SUMMARY DATA FROM THE SPORT FISHERY FOR PACIFIC HALIBUT IN THE IPHC AREA 2C PORTION OF SOUTHEAST ALASKA, 2003

by:

Bruce A. White
Michael J. Jaenicke
Alaska Department of Fish and Game
Division of Sport Fish
P.O. Box 240020
Douglas, AK 99824-0020

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

TABLEPAGE

INTRODUCTION

Sport fishing for Pacific halibut (*Hippoglossus stenolepis*) (herein referred to as halibut) in Southeast Alaska is an important recreational activity for resident and non-resident anglers alike. Sport harvests of halibut in the region rapidly increased in the late 1980s to mid-1990s as a result of continued increases in targeted effort. As the effort for this species continues to increase, an increasing demand is placed on managers to ensure the stocks can support exploitation by sport, subsistence, and commercial user groups. Surveys conducted by the Alaska Department of Fish and Game (ADF&G) Division of Sport Fish in Southeast Alaska collect some of the needed information from sport anglers returning from fishing trips. This information is compiled and presented to various managers who monitor the status of these stocks. The surveys occur in the area defined by the International Pacific Halibut Commission (IPHC) as Regulatory Area 2C (this area excludes the Yakutat area of Southeast Alaska, which is a portion of IPHC Regulatory Area 3A) (Figure 1). The following report provides a summary of data collected during the 2003 season by ADF&G creel survey staff, and contains some historical trends from data collected in selected ports representative of Area 2C. Sport harvest summary information for the Yakutat area (IPHC Regulatory Area 3A) is compiled and presented by ADF&G Southcentral Region staff. All 2003 data summaries published in this report should be considered preliminary.

METHODS

Two survey methodologies are employed by ADF&G to evaluate marine sport harvests of numerous fish species (including halibut) in Southeast Alaska: the annual Statewide Harvest Mail Survey (SWHS) and on-site (creel and catch sampling) surveys. Both survey types were vital to capturing the data presented in this report. The ADF&G mandatory saltwater charter vessel logbook program, initiated in 1998, discontinued the collection of halibut data in 2002. Dean and Howe (1999) and Dean (2001) presented brief summaries of preliminary results from the 1998 and 1999 logbook programs.

Statewide Harvest Mail Survey (SWHS)

The SWHS has occurred annually since 1977. The survey is questionnaire-based and includes estimates for 8 primary areas in Southeast Alaska, of which 7 fall into IPHC Area 2C, and the 8th being Yakutat which is in IPHC Area 3A (Figure 1). Although much of the outer coast of the Glacier Bay area (area G) is north of Cape Spencer and therefore in Area 3A, very little sport harvest is taken in this area and therefore all harvest in the Glacier Bay area is assigned to IPHC Area 2C. In 2000, SWHS area G (Glacier Bay) was enlarged to now include all of Icy Strait and Cross Sound, and thus the southern sections of these latter two water bodies are no longer included in SWHS area D (Sitka) (Figure 1).

Surveys are mailed to a random sample of anglers (both resident and non-resident) purchasing an Alaska sport fishing license in a given year. The survey is designed to obtain fishing activity by all household members. Individuals failing to respond to a first mailing are mailed a second form within a month of the first. Those individuals still not responding after two mailings are mailed a third and final form. Estimates of effort and harvest are determined from the responses, and final estimates are corrected to account for non-response bias. Results from this survey serve as the official and final estimates of harvest and effort for saltwater and freshwater sport fisheries within the State of Alaska. Note that the SWHS harvest estimates from 1996 to 1998 were revised in September 2000 (Howe et al. 2001 a-c). Statewide Harvest Mail Survey estimates for 2003 will not be available until mid to late 2004.

On-site (Creel and Catch Sampling) Surveys

On-site surveys occurred in 9 primary communities in IPHC Area 2C, and varied in duration and type based on data collection needs of managers. Creel surveys in Juneau, Ketchikan, and Sitka began in late April and continued through late September 2003. The surveys were designed such that they enable managers to make in-season estimates of the sport fish harvests in local areas. Additionally, catch sampling programs were in

place in Craig, Klawock, Petersburg, Wrangell, Gustavus, and Elfin Cove (added in 2003) from May or June to September, where similar types of data were collected from returning anglers, but were designed in a way that did not allow for direct in-season estimates of harvests. Length and effort data was collected in Elfin Cove (Glacier Bay Area) as part of a graduate student project and was combined with data gathered in Gustavus. Sampling in Elfin Cove followed the guidelines established by ADF&G for sport fish sampling. Returning anglers were interviewed by ADF&G personnel, and queried for the following information: the type of trip (non-charter vs. charter); charter vessel ADF&G number if a sport fishing charter trip, the type of species targeted during the trip (bottomfish vs. salmon, etc.); the number of rods fished during the trip; the total time (hours) spent fishing on the trip; the length of the trip (if more than 1 day); the area(s) fished during the trip; and the species composition of the catch (by the numbers kept and released). Other data collected during 2003 surveys included the number of halibut cleaned-at-sea versus brought back to dock whole/intact.

Analysis of Historical Trends in HPUE, Harvest, and Effort

Estimates of halibut harvest per angler-hour of effort (HPUE) were computed from on-site survey data dating from 1988 to 2003, and results were used to compare present and historical levels of angler success. Data from each port were separated into two classes--charter and non-charter. Only survey data from the beginning of June through the end of August were used for this computation. Average rates of retention by the two classes were computed by dividing the total number of halibut kept by the total halibut captured (the sum of the number kept and the number released) for the duration of the described period.

Analysis of Possible Localized Depletion in the Juneau Fishery

Juneau on-site survey data were used to evaluate trends in HPUE by area as an indicator of possible localized depletion effects due to the large amount of targeted effort in the area and a limited number of productive halibut fishing areas close to port. Only survey data from the beginning of June to the end of August were used, and only non-charter data were selected for analysis. This was done to remove any potential bias arising from pooling the charter fleet data (which typically had much higher HPUE than non-charter trips) with non-charter data during the selected time period. Individual creel survey responses were recorded based on pre-defined harvest areas. To increase sample sizes, "aggregated" areas were developed (Figure 2). Two larger units defined geographically separated outside and inside units, and 4 smaller sub-units within each larger unit were defined as north, south, central, and west. The on-site survey areas were combined into the larger sampling areas based on their geographic location, and proximity to the defined "aggregates." We also examined past creel survey estimates of halibut harvest and bottomfishing effort in the Juneau area.

Charter Vessel Licensing and Activity

All charter vessel owners are required by State regulation to license their vessels annually with the Commercial Fisheries Entry Commission. Part of this licensing process requires the owner to record the primary port where the vessel is based. The database used for registrations from 1998 to 2003 was different from those used for prior years due to changes in agency reporting requirements. Therefore, registrations from 1998 to 2003 are not comparable to those for prior years. When a charter vessel was encountered during onsite interviews, the vessel license number was recorded in the respective field on the datasheet. The following information was compiled at the end of the season into a separate database: a) the sampled port and date; b) the vessel number; and c) the type of fishing conducted during that particular trip (bottomfish, salmon, or both).

Biological Data

Length data were collected during on-site surveys when time and accurate representation of the halibut catch allowed--the latter being of primary importance to avoid sample bias. This bias could easily happen within the

charter fleet, as many clients want to have photographs taken with their larger "prize" fish once back at the dock. Due to lack of deck space and distance back to port, the smaller halibut observed by survey personnel have sometimes already been "Cleaned at Sea" (CAS) prior to docking. Therefore, length data was collected only when all the halibut aboard the vessel were still intact (none of the harvest was butchered or fletched) prior to returning to port. All lengths (tip of snout to fork of tail) were measured to the nearest centimeter (cm), and the area of harvest was recorded. Biological sampling from 1998 to 2003 also captured the type of trip (charter vs. private) to estimate class-specific statistics. All data sheets were digitized and edited, and net (headed and eviscerated) weights were estimated in pounds (lb) from the length-weight relationship published by Clark (1992). Due to the close proximity of Petersburg and Wrangell, length data collected from these two ports were combined prior to computing average weights. Similarly, length data from Craig was combined with Klawock, and Gustavus with Elfin Cove.

RESULTS

Regional Sport Harvests of Pacific Halibut from 1977 to 2002

The Statewide Harvest Mail Survey (SWHS) provides the official harvest estimates for all sport fisheries in the state of Alaska, including Pacific halibut (Howe et al. 2001 a-d, Walker et al. 2003, Walker et al. *In prep*, Jennings et al. *In prep*). Seven areas in Southeast Alaska are included in IPHC Area 2C. The overall harvest in 2002 was 104,813 halibut, which was 5% below the 2001 harvest and 6% below the record high harvest of 111,640 taken in 2000 (Table 1). Area specific comparisons of harvests between 2001 and 2002 indicate declining harvests in three out of the seven areas, with the Sitka area being down 24%, the greatest decline in the area. The Petersburg/Wrangell area harvest declined by 19%, while the Glacier Bay area harvest was down 5% from 2001. Increased harvests occurred in the Haines/Skagway area up 41%, and the Juneau and Prince of Wales Island area harvest each increased 10%. The Ketchikan area harvest was up 7%. In 2002, harvests from the three outer coast areas of Sitka, Prince of Wales Island, and Glacier Bay accounted for 67% of the overall sport harvest in IPHC Area 2C, down from 70% of the total harvest in 2001 (Figure 3). Since 1991, the combined halibut harvest has been significantly greater in the outer coast areas. Combined sport harvest totals from the outer coastal areas (Sitka, Prince of Wales Island, and Glacier Bay) reached a record of 76,426 halibut in 2001. The great increases in the harvest from the outer coastal areas since 1987 can be attributed to increased effort and harvest by charter anglers. Outer coast harvests had remained at approximately 10,000 fish per year from 1980-1987. While the combined inner coast harvest of approximately 34,375 halibut in 2002 was up 3% from 2001, it was down 16% from the 40,766 halibut harvested in 2000. The combined harvests of halibut from the inner coastal areas (Juneau, Ketchikan, Petersburg/Wrangell, and Haines/Skagway) have increased only slightly since 1987, ranging from 30 thousand to 46 thousand halibut per year.

On-site (Creel) Survey Summaries of HPUE Trends, Harvest, and Effort

Craig and Klawock (West Coast of Prince of Wales Island Area)

Survey data were available to compute comparative HPUE rates for 1992 and from 1994 to 2003 only. Also, a number of charter vessels in Craig began landing clients and their harvest at private docking facilities not accessible by our survey staff during 1997. Therefore, estimates of HPUE for the charter fleet from 1997 to 1998 were not as well estimated as they had been in prior years. In 1999, sampling efforts were expanded to nearby Klawock in an effort to increase survey data for the expanding West Coast of Prince of Wales Island sport fishery.

During 2003, the charter HPUE rate of 0.636 was 37% lower than last years record high HPUE of 1.009. The non-charter HPUE of 0.174 also declined 36% from last years all-time high of 0.274 (Figure 4). Compared to

the recent 5-year average from 1998 to 2002, chartered and non-chartered HPUE decreased by 6% and 18%, respectively. Since 1998, the charter HPUE in the Craig/Klawock area had been rising steadily. Compared to last year, both chartered and non-chartered anglers from Craig/Klawock retained a higher percentage of 72% and 68% of their catch, respectively. In comparison to the other major ports, Craig charter anglers had the highest semi-monthly HPUE, while HPUE levels for non-chartered anglers were the fourth highest in the region (Figure 5). The HPUE for the charter fishery peaked in early July, declined significantly in late July, and then rose again in August. In contrast, the non-charter HPUE remained fairly constant in June, declined in late July, and then rose dramatically through the month of August. Small sample size does not appear to be a factor in the significant increase in the non-charter HPUE at the end of the season.

Ketchikan

The HPUE for both chartered and non-chartered anglers in the Ketchikan area was the lowest of the all the surveyed ports. Charter angler HPUE was 25% below the recent five-year average of 0.308 (Figure 6). Ketchikan's non-chartered angler HPUE was 0.141 or 23% higher than last years rate 0.115 and the third highest HPUE since the survey began in 1988. During the period from 1988-2002, the charter HPUE had ranged from 0.15 to 0.38. As in previous years, chartered anglers harvested halibut at about twice the rate of non-chartered anglers. Charter anglers also retained more of their catch compared to the non-chartered anglers 73% and 67%, respectively. Retention rates for non-chartered anglers have been trending downward since 1999, while retention rates for chartered anglers in Ketchikan have been declining since 2000. Ketchikan's semi-monthly HPUE for non-chartered anglers continue to be similar to Juneau's and remained relatively constant throughout the season (Figure 5). Ketchikan's charter HPUE peaked in late June and then again in early August.

Preliminary creel survey data indicate that during 2003, the estimated total targeted effort (charter and non-charter) for halibut in the Ketchikan area was 27% below the recent five-year average, while the total number of kept halibut was up 20%. According to creel survey estimates, the charter fleet accounted for 28% of the total bottomfishing effort and 42% of the sport harvest of halibut. Last year, the charter fleet accounted for 19% of the bottomfish effort and 40% of the halibut harvest.

Sitka

Consistent survey data in Sitka is available only from 1992 to 2003; therefore, HPUE is not presented for the years from 1988 to 1991 (Note: limited data are available from 1988 to 1989). HPUE rates for both chartered and non-chartered halibut anglers steadily decreased from 1992 to 1996, but since then have been on the rise (Figure 7). During 2003, the HPUE for non-chartered anglers was down 16%, while the HPUE for chartered anglers increased 3% from 2002.

Chartered anglers in Sitka were approximately twice as successful per angler-hour fished than non-charter anglers. The retention rate for non-chartered anglers was 75%, down from 88% last year and closer to the five-year average of 79%. The retention rate for chartered anglers was 82%, and has remained relatively the same for the past three years. Sitka continued to be second only to Craig for the highest regional semimonthly HPUE for chartered anglers (Figure 5). The Charter angler HPUE increased as the season progressed, and peaked in early August. Sitka's non-charter HPUE rates peaked in early June and were second only to those from the Gustavus/Elfin Cove area. During 2003, the non-charter and charter HPUE was 8% and 17% above the recent five-year average, respectively.

Creel survey estimates indicate that total bottomfishing effort in Sitka increased 5%, and the preliminary harvest increased 9% from 2002. The charter fleet accounted for 88% of the total bottomfishing effort, and approximately 94% of the sport harvest of halibut in Sitka. These percentages are slightly higher than last year.

Juneau

The HPUE for Juneau's non-chartered anglers was 0.152, up 11% from the 2002 season, while chartered anglers had an HPUE of 0.261, up 48% from 2002 (Figure 8). Both non-charter and charter HPUE in Juneau remained fairly constant throughout the year, with the charter HPUE increasing slightly in early August (Figure 5). Juneau's non-charter angler HPUE was slightly higher than Ketchikan's. Juneau and Ketchikan had the lowest HPUE rates in area 2C. Ketchikan was the only area that had a lower charter angler HPUE. The retention rates for non-chartered and chartered anglers in Juneau during 2003 were 80% and 76%, respectively, while in 2002 the retention rates were 70% and 66%, respectively.

Preliminary 2003 estimates for total effort and harvest indicate that compared to 2002, the total targeted bottomfishing effort increased 43%, and the estimated total harvest increased 58%. In 2003, the Juneau charter fleet accounted for about 10% of the targeted effort and 19% of the sport harvest of halibut, while in 2002 the charter fleet represented 16% of the targeted effort and harvested 19% of the halibut.

Petersburg and Wrangell

This year, the sampling period in Petersburg and Wrangell was extended from May to September, making comparisons with other ports possible for the entire season. Previously, Petersburg and Wrangell had abbreviated sampling seasons, usually ending in July, which made comparisons difficult. The semi-monthly HPUE for both charter and non-charter anglers remained fairly constant and both peaked in late June. Both charter and non-charter anglers in the Petersburg/Wrangell area had HPUE rates higher than the other "inside" ports of Juneau and Ketchikan (Figure 5). Compared with the short sampling season last year (May to mid-July), the average HPUE for both chartered and non-chartered anglers increased. The non-charter HPUE was up 7% to 0.206, while the charter HPUE rose 35% to 0.293. The HPUE of Petersburg/Wrangell non-chartered anglers remained fairly constant, rising slightly during late June (Figure 5). The charter angler HPUE was slightly higher, but tracked nearly the same as those for non-chartered anglers. The retention rate for halibut in the Petersburg/Wrangell area was the lowest of the "inside" ports at 58% for non-chartered and 49% for chartered anglers, down from 70% and 58%, respectively in 2002.

Gustavus and Elfin Cove

This was the second year of ADF&G creel sampling in Gustavus. Since the two ports are close to each other, effort and length data gathered in Elfin Cove (conducted by a graduate student and the National Park Service with ADF&G oversight) were combined with data gathered in Gustavus. Results show that the HPUE for non-chartered anglers of 0.323 was the highest in the region, up 13% from last year. The HPUE of 0.345 for chartered anglers was up 8% from 2002, but continued to be lower than other outside ports of Sitka and Craig (Figure 5). Like the other ports, chartered anglers enjoyed better harvest rates than non-chartered anglers, and they accounted for 88% of the halibut harvested. The retention rate for charter anglers was 45%, while the retention rate for non-charter anglers was 49%.

Analysis of Possible Localized Depletion in the Juneau Fishery

For purposes of comparison, the halibut fishery around Juneau is divided into inside and outside areas, both of which are divided into 4 sub-areas (Figure 2). The HPUE for the outside area has been consistently higher than the inside area during the last 16 years from 1988 to 2003 (Figure 9). The inside area had a historical low HPUE in 1992, while the outside area experienced its lowest HPUE during 1993. Both areas had a recovering trend from 1994 to 1997, before experiencing a dramatic decline to near record lows in 1998. That decline lead to three consecutive years from 1998 to 2000 where HPUE rates remained very near record low levels.

Given that changes in HPUE for the inside and outside areas are so well correlated, it seems likely that the HPUE is tracking the overall halibut abundance in the Juneau area. Prior to 2003, the trend for non-chartered angling trips for the four inside sub-areas generally followed the same pattern regardless of geographic location (Figure 10). All 4 sub-areas within the inside area reached lows in 1992, and all began to recover in subsequent years until the south area declined precipitously in 1996, and was followed by the other areas in 1998. During 2003, the HPUE increased for all the inside areas. This year, the HPUE in the inside north sub-area is the highest since the survey began in 1988. Although increasing somewhat during 2003, the HPUE within the inside west sub-area has remained at all time low levels for the last three years. All of these sub-areas had either equaled or exceeded historical low HPUE's prior to their recent advances. The sub-area inside-south had the highest HPUE rate since 1995, but the HPUE for this sub-area is from a small sample size and probably does not reflect a true estimate of halibut abundance. The inside-south sub-area had insufficient data to compute a HPUE from 1990 to 1991.

Juneau's outside area non-chartered fishery was evaluated by sub-area during the same time period as the inside area (June through August) (Figure 11). Only 3 of the 4 sub-areas had sufficient data to evaluate historical trends as outside-south sub-area had little sampled effort. During 2003, the outside west sub-area continued its upward trend and set a record HPUE of 0.293, up 25% from last year. The HPUE for the two other outside sub-areas either remained relatively the same (outside central) or trended lower (outside north). Compared to last year, the outside north sub-area declined by 26%, while the outside central sub-area was up 2%. These three sub-areas have shown similar HPUE trends to the inside areas with historic lows in 1993, subsequent increases, and then the beginning of a decline in 1997 for the north and central sub-areas, followed by a decline in 1998 for the west sub-area. The outside north sub-area experienced an all time low HPUE in 1999. The combined HPUE for inside and outside areas has been trending upward since 2000.

During 2002, the total bottomfish effort in the Juneau area was at a record low 42,074 hours (Figure 12). Just ten years earlier in 1992, the amount of bottomfish effort was 84,718 hours. It was apparent that due to low abundance, Juneau area anglers were abandoning the halibut fishery. However, in 2003, the estimated bottomfishing effort based on creel survey estimates in the Juneau area increased significantly to 60,093 hours, up 43% from last year's record low. Compared to the recent five-year average, the targeted bottomfish effort was up 3%, but was 17% below the long-term average from 1981 to 2002. The estimated 2003 Juneau area halibut harvest of 9,754 fish based on the creel survey is 58% above last year's harvest and the highest since 1997 when 12,547 halibut were harvested. The record harvest of 16,414 halibut in Juneau occurred in 1983. This year's harvest was 46% above the recent five-year average, but was 6% below the long-term average from 1981 to 2002. Due to the higher amount of effort and a higher HPUE in the Juneau sport fishery, it appears that anglers are beginning to once again target halibut on a regular basis. Given that Juneau area anglers are now traveling to remote fishing areas far more frequently than in the late 1980s, (effort from the inside area has declined from 85% to 56% of the total Juneau area bottomfish effort during the period from 1988 to 2003) there seems to be little doubt that localized depletion of stocks in Juneau's inside areas has resulted in a similar decline in bottomfish effort closer to Juneau. The fairly stable halibut harvest for the Juneau area estimated from the SWHS is likely due to the growth in remote charter fisheries in more productive grounds (Juneau outside areas), which masks declines in the fishery closer to Juneau.

Charter Vessel Activity

This year, charter fleet registrations (according to the Commercial Fisheries Entry Commission) totaled 1,233 vessels (which includes 56 vessels in Yakutat). This is a slight 1% decrease in the number of registered vessels from 2002. The total number of charter vessels registering annually with ADF&G increased steadily from 1988 to 1997 in Southeast Alaska--more than tripling during that time period (Figure 13). From 1998 to 2003, registered vessel numbers increased substantially due to a change in agency reporting requirements. Thus, the numbers are not comparable from 1988 to 1997. All vessels used in freshwater are included in the registration totals from 1998 to 2003, as well as vessels used to transport anglers to and from shore.

On-site survey data indicate that not all registered charter vessels at sampled ports were encountered by the onsite surveys, due to several possible reasons: some charter vessels used a dock or boat launch not surveyed by our samplers at a given port, used a dock or boat launch that we did survey but was never encountered during our sampling, or never actively participated in charter fishing activities. Of the 928 vessels that registered to operate in the ports sampled during 2003, only 351 or 38% of the vessels were verified as "actively" chartering during on-site surveys (Table 2). Gustavus and Elfin Cove had the highest percentage of active registered vessels 76% and 71%, respectively, while the other ports ranged from 46% active in Sitka to 16% active in Wrangell. Overall, on-site data indicate an increase of 10% in the number of active charter vessels that targeted halibut during 2003. This increase is largely a result of additional survey data on charter vessels from Elfin Cove. Of the 351 active charter vessels surveyed in the region during 2003, 254 (72%) targeted halibut, or both salmon and halibut on at least one of the surveyed trips.

Interview frequency of individual charter vessels increased in Sitka, Petersburg, Wrangell, and Gustavus, and remained relatively the same in Juneau and Craig/Klawock. Interview frequency declined in Ketchikan (Table 3). The number of vessels surveyed more than 4 times increased by about 10% compared to last year, and was a result of additional data obtained from the very active vessels from Elfin Cove. The number of these very active vessels increased in Ketchikan and Petersburg, decreased in Juneau and Craig/Klawock, and remained relatively the same in Sitka, Gustavus, and Wrangell. In Craig, a major reduction in interview frequency per vessel occurred from 1996 to 1998 due to movement of some of the fleet to private docking facilities, rather than a decrease in vessel activity. Starting in 1999, supplemental data from charter trips surveyed in Klawock were pooled with the Craig data.

Juneau and Ketchikan charter vessels were more likely to target “salmon only” 82% and 79%, respectively (Table 4). This is likely due to the lower halibut abundance observed in these ports compared to the rest of the region combined with an abundant supply of local hatchery-produced salmon in Juneau and Ketchikan. In 2003, Petersburg charter operators continued to pursue halibut about twice as often as salmon (66% to 26%, respectively) and rarely targeted both halibut and salmon (only 8%) on the same trip. Sitka, Wrangell, Craig, Gustavus and Elfin Cove operators pursued both salmon and halibut on the same trip more often than operators in the rest of the region. Charter operators in Juneau and Petersburg pursued both salmon and halibut on fewer than 10% of their trips. On a regional basis, the relative percentage of charter trips by target has remained fairly consistent since 1998, with “salmon only” trips representing approximately 51% of the sampled trips, combination trips 38%, and “halibut only” trips approximately 11% (Table 4).

Biological Data

Regionwide statistics for 2003 in area 2C include an unweighted (i.e., a simple average of the collected biological data rather than a weighted average calculated by multiplying the average net weight at each SWHS area by the proportion of the regional harvest at each SWHS area) average net weight of 24.0 lb that was relatively unchanged compared to last year’s unweighted average net weight of 24.3 lb. The unweighted average length in 2003 of 97.6 cm was also about the same as last year’s unweighted average length of 97.1 cm. The unweighted average net weight was based on 7,150 halibut measurements, 32% more than last year. While the number of halibut measured increased at nearly all the ports, most of the additional halibut measurements were a result of a longer sampling season in Petersburg/Wrangell combined with more samples from Craig/Klawock and Gustavus/Elfin Cove. The number of halibut sampled in Ketchikan decreased 76% from last year. All length data collected during 2003 (Table 5) were used to estimate the average net weights (Table 6) from the IPHC standard linear relationship. During 2003, the waters around the Gustavus/Elfin Cove area continued to produce the largest halibut on average (35.8 lb net weight), followed by Petersburg/Wrangell, Sitka, Juneau, Ketchikan and Craig/Klawock at (23.3, 19.4, 19.0, 15.7 and 10.9 lb, respectively). During 2003, the mean net weight decreased 25% in Ketchikan, 24% in Petersburg/Wrangell, 11% in Sitka, and 9% in Craig/Klawock. The average net weight of halibut in Gustavus/Elfin Cove and Juneau was down 1% from last year (Table 6). Precision goals for the average weight estimates in each angler class were ± 5% for charter anglers and ±10% for private anglers at the 90% level of confidence. This goal was achieved for the non–charter angler class at all the sampled ports. The estimated average net weights of

halibut harvested by Ketchikan and Juneau charter anglers were slightly above the prescribed precision goal at (9% and 7%, respectively). A small sample size at both ports is the likely reason. Precision goals for the average net weights of halibut harvested by charter anglers at the other ports were met. Long-term trend data for mean net weights indicate that halibut sampled in Sitka have been predominantly larger than in the Juneau, Ketchikan, and Craig fisheries during the 1990s. Petersburg/Wrangell average net weights were excluded from long-term comparisons since during several years sampling was not conducted over the entire season (Figure 14).

On a regionwide basis, the unweighted average net weight of halibut sampled from charter anglers in 2003 was 8.8 lb greater than the halibut sampled from non-chartered anglers at 26.9 lb and 18.1 lb, respectively (Table 6). The average weight of halibut decreased at all ports for both angler classes with the exception of Juneau's chartered anglers, where the average net weight increased from 16.1 to 18.1 pounds. The average net weight of halibut harvested by charter anglers in the Craig/Klawock continued its precipitous decline (Table 6 and Figure 14), where the overall average net weight has decreased 50% from 21.8 pounds in 1998 to 10.9 pounds in 2003. The numerous large halibut sampled from the Gustavus/Elfin Cove area "masked" a regionwide decline in the overall unweighted average net weight of halibut.

Length frequency distributions of the halibut harvested during 2003 varied between fisheries, with combined charter and non-charter length frequency distributions of halibut greater than 135 cm varying from a high of 20% of the halibut sampled in Gustavus/Elfin Cove to a low of 1% in Craig/Klawock (Table 7 and Figure 15). The majority of halibut (84%) sampled in Gustavus/Elfin Cove were in the 85-145 cm length range, while the predominant length ranges for the other areas in descending order were: Petersburg/Wrangell 75-125 cm at 82%, Ketchikan 75-105 cm at 76%, Sitka 75-105 cm at 74%, Juneau 65-115 cm at 83%, and Craig/Klawock 65-95 cm at 86%.

For the second year in a row, the largest halibut harvested by non-charter anglers were from the Gustavus/Elfin Cove area with 82% falling in the 75-125 cm range. Petersburg/Wrangell non-charter anglers followed, with 74% of the halibut in the 75-115 cm range. Most of the halibut harvested by non-charter anglers in Ketchikan, Sitka, and Juneau were in the 65-105 cm range at 86%, 85% and 77%, respectively, while in Craig/Klawock 86% were in the 65-95 cm range (Table 7).

Gustavus/Elfin Cove charter anglers harvested the largest halibut, with 76% in the 95-145 cm range. In the Petersburg/Wrangell area, 80% of the halibut harvested by charter anglers were in the 85-125 cm range. Most of the halibut harvested by charter anglers in Ketchikan (89%) and Juneau (73%) were in the 75-115 cm range, while in Sitka 74% of the charter halibut harvest was in the 75-105 cm range. Craig area charter anglers harvested the smallest halibut, with 86% falling in the 65-95 cm range (Table 7). Across the region, with the exception of Juneau charter anglers, the halibut harvested this year were smaller.

Examination of the 2003 onsite interview data for disposition of halibut brought back to the docks/boat launches indicated that on a regional basis 56% of the halibut harvested by sport anglers were brought back whole (Table 8). Non-charter anglers brought back 72% of their halibut whole/intact, up from 61% last year. Charter anglers brought back 49% of their halibut whole, an increase from 39% last year. Again, Sitka continued to have the highest charter class Cleaned-at-Sea (CAS) percentage at 87%, while Ketchikan and the Petersburg/Wrangell area had the lowest at 5%. This trend was also true for non-chartered anglers, with Sitka having the highest (CAS) percentage at 67%, and Petersburg/Wrangell the lowest at 11%.

DISCUSSION

It is evident that sport fishing for halibut will continue to be an important activity for sport anglers and that continued demand will produce a relatively consistent annual harvest given no major change in stock status. Based on preliminary creel surveys in Sitka, Juneau, and Ketchikan, the 2003 projected IPHC Area 2C

regional halibut harvest is 117,455 fish. This is 12% higher than last year's harvest of 104,813 halibut. Halibut samples taken across the region resulted in an unweighted average net weight nearly identical to last year (24.0 lb compared to 24.3 lb during 2002). This year's unweighted average net weight was based 7,150 halibut measurements, and is the highest number of halibut ever measured during the creel survey. This increase is largely the result of a longer sampling season in Petersburg/Wrangell, an abundant supply of whole halibut to measure in Gustavus, and the inclusion of Elfin Cove samples. It is apparent that the numerous, large halibut sampled in Gustavus/Elfin Cove and the Petersburg/Wrangell areas had an influence on the regional unweighted average net weight, as it remained virtually the same, while the average weights for each of the ports and angler types declined (except for the Juneau charter class). Overall, fishing activity for both halibut and salmon by charter vessels increased during 2003, with the number of surveyed trips (n= 3,510) being the highest on record, and is also a result of the increased sampling at Gustavus/Elfin Cove and Petersburg/Wrangell. According to the most recent effort data available from the SWHS (2002), the number of combined resident and non-resident sport-fishing trips has decreased 16% since 2000. During this period, trips by resident anglers decreased by 21%, while the number of trips taken by non-resident anglers increased 5% (Walker et al. 2003, Jennings et al. *In prep)*. Many non-resident anglers will more than likely take a charter sport fishing trip (either for salmon, halibut, or both) while visiting the area. There is little reason to expect that non-resident angling pressure will drop off any time soon, as projections for numbers of visitors to the region continue to increase annually.

The growth in the size of the charter vessel fleet in Southeast Alaska appears to have stabilized. The number of registered charter boats peaked in 2001 at 1,302 vessels. This year, 1,233 charter vessels registered, down from 1,251 last year. As the number of charter trips continues to rise, halibut will continue to be harvested in large numbers. The charter fleet will no doubt continue to target halibut throughout much of the salmon fishing season (usually June through August). When salmon are abundant, more effort will be redirected toward halibut after a daily limit of salmon has been taken. The outer coast ports of Elfin Cove and Sitka had the highest proportion of combination trips for the region at 72% and 59%, respectively, followed by Wrangell at 55%, Craig/Klawock at 54% and Gustavus at 47%. Where halibut were less abundant (traditionally the inside ports), the percentage of combination trips was much lower with Juneau at 6%, Petersburg at 8% and Ketchikan at 13%. Shifts in fishing effort are also more likely to occur with non-resident chartered anglers who are limited to lower daily bag limits and annual harvests of chinook salmon (*Oncorhynchus tshawytscha*) in Southeast Alaska. After an annual limit is attained, and when other salmon species are not available, the remainder of their charter fishing time will likely be spent pursuing halibut and other bottomfish such as lingcod (*Ophiodon elongatus*) and rockfish (*Sebastes*).

While regionwide, the estimated halibut harvest increased this year, localized depletion of Pacific halibut stocks is of concern in areas where: a) fishing effort is high, b) local productive fishing areas for halibut are somewhat limited, and c) little productive area is left for effort to redistribute itself once resources in primary areas have been exhausted. Analysis of data to monitor possible localized depletion has focused on the Juneau area since the number of halibut harvested and the amount of targeted bottomfish effort reached record low levels during 2001 and 2002, suggesting that anglers were exiting the fishery. Since 1988, the bottomfish effort in areas close to Juneau has declined 41% while at the same time fishing effort farther away from Juneau has increased 155%. Further evidence of Juneau anglers traveling farther in the pursuit of halibut is that Juneau charter anglers were the only angler class in the region who harvested larger halibut than last year. These anglers are traveling to Icy Strait (Gustavus area) more frequently, since the halibut there are more abundant and considerably larger.

This year, creel survey results indicated that halibut abundance and angler effort in the Juneau area is on the rise. According to preliminary creel survey estimates, this year's halibut harvest of 9,754 fish in the Juneau area was the highest since 1997, when 12,574 halibut were harvested and is 46% above the recent five-year average. Based on the creel survey, the estimated bottomfishing effort in the Juneau area of 60,093 hrs was up 43% from last year when the amount of bottomfish angler effort reached a record low. Compared to last year, the HPUE for all of the Juneau inside sub-areas increased. Juneau's outside area HPUE increased in the West

and Central sub-areas, but decreased in the North sub-area. Although the HPUE for halibut in the Juneau area has improved, it is rebounding from record low numbers.

Due to the consistently low HPUE for halibut in the Juneau sport fishery during the past several years, it is encouraging to see renewed effort and an increased harvest this year. Since Juneau anglers routinely travel to remote fishing areas far more frequently than they did in the late 1980's, there seems to be little doubt that localized depletion of stocks within Juneau's inside sub-areas has occurred. According to the Statewide Harvest Survey, the Juneau area halibut harvest has remained fairly constant, averaging 15,321 fish during the period from 1998 to 2002. The fairly stable halibut harvest for the Juneau area estimated from the SWHS is probably due to growth in remote charter fisheries in more productive grounds, masking the decline in the local fishery. Depletion of halibut stocks in the Juneau inside sub-areas could be exacerbated by changes in fishing patterns for sport, commercial, and subsistence fisheries.

Because of the growing importance of precise average weight estimates for use in GHL's and proposed IFQ programs, there was concern regarding whether length data collected in IPHC Area 2C were from a representative sample of halibut harvested. In 1999, a pilot study in Sitka showed only 20% of the halibut harvested by charter anglers were being brought whole/intact back to the docks, while the remainder was CAS. ADF&G initiated similar data collection for all of IPHC Area 2C to quantify the percentage of the catch CAS. Analysis showed:

1) Sitka has exhibited a consistently high percentage of halibut CAS, i.e. 88% during 2000, 86% in 2001, 85% in 2002, and 85% in 2003.
2) During 2003, other ports in the region had a significantly lower percentage of halibut being CAS, ranging from a low of 8% in Petersburg/Wrangell, to 15% in Ketchikan, 18% in both Craig/Klawock and Gustavus/Elfin Cove, and 34% in Juneau.
3) With the exception of Sitka, all the ports exhibited adequate sampling of halibut brought back to the docks whole/intact and thus available for measuring.

The results of the examination of disposition of halibut being brought back to the docks indicate that overall, halibut measurements being collected for estimating average length and weight by port should be representative, although in Sitka, the high rates of halibut CAS makes it difficult to obtain good samples.

In 2000, the boundary in the Statewide Harvest Survey between area G (Glacier Bay) and area D (Sitka) was modified. As a result, the size of area D decreased and area G increased. Even though the size of area D decreased, the harvest levels of halibut in area D remained about the same during the first year after re-districting. However, during 2001, the harvest in area D increased to a record high of 33,104 halibut before declining to 25,156 halibut last year. Even with the decrease in 2002, the harvest was greater than any year prior to 1997 (Jennings et al. *In prep*).

LITERATURE CITED

Clark, W. G. 1992. Validation of the IPHC length-weight relationship for halibut. Pages 113-116 in Report and Assessment of Research Activities, 1991. International Pacific Halibut Commission, Seattle, WA.

Dean, M. R. and A. L. Howe. 1999. Alaska Department of Fish and Game sportfishing guide and business registration and saltwater sportfishing charter vessel logbook program, 1998. Alaska Department of Fish and Game, Special Publication No. 99-1, Anchorage.

Dean, M. R. 2001. Alaska Department of Fish and Game sportfishing guide and business registration and saltwater sportfishing charter vessel logbook program, 1999. Alaska Department of Fish and Game, Special Publication No. 01-1, Anchorage.

Howe, A. L., R. J. Walker, C. Olnes, K. Sundet, and A. E. Bingham. 2001a. Revised Edition: Harvest, catch, and participation in Alaska sport fisheries during 1996. Alaska Department of Fish and Game, Fishery Data Series No. 97-29 (Revised), Anchorage.

Howe, A. L., R. J. Walker, C. Olnes, K. Sundet, and A. E. Bingham. 2001b. Revised Edition: Harvest, catch, and participation in Alaska sport fisheries during 1997. Alaska Department of Fish and Game, Fishery Data Series No. 98-25 (Revised), Anchorage.

Howe, A. L., R. J. Walker, C. Olnes, K. Sundet, and A. E. Bingham. 2001c. Revised Edition: Participation, catch, and harvest in Alaska sport fisheries during 1998. Alaska Department of Fish and Game, Fishery Data Series No. 99-41 (Revised), Anchorage.

Howe, A. L., R. J. Walker, C. Olnes, K. Sundet, and A. E. Bingham. 2001d. Participation, catch, and harvest in Alaska sport fisheries during 1999. Alaska Department of Fish and Game, Fishery Data Series No. 01-08, Anchorage.

Jennings, G.B., K. Sundet, A. E. Bingham, and H. K. Sigurdsson. *In prep.* Participation, catch, and harvest in Alaska sport fisheries during 2002. Alaska Department of Fish and Game, Fishery Data Series, Anchorage

Walker, R. J., C. Olnes, K. Sundet, A. L. Howe, and A. E. Bingham. 2003. Participation, catch, and harvest in Alaska sport fisheries during 2000. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.

Walker, R. J., C. Olnes, K. Sundet, A. L. Howe, and A. E. Bingham. *In prep.* Participation, catch, and harvest in Alaska sport fisheries during 2001. Alaska Department of Fish and Game, Fishery Data Series, Anchorage.

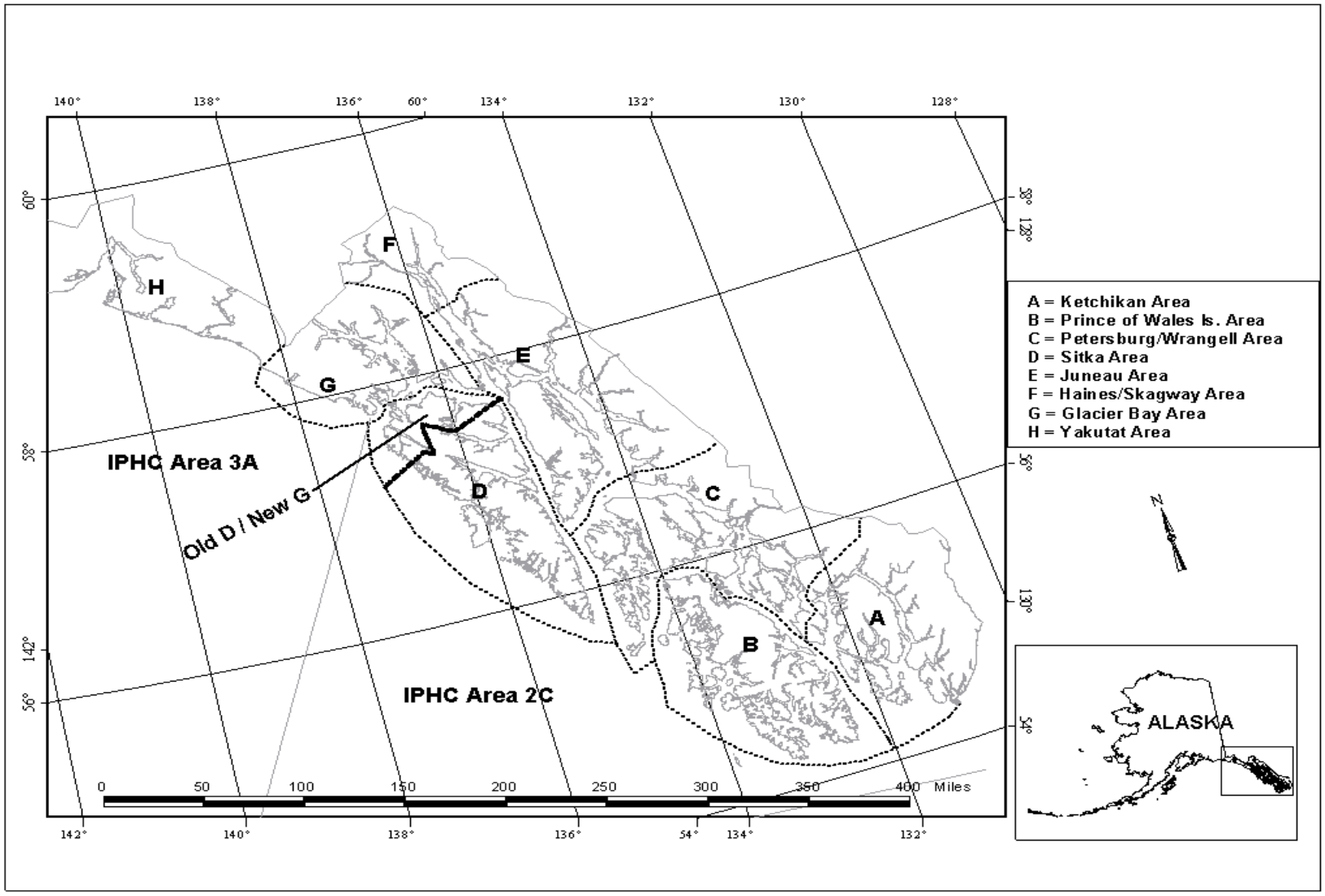


Figure 1.-Map of Southeast Alaska showing boundaries of the International Pacific Halibut Commission (IPHC) regulatory areas, and the Statewide Harvest Mail Survey areas. Note the area labeled "Old D/New G" which prior to 2000 was part of SWHS area D but now is part of area G.

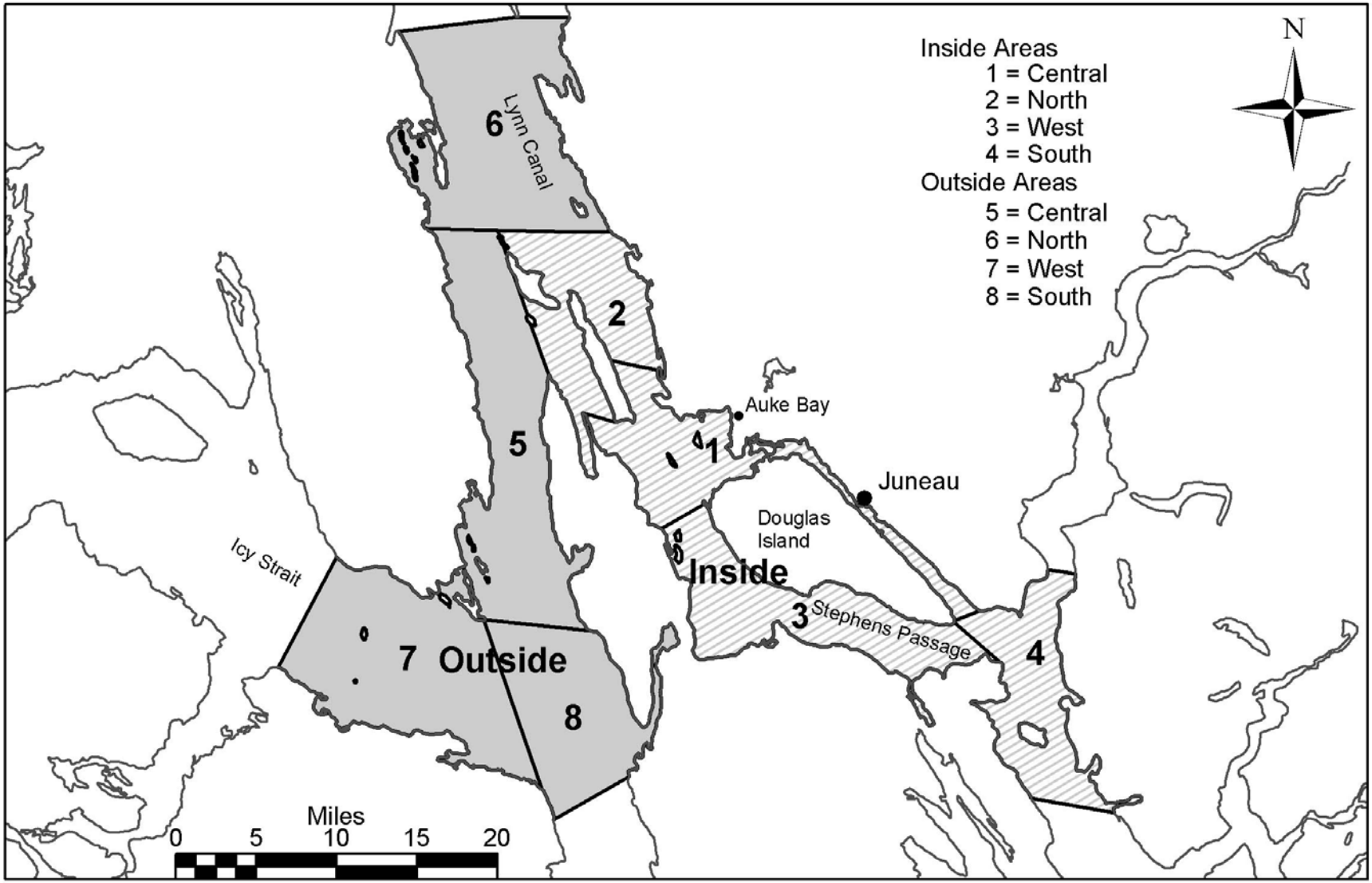


Figure 2.-Map showing boundaries for the inside and outside areas (including sub-areas) used to aggregate Juneau on-site creel survey data from non-chartered trips from 1988 to 2003 to evaluate trends in HPUE which may be an indicator of local depletion.

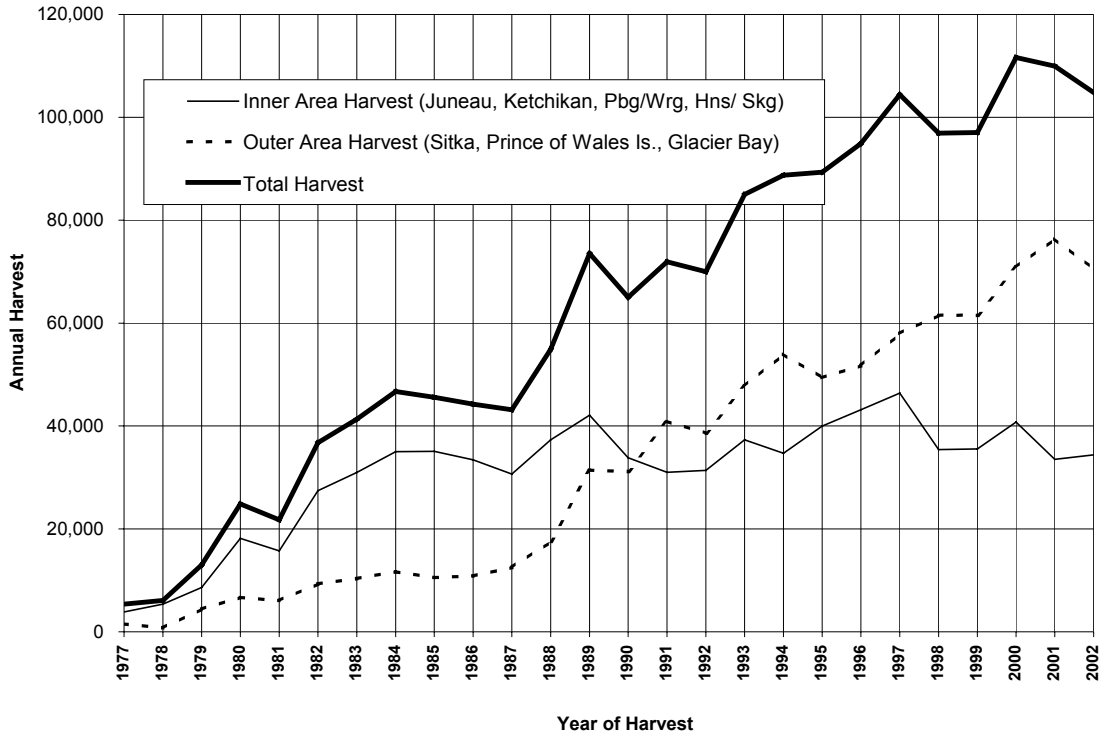
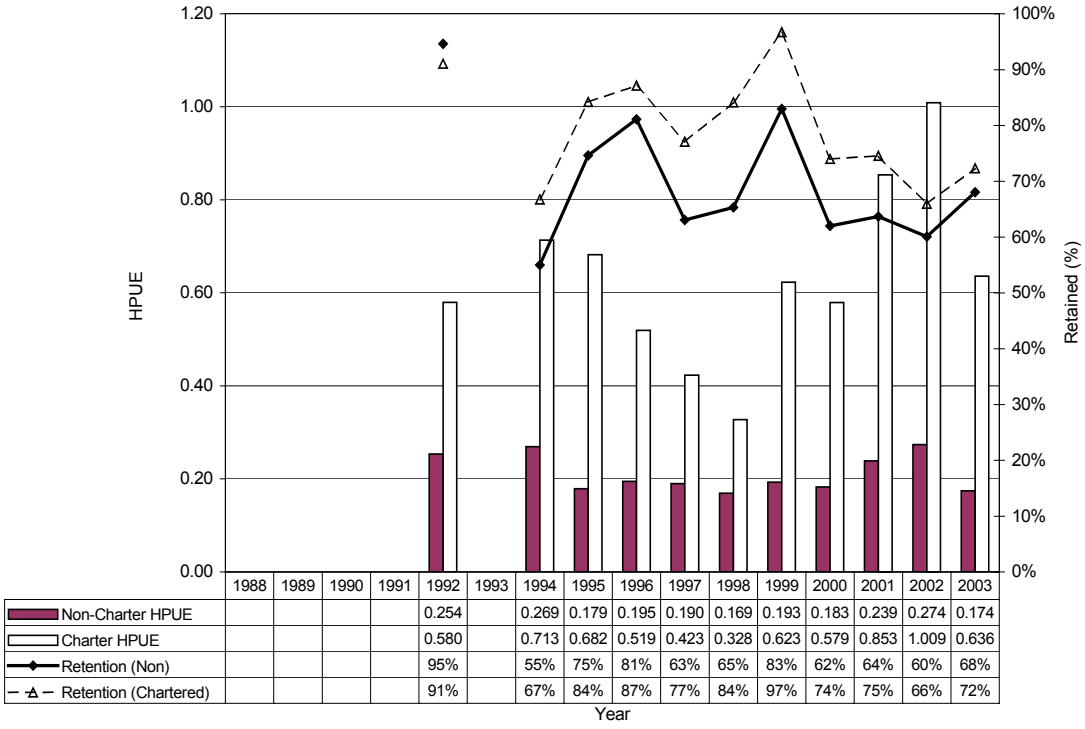


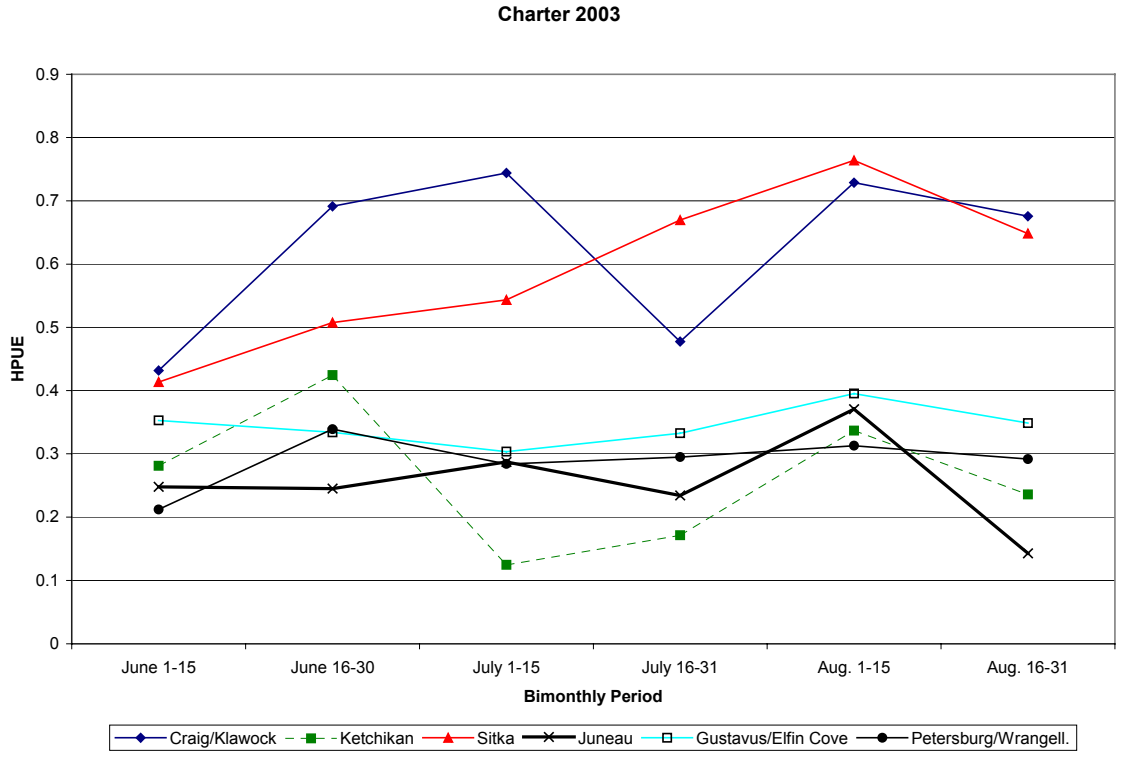
Figure 3.-Sport harvest totals of Pacific halibut in IPHC Area 2C by inner and outer coastal areas from 1977 to 2002 as estimated by the Statewide Harvest Mail Survey (Howe et al. 2002 a-d, Walker et al. 2003, Walker et al. *In prep*, Jennings et al. *In prep*). Note that SWHS estimates for 1996-1998 were revised by ADF&G in September 2000.



	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Non-Charter HPUE					0.254		0.269	0.179	0.195	0.190	0.169	0.193	0.183	0.239	0.274	0.174
Charter HPUE					0.580		0.713	0.682	0.519	0.423	0.328	0.623	0.579	0.853	1.009	0.636
Retention (Non)					95%		55%	75%	81%	63%	65%	83%	62%	64%	60%	68%
Retention (Chartered)					91%		67%	84%	87%	77%	84%	97%	74%	75%	66%	72%

Year

Figure 4.-Historical halibut harvest per unit of effort (HPUE) and percent of catch retained by chartered and non-chartered anglers bottomfishing from the port of Craig, Alaska from 1988 to 2003. HPUE is measured as the number of fish kept per angler-hour of bottomfishing effort.



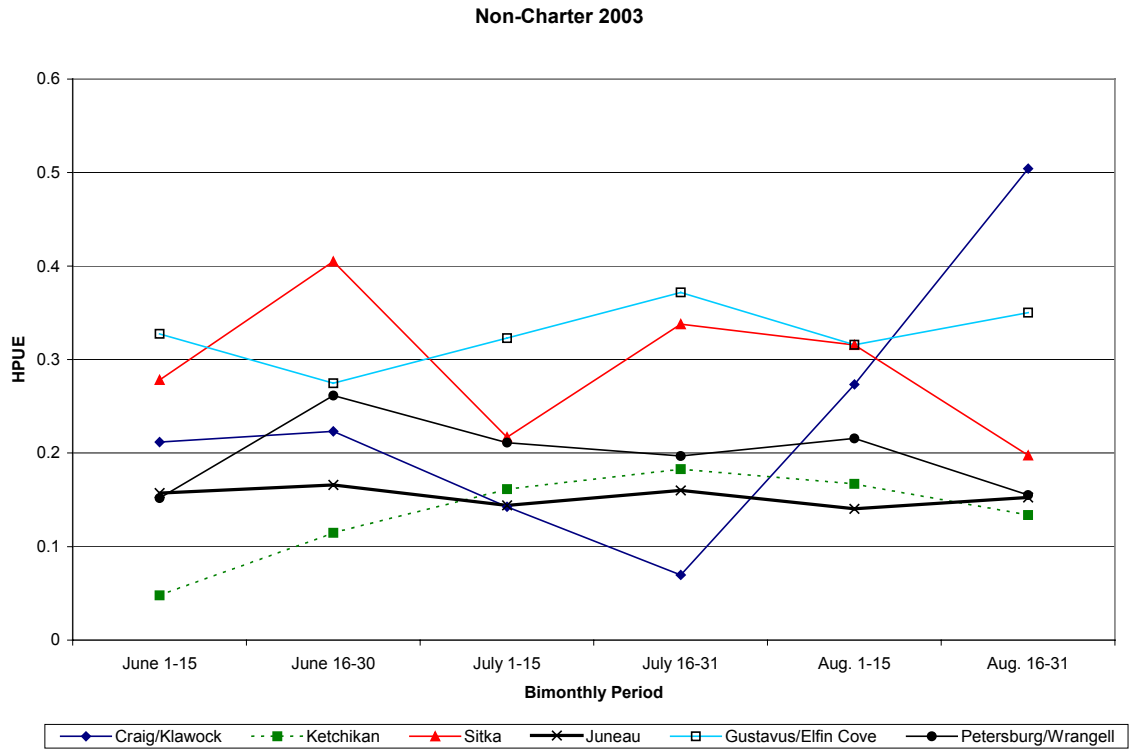
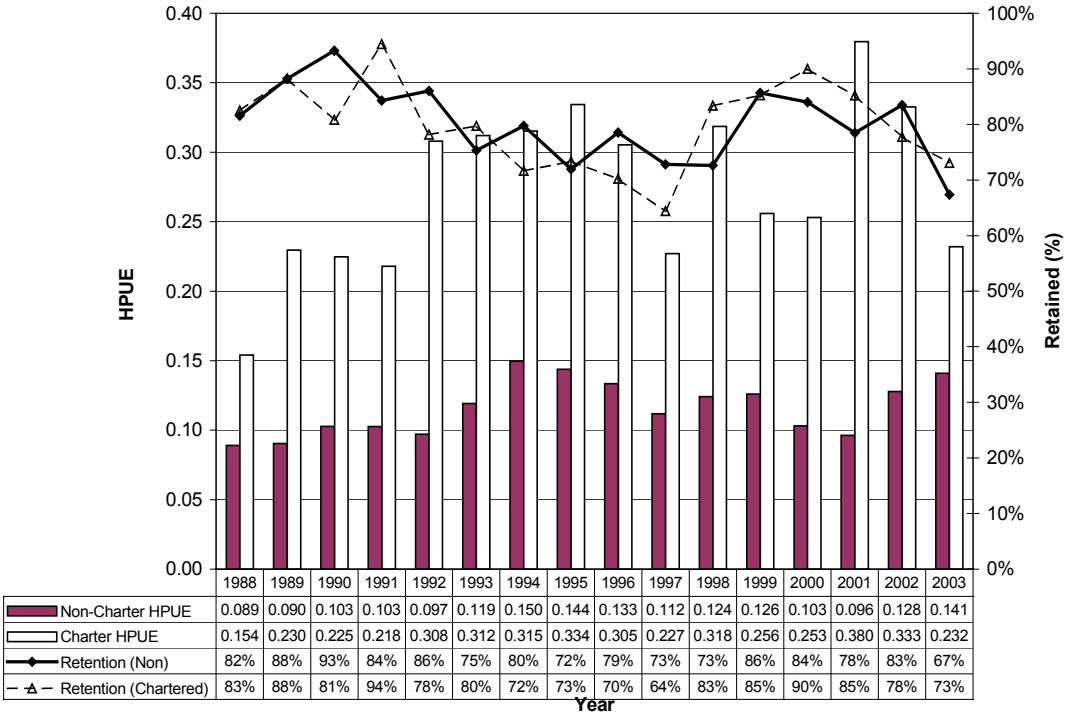


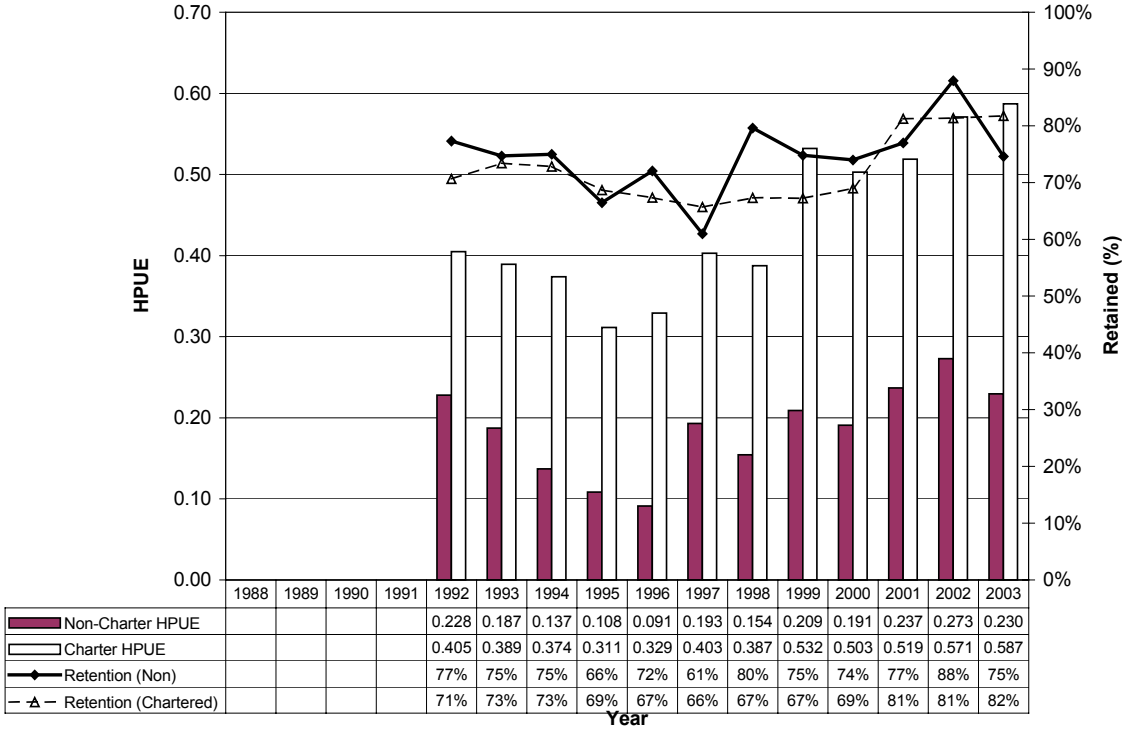
Figure 5.-Semi-monthly chartered and non-chartered halibut harvest per angler-hour of bottomfishing effort (HPUE) in sampled ports of IPHC Area 2C during 2003.



	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Non-Charter HPUE	0.089	0.090	0.103	0.103	0.097	0.119	0.150	0.144	0.133	0.112	0.124	0.126	0.103	0.096	0.128	0.141
Charter HPUE	0.154	0.230	0.225	0.218	0.308	0.312	0.315	0.334	0.305	0.227	0.318	0.256	0.253	0.380	0.333	0.232
Retention (Non)	82%	88%	93%	84%	86%	75%	80%	72%	79%	73%	73%	86%	84%	78%	83%	67%
Retention (Chartered)	83%	88%	81%	94%	78%	80%	72%	73%	70%	64%	83%	85%	90%	85%	78%	73%

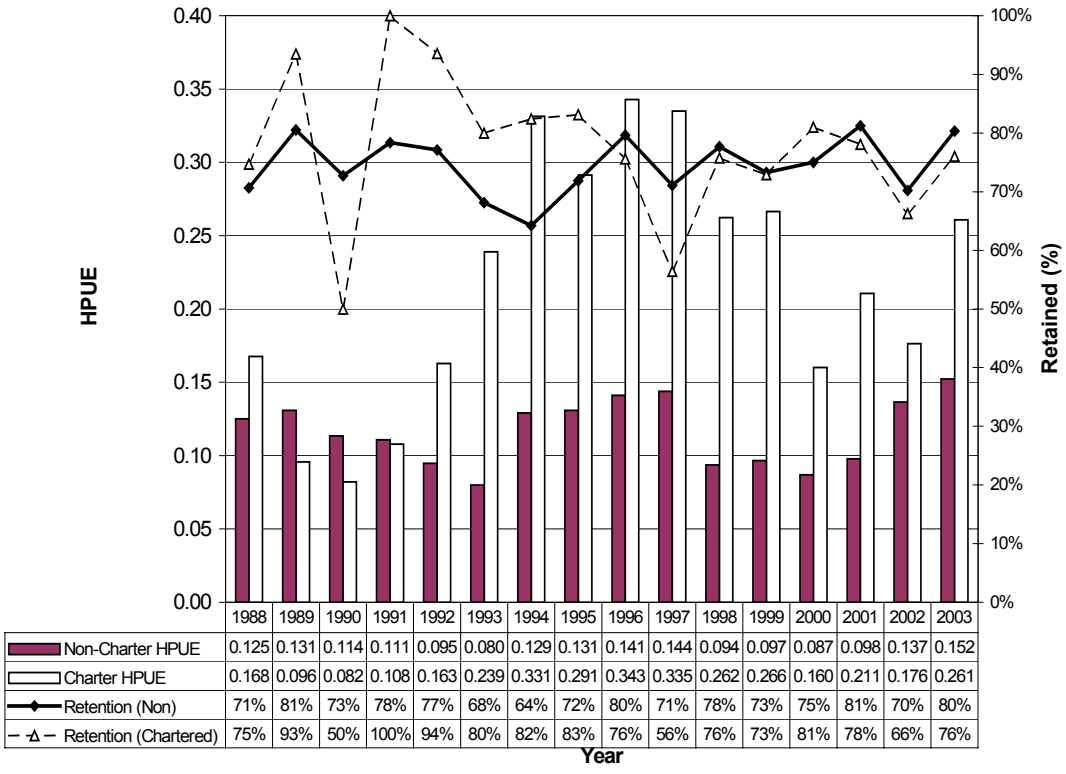
Year

Figure 6.-Historical halibut harvest per unit of effort (HPUE) and percent of catch retained by chartered and non-chartered anglers bottomfishing from the port of Ketchikan, Alaska from 1988 to 2003. HPUE is measured as the number of fish kept per angler-hour of bottomfishing effort.



	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Non-Charter HPUE					0.228	0.187	0.137	0.108	0.091	0.193	0.154	0.209	0.191	0.237	0.273	0.230
Charter HPUE					0.405	0.389	0.374	0.311	0.329	0.403	0.387	0.532	0.503	0.519	0.571	0.587
Retention (Non)					77%	75%	75%	66%	72%	61%	80%	75%	74%	77%	88%	75%
Retention (Chartered)					71%	73%	73%	69%	67%	66%	67%	67%	69%	81%	81%	82%

Figure 7.-Historical halibut harvest per unit of effort (HPUE) and percent of catch retained by chartered and non-chartered anglers bottomfishing from the port of Sitka, Alaska from 1988 to 2003. HPUE is measured as the number of fish kept per angler-hour of bottomfishing effort.



	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Non-Charter HPUE	0.125	0.131	0.114	0.111	0.095	0.080	0.129	0.131	0.141	0.144	0.094	0.097	0.087	0.098	0.137	0.152
Charter HPUE	0.168	0.096	0.082	0.108	0.163	0.239	0.331	0.291	0.343	0.335	0.262	0.266	0.160	0.211	0.176	0.261
Retention (Non)	71%	81%	73%	78%	77%	68%	64%	72%	80%	71%	78%	73%	75%	81%	70%	80%
Retention (Chartered)	75%	93%	50%	100%	94%	80%	82%	83%	76%	56%	76%	73%	81%	78%	66%	76%

Year

Figure 8.-Historical halibut harvest per unit of effort (HPUE) and percent of catch retained by chartered and non-chartered anglers bottomfishing from the port of Juneau, Alaska from 1988 to 2003. HPUE is measured as the number of fish kept per angler-hour of bottomfishing effort.

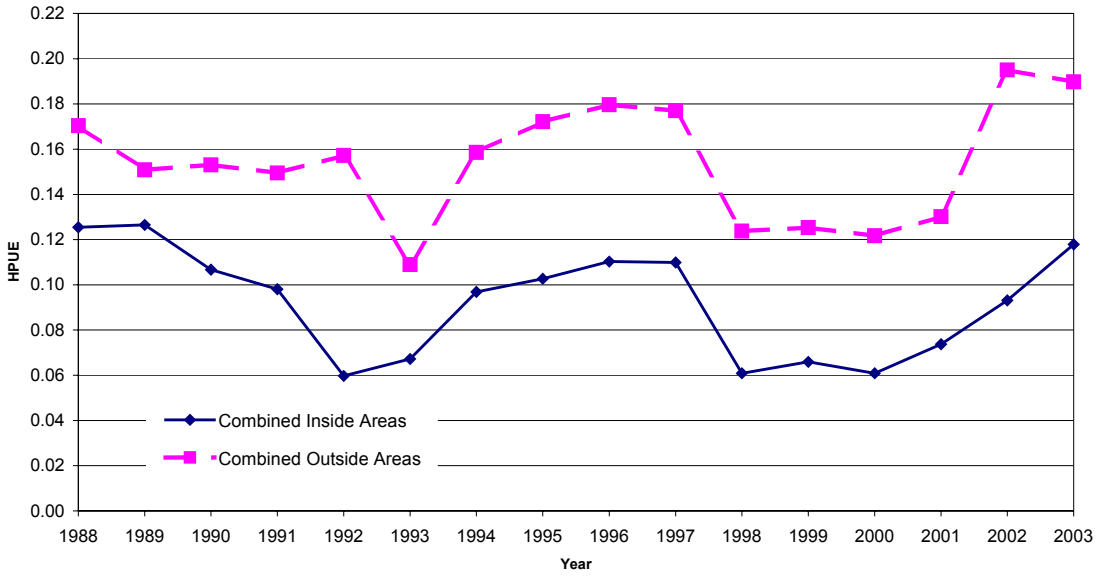


Figure 9.-Historical halibut harvest per unit of effort (HPUE) for non-chartered halibut trips to inside and outside areas around Juneau, Alaska during the period from June to August from 1988 to 2003. HPUE is measured as the number of fish kept per angler-hour of bottomfishing effort.

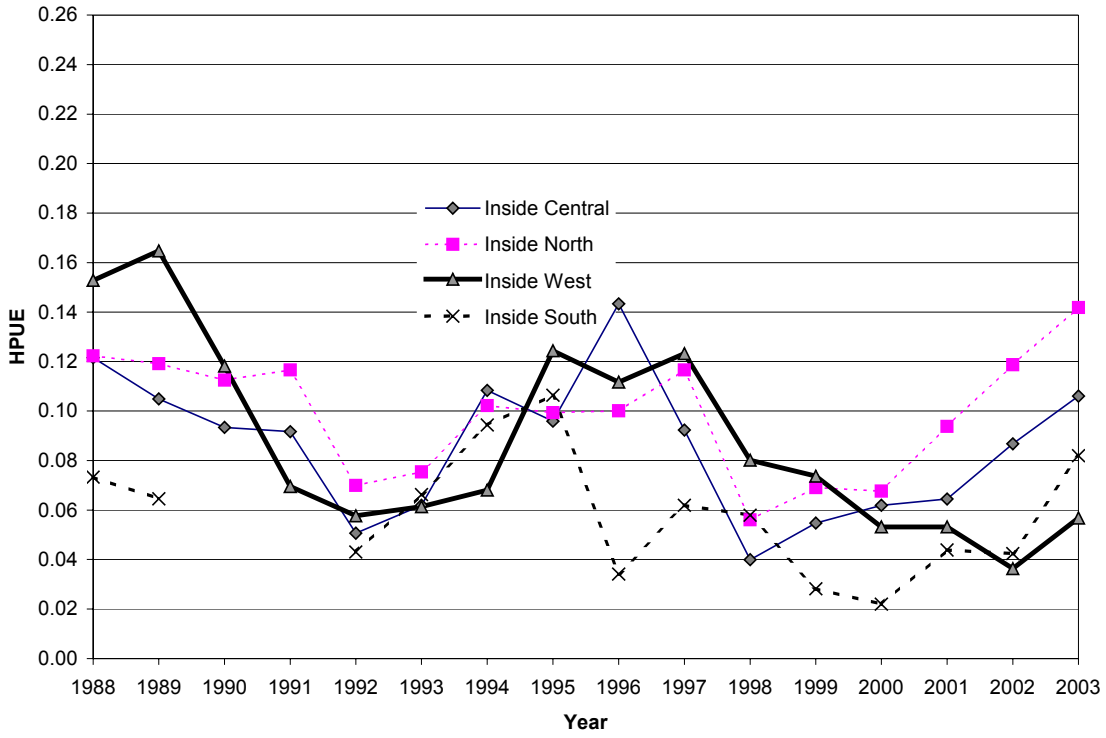


Figure 10.- Historical trend of non-chartered halibut harvest per angler-hour of bottomfishing effort (HPUE) during the period from June to August in Juneau's inside sub-areas from 1988 to 2003.

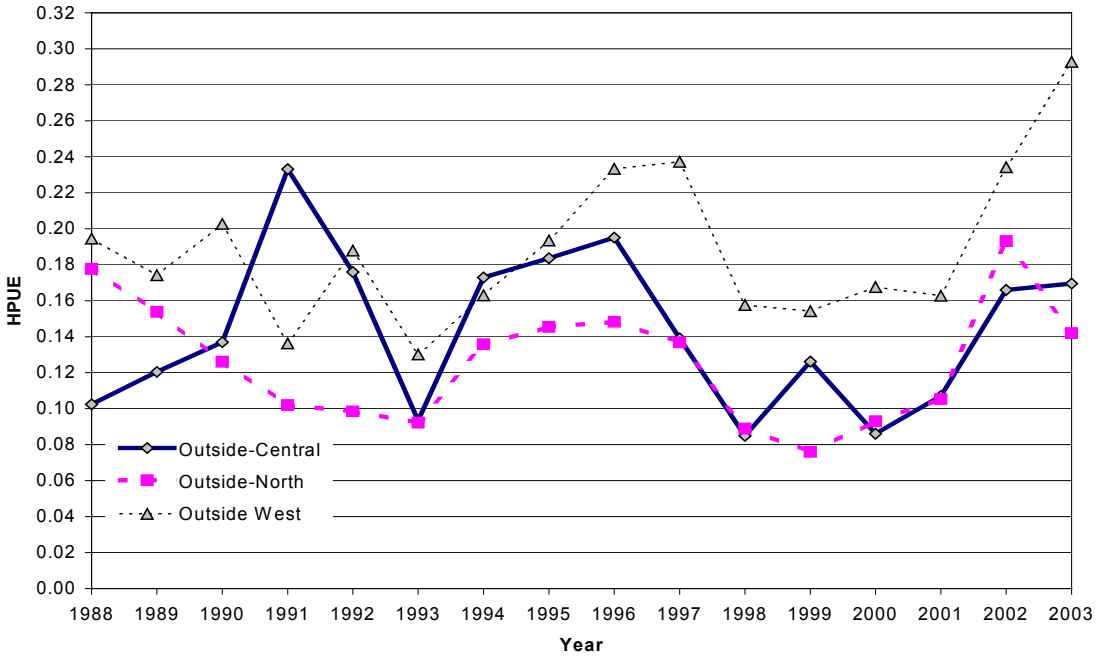


Figure 11.-Historical trend of non-chartered halibut harvests per angler-hour of bottomfishing effort (HPUE) during the period from June to August in Juneau's outside sub-areas from 1988 to 2003.

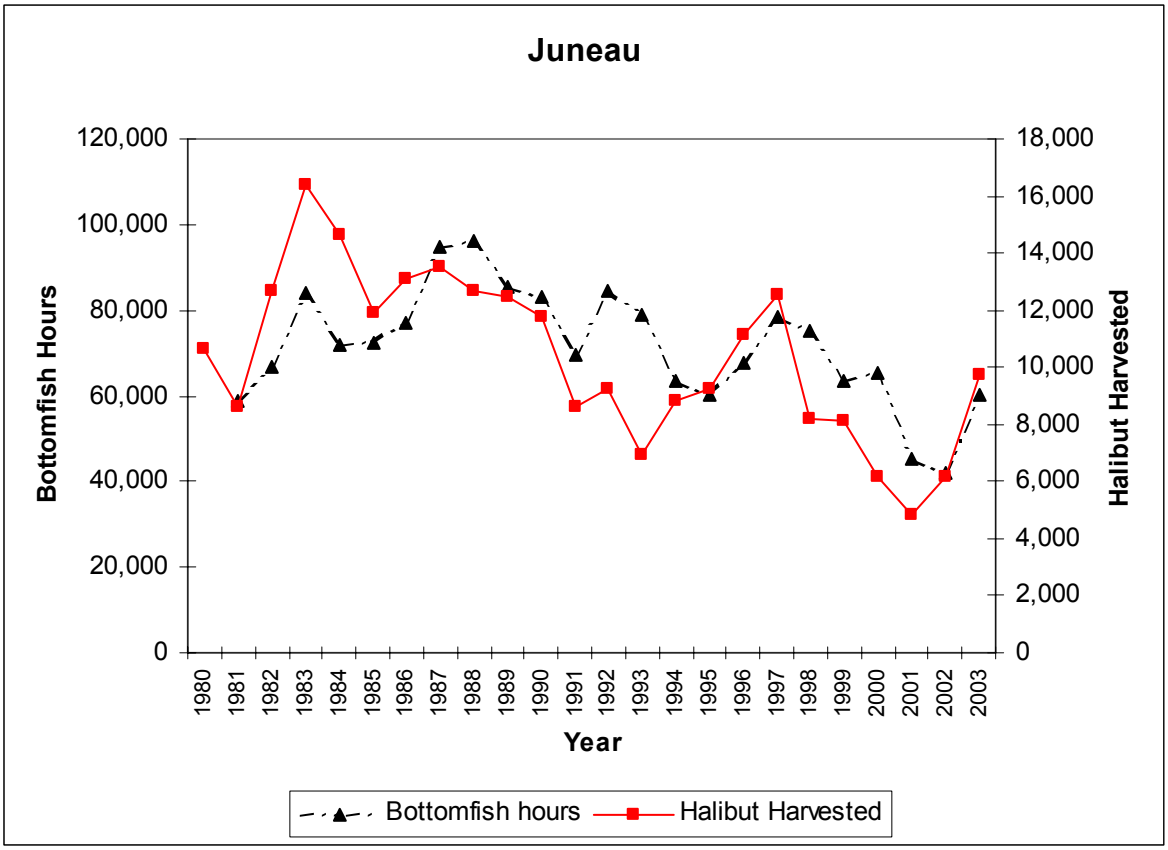


Figure 12. Number of angler hours of bottomfishing effort and total halibut harvested from creel survey data from 1980 to 2003 in the Juneau Marine Sport Fishery.

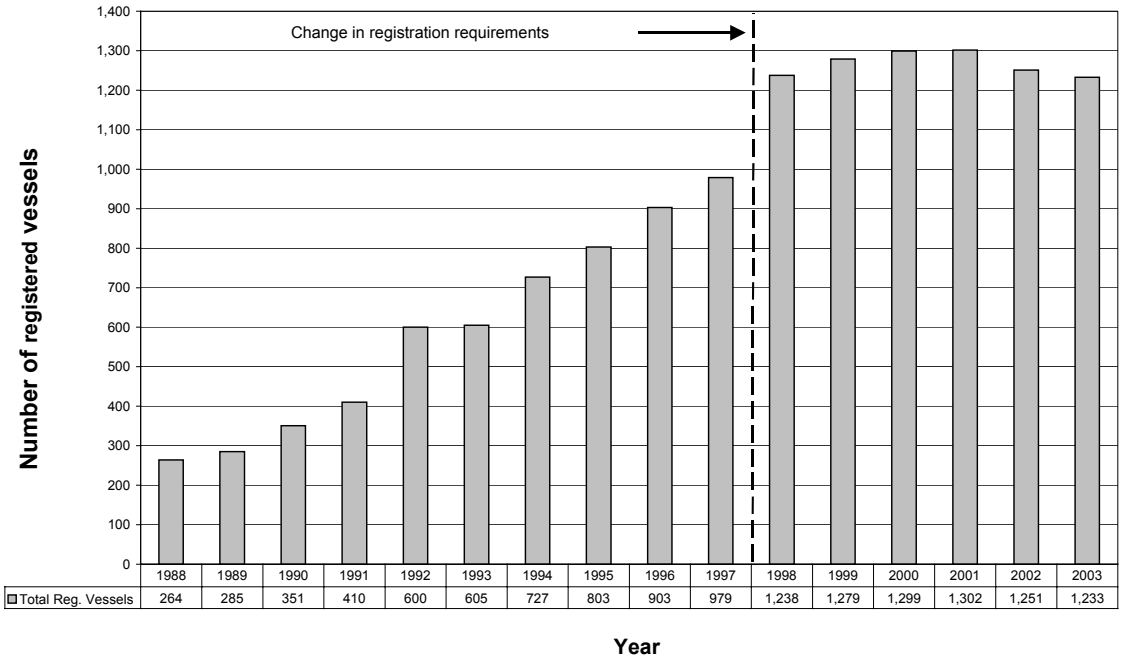


Figure 13. Number of charter vessels registering with the Alaska Department of Fish and Game from 1988 to 1997, and the Commercial Fishery Entry Commission from 1998 to 2003 for use in Southeast Alaska waters (including Yakutat).

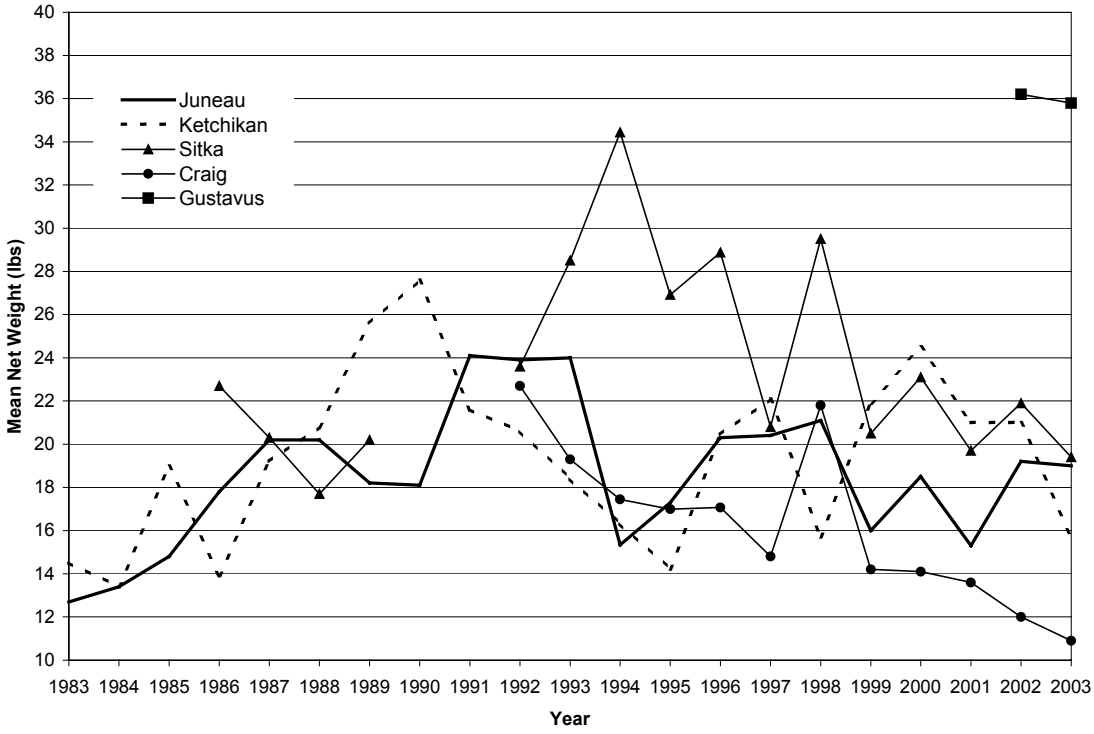


Figure 14.-Historical trend of mean net weights (headed and eviscerated) of sport caught halibut in sampled IPHC Area 2C ports from 1983 to 2003.

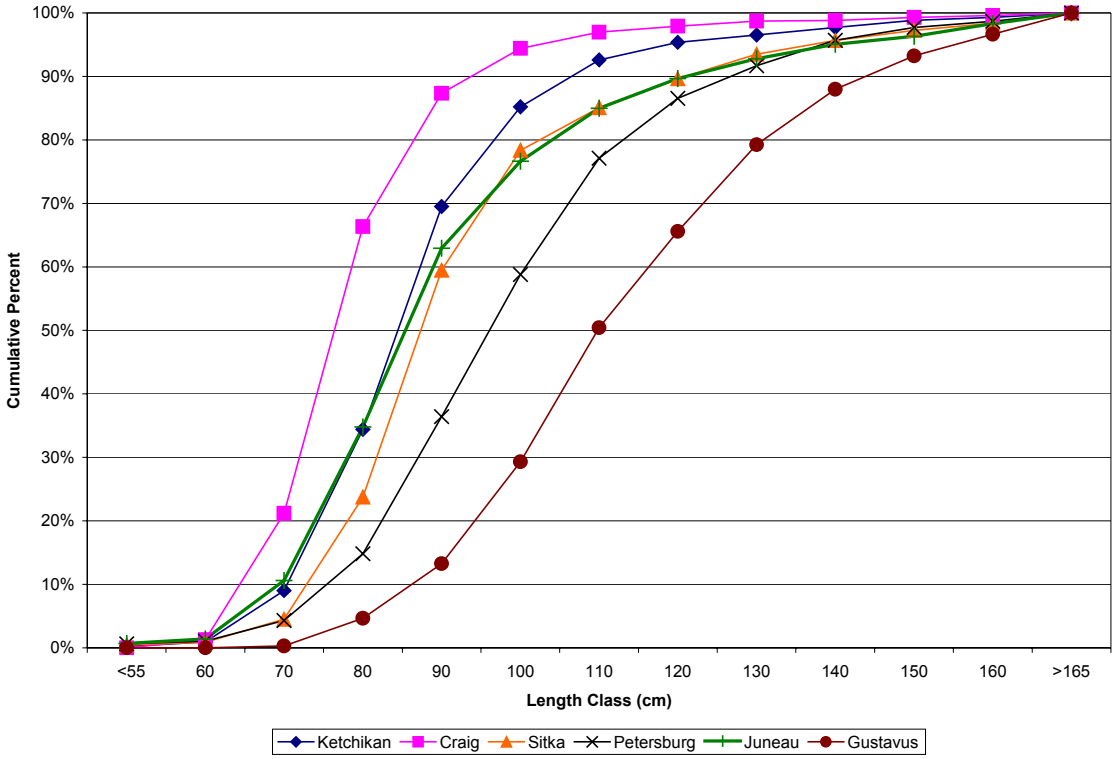


Figure 15.-Cumulative length-frequencies of sport caught halibut sampled in IPHC Area 2C ports during 2003.

Table 1.-Historical sport harvests of Pacific halibut in IPHC Area 2C (which excludes Yakutat) of Southeast Alaska from 1977 to 2002 as reported in the Statewide Harvest Mail Survey (modified from: Howe et al. 2002 a-d, Walker et al. 2003, Walker et al. *In prep*, Jennings et al. *In prep*).

	Area of Harvest							
Year	Ketchikan	Prince of Wales Island	Petersburg/ Wrangell	Sitka	Juneau	Haines/ Skagway	Glacier Bay	Total
1977	1,360	277	447	992	1,976	81	271	5,404
1978	751	230	1,103	339	3,066	448	170	6,107
1979	1,359	593	1,380	3,179	5,832	49	632	13,024
1980	5,260	1,085	3,193	4,976	9,333	361	620	24,828
1981	4,634	1,321	2,299	4,288	8,122	670	443	21,777
1982	5,963	2,242	3,845	6,330	16,988	650	744	36,762
1983	6,760	1,849	4,147	7,945	18,651	1,426	535	41,313
1984	11,719	2,724	5,649	8,197	15,618	2,029	748	46,684
1985	12,600	3,073	4,757	6,091	16,695	1,023	1,355	45,594
1986	11,014	2,902	3,624	6,617	16,574	2,189	1,331	44,251
1987	9,676	2,760	3,039	7,545	14,382	3,567	2,184	43,153
1988	11,544	2,778	3,877	10,572	18,697	3,201	4,238	54,907
1989	13,699	9,213	5,548	17,727	20,273	2,588	4,484	73,532
1990	9,872	10,264	5,768	17,492	16,248	1,972	3,415	65,031
1991	9,733	11,875	6,433	20,283	13,637	1,199	8,766	71,926
1992	9,455	11,661	6,153	22,092	14,850	926	4,863	70,000
1993	12,763	22,501	5,984	19,366	16,340	2,195	5,878	85,027
1994	15,313	24,465	7,992	23,701	10,362	1,058	5,849	88,740
1995	14,483	20,808	9,488	21,452	15,145	856	7,090	89,322
1996[a]	15,316	23,266	10,234	20,840	16,414	1,209	7,618	94,897
1997[a]	13,685	21,201	10,417	27,552	21,282	1,007	9,242	104,386
1998[a]	11,311	24,028	8,995	30,303	14,553	564	7,190	96,944
1999	10,989	25,739	8,133	28,222	15,522	879	7,552	97,036
2000[b]	13,665	28,860	9,930	28,375	16,672	499	13,639	111,640
2001	10,106	28,210	8,345	33,104	14,213	864	15,112	109,954
2002	10,766	30,960	6,742	25,156	15,647	1,220	14,322	104,813
1977-2002 Ave.	9,761	12,111	5,674	15,490	14,119	1,259	4,934	63,348
% 1977-2002	15%	19%	9%	24%	22%	2%	8%	100%
1998-2002 Ave.	11,367	27,559	8,429	29,032	15,321	805	11,563	104,077
% 1998-2002	11%	26%	8%	28%	15%	1%	11%	100%

[a]-SWHS estimates for 1996-1998 were revised by ADF&G/Div. of Sport Fish/RTS in September 2000.
[b]-Glacier Bay boundary area enlarged to include all of Icy Strait and Cross Sound in 2000.

Table 2.-Total number of registered and active charter vessels by sampled ports as determined from on-site sampling in IPHC Area 2C from 1998 to 2003.

Port and Year	Survey Period	Registered [a]	Minimum No. Active	% Active	Fished for Halibut	% Fished for Halibut
Ketchikan						
1998	4/27-9/27	188	98	53%	31	32%
1999	4/26-9/26	204	89	43%	38	43%
2000	4/24-9/24	199	96	50%	47	49%
2001	5/07-9/23	224	79	36%	21	27%
2002	4/29-9/29	220	86	39%	31	36%
2003	4/28-9/28	227	95	42%	43	45%
Craig/Klawock						
1998	4/27-9/13	101	13	13%	10	77%
1999	4/26-9/12	106	32 [b]	30%	28	88%
2000	4/24-9/24	115	34 [b]	30%	31	91%
2001	5/07-9/09	114	29 [b]	25%	27	93%
2002	5/06-9/15	105	28 [b]	27%	25	89%
2003	5/05-9/14	106	24 [b]	23%	20	83%
Sitka						
1998	4/27-9/27	240	119	49%	95	80%
1999	4/26-9/26	255	117	46%	99	85%
2000	4/24-9/24	269	142	53%	107	75%
2001	4/23-9/23	270	121	45%	97	80%
2002	4/29-9/29	279	136	49%	118	87%
2003	4/28-9/28	277	128	46%	109	85%
Petersburg						
1998	5/04-7/13	62	15	24%	14	93%
1999	5/03-7/11	62	17	27%	15	88%
2000[c]	5/01-9/10	64	18	29%	17	94%
2001	5/09-7/08	64	13	21%	11	85%
2002	5/06-7/07	59	12	20%	11	92%
2003[d]	5/07-9/14	52	13	25%	13	100%
Wrangell						
1998	4/27-6/15	57	11	19%	8	73%
1999	5/03-7/11	54	6	11%	4	67%
2000[c]	4/24-9/10	51	15	29%	15	100%
2001	4/30-7/01	48	11	23%	3	27%
2002	5/06-7/07	49	7	14%	3	43%
2003[d]	5/02-9/14	45	7	16%	5	71%
Juneau						
1998	4/27-9/27	207	73	35%	44	60%
1999	4/26-9/26	191	66	35%	35	53%
2000	4/24-9/24	199	58	29%	23	40%
2001	4/23-9/23	181	41	23%	14	34%
2002	4/29-9/29	160	41	26%	20	49%
2003	4/28-9/28	154	35	23%	16	46%
Gustavus						
2002	6/03-9/15	29	24	83%	23	96%
2003	5/05-9/14	29	22	76%	22	100%
Elfin Cove						
2003	6/01-9/06	38	27	71%	26	96%
Totals						
1998		**852**	**329**	**39%**	**202**	**61%**
1999		**870**	**314**	**36%**	**207**	**66%**
2000		**890**	**363**	**41%**	**240**	**66%**
2001		**895**	**294**	**33%**	**173**	**59%**
2002		**901**	**334**	**37%**	**231**	**69%**
2003		**928**	**351**	**38%**	**254**	**72%**

[a] Noted increases in 1998-2001 registrations reflect changes in agency requirements and the resulting source database.

[b] Estimates for 1999 - 2003 include vessel activity in both Klawock and Craig.

[c] Sampling extended in Petersburg and Wrangell through 10 September.

[d] Sampling extended in Petersburg and Wrangell through 14 September.

Table 3.-Number of surveyed trips (including salmon fishing trips) per charter vessel by port from on-site survey sampling in IPHC Area 2C from 1998 to 2003.

Port and Year	Survey Period	Active Vessels[a]	No. of Surveyed Trips per Vessel			
			1	2-4	>4	Average
Ketchikan						
1998	4/27-9/27	98	35	24	39	4.7
1999	4/26-9/26	89	22	18	49	6.0
2000	4/24-9/24	96	21	22	53	6.1
2001	5/07-9/23	79	15	17	48	5.9
2002	4/29-9/29	86	14	18	55	7.8
2003	4/28-9/28	95	18	18	59	6.9
Craig/Klawock						
1998	4/27-9/13	13	6	3	4	6.6
1999	4/26-9/12	31[b]	9	8	14	7.4
2000	4/24-9/10	34[b]	10	6	18	8.6
2001	5/07-9/09	29[b]	10	7	13	7.8
2002	5/06-9/15	28[b]	6	7	16	8.6
2003	5/05-9/14	24[b]	3	8	13	8.0
Sitka						
1998	4/27-9/27	119	27	22	70	7.5
1999	4/26-9/26	117	25	15	77	9.3
2000	4/24-9/24	142	43	14	85	8.3
2001	4/23-9/23	121	16	15	91	10.1
2002	4/29-9/29	136	22	24	90	8.9
2003	4/28-9/28	128	18	19	91	10.1
Petersburg						
1998	5/04-7/13	15	2	4	9	9.0
1999	5/03-7/11	17	5	4	8	6.1
2000[c]	5/01-9/10	18	7	3	8	9.7
2001	5/09-7/08	13	4	4	5	6.3
2002	5/06-7/07	12	4	2	6	6.2
2003[d]	5/07-9/14	13	2	2	9	13.5
Wrangell						
1998	4/27-6/15	11	7	4	0	1.8
1999	5/03-7/11	6	3	3	0	1.9
2000[c]	4/24-9/10	15	6	6	3	3.2
2001	4/30-7/01	11	4	8	0	2.1
2002	5/06-7/07	7	6	1	0	1.1
2003[d]	5/02-9/14	7	3	3	1	2.9
Juneau						
1998	4/27-9/27	73	22	21	30	4.5
1999	4/26-9/26	66	21	17	28	5.0
2000	4/24-9/24	58	17	17	24	5.9
2001	4/23-9/23	41	11	10	21	5.8
2002	4/29-9/29	41	12	10	20	5.9
2003	4/28-9/28	35	8	12	15	5.3
Gustavus						
2002	6/03-9/15	24	3	3	19	22.4
2003	5/05-9/14	22	3	1	19	34.4
Elfin Cove						
2003	6/01-9/06	27	3	6	19	7.0
Totals						
1998		**329**	**99**	**78**	**152**	**5.7**
1999		**326**	**85**	**65**	**176**	**6.0**
2000		**363**	**104**	**68**	**191**	**7.2**
2001		**294**	**60**	**61**	**178**	**6.3**
2002		**334**	**67**	**65**	**206**	**8.7**
2003		**351**	**58**	**69**	**226**	**10.0**

[a] Number of sampled vessels with known CFEC numbers.

[b] Number of active charter vessel trips surveyed for 1999-2003 includes vessel activity in Klawock and Craig.

[c] Sampling extended in Petersburg and Wrangell through 10 September.

[d] Sampling extended in Petersburg and Wrangell through 14 September.

Table 4.-Number of charter vessel trips surveyed during on-site sampling in IPHC Area 2C reported to be targeting halibut only, salmon only, or both halibut and salmon from 1998 to 2003.

Port and Year	Survey Period	Total Trips	Halibut Only		Both Targets		Salmon Only	
			No.	Percent	No.	Percent	No.	Percent
Ketchikan								
1998	4/27-9/27	463	24	5%	75	16%	364	79%
1999	4/26-9/26	535	31	6%	64	12%	440	82%
2000	4/24-9/24	598	55	9%	75	13%	468	78%
2001	5/07-9/23	482	17	4%	34	7%	431	89%
2002	4/29-9/29	680	30	4%	55	8%	594	87%
2003	4/28-9/28	659	56	9%	83	13%	520	79%
Craig/Klawock								
1998	4/27-9/13	86	5	6%	45	52%	36	42%
1999	4/26-9/12[a]	238	12	5%	146	61%	80	34%
2000	4/24-9/10[a]	294	24	8%	198	67%	72	25%
2001	5/07-9/09[a]	230	4	2%	176	77%	50	22%
2002	5/06-9/15[a]	248	7	3%	173	70%	68	27%
2003	5/05-9/14[a]	192[b]	4	2%	103	54%	83	43%
Sitka								
1998	4/27-9/27	890	53	6%	494	56%	343	39%
1999	4/26-9/26	1,097	38	3%	621	57%	438	40%
2000	4/24-9/24	1,182	118	10%	590	50%	474	40%
2001	4/23-9/23	1,228	42	4%	606	49%	580	47%
2002	4/29-9/29	1,211[c]	68	6%	724	60%	480	40%
2003	4/28-9/28	1,292[d]	51	4%	759	59%	475	37%
Petersburg								
1998	5/04-7/13	135	55	41%	12	9%	68	50%
1999	5/03-7/11	104	48	46%	11	11%	45	43%
2000[e]	5/01-9/10	188	124	66%	8	4%	56	30%
2001	5/09-7/08	82	40	49%	3	3%	39	48%
2002	5/06-7/07	74	45	61%	3	4%	26	35%
2003[f]	5/07-9/14	176	116	66%	14	8%	46	26%
Wrangell								
1998	4/27-6/15	20	4	20%	8	40%	8	40%
1999	5/03-7/11	13	3	23%	2	15%	8	62%
2000[e]	4/24-9/10	52	28	54%	12	23%	12	23%
2001	4/30-7/01	28	3	11%	2	7%	23	82%
2002	5/06-7/07	8	3	38%	0	0%	5	63%
2003[f]	5/02-9/14	20	3	15%	11	55%	6	30%
Juneau								
1998	4/27-9/27	324	39	12%	41	13%	244	75%
1999	4/26-9/26	328	21	6%	43	13%	264	80%
2000	4/24-9/24	352	19	5%	17	5%	316	90%
2001	4/23-9/23	239	12	5%	16	7%	211	88%
2002	4/29-9/29	248	17	7%	15	6%	216	87%
2003	4/28-9/28	184	22	12%	11	6%	151	82%
Gustavus								
2002	6/03-9/15	560[g]	183	33%	251	45%	117	21%
2003	5/05-9/14	792[h]	266	34%	375	47%	149	19%
Elfin Cove								
2003	6/01-9/06	195[i]	35	18%	141	72%	18	9%
Totals[j]								
1998		1,918	180	9%	675	35%	1,063	55%
1999		2,314	153	7%	887	38%	1,275	55%
2000		2,666	368	14%	900	34%	1,398	52%
2001		2,289	118	5%	837	37%	1,334	58%
2002		3,029	353	12%	1,221	40%	1,506	50%
2003		3,510	553	16%	1,497	43%	1,448	41%
average		2,621	288	11%	1,003	38%	1,337	51%

[a] Number of active charter vessel trips surveyed for 1999 - 2003 includes vessel activity in Craig and Klawock.

[b] Includes 2 interviews where species targeted was not reported.

[c] Includes 7 interviews where species targeted was not reported.

[d] Includes 7 interviews where species targeted was not reported.

[e] Sampling extended in Petersburg and Wrangell through 10 September.

[f] Sampling extended in Petersburg and Wrangell through 14 September.

[g] Includes 9 interviews where species targeted was not reported.

[h] Includes 2 interviews where species targeted was not reported.

[i] Includes 1 interview where species targeted was not reported.

[j] Represents the unweighted totals of all the onsite interview data collected in area 2C each year.

Table 5.-Estimated average length (cm) of Pacific halibut sampled during on-site surveys in IPHC Area 2C by non-chartered and chartered user groups from 1998 to 2003.

Port/Year	Survey Period	Non-Chartered n	Non-Chartered Avg. Length (cm)	Non-Chartered SE	Chartered n	Chartered Avg. Length (cm)	Chartered SE	Overall n	Overall Avg. Length (cm)	Overall SE
Ketchikan										
1996	5/06-10/06	--	--	--	--	--	--	188	93	1.6
1997	4/30-9/28	--	--	--	--	--	--	264	95	1.4
1998	4/27-9/27	178	88.7	1.5	105	86.4	1	302	88.1	1.0
1999	4/26-9/26	242	93.7	1.6	83	96.3	2.8	325	94.3	1.4
2000	4/24-9/24	337	98.7	1.4	682	98.8	0.8	1,021[a]	98.7	0.7
2001	5/07-9/23	322	92.2	1.2	1,127	96.8	0.5	1,450	95.7	0.5
2002	4/29-9/29	411	88.8	1.4	1,428	95.1	0.6	1,840[b]	93.7	0.5
2003	4/30-9/28	264	85.3	1.1	169	89.6	1.3	433	86.9	0.9
Craig/Klawock										
1996	5/01-9/08	--	--	--	--	--	--	312	88.3	2.3
1997	5/01-9/14	--	--	--	--	--	--	158	85.1	1.5
1998	4/27-9/13	82	92.8	2.6	15	96.1	9	97	93.3	2.6
1999	4/26-9/12	133	90.4	2.3	451	79.9	0.8	584	82.3	0.8
2000	4/24-9/10	383	85.4	1.1	950	81.9	0.6	1,333	82.9	0.5
2001	5/07-9/09	134	84.1	1.9	293	81.2	1	427	82.2	1.0
2002	5/06-9/15	149	83.5	1.5	408	79.1	0.7	557	80.3	0.7
2003	5/05-9/14	385	78.9	0.7	635	78.1	0.6	1,020	78.4	0.4
Sitka										
1996	4/22-9/22	--	--	--	--	--	--	118	101.7	2.6
1997	4/28-9/28	--	--	--	--	--	--	153	93.5	1.8
1998	4/27-9/27	48	92.3	3.2	345	103.5	1.6	407	101.8	1.4
1999	4/26/-9/26	101	86.3	2.4	982	94.5	0.6	1,089	93.8	0.6
2000	4/24-9/24	120	93.8	2.4	410	95.6	12.1	530	95.2	1.1
2001	4/23-9/23	90	84.6	2.4	463	92.8	1	554	91.4	1.0
2002	4/29-9/29	202	91.4	1.8	621	94.2	1	823	93.5	0.9
2003[c]	4/28-9/28	189	83.4	1.3	1193	93.3	0.6	1,385	92.0	0.5
Petersburg/Wrangell										
1996	5/01-7/14	--	--	--	--	--	--	158	104.9	2.0
1997	5/07-7/13	--	--	--	--	--	--	113	108.4	2.4
1998	5/04-7/12	66	107.8	3.3	48	123.4	4.2	114	114.4	2.7
1999	5/03-7/11	68	97.1	3.1	82	112.9	2.9	150	105.8	2.2
2000[d]	4/24-9/10	725	92.5	0.9	718	104.4	0.8	1,443	98.4	0.6
2001	4/30-7/8	55	89.1	3.0	88	109.3	2.1	143	101.5	1.9
2002	5/06-7/07	132	96.9	2.0	196	110.8	1.9	328	105.2	1.4
2003	5/2-9/14	554	93.0	0.9	674	102.6	0.7	1,228	98.2	0.5
Juneau										
1996	4/22-9/22	--	--	--	--	--	--	300	90.9	1.5
1997	4/28-9/28	--	--	--	--	--	--	221	92.8	1.5
1998	4/27-9/27	411	93.7	1.2	329	97.3	0.8	767	95.3	0.7
1999	4/26-9/26	292	90.1	1.6	406	83.8	0.7	705	86.5	0.8
2000	4/24-9/24	411	87.1	1.4	149	89	1.2	560	87.6	1.1
2001	4/23-9/23	396	84.3	1.1	36	88.6	2.7	437	84.7	1.0
2002	4/29-9/29	474	89.8	1.1	63	87.6	2.3	537	89.5	1.0
2003[e]	4/28-9/28	596	90.4	0.9	111	90.8	1.8	712	90.6	0.8
Gustavus										
2002	6/03-9/15	281	101.7	1.5	1043	115.2	0.8	1,328[f]	112.3	0.7
2003	5/05-9/14	320	102.0	1.1	2052	114.5	0.5	2,372[g]	112.8	0.4
Totals[h]										
1996								1,076	93.8	0.7
1997								909	94.2	0.8
1998		785	93.6	0.9	842	100.0	0.8	1,687	96.7	0.6
1999		836	91.3	0.9	2,004	89.9	0.5	2,853	90.3	0.4
2000		1,976	91.1	0.6	2,909	94.7	0.4	4,887	92.7	0.3
2001		997	87.1	0.7	2,007	94.0	0.4	3,011	91.7	0.4
2002		1,649	91.8	0.6	3,759	99.5	0.4	5,413	97.1	0.3
2003		2,308	89.5	0.4	4,834	101.4	0.3	7,150	97.6	0.2

[a] Two halibut lengths (71.0 and 84.0 cm) from Ketchikan with unknown angler type.

[b] Includes one halibut length with unknown angler type.

[c] Includes three halibut with unknown angler type.

[d] Sampling extended in Petersburg and Wrangell through 10 September.

[e] Includes five halibut with unknown angler type.

[f] Includes four halibut with unknown angler type.

[g] Includes 382 lengths sampled at Elfin Cove.

[h] Represents the unweighted average of all length data collected in Area 2C each year. Not a true representation of average regional lengths.

Table 6.-Estimated average net weight (lb) for Pacific halibut sampled during on-site surveys in IPHC Area 2C by non-chartered and chartered user groups from 1998 to 2003.

Port/Year	Survey Period	Non-Chartered n	Non-Chartered Avg. Net Wt. (lb)	Non-Chartered SE	Chartered n	Chartered Avg. Net Wt. (lb)	Chartered SE	Overall n	Overall Avg. Net Wt. (lb)	Overall SE
Ketchikan										
1996	5/06-10/06	--	--	--	--	--	--	188	20.5	1.6
1997	4/30-9/28	--	--	--	--	--	--	264	22.1	1.4
1998	4/27-9/27	178	17.4	1.7	105	13.8	0.6	302	16.4	1.1
1999	4/26-9/26	242	21.5	1.3	83	23.2	2.1	325	21.9	1.1
2000	4/24-9/24	337	25.2	1.3	682	24.1	0.8	1,021[a]	24.5	0.7
2001	5/07-9/23	322	19.6	1.1	1,127	21.4	0.5	1,450	21.0	0.5
2002	4/29-9/29	411	18.4	1.0	1,428	21.8	0.6	1,840[b]	21.0	0.5
2003	4/30-9/28	264	14.9	1.0	169	17.1	1.5	433	15.7	0.8
Craig/Klawock										
1996	5/01-9/08	--	--	--	--	--	--	312	17.1	1.0
1997	5/01-9/14	--	--	--	--	--	--	158	14.7	1.2
1998	4/27-9/13	82	20.5	2.2	15	29.1	12.7	97	21.8	2.7
1999	4/26-9/12	133	21.2	3.0	451	12.1	0.6	584	14.2	0.8
2000	4/24-9/10	383	15.9	0.9	950	13.4	0.5	1,333	14.1	0.4
2001	5/07-9/09	134	15.4	1.6	293	12.8	0.8	427	13.6	0.7
2002	5/06-9/15	149	14	1.3	408	11.2	0.6	557	12.0	0.6
2003	5/05-9/14	385	10.9	0.5	635	10.9	0.5	1,020	10.9	0.4
Sitka										
1996	4/22-9/22	--	--	--	--	--	--	118	28.9	2.9
1997	4/28-9/28	--	--	--	--	--	--	153	20.8	1.6
1998	4/27-9/27	48	20	3.2	345	31.0	1.9	407	29.5	1.7
1999	4/26/-9/26	101	17.6	2.7	982	20.8	0.8	1,089	20.5	0.7
2000	4/24-9/24	120	22.5	2.3	410	23.3	1.4	530	23.1	1.2
2001	4/23-9/23	90	16.2	2.3	463	20.4	1.1	554	19.7	1.0
2002	4/29-9/29	202	20.7	1.7	621	22.2	1.1	823	21.9	0.9
2003[c]	4/28-9/28	189	14.0	1.0	1,193	20.3	0.6	1,385	19.4	0.6
Petersburg/Wrangell										
1996	5/01-7/14	--	--	--	--	--	--	158	29.6	1.8
1997	5/07-7/13	--	--	--	--	--	--	113	32.8	2.6
1998	5/04-7/12	66	33.0	3.5	48	49.9	5.7	114	40.1	3.2
1999	5/03-7/11	68	23.8	2.4	82	37.4	3.7	150	31.3	2.4
2000[d]	4/24-9/10	725	20.4	0.8	718	27.6	0.9	1,443	24.0	0.6
2001	4/30-7/08	55	18.1	2.6	88	31.2	2.0	143	26.2	1.7
2002	5/06-7/07	132	22.9	1.7	196	35.8	2.7	328	30.6	1.8
2003	5/02-9/14	554	20.3	0.9	674	25.8	0.7	1,228	23.3	0.6
Juneau										
1996	4/22-9/22	--	--	--	--	--	--	300	20.3	1.4
1997	4/28-9/28	--	--	--	--	--	--	221	20.4	1.4
1998	4/27-9/27	411	21.7	1.1	329	20.5	0.6	767	21.1	0.6
1999	4/26-9/26	292	20.2	1.4	406	13	0.4	705	16.0	0.6
2000	4/24-9/24	411	19.5	1.2	149	15.8	0.8	560	18.5	0.9
2001	4/23-9/23	396	15.3	0.8	36	15.8	1.6	437	15.3	0.8
2002	4/29-9/29	474	19.6	1.1	63	16.1	1.8	537	19.2	1.0
2003[e]	4/28-9/28	596	19.1	0.9	111	18.1	1.3	712	19.0	0.8
Gustavus										
2002	6/03-9/15	281	27.1	1.5	1,043	38.7	0.9	1,328[f]	36.2	0.8
2003	5/05-9/14	320	25.9	1.1	2,052	37.3	0.6	2,372[g]	35.8	0.6
Totals[h]										
1996								1,076	21.7	0.7
1997								909	21.6	0.7
1998		785	21.5	0.8	842	25.8	1.0	1,687	23.6	0.6
1999		836	20.7	0.9	2,004	18.0	0.5	2,853	18.8	0.4
2000		1,976	20.3	0.5	2,909	20.9	0.4	4,887	20.7	0.3
2001		997	16.9	0.6	2,007	20.2	0.4	3,011	19.1	0.3
2002		1,649	20.5	0.6	3,759	26.1	0.4	5,413	24.3	0.4
2003		2,308	18.1	0.4	4,834	26.9	0.4	7,150	24.0	0.3

[a] Includes two halibut weights (net wt. 6.9 and 11.9 lbs.) from Ketchikan with unknown angler type.

[b] Includes one halibut with unknown angler type.

[c] Includes three halibut with unknown angler type.

[d] Sampling extended in Petersburg and Wrangell through 10 September.

[d] Includes four halibut with unknown angler type.

[e] Includes five halibut with unknown angler type.

[f] Includes four halibut with unknown angler type.

[g] Includes 382 halibut sampled at Elfin Cove.

[h] Represents the unweighted average of all length data collected in Area 2C each year. Not a true representation of average regional lengths.

Table 7.– Length frequency distributions of Pacific halibut sampled in IPHC Area 2C ports by on-site surveys for combined, charter, and non-charter user groups during 2003.

	Length Interval	Ketchikan		Craig/ Klawock		Sitka		Petersburg/ Wrangell		Juneau		Gustavus/ Elfin Cove	
	(cm)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Combined	<55	1	(0)	0	(0)	6	(0)	8	(1)	5	(1)	0	(0)
	60	3	(1)	13	(1)	6	(0)	5	(0)	5	(1)	0	(0)
	70	35	(8)	203	(20)	50	(4)	40	(3)	65	(9)	7	(0)
	80	110	(25)	461	(45)	266	(19)	129	(11)	171	(24)	103	(4)
	90	152	(35)	214	(21)	494	(36)	265	(22)	199	(28)	204	(9)
	100	68	(16)	72	(7)	261	(19)	275	(22)	97	(14)	381	(16)
	110	32	(7)	26	(3)	93	(7)	225	(18)	59	(8)	501	(21)
	120	12	(3)	10	(1)	63	(5)	116	(9)	33	(5)	360	(15)
	130	5	(1)	8	(1)	53	(4)	63	(5)	22	(3)	324	(14)
	140	5	(1)	1	(0)	30	(2)	49	(4)	16	(2)	207	(9)
	150	5	(1)	5	(1)	22	(2)	25	(2)	9	(1)	125	(5)
	160	2	(0)	3	(0)	16	(1)	12	(1)	14	(2)	81	(3)
	>165	3	(1)	4	(0)	22	(2)	16	(1)	12	(2)	79	(3)
	Totals	433	(100)	1020	(100)	1382	(100)	1228	(100)	707	(100)	2372	(100)
Charter	<55	0	(0)	0	(0)	1	(0)	0	(0)	3	(3)	0	(0)
	60	0	(0)	12	(2)	3	(0)	0	(0)	0	(0)	0	(0)
	70	4	(2)	132	(21)	28	(2)	6	(1)	8	(7)	6	(0)
	80	35	(21)	285	(45)	205	(17)	30	(4)	18	(16)	69	(3)
	90	76	(45)	129	(20)	438	(37)	132	(20)	38	(34)	143	(7)
	100	24	(14)	38	(6)	241	(20)	169	(25)	13	(12)	308	(15)
	110	16	(9)	17	(3)	89	(7)	152	(23)	12	(11)	439	(21)
	120	5	(3)	7	(1)	57	(5)	78	(12)	7	(6)	329	(16)
	130	2	(1)	7	(1)	48	(4)	45	(7)	6	(5)	300	(15)
	140	3	(2)	0	(0)	28	(2)	31	(5)	5	(5)	193	(9)
	150	3	(2)	4	(1)	21	(2)	15	(2)	0	(0)	120	(6)
	160	0	(0)	2	(0)	12	(1)	6	(1)	1	(1)	68	(3)
	>165	1	(1)	2	(0)	22	(2)	10	(1)	0	(0)	77	(4)
	Totals	169	(100)	635	(100)	1193	(100)	674	(100)	111	(100)	2052	(100)
Non-charter	<55	1	(0)	0	(0)	5	(3)	8	(1)	2	(0)	0	(0)
	60	3	(1)	1	(0)	3	(2)	5	(1)	5	(1)	0	(0)
	70	31	(12)	71	(18)	22	(12)	34	(6)	57	(10)	1	(0)
	80	75	(28)	176	(46)	61	(32)	99	(18)	153	(26)	34	(11)
	90	76	(29)	85	(22)	56	(30)	133	(24)	161	(27)	61	(19)
	100	44	(17)	34	(9)	20	(11)	106	(19)	84	(14)	73	(23)
	110	16	(6)	9	(2)	4	(2)	73	(13)	47	(8)	62	(19)
	120	7	(3)	3	(1)	6	(3)	38	(7)	26	(4)	31	(10)
	130	3	(1)	1	(0)	5	(3)	18	(3)	16	(3)	24	(8)
	140	2	(1)	1	(0)	2	(1)	18	(3)	11	(2)	14	(4)
	150	2	(1)	1	(0)	1	(1)	10	(2)	9	(2)	5	(2)
	160	2	(1)	1	(0)	4	(2)	6	(1)	13	(2)	13	(4)
	>165	2	(1)	2	(1)	0	(0)	6	(1)	12	(2)	2	(1)
	Totals	264	(100)	385	(100)	189	(100)	554	(100)	596	(100)	320	(100)

Table 8.–. Summary of disposition (Whole or Cleaned-At-Sea (CAS)) of harvested halibut brought back to port by charter and non-charter anglers as indicated by the creel survey data at the various ports in IPHC Area 2C during 2003.

Port	Angler Type	Total Number of Halibut Kept	Number brought back whole to dock	Percent	Number brought back whole to dock and sampled	Percent	Number Cleaned at Sea (CAS)	Percent
Ketchikan	Non-charter	693	544	78%	225	32%	147	21%
	Charter	452	421	93%	84	19%	23	5%
	Combined	1,145	965	84%	309	27%	170	15%
Craig/Klawock	Non-charter	905	675	75%	382	42%	231	26%
	Charter	998	871	87%	343	34%	121	12%
	Combined	1,906[a]	1,546	81%	725	38%	352	18%
Sitka	Non-charter	443	129	29%	110	25%	295	67%
	Charter	5,657	525	9%	437	8%	4,896	87%
	Combined	6,108[b]	654	11%	547	11%	5,191	85%
Petersburg/	Non-charter	1,001	893	89%	596	60%	108	11%
Wrangell	Charter	831	787	95%	643	77%	44	5%
	Combined	1,842[c]	1,680	92%	1,239	68%	152	8%
Juneau	Non-charter	1,512	1,006	67%	366	24%	485	32%
	Charter	293	166	57%	70	24%	127	43%
	Combined	1,807[d]	1,172	65%	436	24%	612	34%
Gustavus/Elfin Cove	Non-charter	786	616	78%	341	43%	170	22%
	Charter	4,391[e]	3,595	82%	1,998	46%	757	17%
	Combined	5,177	4,211	81%	2,339	45%	927	18%
Total[f]	Non-charter	5,340	3,863	72%	2,020	38%	1,436	27%
	Charter	12,622	6,365	50%	3,575	28%	5,968	47%
	Combined	17,962	10,228	57%	5,595	31%	7,404	41%

[a] Includes 3 halibut that were kept cleaned and not sampled by unknown angler type.
[b] Includes 8 whole halibut that were kept and sampled by unknown angler type.
[c] Includes 10 whole halibut that were kept and sampled by unknown angler type.
[d] Includes 2 CAS halibut that were kept by an unknown angler type.
[e] Includes 10 halibut with unknown status (whole or CAS).
[f] Represents the unweighted totals of onsite interview data collected in Area 2C in 2003. Not a true representation of average regional percentages.