (WOODY ISLAND)	3A	259	7	12	306	11	35	956	17	47	36.2%	1,262	34.6%
NATIVE VILLAGE OF AFOGNAK	3A	22	3	19	371	4	21	552	8	40	57.5%	923	54.0%
NATIVE VILLAGE OF AKHIOK	3A	16	0	0	0	13	53	1,809	15	53	28.3%	1,809	33.3%
NATIVE VILLAGE OF CHENEGA	3A	27	14	90	3,877	7	27	1,161	18	117	60.7%	5,038	69.8%
NATIVE VILLAGE OF EYAK	3A	46	12	73	1,749	4	60	625	12	134	57.5%	2,374	57.1%
NATIVE VILLAGE OF KARLUK	3A	4											
NATIVE VILLAGE OF LARSEN BAY	3A	25	8	45	1,066	9	105	2,127	16	150	42.0%	3,193	42.6%
NATIVE VILLAGE OF NANWALEK	3A	32	6	127	2,259	25	327	3,718	25	454	26.4%	5,977	30.4%
NATIVE VILLAGE OF OUZINKIE	3A	30	20	81	2,234	9	89	1,955	23	170	44.1%	4,190	43.5%
NATIVE VILLAGE OF PORT GRAHAM	3A	42	8	292	5,067	19	272	3,168	27	564	17.7%	8,235	18.5%
NATIVE VILLAGE OF PORT LIONS	3A	53	15	152	3,160	11	46	823	25	198	34.8%	3,983	33.5%
NATIVE VILLAGE OF TATITLEK	3A	16	8	47	1,836	2	26	1,084	13	73	24.7%	2,920	25.1%
NINILCHIK VILLAGE	3A	78	6	50	1,065	16	147	2,837	24	197	53.8%	3,902	52.7%
SELDOVIA VILLAGE TRIBE	3A	35	9	153	3,150	10	134	3,359	16	286	31.8%	6,509	28.8%
SHOONAQ' TRIBE OF KODIAK	3A	132	60	689	19,312	26	221	7,147	71	910	18.2%	26,459	26.4%
VILLAGE OF OLD HARBOR	3A	16	3	14	446	9	29	778	9	42	21.4%	1,224	23.5%
VILLAGE OF SALAMATOFF	3A	2											
YAKUTAT TLINGIT TRIBE	3A	53	24	221	4,683	9	72	1,437	26	292	29.1%	6,120	32.7%
SubTotal	3A	936	208	2,102	51,085	191	1,727	35,477	358	3,828	8.3%	86,563	10.7%
AGDAAGUX TRIBE OF KING COVE	3B	28	7	173	1,718	13	133	3,470	19	307	60.3%	5,188	49.3%
CHIGNIK LAKE VILLAGE	3B	4											
NATIVE VILLAGE OF BELKOFSKI	3B	2											
NATIVE VILLAGE OF CHIGNIK	3B	11	4	39	1,681	1	34	1,547	7	73	115.1%	3,228	117.5%

Continued

Appendix Table 3. Estimated Alaska Subsistence Harvests of Halibut by Tribe and Rural Community by Gear Type and Regulatory Area in Number of Fish and Pounds Net Weight, 2003 [continued].

Community/Tribe[1]	Regulatory Area	Number of SHARCs[2] Issued	Estimated Harvest by Gear Type										
			Set Hook Gear			Hook & Line or Handline			All Gear				
			Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	95% C.I. Percent (Number)	Estimated Pounds Harvested	95% C.I. Percent (Pounds)
QAGAN TOYAGUNGIN TRIBE OF SAND POINT VILLAGE	3B	34	2	0	0	2	7	255	3	7	128.6%	255	134.1%
SubTotal	3B	204	43	502	9,293	59	380	9,035	90	884	26.1%	18,328	26.6%
NATIVE VILLAGE OF AKUTAN	4A	44	6	25	231	33	281	9,224	33	305	63.3%	9,455	58.2%
NATIVE VILLAGE OF NIKOLSKI	4A	12	0	0	0	6	28	1,688	6	28	125.0%	1,688	92.3%
QAWALINGIN TRIBE OF UNALASKA	4A	14	3	6	145	3	14	357	6	20	60.0%	502	64.0%
SubTotal	4A	70	9	31	376	42	323	11,269	45	353	52.7%	11,645	46.3%
NATIVE VILLAGE OF ATKA	4B	6	2	11	198	2	8	180	4	19	73.7%	378	79.1%
SubTotal	4B	6	2	11	198	2	8	180	4	19	73.7%	378	79.1%
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST GEORGE	4C	26	9	100	1,235	9	37	439	13	137	75.2%	1,674	80.2%
PRIBILOF ISLANDS ALEUT COMMUNITY OF ST PAUL	4C	251	35	607	10,463	64	467	11,251	88	1,074	67.7%	21,714	50.3%
SubTotal	4C	277	44	707	11,698	73	504	11,690	101	1,211	60.2%	23,388	46.8%
NATIVE VILLAGE OF GAMBELL	4D	6	2	4	105	0	0	0	6	4	300.0%	105	304.1%
NATIVE VILLAGE OF SAVOONGA	4D	41	17	63	3,831	2	8	444	19	71	26.8%	4,275	25.1%
SubTotal	4D	47	19	67	3,936	2	8	444	25	75	26.7%	4,380	24.6%
CHEVAK NATIVE VILLAGE (KASHUNAMIUT)	4E	5											
CHINIK ESKIMO COMMUNITY	4E	1											
EGEGIK VILLAGE	4E	6	0	0	0	0	0	0	0	0	0.0%	0	0.0%
KING ISLAND NATIVE COMMUNITY	4E	2											
NAKNEK NATIVE VILLAGE	4E	2											
NATIVE VILLAGE OF ALEKNAGIK	4E	2											
NATIVE VILLAGE OF DILLINGHAM (CURYUNG)	4E	16	3	15	271	1	1	46	4	16	75.0%	316	85.8%
NATIVE VILLAGE OF EEK	4E	21	3	0	0	5	16	608	8	16	131.3%	608	143.9%
NATIVE VILLAGE OF EKUK	4E	3											
NATIVE VILLAGE OF ELIM	4E	1											
NATIVE VILLAGE OF GOODNEWS BAY (MUMTRAQ)	4E	15	7	40	1,025	8	88	2,894	12	128	75.0%	3,919	82.4%
NATIVE VILLAGE OF HOOPER BAY	4E	90	10	75	281	10	73	364	25	148	120.9%	645	97.4%
NATIVE VILLAGE OF KIPNUK	4E	89	6	83	1,064	61	512	7,209	67	595	56.0%	8,273	63.9%
NATIVE VILLAGE OF KONGIGANAK	4E	8	0	0	0	8	68	1,265	8	68	38.2%	1,265	42.9%
NATIVE VILLAGE OF KWIGILLINGOK	4E	1											
NATIVE VILLAGE OF KWINHAGAK	4E	10	2	4	263	8	28	555	8	32	65.6%	818	78.7%
NATIVE VILLAGE OF MEKORYUK	4E	15	9	96	1,540	4	17	239	9	113	47.8%	1,779	49.9%
NATIVE VILLAGE OF NAPAKIAK	4E	3											
NATIVE VILLAGE OF NIGHTMUTE	4E	4											
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	533	8	256	3,791	44	1,081	20,315	51	1,337	0.0%	24,106	0.0%
NATIVE VILLAGE OF TUNUNAK	4E	1											
NATIVE VILLAGE OF UNALAKLEET	4E	6	0	0	0	0	0	0	0	0	0.0%	0	0.0%

Continued

Appendix Table 3. Estimated Alaska Subsistence Harvests of Halibut by Tribe and Rural Community by Gear Type and Regulatory Area in Number of Fish and Pounds Net Weight, 2003 [continued].

Community/Tribe[1]	Regulatory Area	Number of SHARCs[2] Issued	Estimated Harvest by Gear Type										
			Set Hook Gear			Hook & Line or Handline			All Gear				
			Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	95% C.I. Percent (Number)	Estimated Pounds Harvested	95% C.I. Percent (Pounds)
SOUTH NAKNEK VILLAGE	4E	1											
TRADITIONAL VILLAGE OF TOGIAK	4E	6	0	0	0	0	0	0	6	0	0.0%	0	0.0%
UGASHIK VILLAGE	4E	4											
VILLAGE OF CHEFORNAK	4E	16	8	160	1,050	16	280	2,250	16	440	540.0%	3,300	324.0%
VILLAGE OF CLARK'S POINT	4E	2											
VILLAGE OF KANATAK	4E	11	0	0	0	0	0	0	0	0	0.0%	0	0.0%
SubTotal	4E	906	69	803	10,116	183	2,244	36,528	245	3,046	17.0%	46,640	12.9%
TRIBAL SUBTOTAL		5,578	1,187	12,308	325,927	816	6,628	136,816	1,836	18,934	7.3%	462,738	7.8%
ANGOON	2C	24	13	159	2,800	8	15	493	16	174	29.9%	3,292	26.9%
COFFMAN COVE	2C	39	26	162	4,566	6	30	631	30	192	15.1%	5,197	13.5%
CRAIG	2C	281	115	1,009	24,818	36	389	4,775	141	1,399	12.9%	29,593	11.8%
EDNA BAY	2C	43	21	89	3,739	10	62	1,121	31	151	10.6%	4,860	8.4%
ELFIN COVE	2C	16	4	22	582	2	15	277	6	37	40.5%	858	39.5%
GUSTAVUS	2C	52	16	147	2,556	13	98	1,813	27	244	24.6%	4,369	23.1%
HAINES	2C	380	218	1,204	27,133	25	93	2,067	234	1,297	6.7%	29,201	6.1%
HOLLIS	2C	41	20	91	2,516	2	17	224	22	107	23.4%	2,740	17.1%
HOONAH	2C	120	53	544	16,292	19	132	2,489	67	675	19.4%	18,781	32.7%
HYDABURG	2C	11	3	12	375	1	6	300	5	18	0.0%	675	0.0%
HYDER	2C	37	13	40	952	1	1	33	13	41	41.5%	986	39.0%
KAKE	2C	61	24	188	6,822	7	31	539	30	220	26.8%	7,361	27.6%
KASAAN	2C	16	7	54	1,353	0	0	0	7	54	53.7%	1,353	52.3%
KLAWOCK	2C	115	37	231	8,211	32	246	4,199	52	477	22.9%	12,410	24.6%
KLUKWAN	2C	3											
METLAKATLA	2C	31	14	37	945	4	23	305	16	60	61.7%	1,250	55.9%
MEYERS CHUCK	2C	10	8	15	400	0	0	0	8	15	40.0%	400	32.8%
PELICAN	2C	41	18	122	2,622	8	21	483	24	142	16.2%	3,105	14.6%
PETERSBURG	2C	908	294	1,990	37,775	123	617	12,882	368	2,607	7.2%	50,657	6.5%
PORT ALEXANDER	2C	20	7	32	850	2	8	188	8	40	62.5%	1,038	56.6%
PORT PROTECTION	2C	13	8	36	719	6	21	658	9	56	17.9%	1,377	16.6%
PT. BAKER	2C	20	12	83	1,795	0	0	0	12	83	15.7%	1,795	14.5%
SAXMAN	2C	30	9	39	817	0	0	0	9	39	76.9%	817	67.3%
SITKA	2C	1,224	626	4,358	112,558	120	788	15,931	679	5,146	6.9%	128,489	6.6%
SKAGWAY	2C	40	18	27	686	0	0	0	19	27	37.0%	686	36.6%
TENAKEE SPRINGS	2C	36	21	103	2,769	7	28	745	21	131	17.6%	3,514	18.1%
THORNE BAY	2C	97	50	307	10,914	19	79	2,353	61	387	12.4%	13,268	13.3%
WHALE PASS	2C	24	6	5	196	4	6	309	7	11	27.3%	505	22.8%
WRANGELL	2C	362	168	912	23,284	34	212	4,468	189	1,124	15.4%	27,752	13.4%
SubTotal	2C	4,095	1,832	12,027	299,259	489	2,938	57,283	2,114	14,963	3.5%	356,543	3.7%

Continued

Appendix Table 3. Estimated Alaska Subsistence Harvests of Halibut by Tribe and Rural Community by Gear Type and Regulatory Area in Number of Fish and Pounds Net Weight, 2003 [continued].

Community/Tribe[1]	Regulatory Area	Number of SHARCs[2] Issued	Estimated Harvest by Gear Type										
			Set Hook Gear			Hook & Line or Handline			All Gear				
			Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	95% C.I. Percent (Number)	Estimated Pounds Harvested	95% C.I. Percent (Pounds)
KODIAK	3A	1,100	386	3,592	88,655	253	2,219	47,959	569	5,810	7.0%	136,615	7.0%
LARSEN BAY	3A	12	4	35	1,260	12	92	1,970	12	127	26.0%	3,230	39.9%
NANWALEK	3A	7	2	40	1,089	5	76	1,013	6	116	37.1%	2,103	47.2%
OLD HARBOR	3A	37	5	26	660	20	129	3,271	26	154	22.1%	3,931	19.1%
OUZINKIE	3A	17	7	35	952	8	18	535	10	53	20.8%	1,487	20.7%
PORT GRAHAM	3A	15	4	69	1,326	10	163	3,888	12	231	14.7%	5,214	15.9%
PORT LIONS	3A	24	14	104	2,075	2	11	270	16	115	29.6%	2,345	28.7%
SELDOVIA	3A	89	27	382	6,395	34	409	7,904	47	791	11.5%	14,298	11.0%
STERLING	3A	1											
TATITLEK	3A	7	6	69	1,601	2	5	175	7	74	44.6%	1,776	46.0%
YAKUTAT	3A	36	12	141	4,095	6	62	983	17	203	46.3%	5,078	50.2%
SubTotal	3A	1,674	534	4,854	116,582	397	3,634	76,467	827	8,485	5.4%	193,050	5.5%
CHIGNIK	3B	5											
CHIGNIK LAGOON	3B	7	1	1	30	4	17	304	5	18	0.0%	334	0.0%
CHIGNIK LAKE	3B	7	1	5	175	5	30	184	6	35	25.7%	359	39.6%
COLD BAY	3B	18	11	71	1,382	8	22	883	13	92	21.7%	2,265	27.9%
FALSE PASS	3B	6	2	11	165	5	98	1,230	5	109	0.0%	1,395	0.0%
KING COVE	3B	11	3	37	877	6	65	2,166	7	102	57.8%	3,042	55.4%
SAND POINT	3B	5											
SubTotal	3B	59	22	162	3,391	34	289	6,247	44	450	13.1%	9,637	18.3%
AKUTAN	4A	5											
NIKOLSKI	4A	5											
UNALASKA	4A	74	30	296	5,332	22	143	2,723	40	439	25.5%	8,055	21.7%
SubTotal	4A	84	33	324	6,082	25	153	3,000	48	476	24.0%	9,082	20.4%
ADAK	4B	5											
ATKA	4B	13	4	17	812	4	17	812	4	35	374.3%	1,625	377.1%
SubTotal	4B	18	9	37	1,281	4	17	812	9	55	172.7%	2,094	194.6%
ST GEORGE ISLAND	4C	7	0	0	0	4	23	368	4	23	147.8%	368	140.4%
ST PAUL ISLAND	4C	5											
SubTotal	4C	12	0	0	0	4	23	368	4	23	147.8%	368	140.4%
GAMBELL	4D	1											
SAVOONGA	4D	2											
SubTotal	4D	3	0	0	0	0	0	0	1	0	0.0%	0	0.0%
ALEKNAGIK	4E	1											
BETHEL	4E	4											
CHEFORNAK	4E	4											
CHEVAK	4E	4											
DILLINGHAM	4E	22	3	4	31	1	2	47	5	6	33.3%	79	31.1%
EEK	4E	1											

Continued

Appendix Table 3. Estimated Alaska Subsistence Harvests of Halibut by Tribe and Rural Community by Gear Type and Regulatory Area in Number of Fish and Pounds Net Weight, 2003 [continued].

Community/Tribe[1]	Regulatory Area	Number of SHARCs[2] Issued	Estimated Harvest by Gear Type										
			Set Hook Gear			Hook & Line or Handline			All Gear				
			Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	95% C.I. Percent (Number)	Estimated Pounds Harvested	95% C.I. Percent (Pounds)
KOTLIK	4E	1											
KOYUK	4E	1											
MEKORYUK	4E	2											
NAKNEK	4E	4											
NEWTOK	4E	1											
NIGHTMUTE	4E	25	0	0	0	14	371	6,139	14	371	101.3%	6,139	97.6%
NOME	4E	7	3	0	0	0	0	0	4	0	0.0%	0	0.0%
PLATINUM	4E	2											
QUINHAGAK	4E	4											
SCAMMON BAY	4E	5											
SHELDON POINT	4E	1											
SOUTH NAKNEK	4E	1											
TOKSOOK BAY	4E	3											
SubTotal	4E	112	11	33	336	39	506	7,481	59	540	56.9%	7,818	62.7%
RURAL COMMUNITY SUBTOTAL		6,057	2,441	17,437	426,931	992	7,560	151,658	3,106	24,992	3.1%	578,592	3.1%
Tribal Subtotals		5,578	1,187	12,308	325,927	816	6,628	136,816	1,836	18,934	7.3%	462,738	7.8%
Rural Community Subtotals		6,057	2,441	17,437	426,931	992	7,560	151,658	3,106	24,992	3.1%	578,592	3.1%
Grand Totals		11,635	3,628	29,745	752,858	1,808	14,188	288,474	4,942	43,926	3.6%	1,041,330	3.9%
Area 2C: Tribal and Rural Community Combined	2C	7,227	2,625	20,112	538,484	753	4,372	89,476	3,082	24,481	4.5%	627,959	5.5%
Area 3A: Tribal and Rural Community Combined	3A	2,610	742	6,956	167,667	588	5,361	111,944	1,185	12,313	4.5%	279,613	5.0%
Area 3B: Tribal and Rural Community Combined	3B	263	65	664	12,684	93	669	15,282	134	1,334	17.9%	27,965	18.5%
Area 4A: Tribal and Rural Community Combined	4A	154	42	355	6,458	67	476	14,269	93	829	25.8%	20,727	26.9%
Area 4B: Tribal and Rural Community Combined	4B	24	11	48	1,479	6	25	992	13	74	105.4%	2,472	134.8%
Area 4C: Tribal and Rural Community Combined	4C	289	44	707	11,698	77	527	12,058	105	1,234	59.1%	23,756	46.1%
Area 4D: Tribal and Rural Community Combined	4D	50	19	67	3,936	2	8	444	26	75	26.7%	4,380	24.6%
Area 4E: Tribal and Rural Community Combined	4E	1,018	80	836	10,452	222	2,750	44,009	304	3,586	16.8%	54,458	14.2%
Grand Total	Alaska	11,635	3,628	29,745	752,858	1,808	14,188	288,474	4,942	43,926	3.6%	1,041,330	3.9%

[1] To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs issued are not reported in this table. Area subtotals include all tribes and communities.
[2] SHARC = subsistence halibut registration certificate

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC survey, 2004

Appendix Table 4. Estimated Subsistence and Sport Harvests of Halibut and Harvests of Lingcod and Rockfish by Place of Residence, 2003 [continued].

Community[1]	SHARCs Issued[2]	Subsistence Fished?	Subsistence Harvest		Sport Fished?	Sport Harvest		Lingcod Indicidental Harvest		Rockfish Incidental Harvest	
		Estimated Number	Estimated Number	Pounds	Estimated Number	Estimated Number	Pounds	Estimated Number with Harvest	Estimated Number of fish	Estimated Number with Harvest	Estimated Number of fish
Adak	6	6	27	687	2	25	375	0	0	2	5
Akhiok	15	14	55	1,846	0	0	0	2	16	0	0
Akutan	50	39	313	9,612	12	20	450	8	412	18	817
Aleknagik	1										
Anchor Point	11	4	6	155	10	48	1,010	0	0	0	0
Anchorage	163	37	465	11,206	29	523	18,867	3	4	8	80
Angoon	151	80	1,142	20,283	28	105	2,003	2	4	12	83
APO	1										
Atka	13	4	35	1,625	4	17	812	4	43	0	0
Auke Bay	2										
Bethel	10	4	6	44	0	0	0	0	0	0	0
Big Lake	2										
Chefornak	20	20	472	3,492	0	0	0	4	48	4	24
Chenega Bay	13	13	132	5,644	4	8	150	4	24	9	246
Chevak	10	8	0	0	0	0	0	0	0	0	0
Chignik	21	19	340	12,878	7	118	5,351	6	15	3	62
Chignik Lagoon	34	28	176	2,921	3	9	180	0	0	0	0
Chignik Lake	7	6	35	359	4	14	210	2	9	1	2
Chiniak	25	21	137	4,492	14	69	2,295	4	5	8	61
Chugiak	6	0	0	0	0	0	0	0	0	0	0
Clarks Point	2										
Coffman Cove	39	30	192	5,197	18	84	1,642	3	4	9	66
Cold Bay	18	13	92	2,265	8	25	657	2	55	0	0
Cordova	358	102	814	15,498	144	696	11,534	28	104	35	367
Craig	429	210	1,862	45,658	117	546	9,888	29	67	94	850
Dillingham	35	10	22	395	7	16	213	0	0	1	10
Douglas	20	2	5	76	0	0	0	0	0	0	0
Dutch Harbor	42	18	152	4,252	21	106	3,169	0	0	4	61
Eagle River	7	1	14	378	3	5	114	0	0	0	0
Edna Bay	17	13	47	2,111	7	12	479	4	14	8	139
Eek	21	8	16	608	0	0	0	0	0	0	0
Elfin Cove	16	6	37	858	1	1	46	1	1	1	2
Excursion Inlet	2										
Fairbanks	6	1	0	0	0	0	0	0	0	0	0
False Pass	13	9	128	1,753	1	2	38	1	60	1	35
Fritz Creek	2										
Gambell	7	7	4	105	0	0	0	2	60	2	4
Golovin	1										
Goodnews Bay	17	12	128	3,919	0	0	0	0	0	0	0
Gustavus	52	27	244	4,369	18	79	1,521	0	0	1	6
Haines	473	269	1,394	31,765	96	120	2,860	14	46	38	222
Hollis	5										

Continued

Appendix Table 4. Estimated Subsistence and Sport Harvests of Halibut and Harvests of Lingcod and Rockfish by Place of Residence, 2003 [continued].

Community[1]	SHARCs Issued[2]	Subsistence Fished?	Subsistence Harvest		Sport Fished?	Sport Harvest		Lingcod Indicidental Harvest		Rockfish Incidental Harvest	
		Estimated Number	Estimated Number	Pounds	Estimated Number	Estimated Number	Pounds	Estimated Number with Harvest	Estimated Number of fish	Estimated Number with Harvest	Estimated Number of fish
Hyder	36	11	26	679	5	11	263	0	0	0	0
Juneau	358	88	726	14,884	58	172	3,174	6	7	13	173
Kake	175	73	600	22,233	19	34	763	8	36	14	110
Karluk	1										
Kasaan	14	7	54	1,353	0	0	0	0	0	3	9
Kasilof	8	0	0	0	2	7	83	0	0	0	0
Kenai	50	11	96	1,933	20	53	898	0	0	1	4
Ketchikan	781	187	1,520	37,975	145	497	8,782	21	90	69	642
King Cove	44	23	399	7,857	3	19	380	1	53	1	133
King Salmon	3										
Kipnuk	89	67	595	8,273	0	0	0	11	28	6	6
Klawock	285	101	923	30,831	46	267	4,925	16	75	34	477
Kodiak	1,320	646	6,526	153,254	498	2,820	68,170	70	216	112	1,265
Kongiganak	12	12	84	1,602	0	0	0	0	0	2	2
Larsen Bay	21	20	242	5,684	17	68	1,368	0	0	3	29
Marshall	1										
McGrath	4										
Mekoryuk	15	9	112	1,779	0	0	0	4	15	0	0
Metlakatla	360	121	846	26,185	45	42	1,011	20	36	46	273
Meyers Chuck	10	8	15	400	1	1	17	0	0	0	0
Naknek	5										
Nanwalek	37	31	569	8,080	1	14	209	3	19	5	330
Napakiak	3										
Naukati	7	3	9	539	0	0	0	1	4	3	79
Newtok	4										
Nightmute	29	18	451	6,634	0	0	0	0	0	0	0
Nikiski	3										
Nikolski	16	7	30	1,852	3	6	619	0	0	2	40
Ninilchik	51	18	181	3,538	12	99	1,407	3	9	1	110
Nome	10	5	0	0	0	0	0	0	0	0	0
Old Harbor	46	35	190	5,196	15	28	909	2	28	4	285
Ouzinkie	39	28	212	5,163	9	28	693	5	7	8	91
Palmer	3										
Pelican	51	37	424	11,466	15	22	570	11	44	21	278
Perryville	11	8	81	1,809	1	2	41	0	0	0	0
Petersburg	1,047	415	2,975	55,718	268	870	19,611	13	47	64	423
Platinum	2										
Point Baker	27	18	135	2,775	9	27	430	2	3	10	115

Continued

Appendix Table 4. Estimated Subsistence and Sport Harvests of Halibut and Harvests of Lingcod and Rockfish by Place of Residence, 2003 [continued].

Community[1]	SHARCs Issued[2]	Subsistence Fished?	Subsistence Harvest		Sport Fished?	Sport Harvest		Lingcod Indicidental Harvest		Rockfish Incidental Harvest	
		Estimated Number	Estimated Number	Pounds	Estimated Number	Estimated Number	Pounds	Estimated Number with Harvest	Estimated Number of fish	Estimated Number with Harvest	Estimated Number of fish
Saint George Island	31	16	159	2,041	0	0	0	0	0	0	0
Saint Paul Island	250	82	1,010	19,744	6	35	876	18	99	12	93
Sand Point	73	21	225	4,819	11	17	410	1	10	6	29
Savoonga	43	19	71	4,275	0	0	0	1	1	0	0
Scammon Bay	7	4	25	181	0	0	0	0	0	0	0
Seldovia	103	54	916	17,344	38	259	4,554	6	29	13	121
Seward	10	0	0	0	0	0	0	0	0	0	0
Shishmaref	1										
Sitka	1,639	821	6,621	174,880	401	1,379	32,408	259	984	352	4,354
Skagway	44	21	42	963	18	29	831	3	21	2	16
Soldotna	7	4	28	225	0	0	0	0	0	0	0
South Naknek	1										
Sterling	4										
Sutton	1										
Tatitlek	19	17	127	4,516	1	2	69	1	11	9	122
Tenakee Springs	36	21	131	3,514	23	65	1,323	0	0	10	87
Thorne Bay	99	61	387	13,268	40	72	2,086	4	5	22	263
Togiak	2										
Toksook Bay	532	54	1,397	24,500	0	0	0	13	45	5	41
Trapper Creek	1										
Unalakleet	1										
Unalaska	50	32	377	6,608	12	93	2,350	4	35	4	41
Valdez	22	16	65	1,611	7	0	0	3	4	9	38
Ward Cove	25	4	4	246	8	6	138	0	0	0	0
Wasilla	18	4	37	761	4	6	490	2	4	4	9
Whale Pass	3										
White Mountain	1										
Whittier	1										
Willow	1										
Wrangell	466	223	1,351	33,006	112	252	5,895	13	60	38	302
Yakutat	85	39	455	10,253	18	90	2,041	21	77	12	192
Non Alaska	170	5	6	122	4	5	103	0	0	0	0
Totals	11,635	4,932	43,924	1,041,322	2,576	10,793	245,941	703	3,295	1,241	14,868

[1] To protect confidentiality, data for communities with 5 or fewer SHARCs issued are not reported in this table. Totals include all communities

[2] SHARC = subsistence halibut registration certificate.

Source: Alaska Department of Fish and Game, Division of Subsistence, 2004

Appendix Table 5. Estimated Alaska Subsistence Harvests of Halibut by Gear Type and Place of Residence, 2003.

Community[1]	Number of SHARCs[2] Issued	Estimated Harvest by Gear Type								
		Setline (fixed) Gear			Hand-Operated Gear			All Gear		
		Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested
Adak	6	6	27	687	0	0	0	6	27	687
Akhiok	15	0	0	0	14	55	1,846	14	55	1,846
Akutan	50	7	25	231	36	288	9,381	39	313	9,612
Aleknagik	1									
Anchor Point	11	0	0	0	1	6	155	4	6	155
Anchorage	163	22	394	9,169	18	71	2,038	37	465	11,206
Angoon	151	70	925	16,530	36	217	3,753	80	1,142	20,283
APO	1									
Atka	13	4	17	812	4	17	812	4	35	1,625
Auke Bay	2									
Bethel	10	0	0	0	2	6	44	4	6	44
Big Lake	2									
Chefornak	20	8	160	1,050	20	312	2,442	20	472	3,492
Chenega Bay	13	9	97	4,167	9	35	1,476	13	132	5,644
Chevak	10	0	0	0	0	0	0	8	0	0
Chignik	21	13	147	6,168	13	192	6,710	19	340	12,878
Chignik Lagoon	34	7	49	1,183	25	126	1,738	28	176	2,921
Chignik Lake	7	1	5	175	5	30	184	6	35	359
Chiniak	25	19	101	3,422	8	36	1,069	21	137	4,492
Chugiak	6	0	0	0	0	0	0	0	0	0
Clarks Point	2									
Coffman Cove	39	26	162	4,566	6	30	631	30	192	5,197
Cold Bay	18	11	71	1,382	8	22	883	13	92	2,265
Cordova	358	68	347	7,613	40	467	7,885	102	814	15,498
Craig	429	175	1,407	39,193	60	454	6,464	210	1,862	45,658
Dillingham	35	6	19	302	2	4	93	10	22	395
Douglas	20	2	5	76	0	0	0	2	5	76
Dutch Harbor	42	12	82	2,388	12	70	1,863	18	152	4,252
Eagle River	7	1	12	315	1	2	63	1	14	378
Edna Bay	17	12	46	2,084	1	1	28	13	47	2,111
Eek	21	3	0	0	5	16	608	8	16	608
Elfin Cove	16	4	22	582	2	15	277	6	37	858
Excursion Inlet	2									
Fairbanks	6	1	0	0	0	0	0	1	0	0

Continued

Appendix Table 5. Estimated Alaska Subsistence Harvests of Halibut by Gear Type and Place of Residence, 2003 [continued].

Community[1]	Number of SHARCs[2] Issued	Estimated Harvest by Gear Type								
		Setline (fixed) Gear			Hand-Operated Gear			All Gear		
		Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested
Gustavus	52	16	147	2,556	13	98	1,813	27	244	4,369
Haines	473	250	1,297	29,623	26	97	2,142	269	1,394	31,765
Hollis	5									
Homer	26	5	45	749	5	29	707	7	74	1,455
Hoonah	315	115	1,817	55,746	36	285	5,350	138	2,102	61,096
Hooper Bay	94	10	75	281	16	84	506	33	160	788
Hydaburg	177	59	391	17,284	15	60	3,528	62	451	20,812
Hyder	36	11	24	646	1	1	33	11	26	679
Juneau	358	54	468	10,074	46	258	4,810	88	726	14,884
Kake	175	66	550	21,155	15	49	1,078	73	600	22,233
Karluk	1									
Kasaan	14	7	54	1,353	0	0	0	7	54	1,353
Kasilof	8	0	0	0	0	0	0	0	0	0
Kenai	50	5	62	1,192	4	34	741	11	96	1,933
Ketchikan	781	137	1,169	29,536	44	352	8,439	187	1,520	37,975
King Cove	44	7	201	2,222	19	198	5,636	23	399	7,857
King Salmon	3									
Kipnuk	89	6	83	1,064	61	512	7,209	67	595	8,273
Klawock	285	72	657	25,912	37	266	4,919	101	923	30,831
Kodiak	1,320	438	4,157	101,575	278	2,369	51,678	646	6,526	153,254
Kongiganak	12	0	0	0	12	84	1,602	12	84	1,602
Larsen Bay	21	7	53	1,787	20	189	3,897	20	242	5,684
Marshall	1									
McGrath	4									
Mekoryuk	15	9	96	1,540	4	17	239	9	112	1,779
Metlakatla	360	93	781	25,291	20	65	895	121	846	26,185
Meyers Chuck	10	8	15	400	0	0	0	8	15	400
Naknek	5									
Nanwalek	37	8	166	3,349	30	403	4,731	31	569	8,080

Continued

Appendix Table 5. Estimated Alaska Subsistence Harvests of Halibut by Gear Type and Place of Residence, 2003 [continued].

Community[1]	Number of SHARCs[2] Issued	Estimated Harvest by Gear Type								
		Setline (fixed) Gear			Hand-Operated Gear			All Gear		
		Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested
Nikolski	16	0	0	0	7	30	1,852	7	30	1,852
Ninilchik	51	4	43	933	13	138	2,605	18	181	3,538
Nome	10	5	0	0	0	0	0	5	0	0
Old Harbor	46	7	35	1,003	30	156	4,193	35	190	5,196
Ouzinkie	39	23	101	2,569	18	111	2,594	28	212	5,163
Palmer	3									
Pelican	51	29	375	10,066	15	49	1,400	37	424	11,466
Perryville	11	7	75	1,551	4	5	258	8	81	1,809
Petersburg	1,047	330	2,276	41,704	138	699	14,013	415	2,975	55,718
Platinum	2									
Point Baker	27	18	129	2,693	2	6	81	18	135	2,775
Port Alexander	21	9	43	1,099	2	8	188	10	51	1,287
Port Graham	52	10	254	4,398	28	435	7,056	35	689	11,454
Port Lions	68	31	270	5,693	14	57	1,093	42	327	6,786
Quinhagak	15	3	5	342	12	41	821	12	47	1,164
Saint George Island	31	9	100	1,235	12	60	806	16	159	2,041
Saint Paul Island	250	29	549	8,712	58	461	11,032	82	1,010	19,744
Sand Point	73	15	175	3,409	11	50	1,410	21	225	4,819
Savoonga	43	17	63	3,831	2	8	444	19	71	4,275
Scammon Bay	7	2	10	62	4	15	119	4	25	181
Seldovia	103	28	412	6,977	39	504	10,367	54	916	17,344
Seward	10	0	0	0	0	0	0	0	0	0
Shishmaref	1									
Sitka	1,639	760	5,691	155,276	160	930	19,604	821	6,621	174,880
Skagway	44	18	27	686	2	15	277	21	42	963
Soldotna	7	4	28	225	0	0	0	4	28	225
South Naknek	1									
STERLING	4									
Sutton	1									

Continued

Appendix Table 5. Estimated Alaska Subsistence Harvests of Halibut by Gear Type and Place of Residence, 2003 [continued].

Community[1]	Number of SHARCs[2] Issued	Estimated Harvest by Gear Type								
		Setline (fixed) Gear			Hand-Operated Gear			All Gear		
		Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested
Trapper Creek	1									
Unalakleet	1									
Unalaska	50	27	264	4,325	19	113	2,283	32	377	6,608
Valdez	22	13	56	1,395	1	9	216	16	65	1,611
Ward Cove	25	0	0	0	2	4	246	4	4	246
Wasilla	18	0	0	0	4	37	761	4	37	761
Whale Pass	3									
White Mountain	1									
Whittier	1									
Willow	1									
Wrangell	466	200	1,107	27,762	44	244	5,245	223	1,351	33,006
Yakutat	85	33	336	8,047	13	119	2,206	39	455	10,253
Non-Alaska	170	4	6	122	0	0	0	5	6	122
Totals	11,635	3,623	29,741	752,846	1,806	14,182	288,471	4,932	43,924	1,041,322

[1] To protect confidentiality, data for communities with 5 or fewer SHARCs issued are not reported in this table. Totals include all communities

[2] SHARC = subsistence halibut registration certificate.

Appendix Table 6. Estimated Number of SHARC Holders Who Either Subsistence or Sport Fished by Place of Residence, 2003

Community[1]	Number of SHARCs[2] Issued	Estimated Number Subsistence or Sport Fished for Halibut
Adak	6	6
Akhiok	15	14
Akutan	50	42
Aleknagik	1	
Anchor Point	11	10
Anchorage	163	60
Angoon	151	84
APO	1	
Atka	13	4
Auke Bay	2	
Bethel	10	4
Big Lake	2	
Chefornak	20	20
Chenega Bay	13	15
Chevak	10	8
Chignik	21	19
Chignik Lagoon	34	29
Chignik Lake	7	6
Chiniak	25	23
Chugiak	6	0
Clarks Point	2	
Coffman Cove	39	31
Cold Bay	18	14
Cordova	358	194
Craig	429	262
Dillingham	35	14
Douglas	20	2
Dutch Harbor	42	32
Eagle River	7	3
Edna Bay	17	14
Eek	21	8
Elfin Cove	16	6
Excursion Inlet	2	
Fairbanks	6	1
False Pass	13	9
Fritz Creek	2	
Gambell	7	7
Golovin	1	
Goodnews Bay	17	12
Gustavus	52	34
Haines	473	289
Hollis	5	
Homer	26	8
Hoonah	315	157
Hooper Bay	94	36
Hydaburg	177	63
Hyder	36	14
Juneau	358	114
Kake	175	78
Karluk	1	
Kasaan	14	7
Kasilof	8	2
Kenai	50	26
Ketchikan	781	267
King Cove	44	23
King Salmon	3	
Kipnuk	89	67
Klawock	285	116
Kodiak	1,320	858
Kongiganak	12	12
Larsen Bay	21	23
Marshall	1	
McGrath	4	
Mekoryuk	15	9

Continued

Appendix Table 6. Estimated Number of SHARC Holders Who Either Subsistence or Sport Fished by Place of Residence, 2003 [continued]

Community[1]	Number of SHARCs[2] Issued	Estimated Number Subsistence or Sport Fished for Halibut
Nanwalek	37	31
Napakiak	3	
Naukati	7	3
Newtok	4	
Nightmute	29	18
Nikiski	3	
Nikolski	16	8
Ninilchik	51	19
Nome	10	5
Old Harbor	46	35
Ouzinkie	39	29
Palmer	3	
Pelican	51	40
Perryville	11	8
Petersburg	1,047	523
Platinum	2	
Point Baker	27	20
Port Alexander	21	12
Port Graham	52	36
Port Lions	68	50
Quinhagak	15	12
Saint George Island	31	16
Saint Paul Island	250	82
Sand Point	73	21
Savoonga	43	19
Scammon Bay	7	4
Seldovia	103	69
Seward	10	0
Shishmaref	1	
Sitka	1,639	956
Skagway	44	31
Soldotna	7	4
South Naknek	1	
STERLING	4	
Sutton	1	
Tatitlek	19	17
Tenakee Springs	36	29
Thorne Bay	99	74
Togiak	2	
Toksook Bay	532	54
Trapper Creek	1	
Unalakleet	1	
Unalaska	50	38
Valdez	22	16
Ward Cove	25	13
Wasilla	18	4
Whale Pass	3	
White Mountain	1	
Whittier	1	
Willow	1	
Wrangell	466	254
Yakutat	85	45
Non-Alaska	170	8
Totals	11,635	5,941

[1] To protect confidentiality, data for communities with 5 or fewer SHARCs issued are not reported in this table. Totals include all communities.
[2] SHARC = subsistence halibut registration certificate.

Source: Alaska Department of Fish and Game, Division of Subsistence, 2004