BOTTOM TRAWL SURVEY OF CRAB AND GROUNDFISH KODIAK ISLAND, CHIGNIK, AND SOUTH PENINSULA AREAS, 1997

Regional Information Report No. 4K99-35

Alaska Department of Fish and Game
Division of Commercial Fisheries
211 Mission Road
Kodiak, Alaska 99615

April 1999

Gordon Kruse

BOTTOM TRAWL SURVEY OF CRAB AND GROUNDFISH: KODIAK ISLAND, CHIGNIK, AND SOUTH PENINSULA AREAS, 1997

By

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and

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Regional Information Report[1] No. 4K99-35

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ACKNOWLEDGMENTS

The following staff from the Alaska Department of Fish and Game provided important assistance during the surveys: Dave Jackson supervised data collection for a portion of the surveys; Jim Blackburn provided programming; and Lucinda Neel assisted in the preparation of the report for publication, Nang Blackett entered data. Special thanks to Captain Ron Kutchick of the R/V *Resolution*, his crew Tim Howland and Danny Wilson, and technicians Dave Gilliland, and Tom Dinnocenzo.

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ABSTRACT

A trawl survey of Kodiak Island, and the Alaska Peninsula areas was conducted during July through September of 1997. A total of 368 tows were completed. Catch composition was determined and crabs and commercial groundfish were quantified. Red king crab *Paralithodes camtschaticus* and Tanner crab *Chionoecetes bairdi* stocks were found to be in a depressed state throughout the region with populations insufficient to support commercial fisheries. A survey of bitter crab syndrome was undertaken in Alitak Bay. This was the second year that rock sole was differentiated into northern and southern species. A tagging program of Pacific cod was initiated during the survey to identify migration and growth patterns.

KEY WORDS: crab, groundfish, *Paralithodes*, *Chionoecetes*, trawl survey, Kodiak, Alaska Peninsula, Chignik, bitter crab syndrome, *Gadus macrocephalus.*

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) conducted bottom trawl surveys in 1997 in the Westward Region. The survey focused on inshore waters around Kodiak Island and along the Alaska Peninsula from Cape Douglas to False Pass. This includes the Kodiak and a portion of the Alaska Peninsula management areas for red king crab *Paralithodes camtschaticus*, defined by 5 AAC 34.400 and 5 AAC 34.500 and the Kodiak, Chignik, and South Peninsula districts of the Westward management area for Tanner crab *Chionoecetes bairdi* defined by 5 AAC 35.505 (ADF&G, 1997). This report will refer to the Tanner crab management units unless specifically talking about king crab.

Trawl surveys were conducted in the Westward Region as early as 1963. Early surveys targeted Long Island Bank (Reynolds 1964), Marmot Flats (McMullen 1967a), Portlock Bank (McMullen 1967b), Albatross Banks (McMullen 1968), Alitak and Kaguyak (Kingsbury 1971), and areas of Kodiak Island as well as Chignik and Pavlof Bays on the Alaska Peninsula (Colgate and Hicks 1983, Colgate 1984). Trawling has gradually replaced the crab pot as the preferred gear for crab stock assessment. It allows for faster surveying and captures smaller age classes of crab (Jackson 1990). The last pot survey was conducted in 1987. The 1990 survey was the first trawl survey to cover the Eastern Aleutians District. Since 1988, the total number of hauls conducted during the Westward Region trawl surveys have ranged between 325 and 575 hauls (Table 1).

The objectives of the 1997 survey were to assess Tanner crab and red king crab populations, document the prevalence of bitter crab syndrome in the Tanner crab stocks in Alitak Bay and to examine the groundfish catch. Specific objectives for the groundfish portion of the survey were to (1) determine species composition of the catch by haul and area, (2) obtain length frequency distributions for commercially important groundfish by area and (3) tag Pacific cod (*Gadus macrocephalus*) captured during the survey. An explanation of special technical terms and abbreviations used in this report is presented in Appendix A.

In addition to these objectives, the survey accommodated several special requests. Dr. Christine Ribic of the University of Wisconsin-Madison again requested data on marine debris caught in the survey for comparison with types of debris caught in other areas of the United States. Forest Blau of ADF&G Kodiak requested duplicate tows in certain areas of Chiniak Bay in order to increase the accuracy of the local king crab population estimates. These stations had been sampled with larval crab collectors five years previously and those larva should now begin to become available to the trawl survey. A collection of 50 females of both southern and northern rock sole species were taken for Jim Stark of the National Marine Fisheries Service. Tanner crab chela height measurements and marine leech collection were taken for separate Alaska Department of Fish and Game projects.

METHODS

Trawl Description and Procedures

The 27.4-m ADF&G research vessel *Resolution* was used to conduct surveys in areas of known king and Tanner crab habitat. One tow was made at each station, except for several stations in Chiniak Bay: CHA and CHB were sampled three times, CHE, CHK and CHJ were sampled twice.

A 400-mesh eastern otter trawl net was used. This net had a 21.3-m long headrope with 18 floats that were 3.1 cm in diameter. The footrope was 29.0 m long and lacked roller gear or a tickler chain. The footrope was weighted with a 1-cm chain attached every 25.4 cm to ensure that the footrope tended bottom. The two dandylines were 45.7 m long, and each consisted of an 18.3-m section of 1.5-cm cable and a pair of 27.4-m sections of 1.3-cm cable, one attached to the top and the other to the bottom of each net wing. The Astoria "V" type doors weighed 340 kg each and measured 1.5 m x 2.1 m. The net was constructed with 10.2-cm stretch mesh at the mouth, 8.9-cm stretch mesh in the body, and the cod end consisted of a 3.2-cm stretch mesh liner. The net was designed to sweep a 12.2-m path.

The offshore survey areas were divided into stations approximately 9.2 km square and each inshore or bay area was divided into stations 4.6 km square. Because of land boundaries, considerable variation occurred in the size of some offshore and most bay stations. The trawl was towed on the bottom at a speed of approximately 3.7 km per hour for 1.85 km at each station. The length of the tow was determined from Global Positioning System (GPS) readings; corrections were estimated by the vessel captain for tows that were not straight. Irregular bottom type occasionally caused haul lengths to differ from 1.85 km. Catches, tow distances and related information are recorded in Appendix B. Catches are standardized to kilograms per kilometer. Trawl placement within stations was determined by bottom contours and the location of trawlable bottom. All tows were made during daylight hours. The stations surveyed in 1997 with their areas in km^2 listed by section, and district and stratum are given in Appendix C. A data logger was used to record temperatures. The logger was attached to the headrope of the net so bottom temperatures recorded were approximately 2 meters above the bottom.

Catches were brought aboard and the total weight of the catch was determined by weighing the cod end of the trawl using an electronic crane scale accurate to 5 pounds and converted later to kilograms. The entire haul was sampled for selected important commercial species,. These species include sablefish *Anoplopoma fimbria*, Pacific cod *Gadus macrocephalus*, halibut *Hippoglossus stenolepis*, all rockfish *Sebastes* and *Sebastolobus*, lingcod *Ophiodon elongatus*, octopus *Octopus dofleini*, salmon, weathervane scallops *Patinopecten caurinus*, skates, Dungeness crab *Cancer magister*, Tanner crab, and king crab. A 35 kg capacity basket was used to obtain a subsample of the other species in the catch. The entire subsample was sorted, counted, and weighed. Spiny dogfish *Squalus acanthias* and giant wrymouth *Delolepis gigantea* were whole haul sampled because they are not likely to be taken in a basket sample. The commercial finfish species, the tanner crab and king crab taken in the subsamples and whole haul samples were measured to provide a size frequency distribution for each species. Finfish were measured from snout to the fork or mid-point of the caudal fin. Tanner crab widths were measured from inside the spines. King crabs were measured for length from the eye socket to medial posterior edge of the carapace. Crab widths outside the spines were checked for the legal status. Chela heights were taken from 50

Tanner crabs from each haul in Marmot Bay. The measurements were taken from the widest point across each chela. Reproductive success of mature Tanner and king crabs was measured by examining for the presence of egg clutches and estimating the percent fullness to the closest 10%. Crab exhibiting signs of the bitter crab syndrome (BCS), were noted.

Hemolymph smears from thirty randomly selected Tanner crabs were prepared from each haul in Alitak Bay on the south end of Kodiak Island. This area had previously been identified as an area of high prevalence of bitter crab syndrome (Pearson and Myers, 1992). The smears were stained with a Baxter Dif-Quik stain and read under protocols established by the State Pathology Laboratory in Juneau. Thirty fields were examined under 100 power for each slide and rated either positive on a scale of 1 to 4 or negative.

Rock sole were differentiated to northern and southern species using characteristics defined by the National Marine Fishery Service (James Orr, personal communication). The blind side skin on the southern rock sole is more transparent with the abdominal muscle pattern clearly visible. The gill rakers in southern rock sole are blunter and stouter than the northern rock sole, with the raker count being 6-10 in the southern and 10-14 in the northern. For fish with the overlap count of 10 rakers, the blind side skin characteristics were used to distinguish the species. Some fish could not be reliably speciated.

A Pacific cod tagging program was initiated during the 1997 survey to study the migration patterns, growth patterns, and to help identify inshore and offshore population stocks. Only Pacific cod that were in good condition were selected for tagging. A fluorescent spaghetti tag was sewn through the skin of the fish, anterior to the dorsal fin. Condition, size, tag number and release location were recorded prior to release.

King and Tanner Crab Population Estimation

Population estimates for king and Tanner crabs were derived from the trawl survey data using the *area swept* technique (Alverson and Pereyra, 1969). Assuming that the trawl swept a path 12.2 m wide, the area swept by the trawl in a 1-km tow was 1/82 km^2. Hence, the catch per tow was converted into a density estimate, number per square kilometer by multiplying the number caught per kilometer by 82. The calculated density was then multiplied by the area of the station being considered to give an estimate of that station's population size. In stations where more than one tow was completed, the number caught per kilometer was calculated by combining the total catch in all hauls in the station and dividing by the total distance towed in those hauls. Population estimates were computed for desired subsets of geographic or biological variables by summing the estimates from the individual stations.

RESULTS

Areas fished during the survey are shown in Figure 1 and Appendix B details the exact position, depth, date, bottom temperature, catch and other information recorded for each tow. The "other roundfish" category listed in Appendix B includes poachers, wolf eels, herring, lingcod, tomcod, atka mackerel, snailfish, eulachon, capelin, wrymouth, prickleback, prowfish, and pricklebacks.

The "other flatfish" category includes English sole, sand sole, and butter sole. The "other elasmobranchs" category includes sharks. The "other invertebrates" category includes snails, jellyfish, sea pens, sea anemones, various non-commercial crabs, nudibranchs, starfish, urchins, sea cucumbers, sponges, tunicates and brachiopods.

Kodiak Populations

The Northeast, Eastside, Southeast, and Southwest Sections of the Kodiak Island District were surveyed from July 3 to July 26 with 157 tows completed (numbers 1-157, 150 stations). The Westside and North Mainland Sections were surveyed from September 10 to September 19, and 61 tows were completed (numbers 308-368). The locations of the Kodiak Island tows are shown in Appendices D.1-D.8. The calculated area used in the Kodiak crab population estimates totaled 9,866.8 km^2.

The 1997 survey captured a total of 11,125 male and 5,785 female Tanner crabs having mean widths of 94.9 mm and 72.1 mm, respectively (Figure 2). Tanner crabs were captured in 92% of all tows, their catch numbers ranging from 1 to 1,542 crabs. The density of Tanner crabs ranged from 1 to 835 crab per kilometer towed (Figure 3). New-shell crabs accounted for 86% of the total male Tanner crabs captured on the Kodiak survey (Table 2).

Population estimates for Tanner crabs (Appendix E) were derived for most of the commercial fishing sections described in the ADF&G commercial shellfish regulations. Appendix E also gives the catch per 1.85 km (1 nautical mile) of each size-sex category by station. The estimated population and the shell condition of male Tanner crabs in the Kodiak fishing sections is shown in Figures 4 and 5.

The portion of the Kodiak District Tanner population included in the survey area was estimated to be 20.8 million animals, down from the estimate of 37.4 million in 1996 (Urban 1997, Table 3). The total number of female Tanner crab decreased to less than half of the previous year, contributing to the lower population estimate. The population of male Tanner crab decreased generally across all crab sizes but was most pronounced in crab less than 70 mm (Figure 6).

The population of legal Tanner crabs in the Kodiak District was estimated to be 959,835, down from the 1996 estimate of 988,766. This level is still only 20% of the 1989 population. Due to low abundance of legal crabs, the Kodiak Management District did not open to commercial fishing as scheduled on January 15, 1998.

Egg clutches of 1,775 mature female Tanner crabs from the Kodiak area were examined (Figure 7). Only 43% of all mature females were primiparous compared with 53% in 1996 (Urban 1997). Only 30% of mature females had and ovigerity of 80% or higher.

Only 170 males and 355 female red king crabs were captured during the survey. Males had a mean length of 132.3 mm and females 125.5 mm. The majority were mature. King crabs were captured in 5% of the tows with catches ranging from 1 animal per tow to a high of 216 king crabs in Alitak Bay (Figure 8).

The Kodiak red king crab population remains at historically low population levels, and the commercial fishing season for this species has remained closed since 1983 (Figure 9). The Kodiak red king crab population in surveyed areas was estimated to be 183,131 animals, a substantial increase from 94,360 animals in the 1996 survey (Urban, 1997, Appendix F). A large increase of approximately 70 mm crab and a greater number of crab surviving to legal size contributes to this increase. Population estimates were derived for the main commercial fishing districts by size and sex categories (Appendix F). Ninety percent of the adult female king crabs sampled had an ovigerity of 80% or greater (Figure 7).

The average haul weight of fish and invertebrates from all Kodiak hauls was 655 kg per kilometer towed. Species composition from each Kodiak area haul is presented in Appendix B. Arrowtooth flounder *Atheresthes stomias* was the most abundant species encountered (25.7%), followed by pollock *Theragra chalcogramma* (20.7%) and flathead sole *Hippoglossoides elassodon* (16.8%) (Table 4). These species have also been the most abundant species encountered in past surveys (Urban, 1996a, Urban, 1996b, Urban, 1997).

Length measurements of 11,279 fish, 30 different species, were taken during the Kodiak Island bottom trawl survey. Length frequency data has been combined by bays within the Kodiak area (Appendix G). The highest densities of groundfish were mostly found in the inshore stations. Catches of selected groundfish are plotted by haul in Figures 10 and 11.

South Peninsula and Chignik Populations

The area south of the Alaska Peninsula was surveyed from August 8 through August 30 with 150 hauls being completed. There were 116 hauls in the South Peninsula District, numbers 165 to 280. Thirty-four hauls were completed in the Chignik District, numbers 158 to 164 and 281 to 307. The calculated areas used in the crab population estimates were 3,349.4 km^2 and 1,009.6 km^2 in the South Peninsula and Chignik districts, respectively (Appendix C). Appendices D.9-D.13 show the specific locations, haul numbers and trawl station names in the sampled areas.

The 1997 crab and groundfish trawl survey captured 2,961 Tanner crabs in the South Peninsula District. The density of Tanner crab captured ranged from 1 to 416 (Figure 12). The mean width of Tanner crabs in that district was 90.4 mm for males and 75.4 mm for females (Figure 2). Size frequency and shell condition of the estimated male Tanner crab populations in 1997 by fishing area are shown in Figures 13 and 14. Population estimates were derived for each size-sex category of crabs by fishing area (Appendix H).

The Tanner crab population in the surveyed portion of the South Peninsula District was estimated to be 3.4 million crabs, down from the 1996 survey estimate of 5.6 million crabs (Urban 1997). The population of Tanner crab shows a slight increase in legal crab and a decrease in smaller crab from 1996 (Table 5, Figure 15). The legal crab are still at low levels compared to the first trawl survey in 1988. The commercial Tanner crab fishery did not open during the 1997 season because of low legal crab abundance.

The 1997 Chignik bottom trawl survey captured 4,863 Tanner crabs. The number of Tanner crabs captured in a single tow ranged from 4 to 770 animals. Chignik Bay continues to show the highest

densities of Tanner crab found in the Alaska Peninsula District (Figure 12). The mean width of Tanner crabs was 76.6 mm for males and 60.3 mm for females (Figure 2). Both the male and female mean size increased from the previous survey (Urban 1997). New-shelled animals accounted for 93% of the male Tanner crabs captured and is represented throughout the fishing areas (Figure 16 and 17).

Population estimates were derived for each size-sex category of crabs by fishing area (Appendix I). The 1997 Tanner crab population was estimated to be 6.2 million crabs, up from the previous estimate of 3.4 million (Figure 18). The population increase was spread across a wide range of crab sizes. The commercial Tanner crab fishery did not open in the Chignik District during the 1997 season because a high level of effort was anticipated and the estimated abundance of legal crab is still well below historic levels.

Egg clutches of 80% fullness or greater were found in only 16% of 398 adult female Tanner crabs captured in the South Peninsula District and in 52% of 346 adult females in the Chignik District (Figure 19). This in a decrease from 1996 (Figure 15, Urban, 1997)

The red king crab population in the Alaska Peninsula area remains at historic low levels. The population was estimated to be 175,734 crabs (Appendix J). The majority of the king crab was found in Castle Bay (Figure 8). Two hundred and forty males and 200 female red king crabs were captured with mean lengths of 80.6 mm and 75.7 mm, respectively. Egg clutches of 80% fullness or greater were found in 90% of the females captured during the survey (Figure 7). As is the case in Kodiak, the last commercial fishery was the 82/83 season.

The average haul weight of fish and invertebrates from all Alaska Peninsula hauls was 717 kg per kilometer towed. Species composition of each Alaska Peninsula haul is presented in Appendix B. Flathead sole *Hippoglossoides elassodon* and arrowtooth flounder *Atheresthes stomias* remain to be the most abundant species captured in the survey making up 25% and 16.6% of the catch, respectively. While pollock *Theragra chalcogramma* replaced yellowfin sole from the 1996 survey as the third most abundant species (15.7%) (Table 6).

Length frequencies were derived from 8,670 measurements of 26 groundfish species found in the Alaska Peninsula area (Appendix K). Pavlof Bay, Cold Bay and Morzhovoi Bay have the highest densities of groundfish in the Alaska Peninsula area (Figure 20 and 21).

Prevalence of Bitter Crab Syndrome

Blood smears were sampled from 366 Tanner crabs in Alitak Bay (Table 7). Bitter crab syndrome prevalence rates ranged from 16.0% to 6.6% over the past 6 years. The samples from 1997 were not yet examined at the time of this report.

Tagging Pacific cod

Six hundred and sixty-six Pacific cod were tagged and released during the 1997 survey. Only the fish that were in the best condition were tagged. Fish that had distended eyes, stomachs or were too

lethargic were not tagged. The majority of the Pacific cod tagged were in the Alaska Peninsula area (74%). The release locations for Kodiak and the Alaska Peninsula areas are shown in Figure 22.

LITERATURE CITED

ADF&G (Alaska Department of Fish and Game) 1997. Commercial shellfish regulations, 1997 edition. Alaska Department of Fish and Game, Division of Commercial Fisheries. Juneau.

Alverson, D. L., and W. T. Pereyra. 1969. Demersal fish explorations in the northeastern Pacific Ocean-an evaluation of exploratory fishing methods and analytical approaches to stock size and yield forecasts. Journal of the Fisheries Research Board of Canada 26:1985-2001.

Colgate, W.A. 1984. Westward Region Tanner crab, *Chionoecetes bairdi*, population index surveys. Alaska Department of Fish and Game, Division of Commercial Fisheries, Technical Report to Industry, Kodiak.

Colgate, W.A. and Hicks, D.M. 1983. Investigations of life history and fishery for Tanner crab (*Chionoecetes bairdi*) in the Westward Region, Alaska, 1982. Alaska Department of Fish and Game, Division of Commercial Fisheries, Technical Data Report 96, Kodiak.

Jackson, D.R. 1990. A bottom trawl survey of crab and groundfish in the Kodiak Island and Alaska Peninsula Areas, June through September, 1989. Alaska Department of Fish and Game, Division of Commercial Fisheries, Westward Region, Regional Information Report 4K90-22, Kodiak.

Kingsbury, A.P. and James, K.E. 1971. Abundance and composition of king crabs in the Alitak and Kaguyak Bay areas during April and June 1970. Alaska Department of Fish and Game, Division of Commercial Fisheries, Informational Leaflet 152, Kodiak.

McMullen, John C. 1967a. King crab, *Paralithodes camtschatica* (Tilesius) offshore breeding study on Marmot Flats, Kodiak Island, spring of 1967. Alaska Department of Fish and Game, Division of Commercial Fisheries, Research Section, Informational Leaflet 112, Kodiak.

McMullen, John C. 1967b. A preliminary study of king crab, *Paralithodes camtschatica* (Tilesius) ocean reproduction and the delineation of the Kodiak District continental shelf environmental zones. Alaska Department of Fish and Game, Division of Commercial Fisheries, Research Section, Informational Leaflet 93, Kodiak.

McMullen, John C. 1968. Investigation of king crab ocean reproduction and brood stock composition, Kodiak Island. Alaska Department of Fish and Game, Division of Commercial Fisheries, Research Section, Informational Leaflet 126, Kodiak.

Pearson, Tom and Meyers, T. 1992. Prevalence of bitter crab syndrome and bacterial infection of Tanner Crab *Chionoecetes bairdi* in the Kodiak, Chignik, South Peninsula, and Eastern Aleutian Management Areas. Alaska Department of Fish and Game, Division of Commercial Fisheries, Westward Region, Regional Information Report 4K92-26, Kodiak.

LITERATURE CITED (Cont.)

Reynolds, Richard E. and Powell, Guy C. 1964. King crab, *Paralithodes camtschatica* (Tilesius), trawl survey of Long Island Bank, east of Kodiak Island, Alaska, June 1963. Alaska Department of Fish and Game, Division of Biological Research, Informational Leaflet 44, Kodiak.

Urban, D. 1996a. Bottom trawl survey of crab and groundfish: Kodiak Island, Chignik and Eastern Aleutian areas, 1994. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Westward Region, Regional Information Report No. 4K96-3.

Urban, D. 1996b. Bottom trawl survey of crab and groundfish: Kodiak Island, Chignik and Eastern Aleutian areas, 1995. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Westward Region, Regional Information Report No. 4K96-39.

Urban, D. 1997. Bottom trawl survey of crab and groundfish: Kodiak Island, Chignik and Eastern Aleutian areas, 1996. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Westward Region, Regional Information Report No. 4K97-58.

Table 1. Location and number of hauls conducted by the Westward Region trawl survey, 1988-1997

Year	Kodiak	Chignik	South Peninsula	Eastern Aleutians	Shrimp[a]	TOTAL
1988	217		108			325
1989	221	35	132		187	575
1990	217	37	123	46		423
1991	228	33	117	41		419
1992	209	29	114		76	428
1993	231	35	111			377
1994	200	34	122	44		400
1995	218	31		38	85	372
1996	223	27	122			372
1997	218	34	116			368

[a]Includes shrimp survey hauls from all areas.

Table 2. Number of male king and Tanner crab by shell condition and cohort captured during the Westward Region trawl survey, 1997.

cohort	definition	SHELL CONDITION soft-shell	new-shell	old-shell	very old	TOTAL
Kodiak king crab						
Prerecruit IV	< 79 mm	3	22	0	0	25
Prerecruit III	79 - 95 mm	7	0	0	0	7
Prerecuit II	96 - 115 mm	5	0	0	0	5
Prerecuit I	>116 mm and sublegal	7	44	0	0	51
Recruit	<152 mm and legal new-shell	0	23	--	--	23
Postrecruit	>151 mm or legal and not new-shell	3	51	4	1	59
		25	140	4	1	170
Alaska Peninsula King Crab						
Prerecruit IV	< 79 mm	0	139	0	0	139
Prerecruit III	79 - 95 mm	0	53	0	0	53
Prerecuit II	96 - 115 mm	0	37	0	0	37
Prerecuit I	>116 mm and sublegal	0	4	0	0	4
Recruit	<152 mm and legal new-shell	0	2	--	--	2
Postrecruit	>151 mm or legal and not new-shell	0	3	2	0	5
		0	238	2	0	240
Kodiak Tanner crab						
Prerecruit IV	< 70 mm	106	2,196	18	2	2,322
Prerecruit III	70 - 91 mm	180	2,556	52	3	2,791
Prerecuit II	92 - 114 mm	190	2,277	215	54	2,736
Prerecuit I	>114 mm and sublegal	94	1,253	425	239	2,011
Recruit	<165 mm and legal new-shell	22	672	--	--	694
Postrecruit	>164 mm or legal and not new-shell	0	54	228	289	571
		592	9,008	938	587	11,125
Chignik Tanner crab						
Prerecruit IV	< 70 mm	25	1,382	2	0	1,409
Prerecruit III	70 - 91 mm	1	600	3	0	604
Prerecuit II	92 - 114 mm	0	317	24	6	347
Prerecuit I	>114 mm and sublegal	0	187	67	33	287
Recruit	<165 mm and legal new-shell	0	149	--	--	149
Postrecruit	>164 mm or legal and not new-shell	0	9	63	10	82
		26	2,644	159	49	2,878
South Peninsula Tanner crab						
Prerecruit IV	< 70 mm	3	397	3	0	403
Prerecruit III	70 - 91 mm	4	452	7	0	463
Prerecuit II	92 - 114 mm	1	433	16	14	464
Prerecuit I	>114 mm and sublegal	0	209	31	53	293
Recruit	<165 mm and legal new-shell	0	95	--	--	95
Postrecruit	>164 mm or legal and not new-shell	0	1	17	29	47
		8	1,587	74	96	1,765

Table 3. Tanner crab population estimates from trawl surveys in the Kodiak District, 1987-1997.

Year	Females			No. Sublegal Males by size (mm)				Recruits	Postrecruit		Total	Total	Total
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165 mm	>164 mm	Legal	Males	Crab
Northeast													
1987	461,089	1,135,422	1,596,511	352,860	248,415	326,506	493,916	101,484	197,865	33,038	332,387	1,754,084	3,350,595
1988	2,643,594	674,490	3,318,084	2,495,836	395,350	545,140	685,327	384,565	23,104	20,977	428,647	4,550,299	7,868,383
1989	5,481,792	5,654,266	11,136,058	5,127,986	1,546,105	2,165,369	2,319,049	1,409,193	133,905	269,859	1,812,957	12,971,466	24,107,524
1990	1,812,656	3,140,834	4,953,490	1,446,757	1,482,180	1,142,711	1,024,535	510,407	93,031	101,879	705,317	5,801,500	10,754,990
1991	4,385,849	2,055,075	6,440,924	3,651,597	1,501,747	1,330,396	1,080,017	424,636	25,367	52,117	502,121	8,065,877	14,506,801
1992	2,013,074	1,365,357	3,378,431	1,586,874	1,225,453	929,682	793,749	209,337	15,516	7,070	231,922	4,767,681	8,146,112
1993	2,273,819	1,116,830	3,390,649	2,224,926	435,614	581,625	637,663	263,095	31,759	16,787	311,640	4,191,469	7,582,118
1994	602,256	1,227,010	1,829,266	627,897	170,908	255,845	455,371	102,589	98,082	2,401	203,072	1,713,093	3,542,359
1995	6,481,040	1,423,393	7,904,433	6,459,818	1,453,343	326,713	372,625	10,279	132,191	0	142,470	8,754,969	16,659,402
1996	2,132,659	2,508,696	4,641,355	1,766,596	2,544,865	1,190,131	427,287	30,485	54,026	1,603	86,114	6,014,993	10,656,348
1997	423,217	1,021,369	1,444,586	523,906	935,670	1,120,040	604,140	48,509	24,329	0	72,838	3,256,593	4,701,179
Eastside													
1987	5,476,413	3,930,451	9,406,864	5,750,053	609,468	514,257	1,202,144	149,925	299,091	89,925	538,941	8,614,863	18,021,727
1988	2,083,954	820,032	2,903,986	1,616,718	443,776	627,028	732,705	298,165	100,786	1,914	400,865	3,821,092	6,725,078
1989	2,393,419	3,821,312	6,214,731	2,029,181	1,567,590	1,640,007	1,285,700	799,441	270,769	29,333	1,099,543	7,622,021	13,836,752
1990	1,547,033	10,045,389	11,592,422	1,299,698	679,016	2,019,193	4,059,072	788,369	162,670	60,418	1,011,457	9,068,436	20,660,858
1991	1,490,845	3,677,868	5,168,713	1,207,670	289,090	655,547	2,669,044	3,016,121	494,482	38,622	3,549,225	8,370,576	13,539,289
1992	1,292,574	1,963,566	3,256,140	1,612,556	328,625	472,486	1,584,166	460,988	280,962	64,984	806,934	4,804,767	8,060,907
1993	1,723,641	1,504,592	3,228,233	1,362,714	252,485	406,367	1,003,469	108,462	382,993	18,760	510,215	3,535,250	6,763,483
1994	1,768,539	571,130	2,339,669	1,311,715	706,286	465,077	572,892	28,420	141,209	2,837	172,466	3,228,436	5,568,105
1995	3,796,916	505,420	4,302,336	3,326,873	594,529	456,566	411,403	24,858	87,815	2,394	115,067	4,904,438	9,206,774
1996	2,099,145	916,539	3,015,684	2,187,039	705,077	609,875	849,485	107,556	179,487	14,538	301,581	4,653,057	7,668,741
1997	802,758	652,061	1,454,819	772,755	678,462	724,637	708,745	118,243	104,661	15,679	238,583	3,123,181	4,578,000
Southeast													
1987	2,379,119	894,205	3,273,324	2,044,847	413,335	337,537	875,142	480,004	88,816	2,841	571,661	4,242,522	7,515,846
1988	243,200	314,486	557,686	188,394	221,880	607,570	1,185,633	777,880	129,593	50,773	958,246	3,161,723	3,719,409
1989	922,092	424,847	1,346,939	694,841	140,444	246,215	564,215	175,593	70,553	9,739	255,885	1,901,600	3,248,539
1990	1,148,017	781,102	1,929,119	1,086,357	131,469	299,245	651,302	383,859	117,252	5,970	507,081	2,675,454	4,604,573
1991	4,650,523	919,633	5,570,156	4,448,179	425,927	270,594	367,736	173,532	37,162	7,382	218,076	5,730,512	11,300,668
1992	2,156,307	1,322,229	3,478,536	1,648,095	688,608	443,849	587,767	33,246	139,404	10,076	182,726	3,551,045	7,029,581
1993	3,893,506	563,806	4,457,312	3,625,310	248,343	430,013	403,299	27,357	111,011	8,453	146,821	4,853,786	9,311,098
1994	112,692	222,890	335,582	88,247	28,663	87,918	474,048	108,208	54,865	4,252	167,325	846,201	1,181,783
1995	2,728,372	110,416	2,838,788	2,425,953	15,058	28,566	82,912	76,922	47,721	2,370	127,013	2,679,502	5,518,290
1996	2,567,943	141,849	2,709,792	2,274,742	486,210	112,033	124,446	55,489	68,179	7,990	131,658	3,129,089	5,838,881
1997	460,018	141,758	601,775	361,124	206,538	114,928	45,616	3,134	45,000	1,337	49,471	777,676	1,379,451

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Table 3. (Page 2 of 3).

Year	Females			No. Sublegal Males by size (mm)				Recruits	Postrecruit		Total	Total	Total
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165 mm	>164 mm	Legal	Males	Crab
Southwest													
1987	2,368,774	590,671	2,959,445	1,990,338	45,752	727,616	1,799,111	638,664	107,127	44,416	790,207	5,353,024	8,312,469
1988	191,219	225,135	416,354	168,051	16,405	63,339	591,313	1,370,943	61,725	76,170	1,508,838	2,347,946	2,764,300
1989	2,716,302	220,553	2,936,855	2,510,149	202,807	189,372	443,446	281,673	118,617	85,688	485,978	3,831,752	6,768,607
1990	3,527,315	1,383,437	4,910,752	2,635,176	1,259,988	709,183	704,467	53,127	59,552	11,567	124,246	5,433,060	10,343,812
1991	1,248,463	262,105	1,510,568	1,020,587	219,284	403,480	553,335	97,159	33,952	3,185	134,296	2,330,982	3,841,550
1992	461,617	212,484	674,101	455,293	153,648	320,046	236,226	296,449	58,330	5,803	360,582	1,525,795	2,199,896
1993	6,656,829	244,881	6,901,710	6,173,566	505,031	182,384	392,985	251,151	69,760	13,352	334,263	7,588,229	14,489,939
1994	205,702	120,561	326,263	131,884	70,630	60,597	145,516	129,013	23,087	7,429	159,529	568,156	894,419
1995	151,984	91,201	243,185	137,702	57,628	109,653	124,067	33,631	48,012	0	81,643	510,693	753,878
1996	348,245	44,722	392,967	326,522	98,585	162,621	240,133	36,057	74,458	1,571	112,086	939,947	1,332,914
1997	265,172	66,131	331,303	255,708	102,022	82,313	185,338	124,784	88,079	3,170	216,033	841,414	1,172,717
Westside													
1987	2,541,394	1,526,443	4,067,837	1,243,848	2,401,608	1,149,549	1,302,877	835,177	46,421	50,537	932,135	7,030,017	11,097,854
1988	3,232,321	1,125,086	4,357,407	2,903,179	160,149	477,223	606,182	243,134	45,969	21,869	310,972	4,457,705	8,815,112
1989	8,655,122	1,185,882	9,841,004	7,125,499	1,387,997	651,689	739,127	373,683	71,456	32,282	477,421	10,381,733	20,222,737
1990	1,539,037	4,037,828	5,576,865	725,246	1,325,090	807,624	874,879	209,757	98,770	42,662	351,189	4,084,028	9,660,893
1991	188,063	564,038	752,101	130,079	138,641	480,619	440,221	35,631	22,320	4,335	62,286	1,251,846	2,003,947
1992	168,907	419,822	588,729	129,031	171,209	214,118	299,796	114,508	46,032	5,615	166,155	980,309	1,569,038
1993	397,675	587,678	985,353	266,121	161,469	153,721	292,347	56,918	114,132	8,001	179,051	1,052,709	2,038,062
1994	159,998	248,767	408,765	108,531	113,242	74,755	90,262	31,733	42,415	0	74,148	460,938	869,703
1995	169,581	419,442	589,023	108,716	165,389	162,040	136,931	15,092	89,628	2,203	106,923	679,999	1,269,022
1996	221,986	406,957	628,943	104,838	263,794	293,384	226,226	36,717	99,630	469	136,816	1,025,058	1,654,001
1997	221,626	679,270	900,896	83,887	293,572	424,991	330,268	70,487	62,404	2,605	135,497	1,268,215	2,169,111
North Mainland													
1987	668,509	2,267,682	2,936,191	622,331	926,344	2,693,481	2,761,800	498,657	101,469	39,646	639,772	7,643,728	10,579,919
1988	3,055,286	861,060	3,916,346	2,592,371	131,758	424,485	1,227,352	922,762	82,755	32,415	1,037,932	5,413,898	9,330,244
1989	4,557,775	1,263,559	5,821,334	4,670,560	251,950	289,575	1,150,687	417,410	105,261	165,459	688,130	7,050,902	12,872,236
1990	7,046,141	3,301,573	10,347,714	5,970,049	2,313,040	806,067	1,470,971	148,847	115,216	36,289	300,352	10,860,479	21,208,193
1991	760,801	1,128,212	1,889,013	605,036	606,408	537,513	948,691	61,666	121,712	4,747	188,125	2,885,773	4,774,786
1992	2,379,002	898,078	3,277,080	2,279,142	224,065	392,813	753,649	108,416	70,078	14,613	193,107	3,842,776	7,119,856
1993	3,812,333	1,022,423	4,834,756	3,215,642	150,137	418,016	820,819	157,189	146,364	36,468	340,021	4,944,635	9,779,391
1994	3,023,459	536,322	3,559,781	2,228,789	554,325	232,786	360,218	143,776	116,170	58,652	318,598	3,694,716	7,254,497
1995	626,581	246,765	873,346	676,801	133,803	61,118	151,268	38,078	49,671	18,653	106,402	1,129,392	2,002,738
1996	4,440,244	390,477	4,830,721	4,282,612	340,128	215,935	341,473	34,667	164,161	21,682	220,510	5,400,658	10,231,379
1997	2,395,876	263,513	2,659,389	2,345,312	505,068	343,651	654,116	52,567	186,794	8,054	247,415	4,095,561	6,754,950

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Table 3. (Page 3 of 3).

Year	Females			No. Sublegal Males by size (mm)				Recruits	Postrecruit		Total	Total	Total
	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165 mm	>164 mm	Legal	Males	Crab
South Mainland													
1987	11,393	64,558	75,951	37,975	11,393	37,975	3,798	0	0	0	0	91,141	167,092
GRAND TOTAL													
1987	13,906,688	10,409,430	24,316,118	12,042,252	4,656,314	5,786,921	8,438,786	2,703,910	840,789	260,402	3,805,101	34,729,374	59,045,492
1988	11,449,574	4,020,290	15,469,864	9,964,549	1,369,319	2,744,783	5,028,512	3,997,449	443,932	204,119	4,645,500	23,752,663	39,222,527
1989	24,726,502	12,570,419	37,296,921	22,158,216	5,096,893	5,182,227	6,502,224	3,456,993	770,561	592,360	4,819,914	43,759,474	81,056,395
1990	16,620,199	22,690,162	39,310,361	13,163,283	7,190,782	5,784,022	8,785,225	2,094,366	646,492	258,785	2,999,643	37,922,955	77,233,316
1991	12,724,544	8,606,932	21,331,476	11,063,149	3,181,096	3,678,149	6,059,042	3,808,745	734,995	110,388	4,654,128	28,635,564	49,967,040
1992	8,671,479	6,181,536	14,853,015	7,710,991	2,791,607	2,772,995	4,255,353	1,222,944	1,220,642	108,160	2,551,746	20,082,692	34,935,707
1993	18,757,803	5,040,209	23,798,012	16,868,279	1,753,109	2,172,126	3,550,581	864,271	856,019	101,822	1,822,112	26,166,207	49,964,219
1994	5,876,645	2,929,680	8,806,325	4,497,063	1,634,055	1,176,978	2,098,307	543,740	475,828	75,571	1,095,139	10,501,542	19,307,867
1995	13,954,474	2,796,636	16,751,110	13,135,863	2,419,749	1,144,656	1,279,207	198,861	455,038	25,620	679,519	18,658,994	35,410,104
1996	11,810,222	4,409,239	16,219,461	10,942,349	4,438,659	2,583,980	2,209,049	300,970	639,942	47,854	988,766	21,162,803	37,382,264
1997	4,568,667	2,824,101	7,392,768	4,342,691	2,721,331	2,810,559	2,528,223	417,724	511,267	30,844	959,835	13,362,640	20,755,408

Table 4. Relative abundance by weight of the top 20 species captured from a trawl survey of Kodiak Island waters, 1997.

Rank	Common name	Species Name	% of catch by weight
1	Arrowtooth flounder	*Atheresthes stomias*	25.7
2	Pollock	*Theragra chalcogramma*	20.7
3	Flathead sole	*Hippoglossoides elassodon*	16.8
4	Pacific cod	*Gadus macrocephalus*	4.3
5	Yellowfin sole	*Pleuronectes aspera*	3.9
6	Starfish, unidentified	Subclass: Asteroidea	3.6
7	Halibut	*Hippoglossus stenolepis*	3.2
8	Big skate	*Raja binoculata*	2.2
9	Tanner crab	*Chionoecetes bairdi*	1.8
10	Butter sole	*Isopsetta bilineata*	1.8
11	Dover sole	*Microstomus pacificus*	1.5
12	sculpin, unidentified	Family: Cottidae	1.4
13	Hermit crab, unidentified	Family: Paguridea	1.1
14	Starry flounder	*Platichthys stellatus*	1.1
15	Northern rock sole	*Lepidopsetta perarcuata*	1.0
16	Longnose skate	*Raja rhina*	1.0
17	sea anemone, unidentified	Order: Actinaria	0.8
18	Rex sole	*Glyptocephalus zachirus*	0.8
19	Alaska/Aleutian skates	*Bathyraja* spp.	0.7
20	Southern rock sole	*Lepidopsetta bilineata*	0.7
	all others		6.1
			100.0

Table 5. Tanner crab population estimates from trawl surveys in the South Peninsula and Chignik Management Districts, 1988-1997.

Fishing	Females			No. Sublegal Males by size (mm)				Recruits	Postrecruit		Total	Total	Total
Section	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165 m	>164 mm	Legal	Males	Crab
SOUTH PENINSULA DISTRICT													
Sanak Island													
1989	1,007,287	116,393	1,123,680	1,087,034	23,924	31,519	64,368	6,836	0	0	6,836	1,213,681	2,337,361
1990	544,525	102,533	647,058	412,210	80,760	52,532	22,785	0	0	0	0	568,287	1,215,345
1991	448,105	27,532	475,637	461396	30,380	34,178	0	0	0	0	0	525,954	1,001,591
1992	344,623	41,013	385,636	270,952	42,912	45,760	3,798	0	0	0	0	363,422	749,058
1993	337,216	19,132	356,348	260,565	30,577	37,408	9,998	0	0	0	0	338,548	694,896
1994	87,847	69,011	156,858	112,055	13,413	18,801	19,823	0	0	0	0	164,092	320,950
1996	579,289	134,287	713,576	433,898	53,476	29,469	36,368	0	0	0	0	553,211	1,266,787
1997	104,890	53,408	158,298	79,644	75,563	38,236	17,180	0	0	0	0	210,623	368,921
Morzhovoi Bay													
1988	473,143	393,460	866,603	256,652	287,299	245,461	221,888	96,780	30,848	17,019	144,647	1,155,947	2,022,550
1989	3,840,620	1,173,058	5,013,678	3,214,760	1,373,096	440,767	133,655	42,427	4,949	0	47,376	5,209,654	10,223,332
1990	2,137,939	1,047,225	3,185,164	1,503,423	663,670	551,967	197,960	25,633	25,542	1,489	52,664	2,969,684	6,154,848
1991	1,657,718	478,548	2,136,266	1,318,755	426,210	209,931	57,608	15,555	4,667	0	20,222	2,032,726	4,168,992
1992	364,690	886,270	1,250,960	193,851	455,385	278,843	207,281	39,945	21,471	949	62,365	1,197,725	2,448,685
1993	72,434	544,697	617,131	18,974	160,368	414,318	368,297	62,370	63,859	949	127,178	1,089,135	1,706,266
1994	43,583	284,888	328,471	9,922	62,598	132,024	214,544	7,299	49,193	0	56,492	475,580	804,051
1996	221,620	107,996	329,616	191,235	22,344	14,476	53,533	5,696	31,185	0	36,881	318,469	648,085
1997	142,085	103,607	245,692	93,088	79,525	63,073	38,078	6,646	10,622	0	17,267	291,030	536,722
Cold Bay/Belkofski													
1988	263,424	311,506	574,930	133,813	222,565	234,339	220,235	88,143	32,649	8,520	129,312	940,264	1,515,194
1989	465,622	55,256	520,878	408,728	54,811	29,720	16,589	3,881	488	0	4,369	514,217	1,035,095
1990	1,819,773	553,714	2,373,487	1,536,289	526,568	276,381	224,763	88,021	51,348	4,548	143,917	2,707,918	5,081,405
1991	601,571	588,961	1,190,532	668,699	135,225	223,859	374,770	74,553	110,621	161	185,335	1,587,888	2,778,420
1992	177,787	174,384	352,171	95,544	110,096	97,452	142,607	39,898	39,104	1,721	80,723	526,422	878,593
1993	100,302	269,850	370,152	68,373	87,201	156,298	137,850	35,907	18,608	434	54,949	504,671	874,823
1994	96,033	220,312	316,345	28,880	54,379	64,115	75,642	27,345	10,266	1,258	38,869	261,885	578,230
1996	339,068	15,337	354,405	266,412	62,717	40,124	30,565	24,165	2,530	201	26,896	426,714	781,119
1997	118,157	12,184	130,341	44,101	59,543	90,588	80,558	37,302	936	483	38,721	313,512	443,854

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Table 5. (2 of 5).

Fishing	Females			No. Sublegal Males by size (mm)				Recruits	Postrecruit		Total	Total	Total
Section	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165 m	>164 mm	Legal	Males	Crab
Pavlof/Volcano													
1988	438,378	879,351	1,317,729	351,825	213,743	527,769	473,115	211,734	88,807	79839	380,380	1,946,832	3,264,561
1989	1,193,787	1,898,744	3,092,531	752,840	448,297	374,030	447,775	121,787	80,943	17669	220,399	2,243,341	5,335,872
1990	1,138,250	2,110,361	3,248,611	823,545	574,445	631,345	345,196	62,129	125,646	18957	206,732	2,581,263	5,829,874
1991	440,000	549,233	989,233	398,020	76,496	276,907	273,133	38,822	89,006	3039	130,867	1,155,423	2,144,656
1992	206,620	387,633	594,253	96,109	162,427	150,644	164,303	32,774	52,064	0	84,838	658,321	1,252,574
1993	115,627	201,551	317,178	71,677	168,723	494,229	230,544	44,414	27,416	1925	73,755	1,038,928	1,356,106
1994	40,819	123,378	164,197	25,438	50,672	91,918	143,134	54,379	28,337	0	82,716	393,878	558,075
1996	391,494	55,285	446,779	367,493	40,122	31,041	52,307	14,841	9,517	992	25,350	516,313	963,092
1997	70,299	79,456	149,755	31,066	48,449	82,056	53,514	5,405	28,417	949	34,771	249,857	399,612
Beaver/Balboa/Unga Strait													
1988	123,769	76,533	200,302	106,816	66,274	50,497	22,020	5,399	10,364	0	15,763	261,370	461,672
1989	129,353	247,345	376,698	141,019	56,566	48,228	30,418	0	6,059	0	6,059	282,290	658,988
1990	373,873	479,216	853,089	384,768	40,079	155,649	89,422	16,441	6,615	0	23,056	692,974	1,546,063
1991	337,522	188,765	526,287	313,050	36,940	56,286	51,489	5,058	1,127	0	6,185	463,950	990,237
1992	73,138	128,905	202,043	80,582	30,326	47,470	20,585	564	2,026	0	2,590	181,553	383,596
1993	9,322	43,753	53,075	16,876	7,062	28,751	29,838	3,164	4,361	0	7,525	90,052	143,127
1994	10,118	29,294	39,412	9,240	4,361	11,329	25,120	2,254	5,938	0	8,192	58,242	97,654
1996	716,832	5,415	722,247	746,234	10,645	9,232	4,541	905	460	0	1,365	772,017	1,494,264
1997	107,308	23,353	130,661	57,536	34,559	4,218	6,683	0	0	0	0	102,996	233,657
West Nagai													
1989	263,853	202,990	466,843	307,542	136,756	71,670	23,766	2,101	5,383	0	7,484	547,218	1,014,061
1990	223,997	36,745	260,742	228,844	17,172	17,328	5,913	0	908	0	908	270,165	530,907
1991	212,474	24,805	237,279	236,403	6,002	6,002	18,007	3,813	0	0	3,813	270,227	507,506
1992	24,726	33,234	57,960	13,306	8,516	19,137	8,255	0	3,165	0	3,165	52,379	110,339
1993	19,405	4,835	24,240	16,141	9,946	74,494	14,797	908	0	0	908	116,286	140,526
1994	20,348	24,860	45,208	8,615	24,858	29,968	27,774	8,468	0	0	8,468	99,683	144,891
1996	50,747	4,706	55,453	40,628	7,431	16,597	20,148	0	908	0	908	85,712	141,165
1997	334,022	263,780	597,802	180,257	292,164	173,397	25,182	0	4,706	0	4,706	675,706	1,273,508

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Table 5. (page 3 of 5.)

Fishing Section	Females Juvenile	Females Adult	Females Total	No. Sublegal Males by size (mm) <70	70-91	92-114	>114	Recruits	Postrecruit <165 m	Postrecruit >164 mm	Total Legal	Total Males	Total Crab
Stepovak													
1989	369,775	129,844	499,619	327,572	19,700	18,217	4,025	0	0	0	0	369,514	869,133
1990	891,103	138,654	1,029,757	992,870	7,256	28,929	19,636	8,266	6,158	0	14,424	1,063,115	2,092,872
1991	225,164	24,116	249,280	273,356	8,175	30,978	13,539	0	8,171	0	8,171	334,219	583,499
1992	286,231	26,900	313,131	255,298	7,249	31,206	7,802	2,013	0	0	2,013	303,568	616,699
1993	27,147	4,177	31,324	35,652	2,013	5,092	4,025	0	3,079	0	3,079	49,861	81,185
1994	30,462	2,013	32,475	32,303	0	0	0	0	0	0	0	32,303	64,778
1996	158,463	0	158,463	158,924	6,038	2,013	6,038	0	0	0	0	173,013	331,476
1997	25,774	18,114	43,888	67,372	40,254	14,089	0	0	2,013	0	2,013	123,727	167,616
SOUTH PENINSULA TOTALS													
1988	1,298,714	1,660,850	2,959,564	849,106	789,881	1,058,066	937,258	402,056	162,668	105,378	670,102	4,304,413	7,263,977
1989	7,270,297	3,823,630	11,093,927	6,239,495	2,113,150	1,014,151	720,596	177,032	97,822	17,669	292,523	10,379,915	21,473,842
1990	7,129,460	4,468,448	11,597,908	5,881,949	1,909,950	1,714,131	905,675	200,490	216,217	24,994	441,701	10,853,406	22,451,314
1991	3,922,555	1,881,961	5,804,516	3,669,679	719,429	838,141	788,545	137,801	213,591	3,200	354,592	6,370,386	12,174,902
1992	1,477,816	1,678,339	3,156,155	1,005,643	816,910	670,511	554,631	111,193	235,659	2,671	349,523	3,397,218	6,553,373
1993	681,454	1,087,994	1,769,448	488,259	465,890	1,210,591	795,350	146,764	117,323	3,308	267,395	3,227,485	4,996,933
1994	329,210	753,755	1,082,965	226,452	210,281	348,155	506,035	99,746	93,734	1,258	194,738	1,485,661	2,568,626
1996	2,457,513	323,027	2,780,540	2,204,825	202,773	142,952	203,500	45,608	44,601	1,193	91,402	2,845,452	5,625,992
1997	902,536	553,903	1,456,439	553,065	630,056	465,658	221,195	49,352	46,693	1,432	97,478	1,967,451	3,423,890
CHIGNIK DISTRICT													
Ivanof													
1989	502,222	266,214	768,436	451,363	139,929	782,548	739,638	336,765	12,413	12,413	361,591	2,475,069	3,243,505
1990	883,810	32,971	916,781	1,040,228	14,699	108,905	250,741	108,961	0	0	108,961	1,523,534	2,440,315
1991	360,136	1,476	361,612	349,152	0	0	1,723	7,136	0	738	7,874	358,749	720,361
1992	32,735	2,215	34,950	37,240	1,969	984	5,028	4,119	1,282	738	6,139	51,360	86,310
1993	54,793	1,625	56,418	27,817	41,776	9,880	2,751	0	395	0	395	82,619	139,037
1994	44,186	12,094	56,280	13,569	22,612	12,866	3,832	984	246	0	1,230	54,109	110,389
1995	60,450	3,832	64,282	72,813	2,848	492	2,461	2,707	492	0	3,199	81,813	146,095
1996	72,588	699	73,287	73,697	41,649	6,890	7,871	8,754	0	0	8,754	138,861	212,148
1997	40,249	4,675	44,924	56,022	4,595	7,770	4,183	3,691	492	246	4,429	77,000	121,924

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Table 5. (Page 4 of 5.)

Fishing	Females			No. Sublegal Males by size (mm)				Recruits	Postrecruit		Total	Total	Total
Section	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165 m	>164 mm	Legal	Males	Crab
Mitrofania													
1989	193,422	510,311	703,733	201,538	155,170	637,889	315,908	42,526	17,719	21,263	81,508	1,392,013	2,095,746
1990	280,518	49,611	330,129	226,831	147,864	178,760	224,330	81,523	22,790	6,582	110,895	888,680	1,218,809
1991	491,176	51,907	543,083	469,640	113,946	89,887	96,212	87,350	5,064	2,532	94,946	864,631	1,407,714
1992	290,955	6,875	297,830	219,423	36,769	6,451	14,620	17,153	0	2,532	19,685	296,948	594,778
1993	133,718	17,870	151,588	76,188	68,542	37,635	15,337	18,459	9,047	653	28,159	225,861	377,449
1994	48,370	8,682	57,052	32,122	19,976	14,992	6,150	13,384	2,532	0	15,916	89,156	146,208
1995	221,670	39,309	260,979	258,696	13,475	46,293	32,346	27,261	0	2,532	29,793	380,603	641,582
1997	581,969	129,834	711,804	376,751	832,433	412,232	101,307	8,230	25,322	10,129	43,680	1,766,404	2,478,207
Chignik Bay													
1989	672,315	450,163	1,122,478	660,618	89,843	81,938	174,032	40,159	13,229	0	53,388	1,059,819	2,182,297
1990	1,650,408	423,973	2,074,381	1,330,223	112,046	133,699	445,000	83,477	77,931	1,387	162,795	2,183,763	4,258,144
1991	1,119,262	486,770	1,606,032	1,065,392	98,759	48,866	131,640	67,386	66,421	0	133,807	1,478,464	3,084,496
1992	1,150,083	323,334	1,473,417	1,307,665	91,362	69,122	34,071	0	14,828	0	14,828	1,517,048	2,990,465
1993	823,018	216,258	1,039,276	790,570	467,458	307,173	186,929	22,190	60,687	3,285	86,162	1,838,292	2,877,568
1994	235,448	135,863	371,311	72,104	520,864	514,182	143,525	28,567	32,314	949	61,830	1,312,505	1,683,816
1995	173,571	93,530	267,101	206,860	3,191	52,921	174,183	82,082	14,528	0	96,610	533,765	800,866
1996	1,007,659	128,777	1,136,436	995,237	34,926	44,795	249,658	263,870	72,615	0	336,485	1,661,101	2,797,537
1997	1,125,526	334,726	1,460,252	1,020,376	270,496	167,556	237,470	150,391	77,358	5,367	233,116	1,929,015	3,389,267
Kujulik													
1989	83,550	13,089	96,639	78,148	722	9,150	11,386	931	0	0	931	100,337	196,976
1990	394,255	122,744	516,999	380,715	2,193	10,486	10,206	2,525	0	0	2,525	406,125	923,124
1991	8,256	949	9,205	14,470	0	0	0	0	0	0	0	14,470	23,675
1992	108,457	18,988	127,445	129,874	760	760	3,038	0	1,519	0	1,519	135,951	263,396
1993	107,646	16,184	123,830	100,150	81,074	29,658	1,367	0	0	0	0	212,249	336,079
1994	7,736	3,190	10,926	9,141	7,322	4,952	6,471	0	2,279	0	2,279	30,165	41,091
1995	851	28,922	29,773	2,772	0	911	456	0	0	0	0	4,139	33,912
1996	231,502	7,595	239,097	188,334	0	0	0	0	0	0	0	188,334	427,431
1997	49,589	61,537	111,126	63,018	456	3,711	14,105	0	5,425	0	5,425	86,714	197,841

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Table 5. (Page 5 of 5.)

CHIGNIK DISTRICT TOTALS

Fishing	Females			No. Sublegal Males by size (mm)				Recruits	Postrecruit		Total	Total	Total
Section	Juvenile	Adult	Total	<70	70-91	92-114	>114		<165 m	>164 mm	Legal	Males	Crab
1989	1,451,509	1,239,777	2,691,286	1,391,667	385,664	1,511,525	1,240,964	420,381	43,361	33,676	497,418	5,027,238	7,718,524
1990	3,208,991	629,299	3,838,290	2,977,997	276,802	431,850	930,277	276,486	100,721	6,582	383,789	5,000,715	8,839,005
1991	1,978,830	541,103	2,519,933	1,898,654	212,706	138,753	229,574	161,872	71,486	3,270	236,628	2,716,315	5,236,248
1992	1,582,231	351,412	1,933,643	1,694,201	130,859	77,317	56,757	21,271	35,259	3,270	59,800	2,018,934	3,952,577
1993	1,119,174	251,937	1,371,111	994,727	658,849	384,345	206,384	40,648	70,129	3,939	114,716	2,359,021	3,730,132
1994	335,740	159,829	495,569	126,937	570,773	546,992	159,978	42,936	37,371	949	81,256	1,485,936	1,981,505
1995	456,542	165,594	622,136	541,142	19,515	100,618	209,445	112,050	15,020	2,532	129,602	1,000,322	1,622,458
1996	1,311,749	137,071	1,448,820	1,257,268	76,575	51,685	257,530	272,624	72,615	0	345,239	1,988,297	3,437,117
1997	1,797,334	530,773	2,328,106	1,516,168	1,107,980	591,269	357,066	162,312	108,597	15,742	286,651	3,859,133	6,187,239

Table 6. Relative abundance by weight of the top 20 species captured from a trawl survey of Alaska Peninsula area waters, 1997.

Rank	Common name	Species Name	% of catch by weight
1	Flathead sole	*Hippoglossoides elassodon*	25.0
2	Arrowtooth flounder	*Atheresthes stomias*	16.6
3	Pollock	*Theragra chalcogramma*	15.7
4	Yellowfin sole	*Pleuronectes aspera*	14.7
5	Halibut	*Hippoglossus stenolepis*	4.6
6	Northern rock sole	*Lepidopsetta perarcuata*	3.9
7	Pacific cod	*Gadus macrocephalus*	2.9
8	starfish, unidentified	Subclass: Asteroidea	2.7
9	sea anemone, unidentified	Order: Actinaria	2.3
10	Starry flounder	*Platichthys stellatus*	1.9
11	Alaska Plaice	*Pleuronectes quadrituberculatu*	1.7
12	sculpin, unidentified	Family: Cottidae	1.3
13	Big skate	*Raja binoculata*	1.3
14	Tanner crab	*Chionoecetes bairdi*	0.9
15	hermit crab unidentified	Family: Paguridae	0.7
16	Basket Star	*Gorgonocephalus caryi*	0.4
17	Southern rock sole	*Lepidopsetta bilineata*	0.4
18	Dungeness crab	*Cancer magister*	0.2
19	Ribbed Neptune snail	*Neptunea lyrata*	0.2
20	Weathervane scallop	*Patinopecten caurinus*	0.2
	all others		2.2
			100

Table 7. Bitter crab sample results from Alitak Bay, 1991-1997.

	BCS SAMPLING RESULTS												
	1991		1992		1993		1994		1995		1996		1997*
Station	Sample size	percent positive	Sample size	percent positive	Sample size	percent positive	Sample size	percent positive	Sample size	percent positive	Sample size	percent positive	Sample size
ALA	30	6.7	30	0.0	30	3.5	29	0.0	29	0.0	30	0.0	30
ALB	24	23.8	23	8.7	11	0.0	no sample		no sample		no sample		no sample
ALC	29	0.0	30	0.0	30	13.3	29	3.4	30	0.0	30	3.3	30
ALD	30	0.0	29	0.0	30	3.3	9	11.1	1	0.0	20	0.0	no sample
ALF	30	6.7	29	0.0	30	10.0	17	0.0	28	0.0	29	6.9	26
ALG	30	3.3	30	3.4	30	3.4	28	10.7	18	11.1	4	0.0	30
ALH	30	3.3	30	10.0	30	6.7	30	3.3	30	6.7	30	0.0	33
ALI	30	13.3	30	6.7	30	6.7	30	3.3	30	0.0	30	0.0	30
ALJ	28	10.7	30	3.3	30	3.3	30	16.7	14	7.7	19	0.0	14
ALK	17	41.2	15	20.0	30	6.7	9	55.6	2	50.0	7	0.0	11
ALL	30	6.7	28	7.1	30	3.3	30	3.3	30	3.3	30	0.0	30
ALM	27	48.1	3	33.3	30	6.7	6	0.0	5	0.0	4	0.0	12
ALO	28	42.9	30	24.1	30	13.3	30	0.0	29	0.0	30	10.0	30
ALP	30	60.0	29	37.9	30	26.7	30	23.3	30	23.3	30	23.3	30
ALQ	30	60.0	29	27.6	30	16.7	30	3.3	29	36.7	29	31.0	30
ALR	30	33.3	29	24.1	30	10.0	30	3.3	21	0.0	30	13.3	30
TOTALS	453	16.0	424	18.1	461	7.9	367	5.2	326	7.8	352	6.6	366

* Results not available.

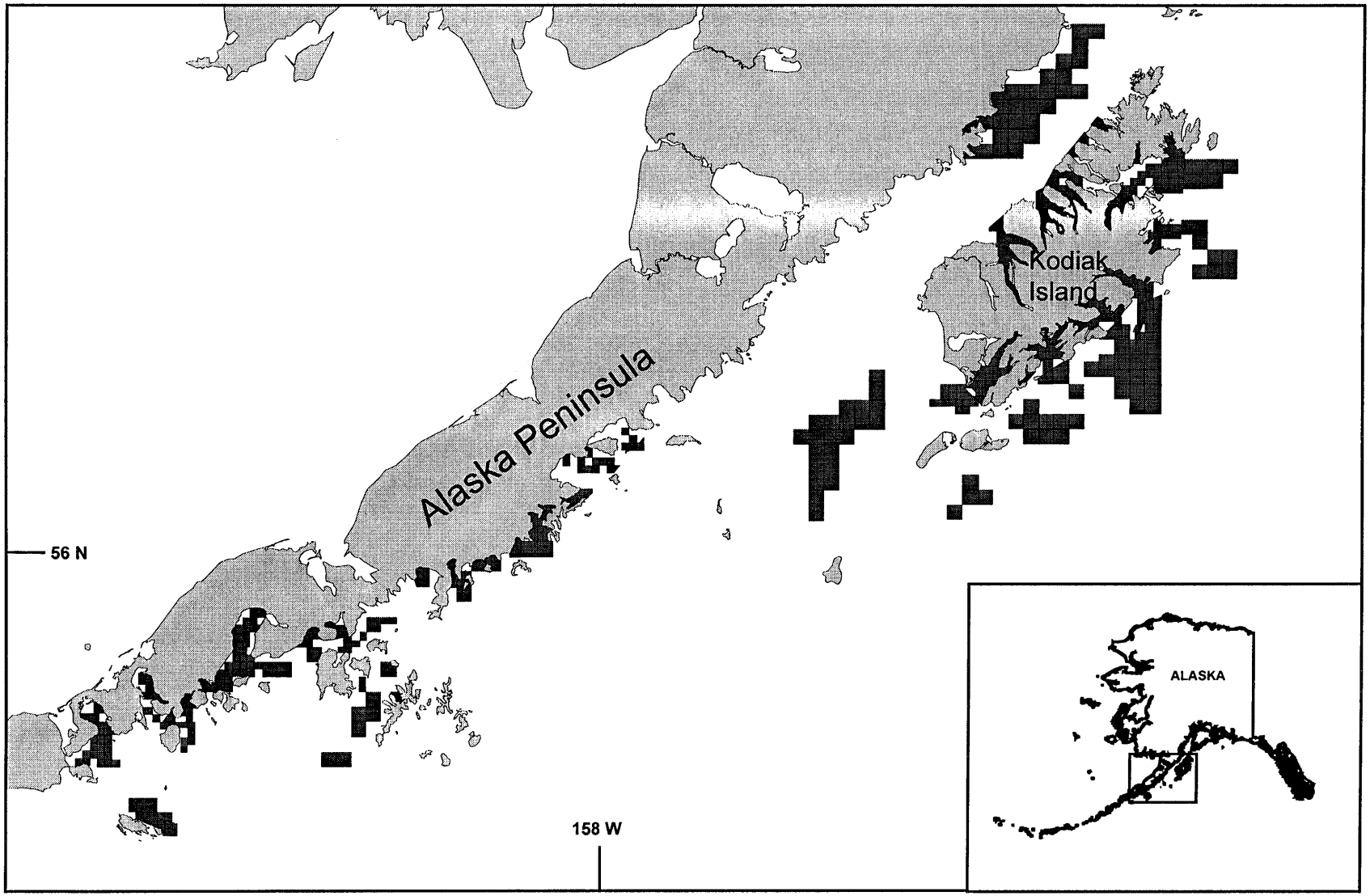


Figure 1. Area surveyed during the 1997 Westward Region trawl survey.

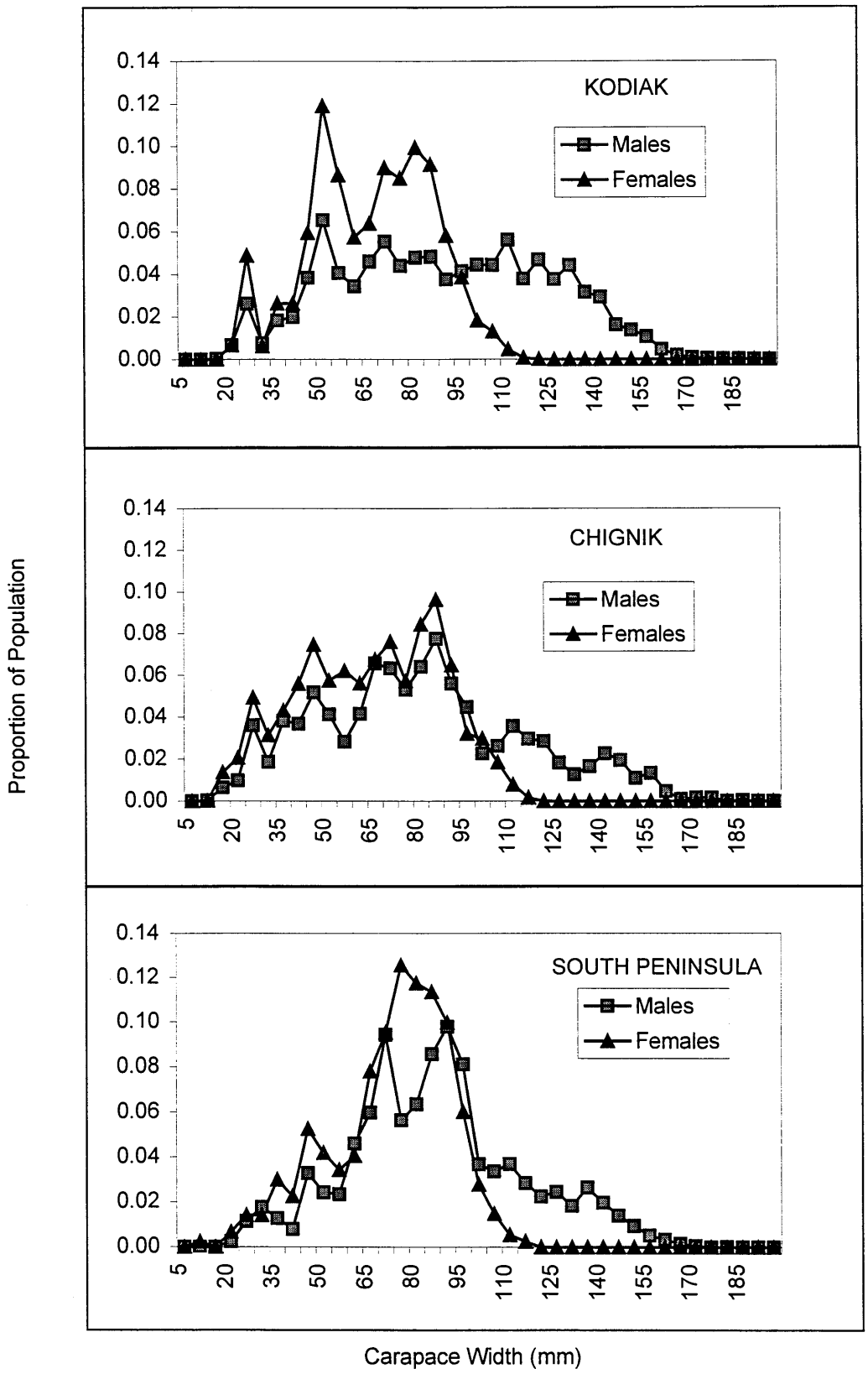


Figure 2. Carapace width frequency of male and female Tanner crab populations during the 1997 Westward Region trawl survey.

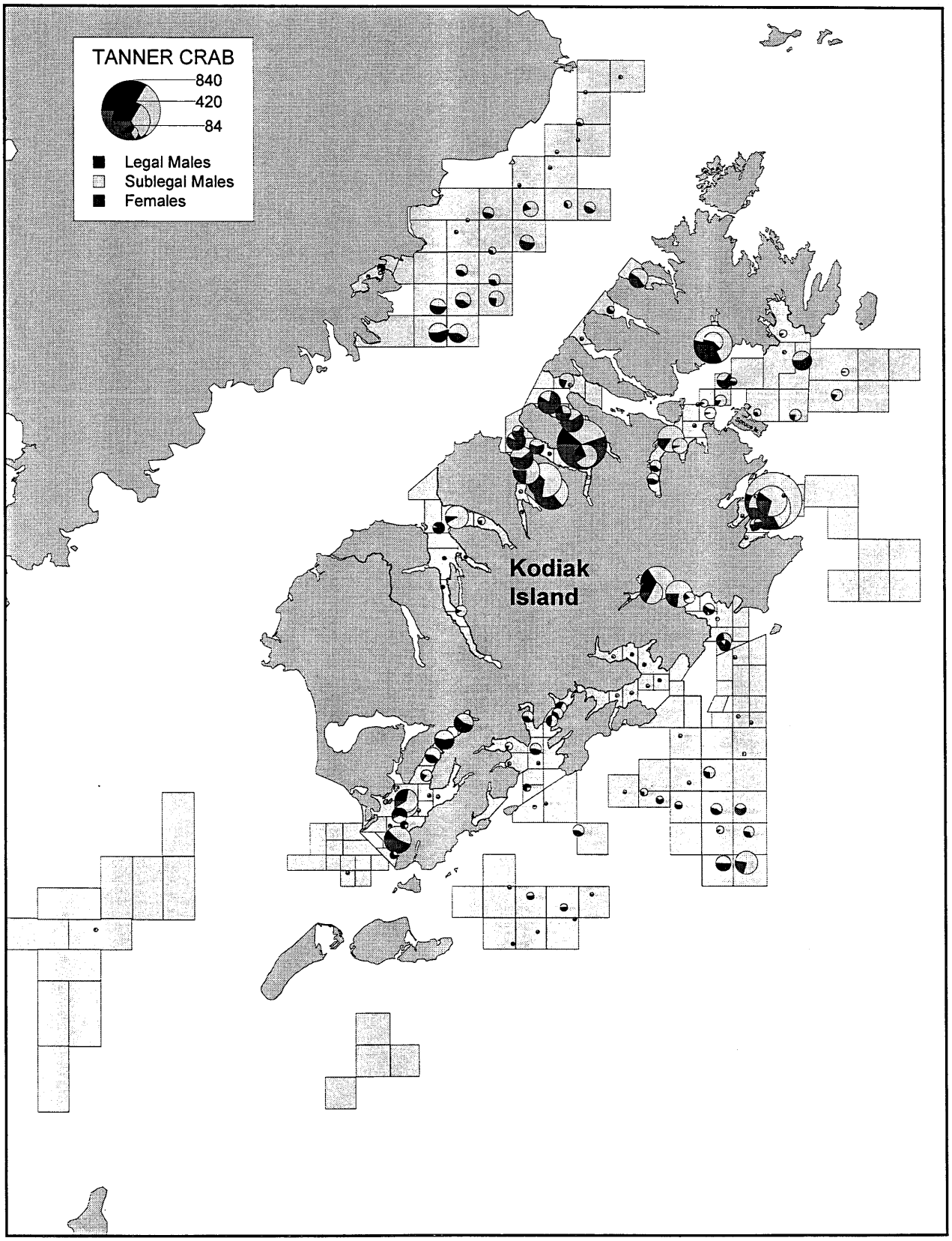


Figure 3. The number of Tanner crab per kilometer towed from the 1997 Kodiak trawl survey.

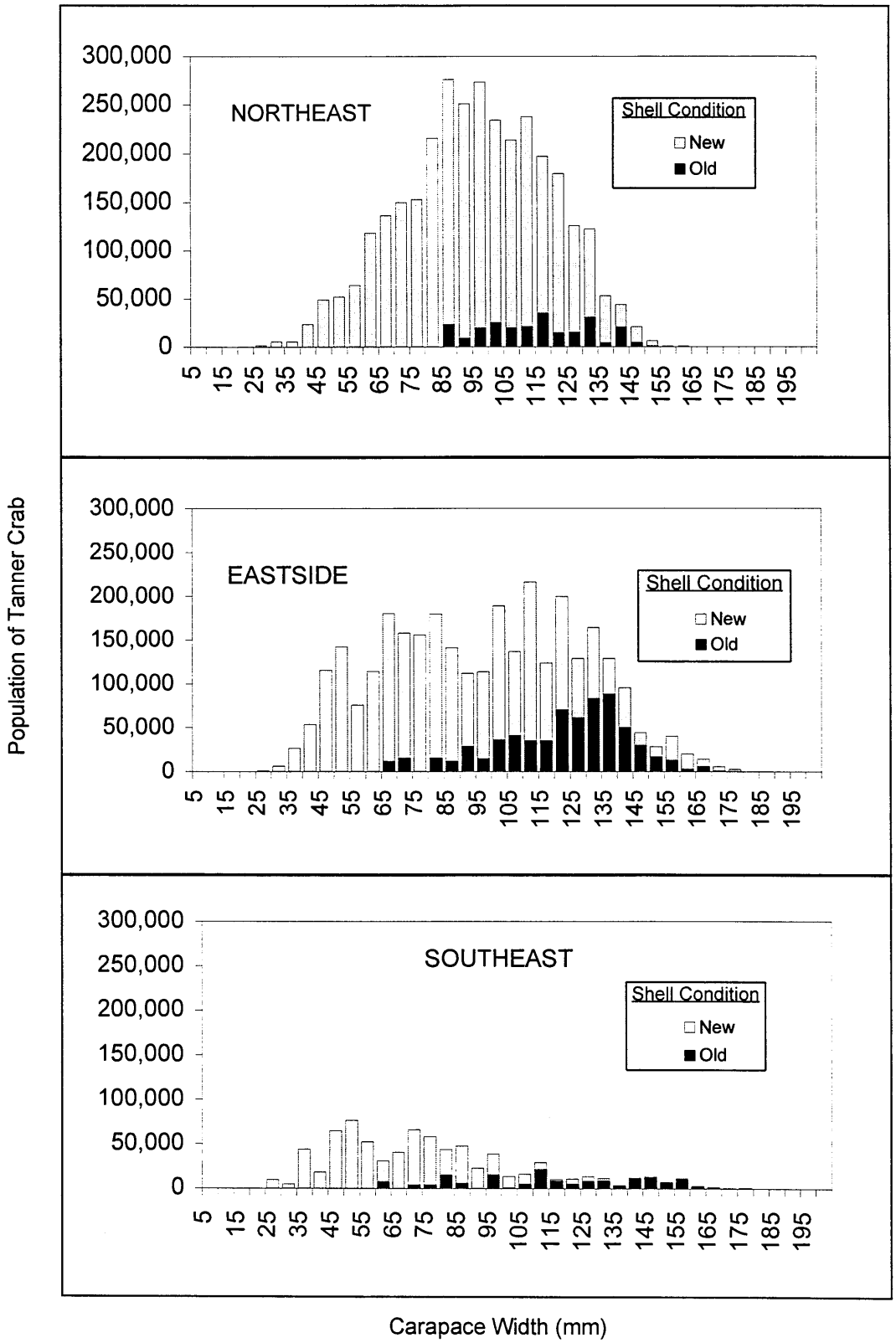


Figure 4. Carapace width frequency by shell condition of the estimated population of male Tanner crab from the Northeast, Eastside and Southeast Sections of the Kodiak District taken during the 1997 survey.

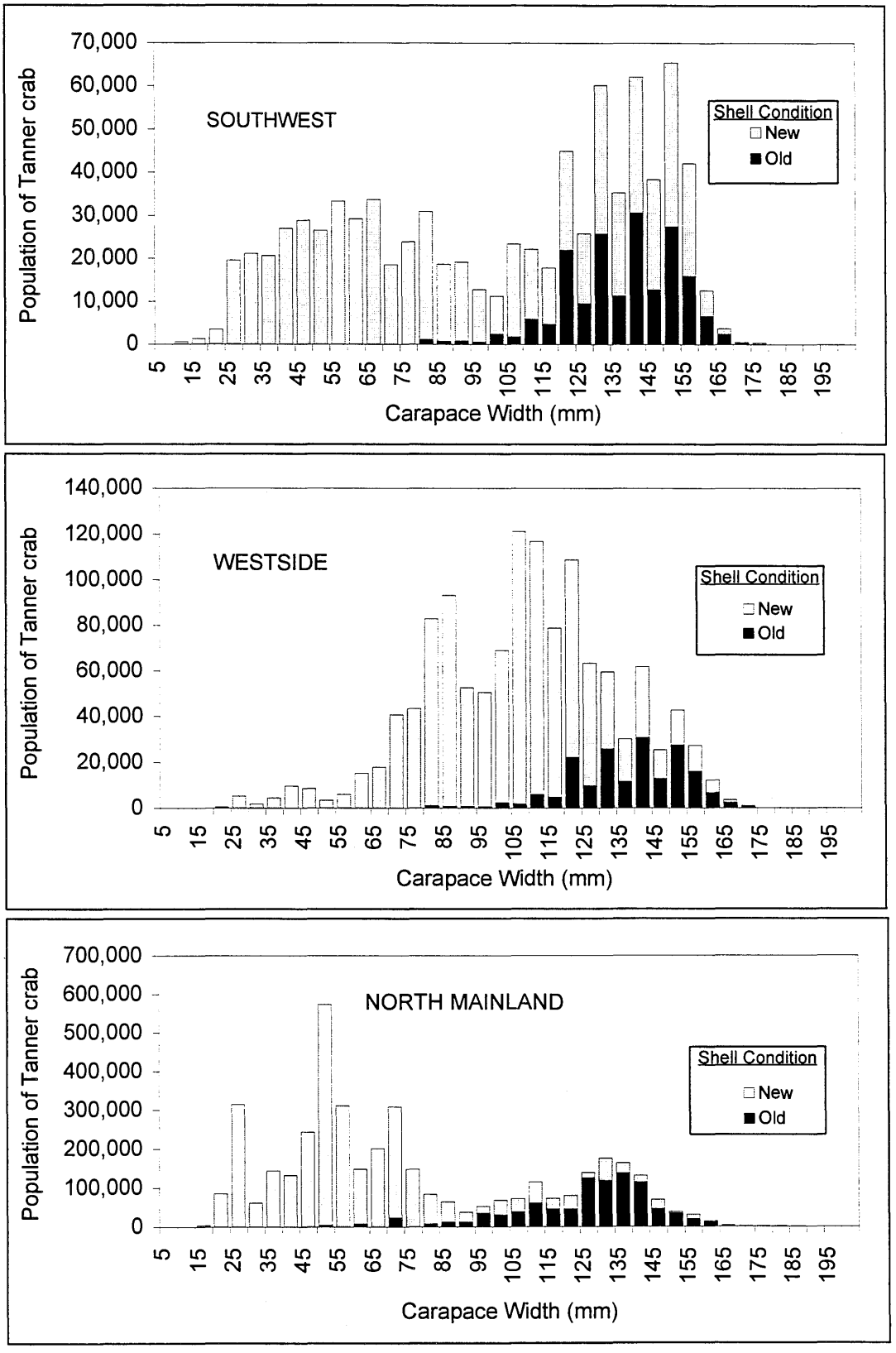


Figure 5. Carapace width frequency by shell condition of the estimated population of male Tanner crab from the Southwest, Westside and North Mainland Sections of the Kodiak District taken during the 1997 trawl survey.

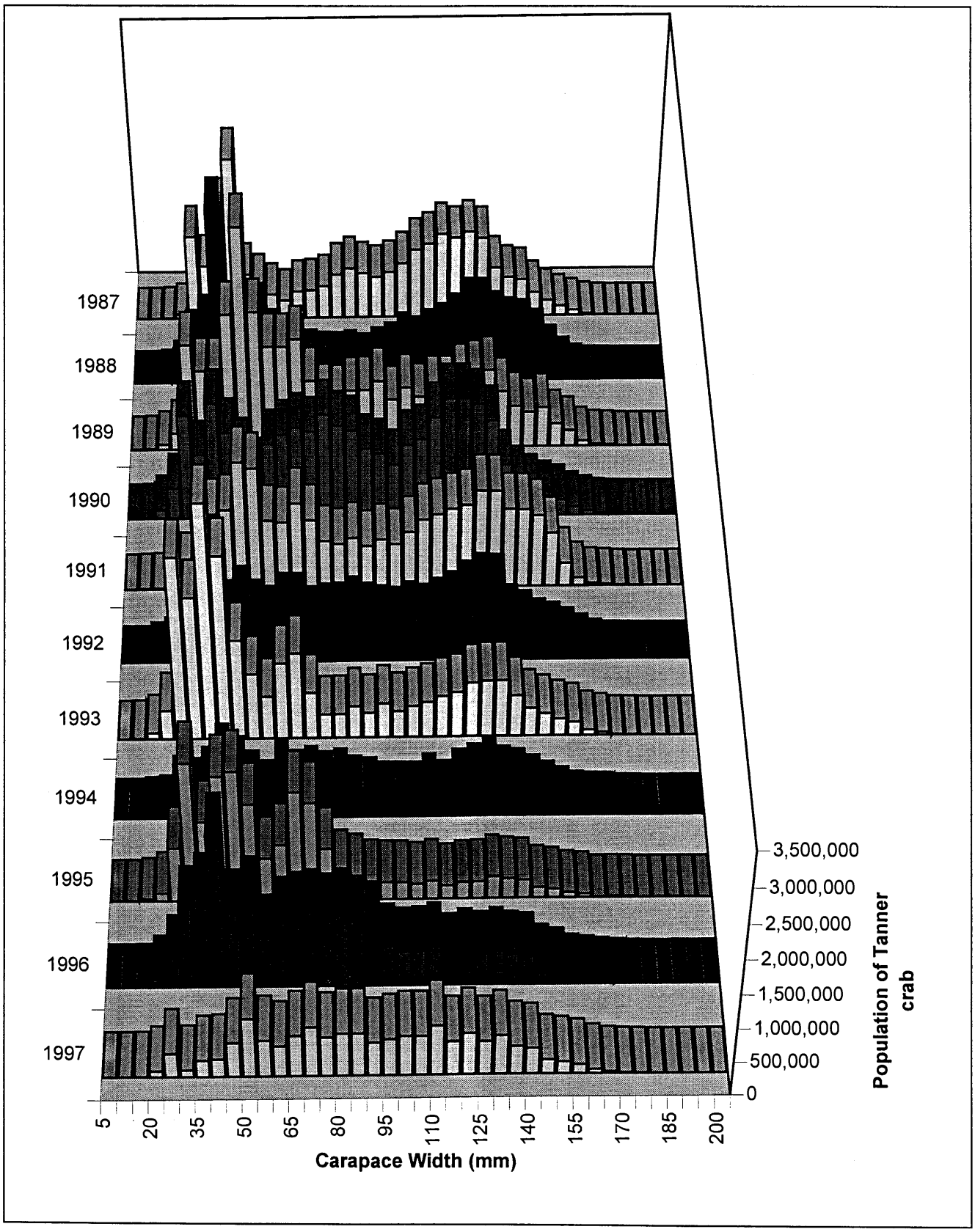
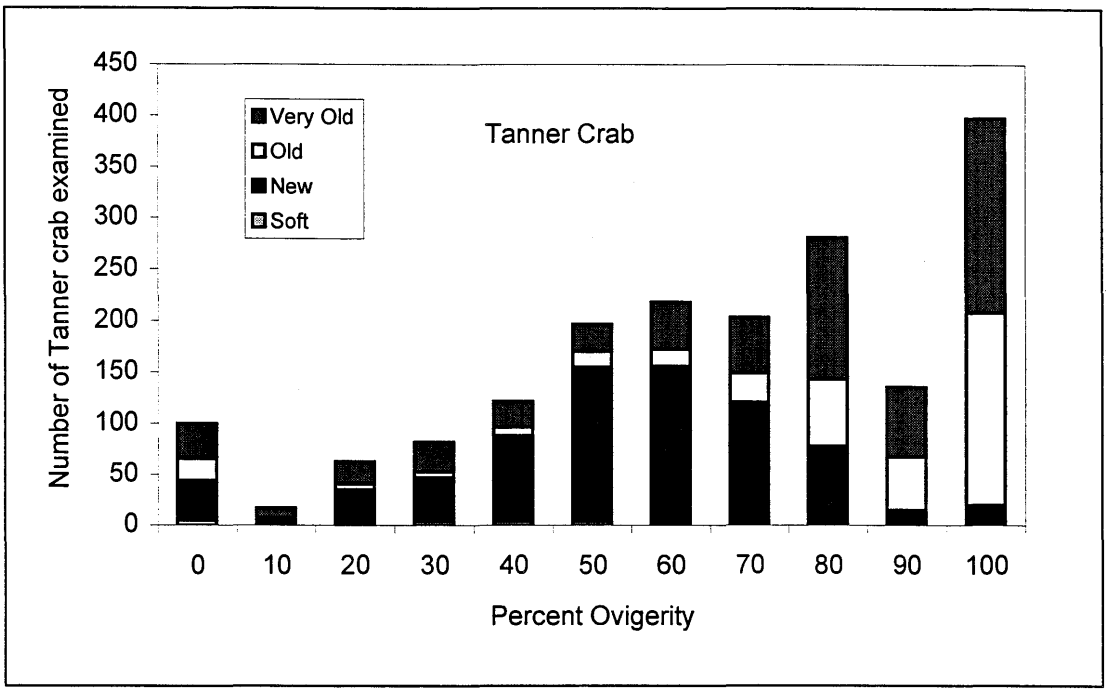


Figure 6. Population of male Tanner crab by carapace width from the Kodiak District 1987-1997



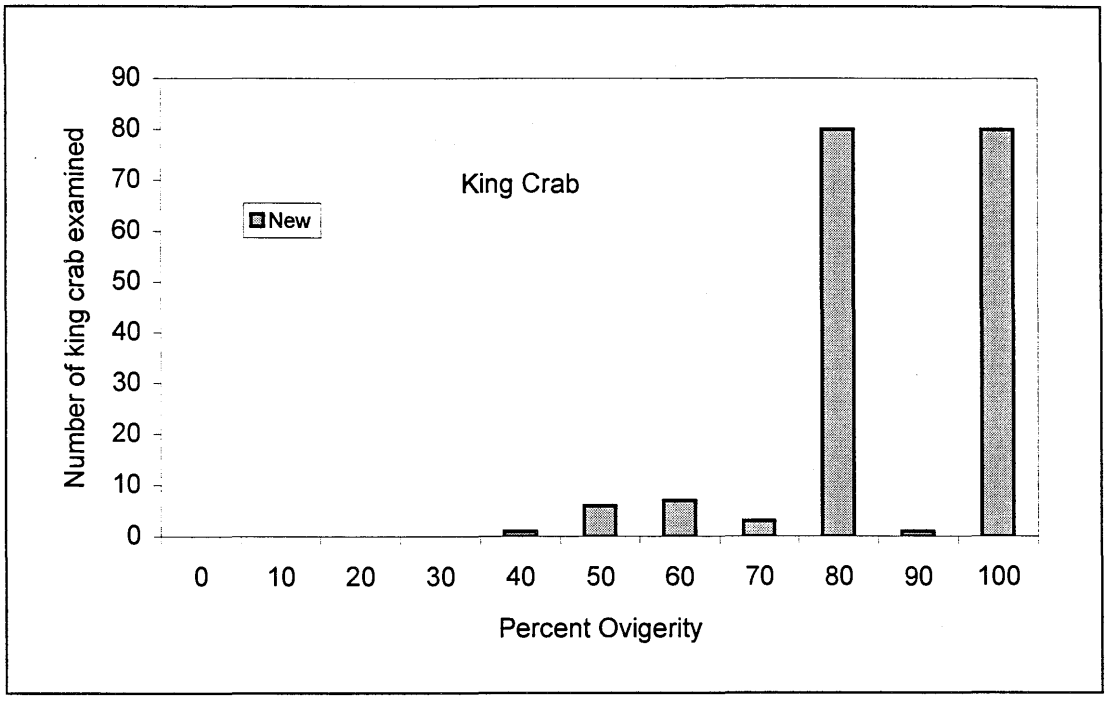


Figure 7. Percent ovigerity by shell condition of king and Tanner crab captured during the Kodiak trawl survey, 1997.

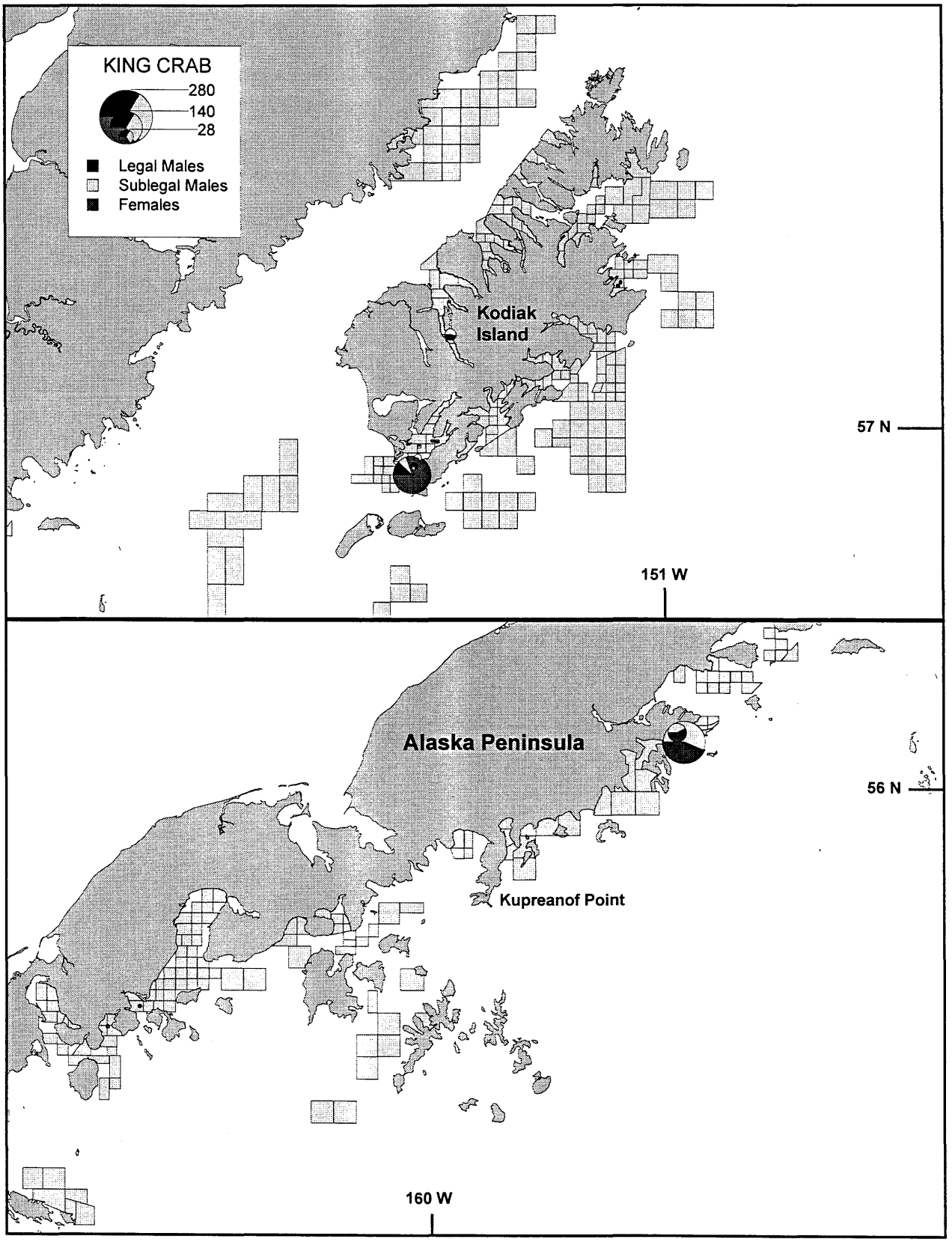


Figure 8. The number of king crab per kilometer towed from the 1997 Kodiak and Alaska Peninsula trawl survey.

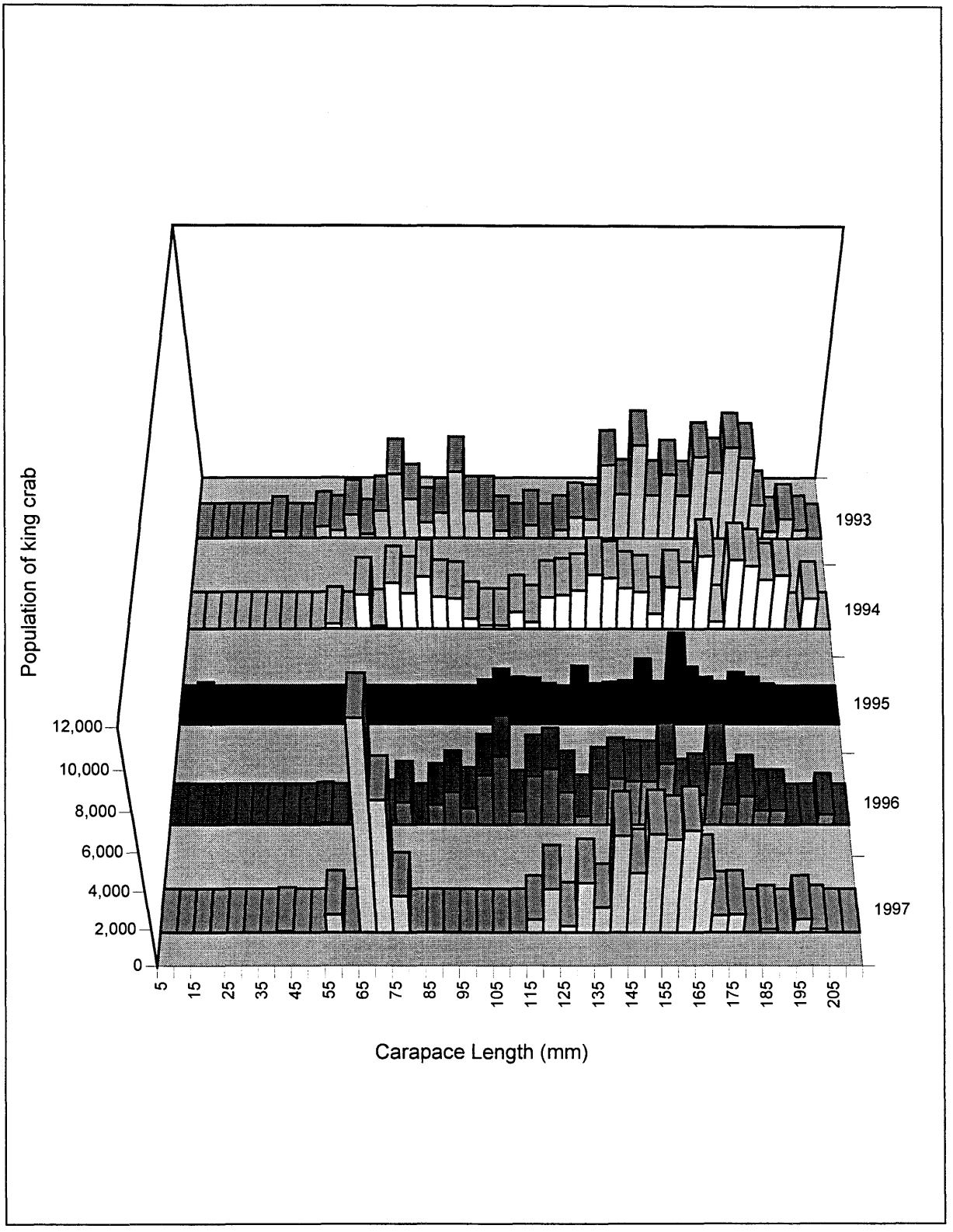


Figure 9. Male king crab population by carapace length from trawl surveys of the Kodiak District, 1993-1997.

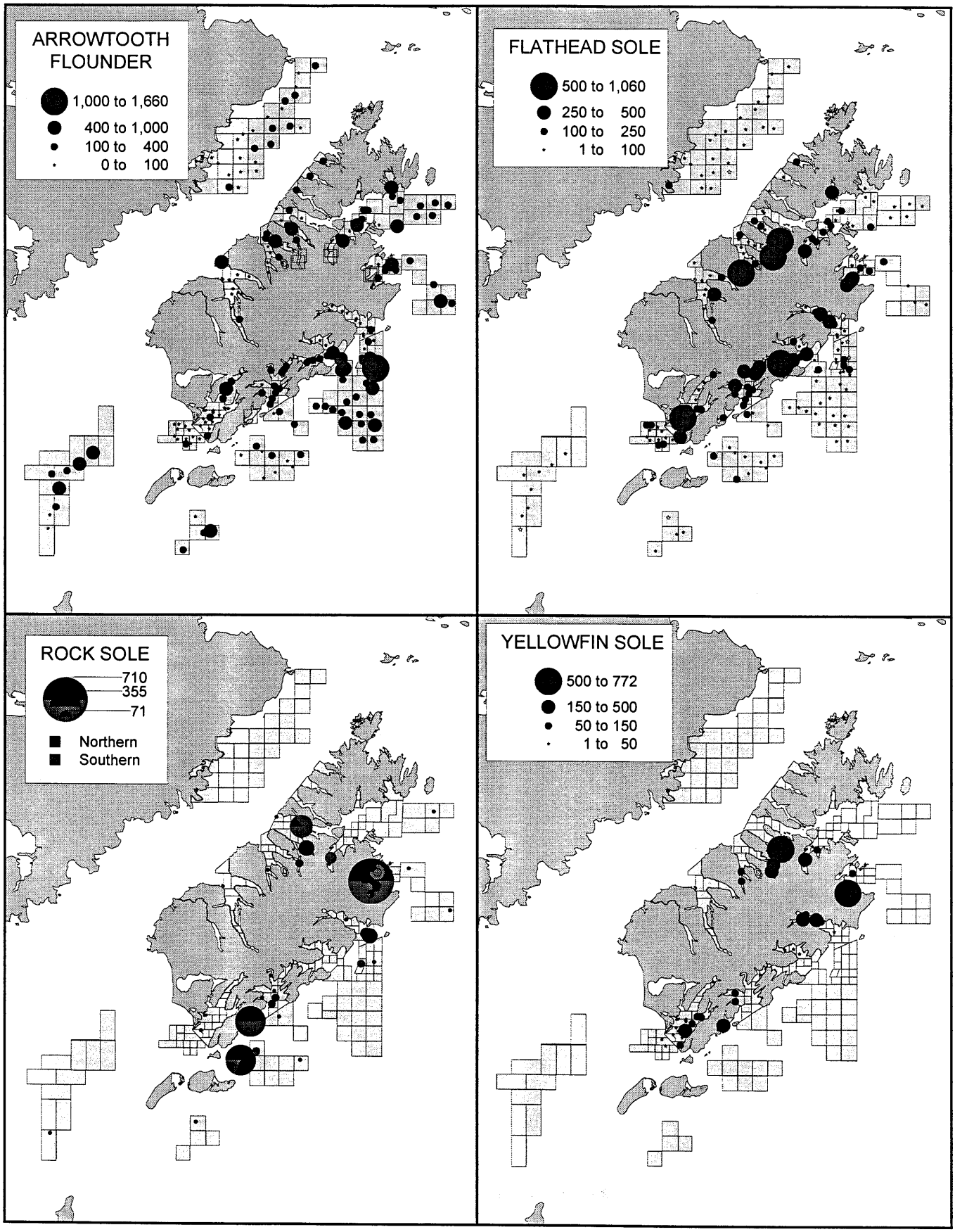


Figure 10. Catch in kilograms per kilometer of arrowtooth flounder, flathead sole, yellowfin sole and rock sole from the 1997 Kodiak trawl survey.

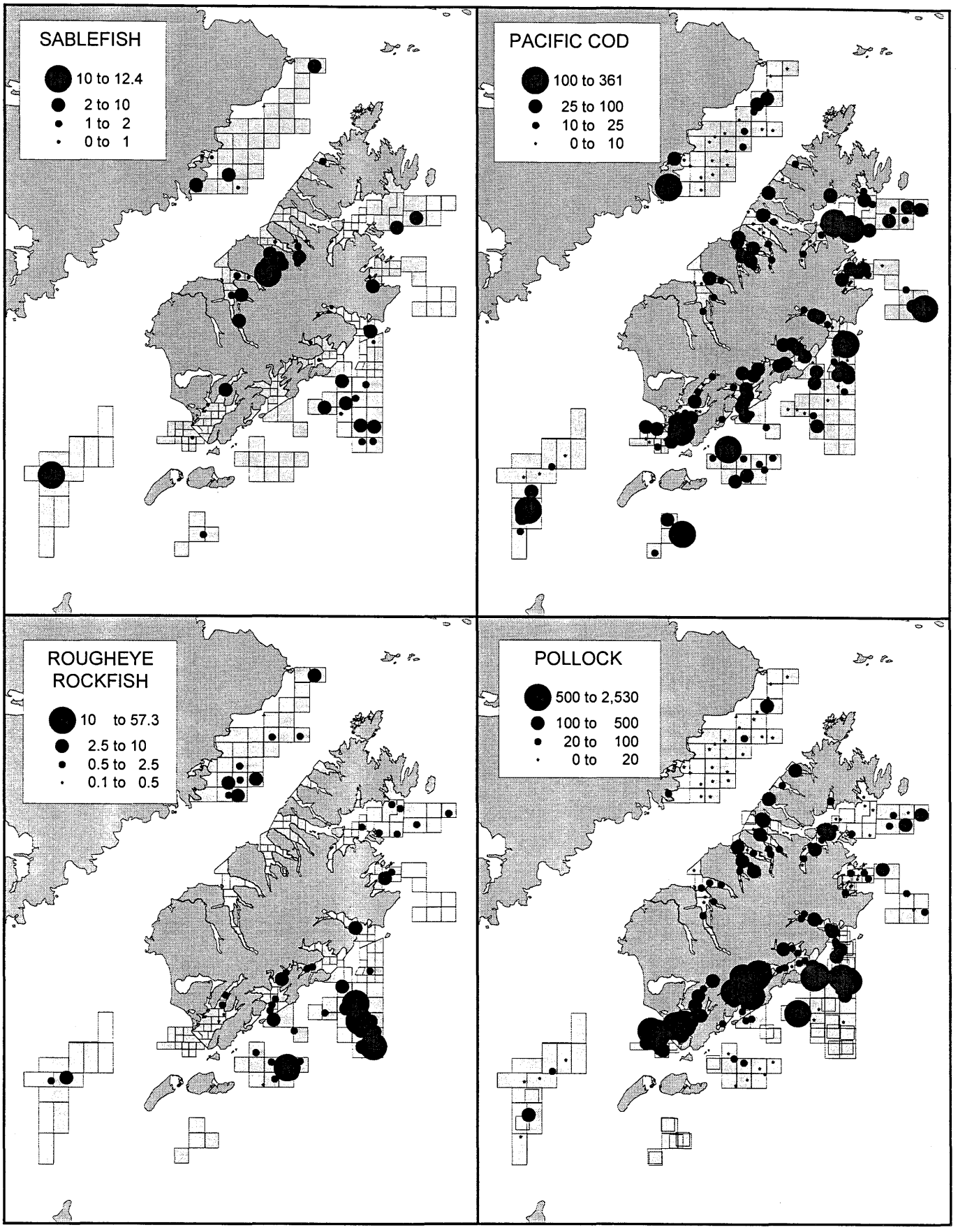


Figure 11. Catch in kilograms per kilometer of sablefish, Pacific cod, pollock, and rougheye rockfish from the 1997 Kodiak trawl survey.

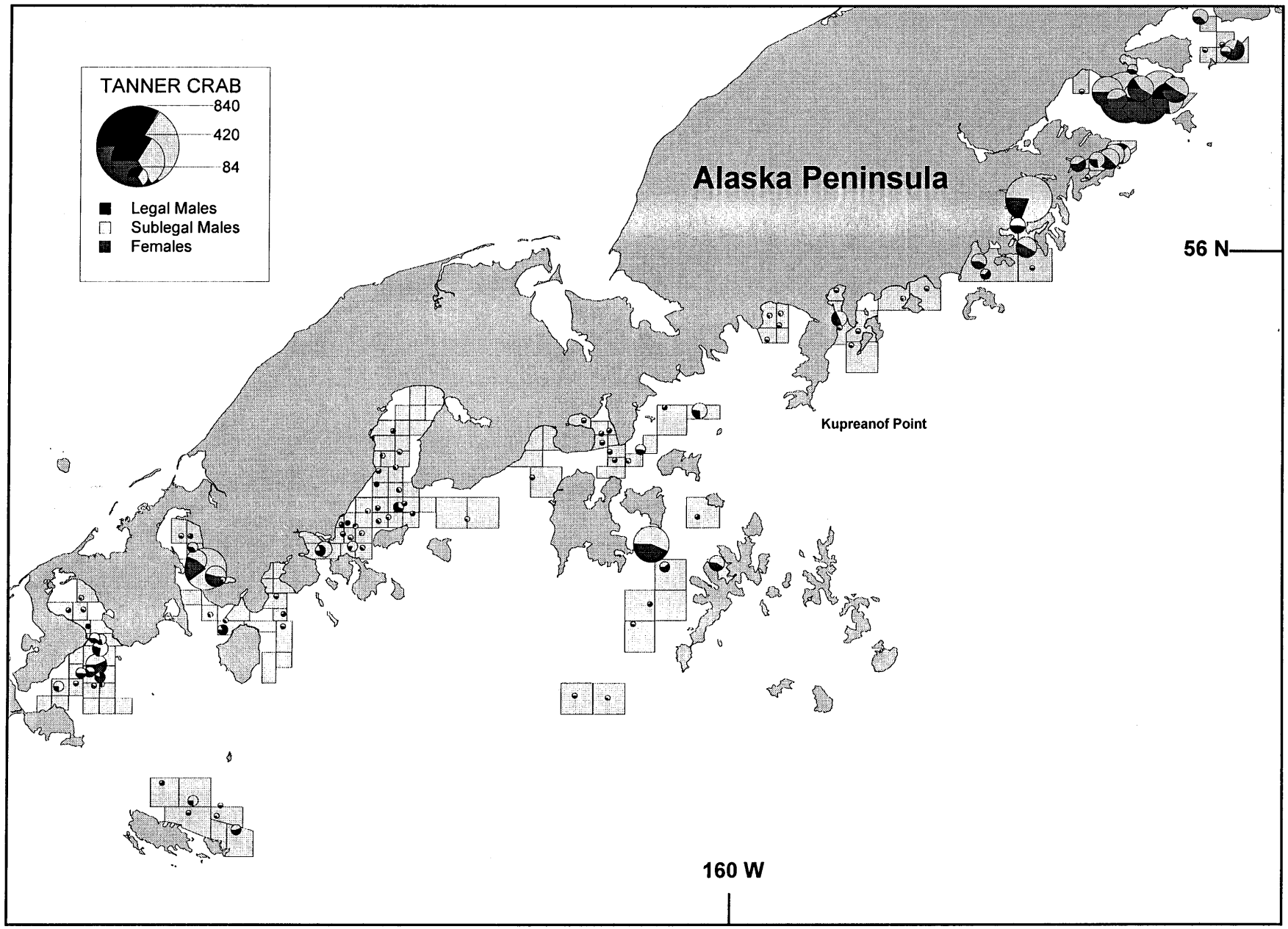


Figure 12. The number of Tanner crab per kilometer towed from the 1997 Alaska Peninsula trawl survey.

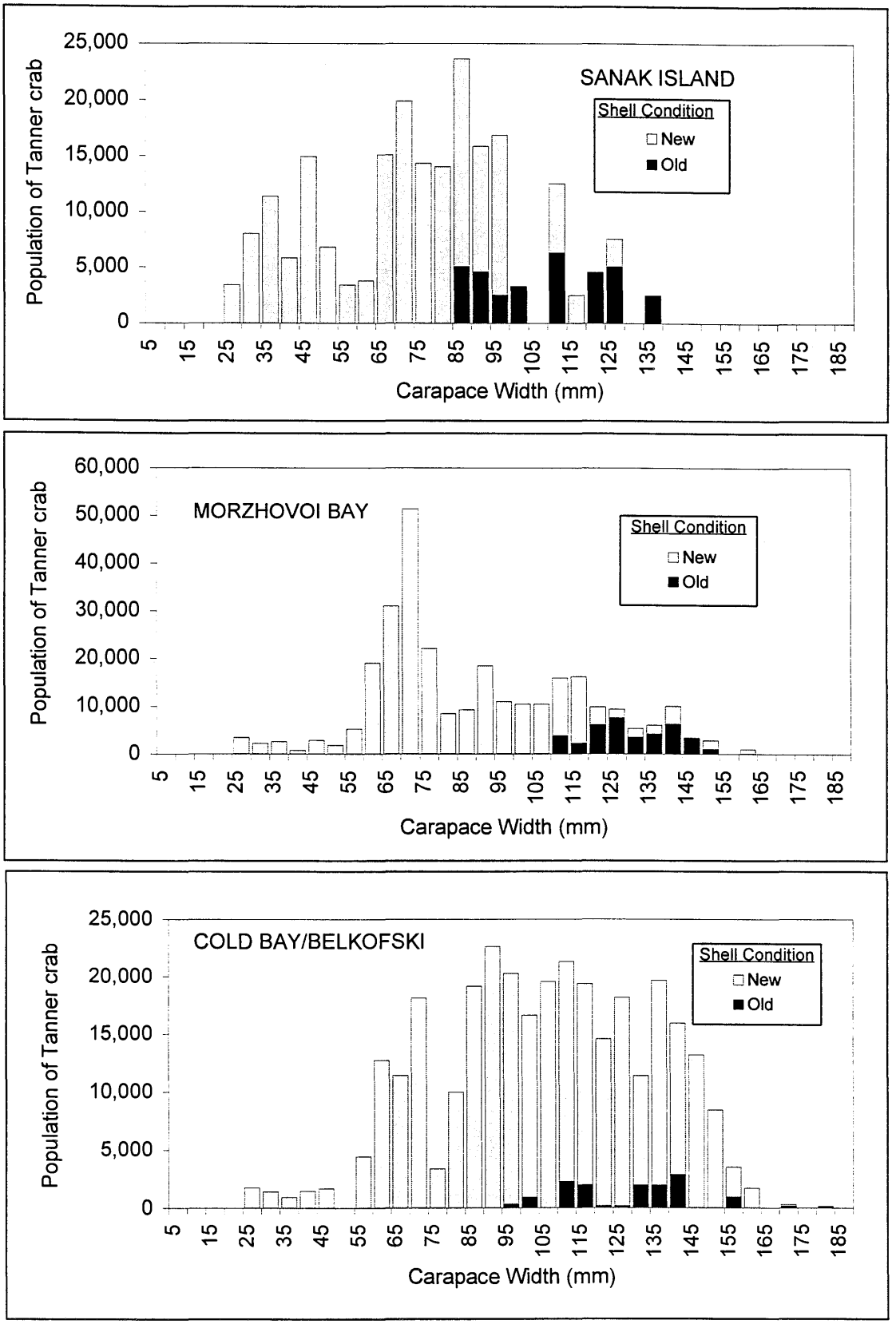


Figure 13. Carapace width frequency by shell condition of the estimated population of male Tanner crab from Sanak Island, Morzhovoi Bay, and Cold Bay/Belkofski Bay, from the South Peninsula trawl survey, 1997.

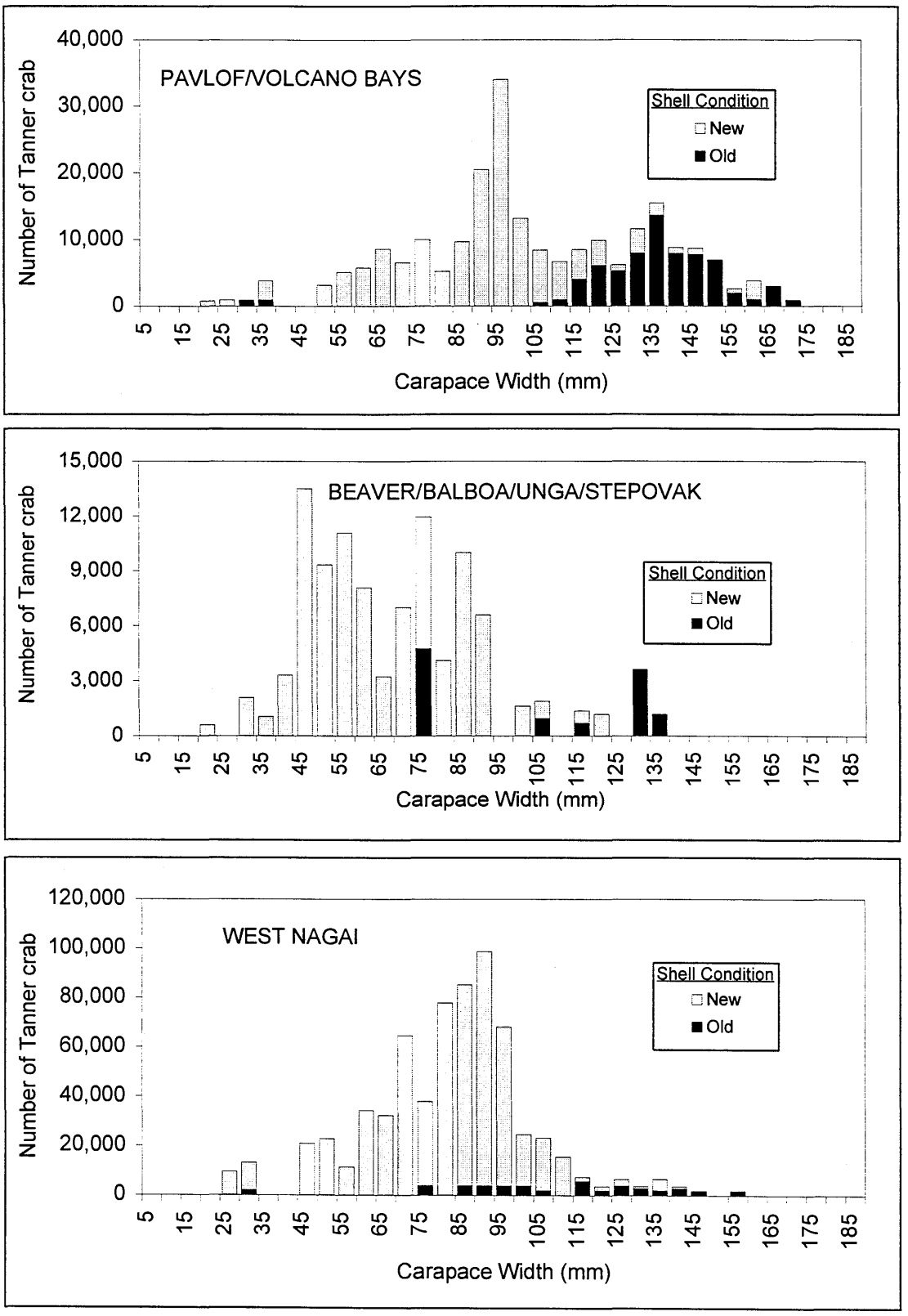


Figure 14. Carapace width frequency by shell condition of the estimated population of male Tanner crab from Pavlof/Volcano, Beaver/Balboa/Unga/Stepovak and West Nagai, from the South Peninsula trawl survey, 1997.

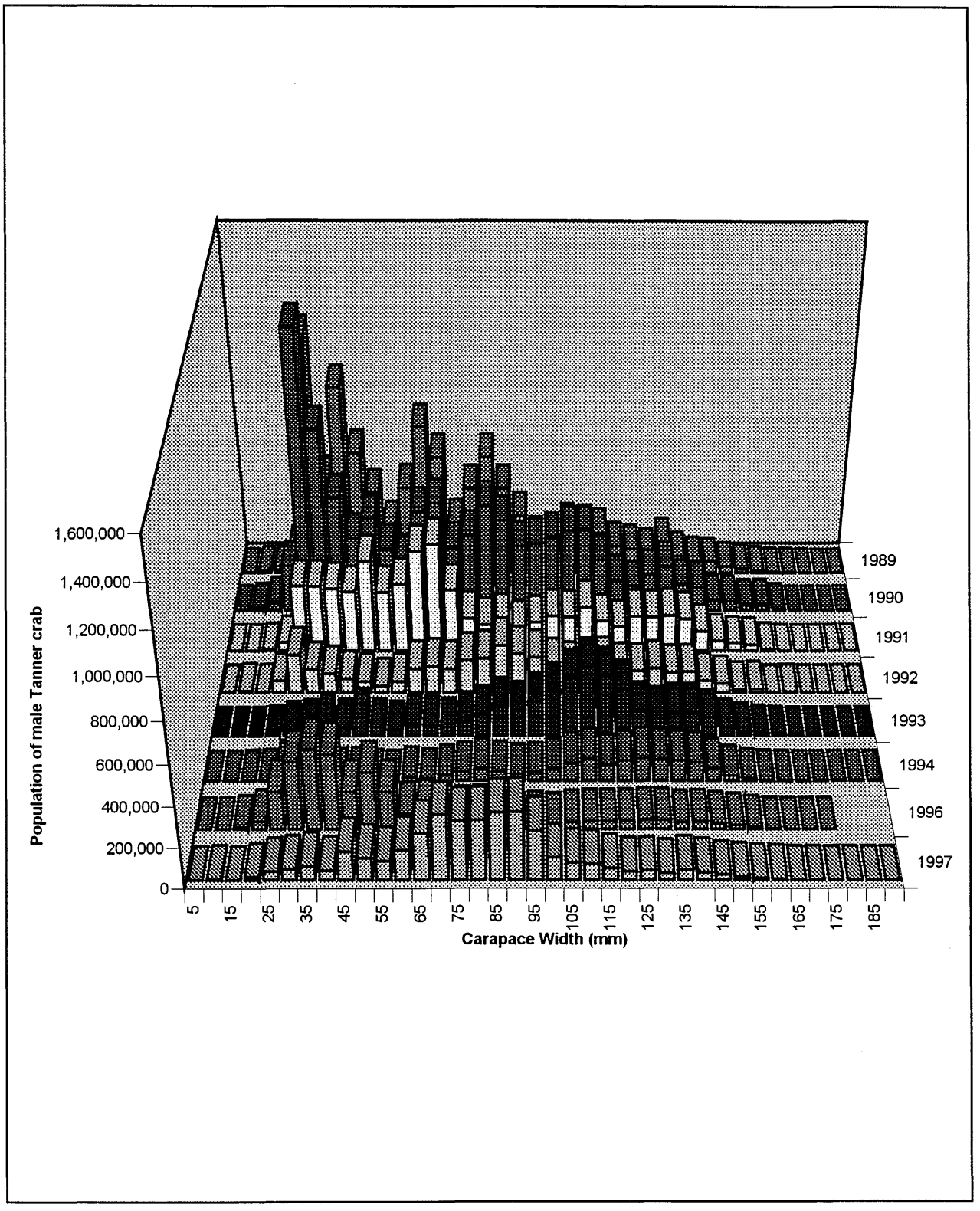


Figure 15. Population of male Tanner crab by carapace width from the South Peninsula District, 1989-1997.

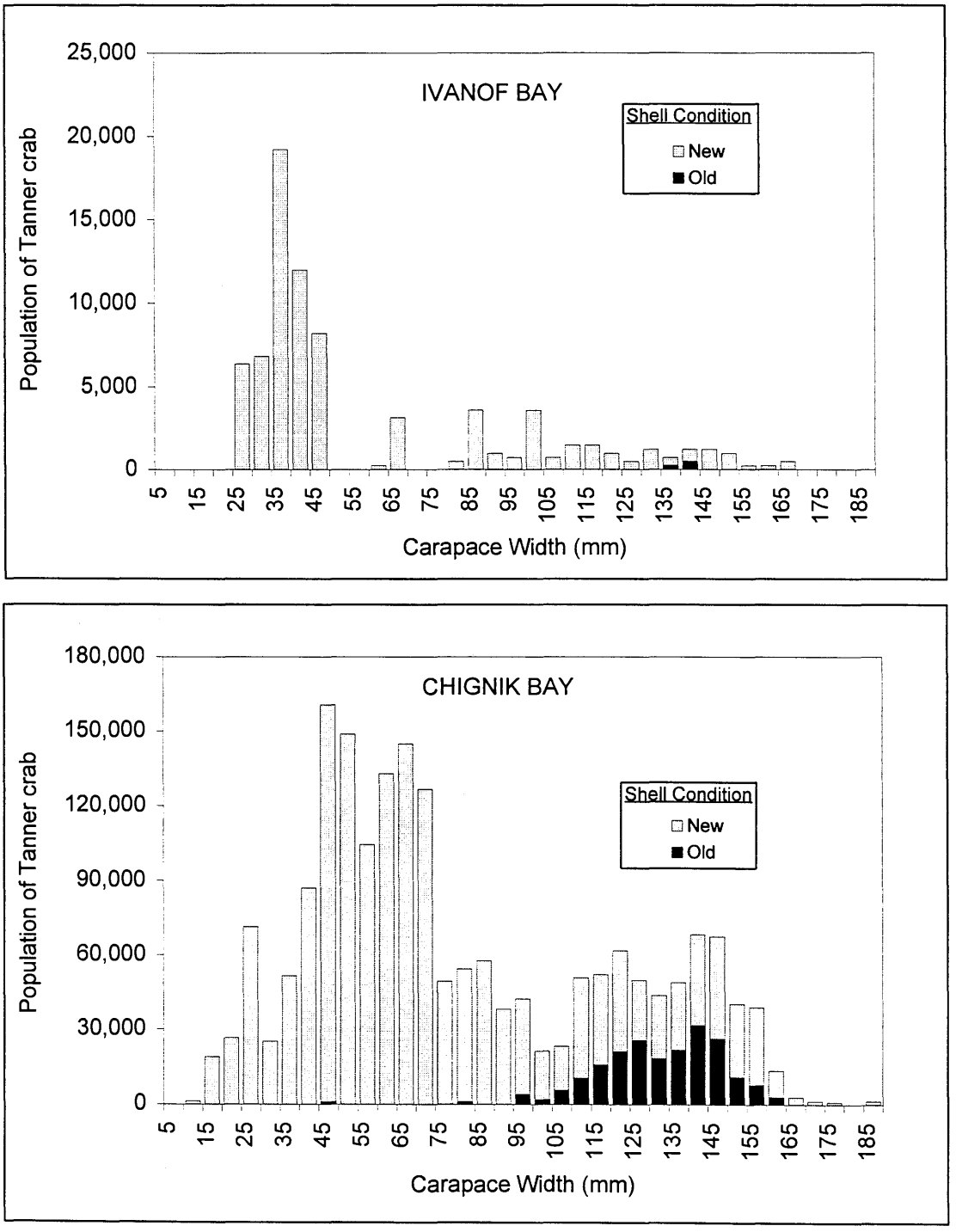
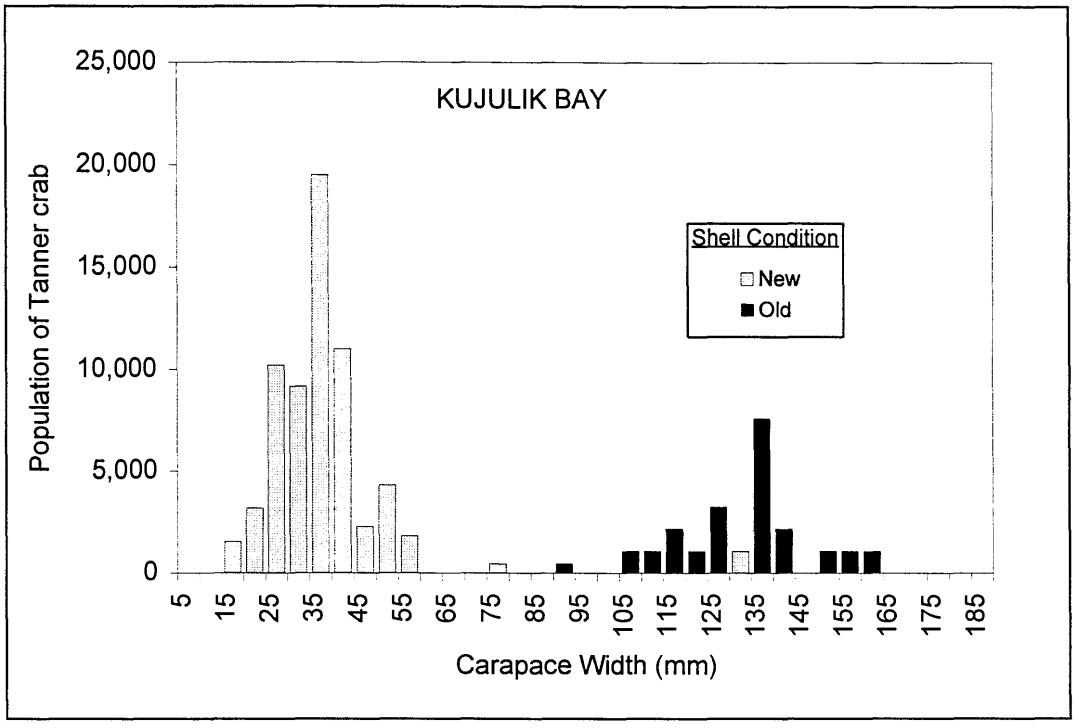


Figure 16. Carapace width frequency by shell condition of the estimated population of male Tanner crab from Ivanof and Chignik Bays taken during the Chignik trawl survey, 1997.



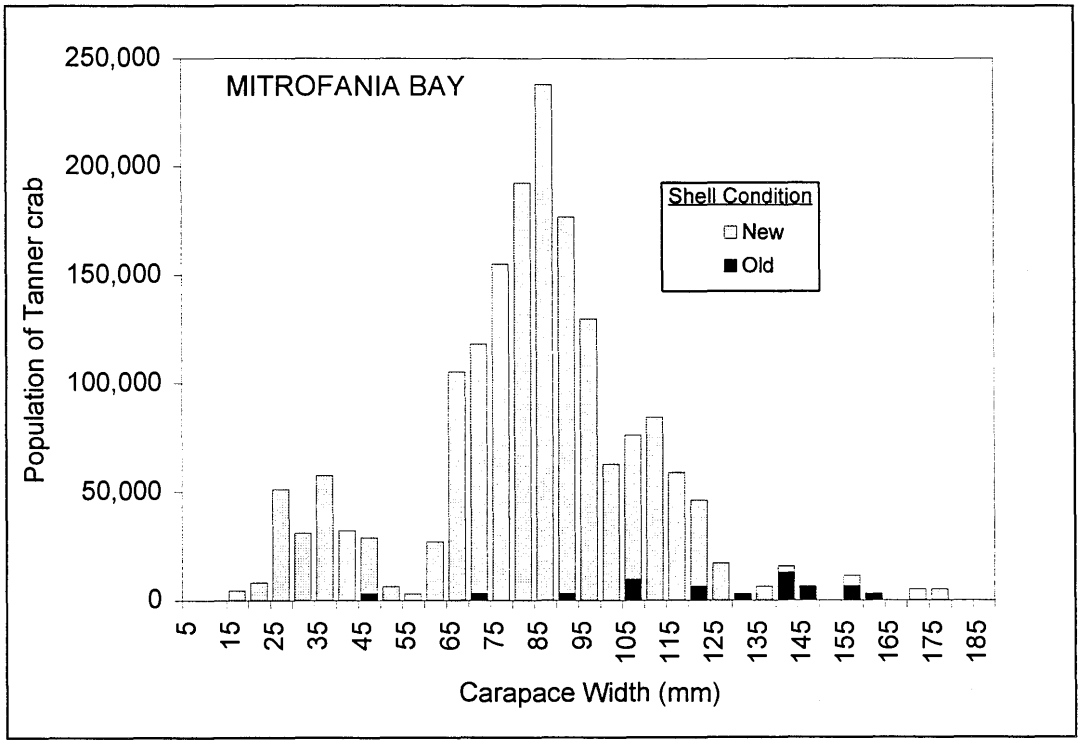


Figure 17. Carapace width frequency by shell condition of the estimated population of male Tanner crab from Kujulik and Mitrofania Bays taken during the South Peninsula trawl survey, 1997.

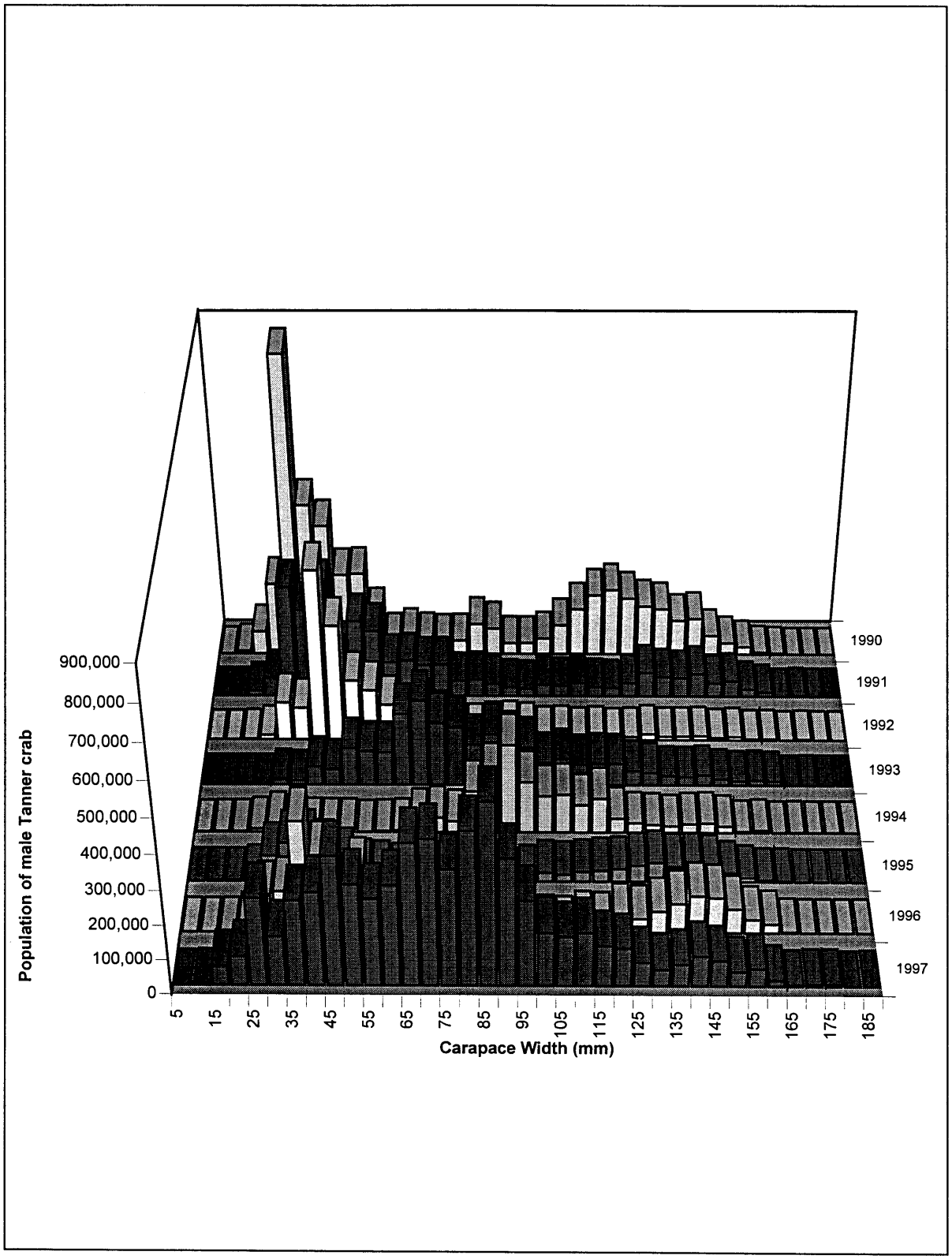
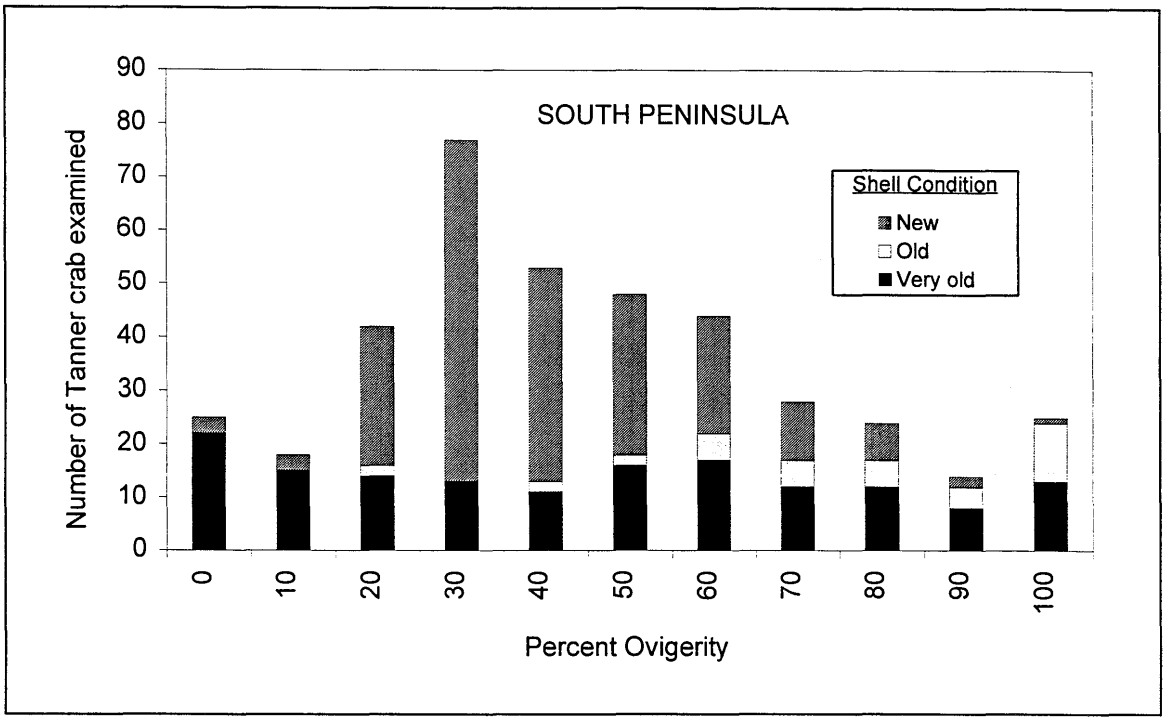


Figure 18. Population of male Tanner crab by carapace width from the Chignik District, 1990-1997.



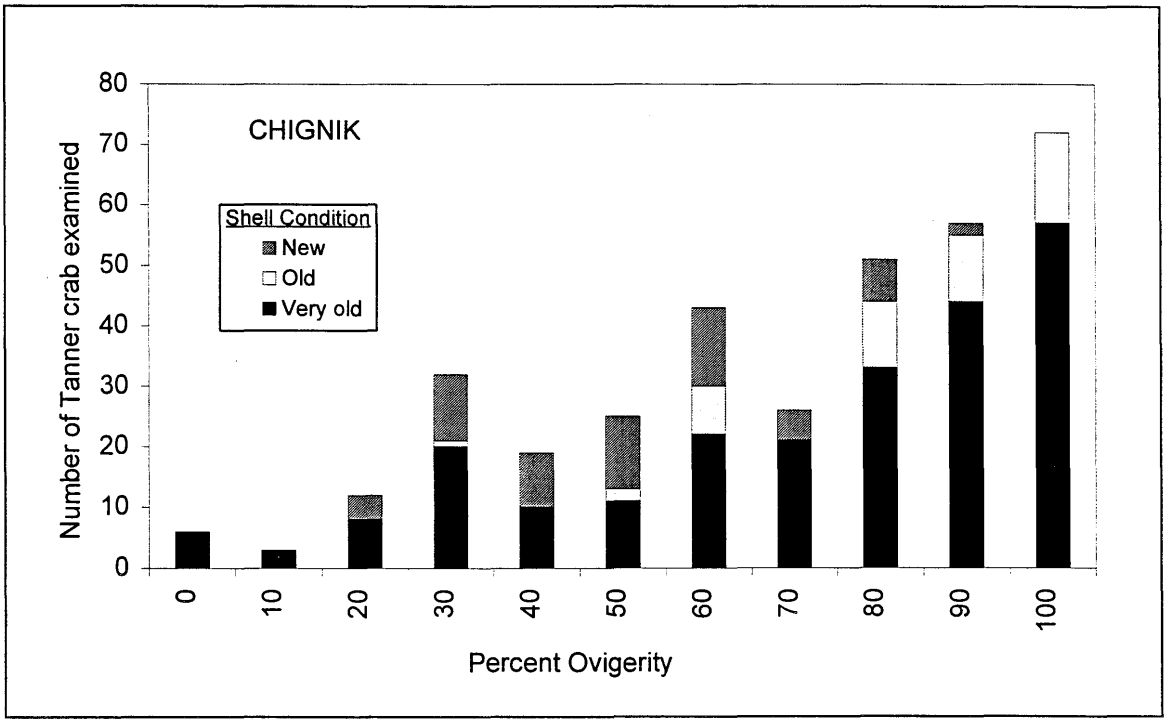


Figure 19. Percent ovigerity by shell condition of Tanner crab captured during the South Peninsula trawl survey, 1997.

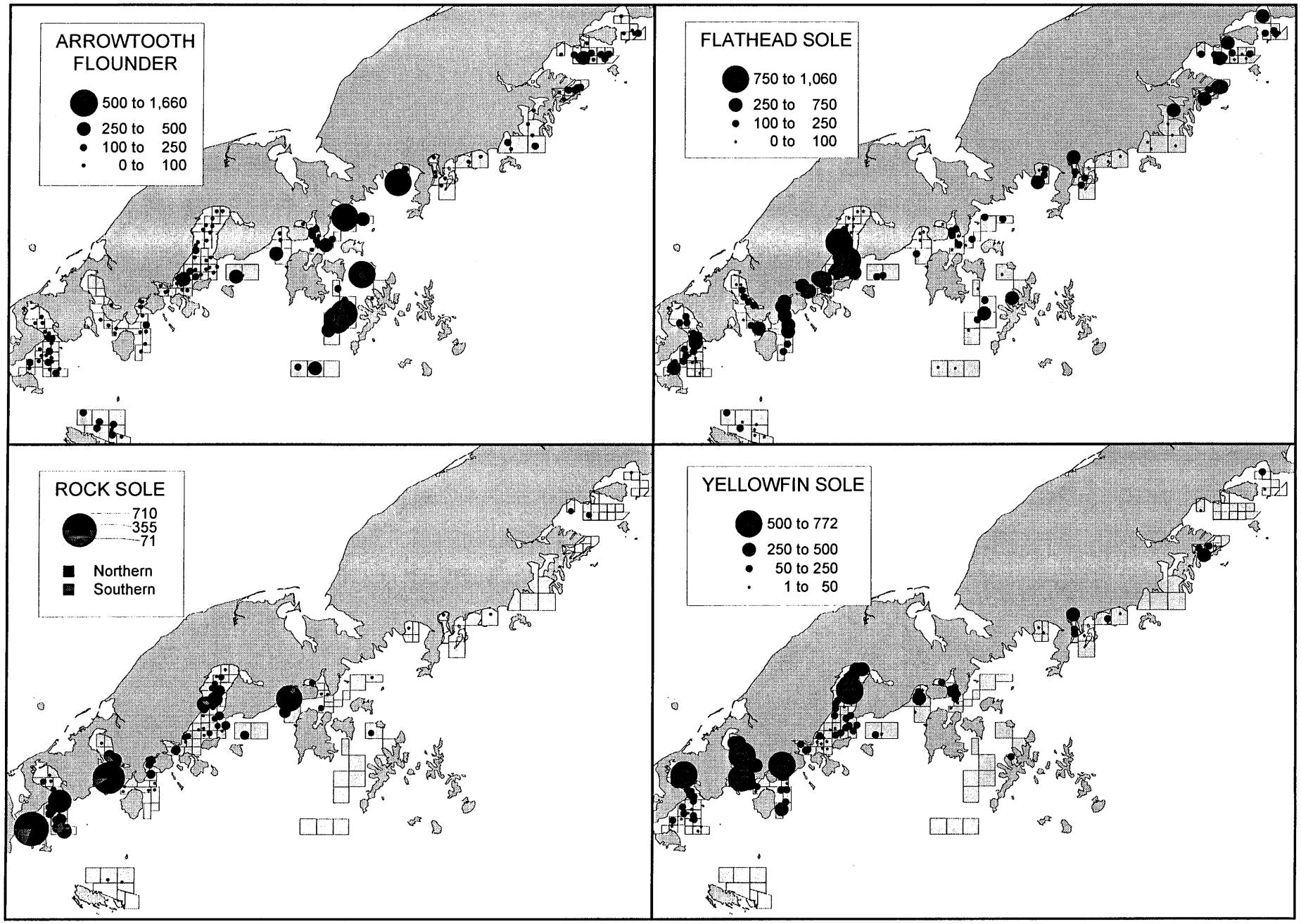


Figure 20. Catch in kilograms per kilometer of arrowtooth flounder, flathead sole, yellowfin sole and rock sole from the 1997 Alaska Peninsula trawl survey.

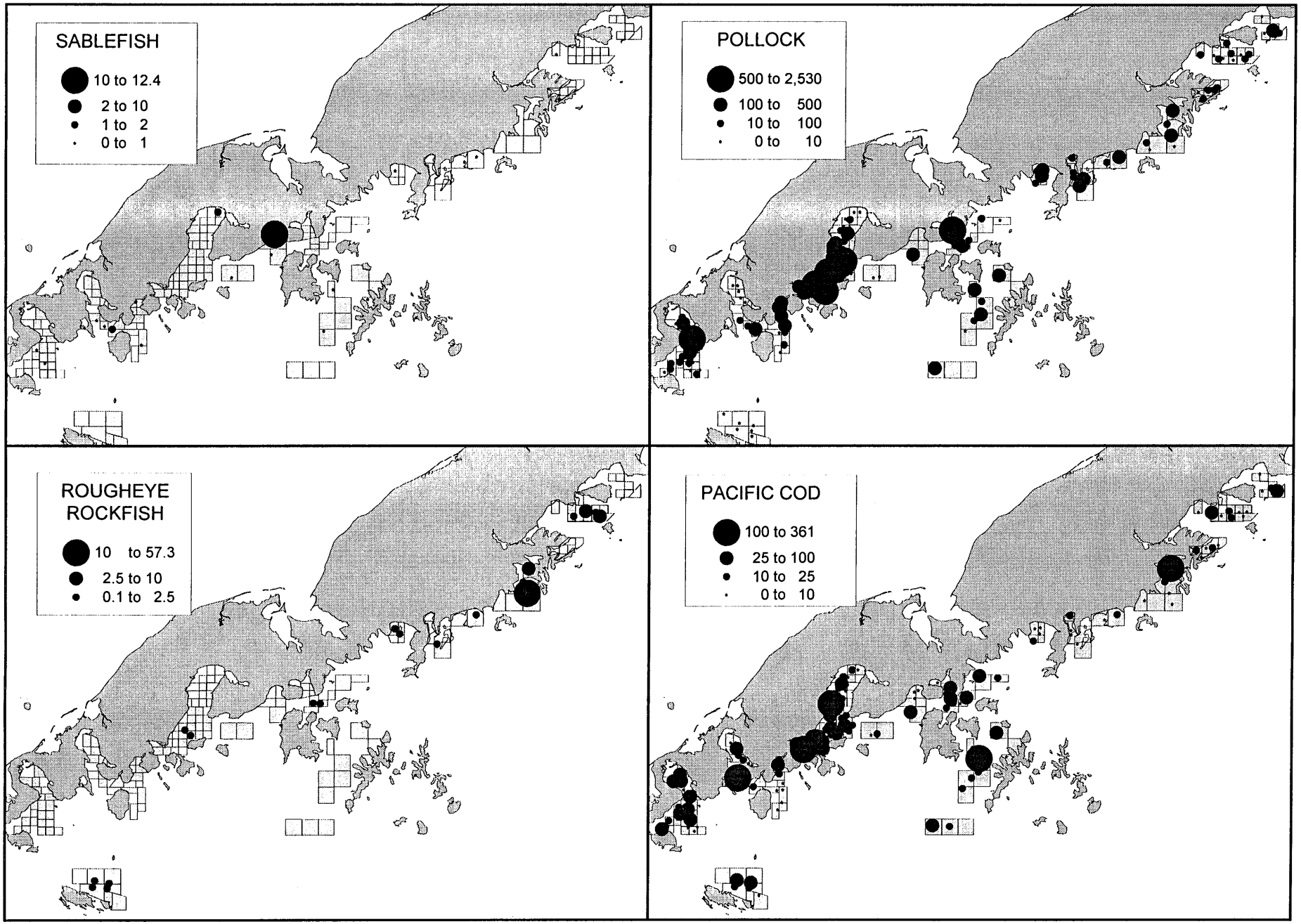


Figure 21. Catch in kilograms per kilometer of sablefish, pollock, Pacific cod and rougheye rockfish from the 1997 Alaska Peninsula trawl survey.

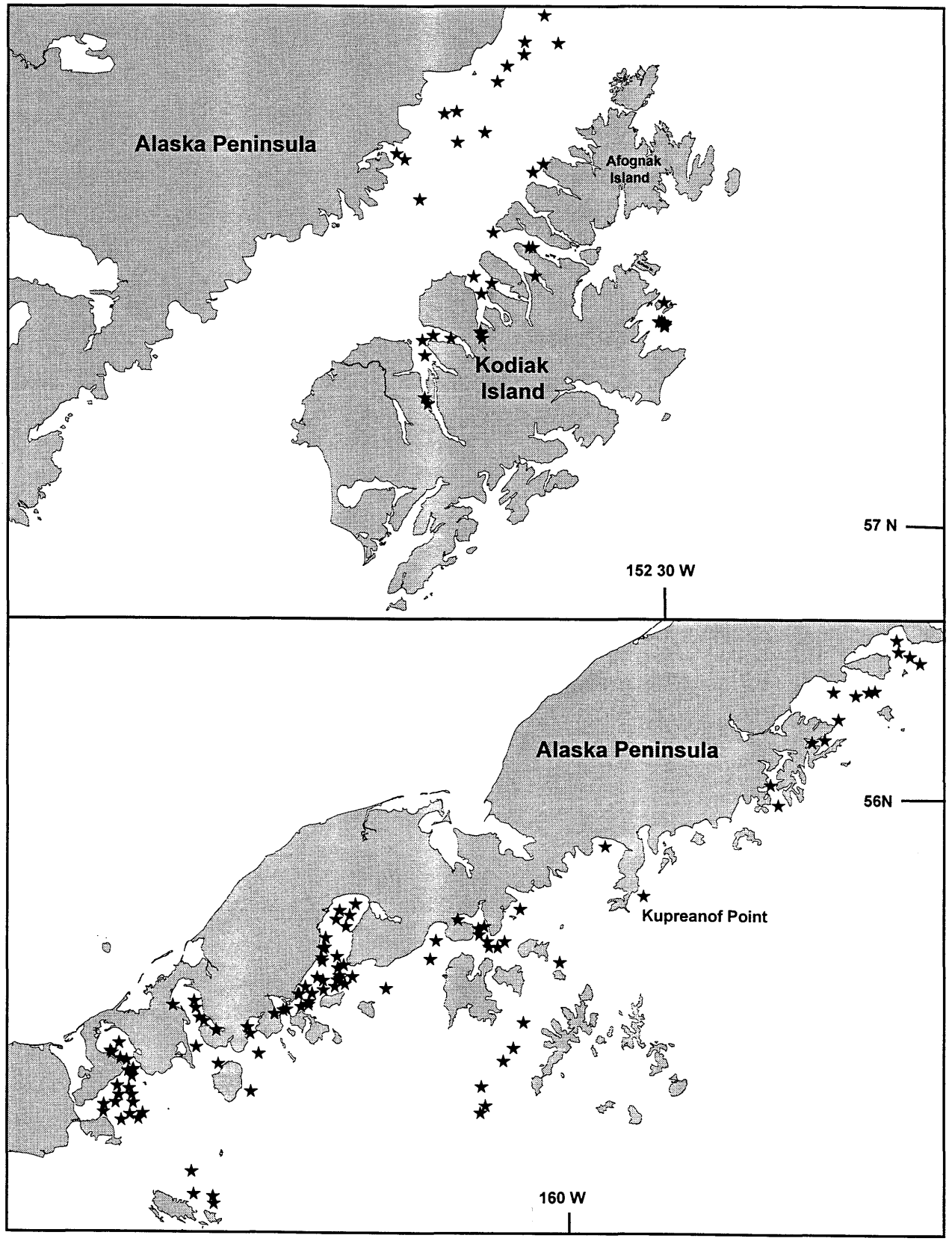


Figure 22. Tagged Pacific cod release locations from the 1997 Kodiak and Alaska Peninsula trawl surveys.

APPENDIX

Appendix A. Explanation of terms and acronyms.

The following definitions were developed for characterizing Tanner crab, *Chionoecetes bairdi.*

Softshell	Soft exoskeleton which are newly molted; exoskeletons are thin and flexible and are not calcified; clean shell with no abrasions or scratches; the dactylus and spines are sharp with little or no wear present.
Newshell	Hard exoskeletal animal; the dorsal side of the carapace brownish-red; no apparent scratching on ventral side; epifauna absent or limited; and dactyli, pterygostomial and branchial spines sharp.
Oldshell	An apparent skip molt; carapace hard and brownish; thoracic sternum and ventral sides of legs with numerous scratches and abrasions; dactyli, pterygostomial and branchial spines worn; epifauna may be present.
Very Oldshell	An obvious skip molt; carapace hard, dark brown to blackish; thoracic sternum and ventral side of legs with multiple scratches and abrasions; underside of legs usually dark yellow-brown; dactyli, pterygostomial and branchial spines heavily worn; epifauna usually present: e.g., large barnacles.
Molting	Physiological events immediately preceding shedding the old shell and the actual extraction from the old shell itself.
Skip Molt	A crab which has retained its exoskeleton (not molted) for more than 12 months.
Crab Measurements	Crab measurements are made in millimeters with a vernier calipers and refer to carapace width (CW) inside the spines, however legal size is measured outside the spines.
Prerecruit IV	Male Tanner crab less than or equal to 69 mm in carapace width and four or more molts from attaining legal size. Note that this group includes prerecruit IV, V and VI and younger crabs but are referred to a prerecruit IV's herein.
Prerecruit III	Male Tanner crab 70-91 mm in carapace width and three molts from attaining legal size.
Prerecruit II	Male Tanner crab 92-114 mm in carapace width and two molts from attaining legal size.

-Continued-

Prerecruit I	Male Tanner crab 115-139 mm in carapace width and one molt from attaining legal size.
Recruit Legals	Newshell male Tanner crab 140-164 mm in carapace width, recruited to legal size in year of capture.
Postrecruit Legals	Male crab that have been legal size at least one year: defined as oldshells and very oldshells 140-164 mm and all males >164 mm in carapace width.
Total Legals	All male Tanner crab >139 mm in carapace width outside the spines.
Females	Identified as adult or immature by visual observation of abdominal flap.
Primiparous female	A new shell ovigerous female.

The following definitions were developed for characterizing king crab, *Paralithodes camtschaticus*.

Carapace Length	The straight line distance across the carapace from the posterior margin of the right eye orbit to the medial-posterior margin of the carapace.
Legal Size	The Board of Fisheries sets the legal size of king crab. In the Kodiak Management Area, legal size is set at seven inches (178 mm) or greater in width of shell. In the Alaska Peninsula and Dutch Harbor Management Areas, legal size is set at 6 1/2 inches (165 mm). Measurements are made including the spines, as the straight line distance across the carapace at a right angle to a line midway between the eyes to the midpoint of the posterior portion of the carapace.
Juvenile Females	Nonovigerous females with carapace lengths of less than 116 mm.
Adult, Mature Females	Ovigerous females and nonovigerous females with carapace lengths greater than 115 mm.
Adult, Mature Males	Male king crabs with carapace lengths greater than 130 mm.
Newshell Males	Individuals that molted during the last molting season (generally January through April).

-Continued-

Oldshell Males	(Skipmolts) Individuals that failed to molt during last molting season.
Very Oldshell Males	(Double Skipmolts) Individuals that failed to molt during the last two or more molting seasons.
Prerecruit IV	Individuals estimated to be 4 or more years from legal size and less than 95 mm in length in the Kodiak Management Area, less than 79 mm in length in the Alaska Peninsula and Dutch Harbor Management Areas.
Prerecruit III	Individuals estimated to be 3 years from legal size and 95-112 mm in length in the Kodiak Management Area, and 79-95 mm in length in the Alaska Peninsula and Dutch Harbor Management Areas.
Prerecruit II	Individuals estimated to be 2 years from legal size and 113-130 mm in length in the Kodiak Management Area, and 96-115 mm in length in the Alaska Peninsula and Dutch Harbor Management Areas.
Prerecruit I	Individuals estimated to be 1 year from legal size which includes all sublegals greater than 130 mm in length in the Kodiak Management Area, and greater than 116 mm in length in the Alaska Peninsula.
Recruits	Newshell males which are legal size and are in their first year of availability to the fishery which includes crabs less than or equal to 164 mm in length in the Kodiak Management Area, and less than or equal to 152 mm in length in the Alaska Peninsula and Dutch Harbor Management Areas.
Postrecruit	Males which are legal size and old shell or very old shell or newshell males which are of greater length than recruit crab.

Appendix B. Fishing log and catch data from the Westward Region Trawl Survey, 1997. Temperatures when available in degrees Celsius.

Haul	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Location	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD
Month/Day/Year	7/3/97	7/3/97	7/3/97	7/3/97	7/3/97	7/3/97	7/4/97	7/4/97	7/4/97	7/4/97	7/4/97	7/4/97	7/5/97	7/5/97	7/5/97
Station	CHE	CHE	CHF	CHK	CHK	CHB	CHA	CHA	CHA	CHB	CHB	CHG	283	284	257
Longitude Start	152 26.8	152 28.0	152 18.8	152 18.2	152 17.7	152 23.6	152 27.1	152 26.1	152 25.8	152 23.0	152 22.2	152 12.1	151 59.2	151 49.3	151 39.7
Latitude Start	57 40.6	57 40.2	57 41.8	57 43.0	57 43.0	57 38.5	57 36.3	57 37.2	57 37.2	57 39.3	57 39.6	57 42.0	57 59.7	58 0.1	58 3.5
Heading, Degrees	40	32	224	303	294	44	42	35	37	34	40	90	90	77	270
Average Depth (m)	16	13	139	146	152	80	18	49	51	99	101	110	172	141	157
Distance Fished (km)	1.3	1.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature													5.8	5.9	5.9
							----------kilograms/kilometer----------								
Pollock	0	1.2	2	4.3	0	0	7.6	29.8	13	15.7	15.1	29.8	38.3	124.6	101.9
Pacific Cod	9.1	3.8	8.6	42.8	40.9	5.4	8.1	2.7	7	4.9	4.3	14.6	32.4	13.4	28.7
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	3.8	0	1.1	0	0	0	0	0	0	0	1.1	0	1.6
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0.6	0	0	0	0	1.1	5.4	1.6	0	0	0	9.2	0	0
Herring	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	29	24.8	25.5	129.3	0	7.5	32.6	0	0	15.5	49.4	11	0	0	0
Other Roundfish	7.3	37.7	0	0	14	4.8	13.3	10.3	0	4.7	3.4	3.1	0.9	0	0
TOTAL ROUNDFISH	45.4	68	39.9	176.5	56	17.7	63.2	48.2	21.6	40.7	72.2	58.5	81.9	138.1	132.2
Arrowtooth Flndr	0	0	104.1	207.4	248.5	7.5	30.3	90.4	34.1	133.3	68.4	140.9	219.8	153.7	206.6
Flathead Sole	0	0	65.8	68.3	164.8	311	111.8	395.9	198.7	282.2	255.9	184.7	39.5	55.9	42.1
Rock Sole	704	124.9	0	0	0	26.2	42	4.3	0	20.2	0	0	0	0	0
Rex Sole	0	0	0	0	0	0	0	0	0	0	0	23.5	0	13.4	0
Dover Sole	0	0	0	0	0	82.4	0	0	0	0	0	40.7	41.3	19.3	0
Pac Halibut	4.7	1.6	4.5	26.1	61.8	0	5.5	2.3	15.2	15.6	1.5	0	64.3	29.9	126
Starry Flndr	0	9.8	0	0	0	562	0	477.7	0	0	0	0	0	0	0
Yellowfin Sole	76.2	28.4	0	0	0	146.1	237.6	163.6	771.8	32.6	0	0	0	0	0
Other Flatfish	29	0	0	0	0	63.7	32.6	210.9	726.4	0	13.9	0	0	0	0
TOTAL FLATFISH	813.9	164.7	174.3	301.9	475	1198.9	459.8	1345	1746.1	483.8	339.8	389.7	364.8	272.2	374.7
Skates	1.9	0	21.8	1.3	12.8	26.9	63.1	93	124.1	1	7	30.8	41.3	1.6	29.4
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0.8	0.6	58.3	95.1	241.6	1.6	0.5	0.5	0.5	5.1	3.2	0.5	9.2	0.1	0.5
Red King Crab	0.8	0	0	0	0	13	0	0.5	0	0	4.9	0	0	0	0
Dungeness Crab	0	0.6	0	0	0	0	0.5	0	1.1	0	0	0	0	0	0
Shrimp	0	0	1.3	1.2	0	0	0	0	0	4.7	5.1	3.1	1.9	0.5	0.5
Scallop	0	0	0	0	0	0	1.1	0	0.5	0	0	0	0.5	0	0.5
Other Inverts	239.5	65	4	13.1	11	0	175.8	17.8	18.1	12.9	0	101.7	0.9	4.8	27.1
TOTAL INVERTS	241.1	66.2	63.6	109.5	252.7	14.6	178	18.8	20.2	22.7	13.2	105.4	12.5	5.4	28.7
Other	0	1.6	2.7	0	0	0	21	12.9	54	15.5	2.5	4.7	7.5	1.6	0.9
TOTAL CATCH(kg/km)	1102.3	300.5	302.4	589.1	796.4	1258.1	785.1	1517.9	1966	563.7	434.7	589.1	508.1	419	565.9

----Continued----

Appendix B. (Page 2 of 25)

Haul	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Location	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD
Month/Day/Year	7/5/97	7/5/97	7/5/97	7/6/97	7/6/97	7/6/97	7/6/97	7/6/97	7/6/97	7/6/97	7/6/97	7/7/97	7/7/97	7/7/97	7/7/97
Station	256	255	MOLX	MOXX	MOPX	MOGX	MOEX	MONX	KZO	KZS	KZR	KZA	KZB	KZD	KZC
Longitude Start	151 47.5	151 56.7	152 9.3	152 14.7	152 14.4	152 11.2	152 22.4	152 29.4	152 31.9	152 35.2	152 35.2	152 52.9	152 52.1	152 47.6	152 44.9
Latitude Start	58 4.3	58 3.3	58 5.1	58 9.4	58 6.4	57 56.5	57 56.9	58 1.8	58 2.0	58 8.1	58 7.7	57 46.5	57 48.5	57 52.8	57 51.7
Heading, Degrees	270	270	315	129	222	270	69	0	35	4	184	15	22	42	33
Average Depth (m)	146	133	190	165	172	196	126	192	194	95	121	40	53	91	57
Distance Fished (km)	1.9	1.9	2	1.9	1.9	1.9	1.5	1.9	1.9	1.9	1.9	1.9	1.5	1.5	1.7
Bottom Temperature	6.1	6.1	5.8	5.9	5.8	6	6.5	5.7	5.7	4.4	4.4	6.3	6.3	7.6	8.1
							----------kilograms/kilometer---------								
Pollock	7.8	60.3	3.4	1.6	7.6	0.5	55.2	8.3	8.1	56	68	11.9	28.6	55.3	192.7
Pacific Cod	57.4	19.7	11.4	18.3	32.5	45.6	126.2	22.8	4.9	83.4	28.3	5.4	20.4	2.7	4.8
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	1	0	0.5	2.2	0.7	0	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	7.6	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	45.5	0	0	0	0	0	5.7	0	1	0	0.6	13.8	34.6	0	41.5
Other Roundfish	0	0	4.9	0	3.8	0	2	2.7	0	1.1	1.8	0.6	8	1	7.1
TOTAL ROUNDFISH	110.7	80	20.8	19.9	44.4	55.9	189.8	33.8	14	140.6	98.8	31.6	91.6	59	246.1
Arrowtooth Flndr	171.9	339.4	333.1	489.7	291.5	587.2	54	352.9	197	14.9	29.2	0	0	146.4	460.7
Flathead Sole	54.2	82.6	53.7	85.5	38.9	151.4	97.7	144.5	92.3	304.4	20.1	43	266.1	116.3	196.4
Rock Sole	5.6	0	0	0	0	0	0	0	0	0	0	3.9	53.2	0	0
Rex Sole	24.6	0	0	0	34	0	0	0	0	0	0	0	0	0	0
Dover Sole	12.3	62	0	0	55.9	75.7	0	0	0	0	0	0	0	0	11.3
Pac Halibut	23.1	40.5	58.3	59.1	37.9	17.8	0	32.1	4.9	0	7.5	0	0	0	30.3
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	30.9	207.5	0	0
Yellowfin Sole	0	0	0	0	0	0	0	0	0	0	0	38.6	287.4	16	147.3
Other Flatfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FLATFISH	291.7	524.5	445.1	634.3	458.2	832	151.7	529.5	294.1	319.3	56.8	116.4	814.2	278.7	845.9
Skates	9.1	29.7	65.7	13.5	16.2	35.4	8.6	10.9	10.7	0	10.3	0	0	0	78.6
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.8
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0	13	24.7	8	3.7	15.5	2.1	15.6	11.7	24	125.3	7.2	9.5	46.6	29.2
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0.7	0	0
Shrimp	0.5	1.5	2.4	1.9	2.4	2.6	2.3	1.6	4.1	1.2	1.7	0.6	2.7	1	3.8
Scallop	1.5	1.6	0	0	0.5	0	0	0	0	0	0	0	0	0	0.6
Other Inverts	45	2.9	22.7	0	2.4	21.4	9.8	3.3	5.2	9.9	1.5	2.8	0	27.1	324.8
TOTAL INVERTS	47	19	49.8	9.9	9.1	39.5	14.2	20.5	21	35.2	128.5	10.5	12.9	74.7	358.3
Other	2.1	4.4	2.4	0	2.4	2.6	25.9	32.8	44.6	1.2	2.1	9.4	0	4	7.6
TOTAL CATCH(kg/km)	460.5	657.6	583.6	677.6	530.2	965.4	390.1	627.4	384.4	496.2	296.4	167.9	918.6	416.4	1538.3

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Appendix B. (Page 3 of 25)

Haul	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Location	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	N.E.KOD	E.KOD	E.KOD	E.KOD
Month/Day/Year	7/7/97	7/7/97	7/7/97	7/7/97	7/7/97	7/8/97	7/8/97	7/8/97	7/8/97	7/10/97	7/10/97	7/10/97	7/11/97	7/11/97	7/11/97
Station	KZE	KZF	KZJ	KZK	KZG	CHJ	CHJ	CHL	369X	420	444	443	UGC	UGF	UGG
Longitude Start	152 40.7	152 39.6	152 37.8	152 33.0	152 36.0	152 22.9	152 23.0	152 14.6	152 3.3	151 48.6	151 37.4	151 44.2	152 42.3	152 34.2	152 29.9
Latitude Start	57 54.9	57 58.2	57 58.4	57 58.8	57 56.8	57 43.7	57 43.8	57 43.8	57 45.0	57 37.1	57 30.9	57 31.6	57 27.7	57 24.3	57 23.0
Heading, Degrees	5	180	28	0	280	126	133	57	180	140	317	290	123	180	85
Average Depth (m)	97	119	133	177	132	106	101	174	110	126	166	146	91	90	64
Distance Fished (km)	1.3	1.9	1.9	1.9	1.9	1.7	1.9	1.9	1.9	1.9	1.9	1.3	1.9	1.9	1.9
Bottom Temperature	7.4	6.7	6.4	5.7	6.5	7.3	7.6	7.1	6.6	6.4	6.3	6.3	6.7	7.3	7.6
							----------kilograms/kilometer----------								
Pollock	54.4	112.1	299.9	27.3	303.5	73.9	33.9	66.4	207.7	57.8	79.6	10	66.4	159.6	8.1
Pacific Cod	23	24	16.6	233.4	21.4	51.6	45.2	86.6	2.7	20.5	177.4	67.1	73.8	3.2	6.5
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0.5	0	0	0	1.6	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	52.8	27.4	76.4	0	36	187.5	25.2	0	0	0	0	0	0	0
Other Roundfish	1.5	0	0	0	0	6.4	14.2	8.1	0	0	0	2.2	0.5	1.2	40.6
TOTAL ROUNDFISH	78.8	188.8	343.9	337.7	324.9	167.8	280.8	187.9	210.4	78.3	257	79.3	140.7	164.1	56.8
Arrowtooth Flndr	88.7	77	66.6	278.9	428.4	23.3	85.4	495.5	392.1	134.2	100.4	500.5	30.1	53.9	12.5
Flathead Sole	123.6	56	123.8	76.4	212.1	84.8	35.6	95.6	116.6	36.2	17.1	96.1	265	196.5	68.8
Rock Sole	0	0	0	0	0	44.5	83.1	17.6	12.4	0	4.3	0	12	0	62.5
Rex Sole	0	14.5	4.7	0	0	6.4	0	0	29.8	51.4	33.7	0	0	0	0
Dover Sole	0	0	0	0	0	0	0	0	6.2	30.5	15.3	0	0	7.2	0
Pac Halibut	1	7.3	5.1	23.9	25.4	31.8	33.5	54.6	1.7	4.5	41.9	20.5	5.4	4.5	12.5
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	0	0	0	33.9	116.3	0	0	0	0	0	76.8	30	0
Other Flatfish	0	10.7	0	0	0	0	0	0	7.4	0	0	0	0	46.8	43.8
TOTAL FLATFISH	213.4	165.6	200.1	379.3	665.9	224.6	353.9	663.3	566.2	256.8	212.6	617.2	389.3	338.9	200.1
Skates	21.6	0	18.3	9.2	18.1	7.7	8.4	1.2	6.5	14.1	10.8	3.6	6.4	122.5	64.9
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0.8	0.5	6.4	13.8	37.9	0.6	0.5	0	0.5	0.5	0.5	0.8	24.8	0.5	0
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0
Shrimp	1.5	0	2.4	1.4	1.1	0	0	5	0	0	0	0	1.5	1.2	0
Scallop	0	0	0	0	0	0.6	0	0	0.5	2.2	0	0	0	1.1	4.9
Other Inverts	8.7	32	12.6	0	7.4	286.1	115	90.6	173.7	35.2	9.8	35.8	36.1	40.7	697.3
TOTAL INVERTS	11	32.5	21.4	15.2	46.3	287.3	116.1	95.6	174.8	37.9	10.3	36.5	62.4	43.5	702.1
Other	126.5	20.8	5.5	7.1	3.2	76.3	46.8	5	0	0	0.6	0	0	10.8	6.3
TOTAL CATCH(kg/km)	451.2	407.7	589.2	748.4	1058.3	763.7	806.2	953	957.9	387.1	491.4	736.7	598.8	679.8	1030.2

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Haul	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Location	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD
Month/Day/Year	7/11/97	7/11/97	7/11/97	7/11/97	7/11/97	7/11/97	7/12/97	7/12/97	7/12/97	7/12/97	7/12/97	7/12/97	7/12/97	7/12/97	7/13/97
Station	UGJ	486B	511B	511A	510B	UGI	UGE	UGM	486A	510C	534B	535A	535B	535D	UGAC
Longitude Start	152 27.5	152 25.7	152 24.8	152 28.1	152 31.6	152 32.3	152 37.0	152 32.1	152 29.1	152 33.0	152 32.7	152 28.0	152 24.6	152 24.4	152 59.9
Latitude Start	57 22.2	57 18.7	57 13.5	57 12.7	57 15.9	57 20.9	57 25.2	57 20.1	57 18.2	57 12.9	57 11.8	57 10.8	57 9.5	57 7.8	57 27.4
Heading, Degrees	184	186	180	333	329	347	123	180	199	207	180	158	357	0	48
Average Depth (m)	71	71	79	99	99	95	97	102	99	93	102	137	126	137	35
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	7.7	8.1	6.8	6.8	7	7.3	6.4	7.3	7.2	6.7	6.4	6.3	6.3	5.7	5.2
							----------kilograms/kilometer----------								
Pollock	0	0	0	0	217	99.4	24.6	47.2	151.3	0	1.1	103.3	0	771.8	11.3
Pacific Cod	14.6	199.3	4.3	5.9	14	4.9	22.3	3.7	12.4	10.3	2.2	72.3	95.7	42.5	0
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	2.7	0	0	0	0	1.1	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	1.1	0	0	0
Sablefish	2.2	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0.5
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	0	0	0	52.9	0.7	20.7	47.7	18.3	0	0	0	0	0	1.6
Other Roundfish	37.5	0.1	0.4	0	2.2	0.7	1.6	1	1.1	0	0	2.6	0	0	0
TOTAL ROUNDFISH	54.2	200	4.7	5.9	286.1	105.6	71.9	99.5	183.1	10.3	3.2	180.3	95.7	814.3	13.5
Arrowtooth Flndr	123.8	0.6	3.4	430.8	73.4	96.4	41.4	77.5	106.5	368.5	290.6	431.2	1071.9	331.1	0.5
Flathead Sole	61.9	0.1	0.8	152.2	23.7	56.9	310.5	12.9	28	81.5	89.2	184.8	111.7	53.6	4.3
Rock Sole	110.8	1.5	13.6	0	0	0	0	0	0	42.5	0	0	0	0	0
Rex Sole	0	0	0	0	0	0	0	0	2.2	0	52.8	77	0	11.7	0
Dover Sole	0	0	0	67.9	0	0	0	0	0	0	5	20.5	44.7	0	0
Pac Halibut	7.7	3.7	16.2	4.3	14.6	2.5	28.8	0	28	0	0	17.1	28.1	20.7	0
Starry Flndr	0	1.4	0	0	0	0	0	0	0	0	0	0	0	0	6.5
Yellowfin Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.8
Other Flatfish	71.7	0.7	9.3	124.1	0	16	0	0	0	0	0	0	52.1	0	0.5
TOTAL FLATFISH	375.9	8	43.2	779.3	111.7	171.7	380.7	90.4	164.6	492.5	437.6	730.7	1308.4	417.1	15.7
Skates	35.7	7.5	15.5	3.9	9.6	29	37.2	7.9	32.4	1.1	4.5	0.6	14.9	3.5	0
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0	0.5	0	0	1.1	31	2.9	17.5	1.1	0	0	0.5	0.5	1.1	1.6
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	0	0	0	0	0	0.7	1.6	1	0	0	0	0	0	0	0
Scallop	0	0	2.2	0	0	0.5	2.2	0	0	0	1.1	1.1	0	0	0
Other Inverts	120.6	4.2	24.7	2.3	205	79.1	130.6	137.1	137.7	39	67.6	41.1	0	17.5	3.8
TOTAL INVERTS	120.6	4.7	26.9	2.3	206.1	111.3	137.2	155.5	138.8	39	68.6	42.7	0.5	18.6	5.4
Other	1.6	0.1	1.5	2.3	54	1.4	1.6	3	7.5	3.5	1.7	2.6	3.7	11.7	12.4
TOTAL CATCH(kg/km)	588	220.3	91.8	793.7	667.4	419	628.5	356.4	526.5	546.4	515.7	956.8	1423.3	1266.7	47

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Haul	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Location	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	E.KOD	E.KOD
Month/Day/Year	7/13/97	7/13/97	7/13/97	7/13/97	7/13/97	7/13/97	7/13/97	7/14/97	7/14/97	7/14/97	7/14/97	7/14/97	7/14/97	7/14/97	7/14/97
Station	UGAB	UGAA	UGB	UGD	535C	534D	533B	KLI	533A	559	586	585X	618A	619	587
Longitude Start	152 53.4	152 51.6	152 45.4	152 36.6	152 28.2	152 30.3	152 43.8	152 51.1	152 45.7	152 45.1	152 55.8	153 1.5	152 51.2	152 45.7	152 42.6
Latitude Start	57 28.5	57 30.0	57 28.3	57 25.9	57 8.8	57 8.5	57 9.4	57 14.5	57 8.8	57 5.7	56 56.9	56 56.9	56 55.7	56 54.8	56 58.3
Heading, Degrees	90	135	180	290	178	0	30	117	190	157	37	80	19	22	0
Average Depth (m)	66	77	90	97	148	126	141	124	143	154	128	135	123	130	144
Distance Fished (km)	1.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.9	1.9	1.9	1.9
Bottom Temperature	5	4.9	6.8	6.7	5.7	6	5.9	6.4	5.7	5.7	6	6.3	5.7	5.7	5.7
							----------kilograms/kilometer----------								
Pollock	25.2	40.3	101.3	45.5	1556.9	0	1462.2	46.5	905.4	25.9	510.8	18.4	67	14.6	0.5
Pacific Cod	2.3	14.4	25.2	3.8	87.9	36.7	25.9	26.7	2.7	47	8.6	7.6	0.5	17.8	0
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0.5	0	0	0	0	0	3.2	2.2	0	0	0	3.2
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	1.6	0	0	1.1	2.2	0	0	0	0
Sablefish	0.8	0.5	0	0	0	0	0	0	0	3.8	2.2	0	0	0.5	4.9
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	14.2	40.3	0	55.5	0	0	0	0	0	0	43	0	0	0	0
Other Roundfish	3.9	1	0	2.9	2.1	0	7.3	17.4	2.2	18.9	8.9	5.4	2.7	0	4.9
TOTAL ROUNDFISH	46.4	96.5	126.5	108.2	1646.9	36.7	1497.1	90.6	910.2	99.9	577.8	31.3	70.2	32.9	13.5
Arrowtooth Flndr	0.8	10.2	22.8	52.8	291.1	220.4	489	410.6	555.1	172.5	214.9	107.8	106.1	141.3	382.6
Flathead Sole	8.3	17.8	242.8	227.1	82.3	48.4	125.3	382.7	66.1	19.8	66.3	37.4	39.3	46.2	63.5
Rock Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rex Sole	0	0	0	0	0	12.7	0	2.8	0	0	16	38.5	46.6	6.8	0
Dover Sole	0	0	0	0	14.8	11.5	0	0	0	0	183	149.6	102.4	0	35.8
Pac Halibut	0.5	0	83.7	19.5	29.9	6.3	0	14.7	2.9	0	38.7	19.2	15.1	25.7	25.1
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	187.4	97.4	182.1	0	0	0	0	0	0	0	0	0	0	0	0
Other Flatfish	0	0	369.3	34.3	0	0	0	0	0	0	0	0	0	0	0
TOTAL FLATFISH	197.1	125.4	900.6	333.8	418.1	299.2	614.4	810.8	624.1	192.2	518.8	352.4	309.6	220.1	507.1
Skates	0	8.1	80.7	120.8	1.8	4.5	3.2	30.5	11.3	8.2	5.1	20	7.1	5.6	19.9
Spiny Dogfish	0	0	0	0	0	0	0	0	1.1	0	0	0	1.6	0	0
Other Elasmobrh	0	0	0	0	0	0	0	54	0	0	0	0	0	0	0
Tanner Crab	74.7	105.9	29.6	8.7	0.5	0	0	0.5	0	1.1	3.8	1.1	7.6	8.6	4.3
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	1.1	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	1.7	1	2.5	1.3	0	1.3	0	0	0	0	0	1.1	0	0.7	1.6
Scallop	0	0	10.3	0.5	0.5	0.5	0.5	0	1.1	1.1	0.5	1.1	1.1	13	4.3
Other Inverts	11.7	0.5	0	67.3	16.9	20.4	0	38.3	259.9	54.8	19.5	5.5	2.4	5.2	6.5
TOTAL INVERTS	88	107.5	43.5	77.9	18	22.2	0.5	38.8	261	57	23.8	8.7	11	27.4	16.8
Other	13.3	0.5	0	1.3	0	1.3	2.5	2.8	0	1.8	2.5	1.1	0	0.7	0
TOTAL CATCH(kg/km)	344.8	338	1151.2	642	2084.8	363.9	2117.7	1027.5	1807.8	359.1	1128	413.6	399.6	286.7	557.2

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Haul	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Location	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD
Month/Day/Year	7/15/97	7/15/97	7/15/97	7/15/97	7/15/97	7/15/97	7/15/97	7/15/97	7/16/97	7/16/97	7/16/97	7/16/97	7/16/97	7/16/97	7/17/97
Station	588	620	654	655	695	696	656	621	560	561	KLL	KLH	KLC	KLB	KLA
Longitude Start	152 36.7	152 34.7	152 43.4	152 33.6	152 32.7	152 25.9	152 25.1	152 27.6	152 30.3	152 26.5	152 46.2	152 54.6	152 55.6	152 59.2	153 4.6
Latitude Start	56 60.0	56 54.2	56 51.4	56 51.0	56 45.6	56 45.8	56 50.7	56 54.2	57 4.6	57 2.9	57 12.5	57 13.6	57 17.0	57 18.6	57 18.3
Heading, Degrees	180	180	309	180	204	20	0	27	197	321	298	272	337	153	90
Average Depth (m)	155	154	97	148	144	176	161	161	141	146	132	115	91	82	91
Distance Fished (km)	1.9	1.9	1.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	5.7	5.7	6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	6.3	6.4	7	6.9	4
							----------kilograms/kilometer----------								
Pollock	0	0	0	0	0	0	0	1.1	56.5	203	111.2	26.1	73.7	62.6	183
Pacific Cod	1.6	0	56.5	0	0	0	0	0	8.4	22.4	6.7	7.5	64.8	41.4	51.5
Pac Ocean Perch	0	0	0	0	0	0	1.6	0.8	0	0	0	0	0	0	0
Rougheye Rkfish	12.4	26.6	0	8.3	3.1	57.3	2.8	3.1	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	1.9	0	0	0	0	0	0	0	0	0
Other Rockfish	0.5	0	0	1.8	0	0.1	0.1	0.1	0	0	0	0	0	0	0
Sablefish	1.6	0	0	2.9	1.7	1.9	2.1	0	1.2	0	0	0	0	0	0.3
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	0.9	0	0	0	0	0	1.4	0	0	0	0	0.1	0	0
Other Roundfish	9.9	0	2.3	0.6	0	0.5	2.9	0	0	12.9	36.8	9.7	0	2.2	1.1
TOTAL ROUNDFISH	26.1	27.5	58.7	13.6	4.9	61.8	9.5	6.5	66.1	238.3	154.7	43.3	138.7	106.2	236
Arrowtooth Flndr	350.3	175	566.9	124.8	305.2	116.6	532.7	365.3	252.7	816.6	467.9	130.4	5.9	59.6	2.3
Flathead Sole	31	49.2	36.3	28.5	49.4	38.3	10.6	31.9	68.9	42.8	13.2	203.9	7.3	165.6	38.9
Rock Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rex Sole	0	0	29.5	0	0	0	0	0	0	0	33.1	0	0	0	0
Dover Sole	0	0	77.1	16.3	0	18.9	0	56.5	28.7	0	24.3	36.8	0	0	0
Pac Halibut	8.5	17.6	0	2.7	5.8	0	3.3	0	50.6	115.3	3.5	5.4	1.2	14.7	22.7
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	2.6	57.4	0
Yellowfin Sole	0	0	0	0	0	0	0	0	0	0	0	0	1.2	11	17.7
Other Flatfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FLATFISH	389.8	241.8	709.8	172.2	360.3	173.8	546.6	453.7	400.9	974.8	542	376.5	18.3	308.5	81.6
Skates	12.9	68.9	9.1	14.4	12.3	30.8	20.7	12.5	3.3	3.9	3.1	29	78.9	47.9	0
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	21.6	0	0	0
Tanner Crab	12.4	9	0.8	10.4	10	40.1	11.1	11.3	0.1	4	0.5	2.5	0.2	0.1	0.1
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	1.1	2.7	0	1.2	4.5	1.6	1.8	1.4	0	0	2.2	0	0.1	3.3	2.9
Scallop	0	0	94.8	1.6	0.2	0	0.4	0.2	1.8	0.3	0	3.9	6.2	3.4	0
Other Inverts	6.4	8.2	0	4.2	12.3	4.6	0	2.7	63.2	0	125.8	97	2.6	66.3	2.9
TOTAL INVERTS	19.9	20	95.6	17.3	27	46.2	13.3	15.6	65	4.3	128.5	103.4	9.1	73	5.8
Other	2.1	0.9	0	1.7	1.1	1.1	1.8	1.4	10.1	0	0	40.1	0.2	1.1	0
TOTAL CATCH(kg/km)	450.9	359.1	873.2	219.2	405.5	313.7	591.8	489.7	545.4	1221.4	828.3	613.9	245.1	536.7	323.4

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Haul	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
Location	E.KOD	E.KOD	E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD
Month/Day/Year	7/17/97	7/17/97	7/17/97	7/17/97	7/17/97	7/17/97	7/18/97	7/18/97	7/18/97	7/18/97	7/18/97	7/18/97	7/18/97	7/18/97	7/19/97
Station	KLG	KLF	KLE	THM	THL	THJ	THN	THK	THH	THG	THI	THF	THD	THC	THA
Longitude Start	152 59.3	153 3.5	153 7.1	153 21.0	153 22.6	153 27.4	153 20.0	153 29.7	153 24.4	153 26.7	153 35.3	153 35.1	153 28.8	153 30.0	153 42.3
Latitude Start	57 12.5	57 12.1	57 11.4	57 9.2	57 8.0	57 3.6	57 10.2	57 8.7	57 2.7	57 1.4	57 4.1	57 1.3	56 59.3	56 57.5	56 53.4
Heading, Degrees	247	256	222	217	222	345	177	190	190	218	123	62	180	180	61
Average Depth (m)	119	123	117	121	121	113	110	102	106	123	91	75	130	130	51
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	6.5	6.5	6.5	5.7	5.5	6.2	6.8	6.1	6.8	6.5	6.5	6.4	6.8	6.7	7.8
							----------kilograms/kilometer----------								
Pollock	4.6	52	31.9	1115.4	463.7	398.6	1357.2	826.2	742.2	103.2	551.2	244.4	71.1	32	89.4
Pacific Cod	1.5	57.2	36.6	23.5	48.4	68.2	70.9	84	5.7	42.5	13.3	7.7	59.5	67.2	24
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0.6	1.5	0	2.9	0	1.7	0.5	0	0.7	0	0	0.9	2.1	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	39.4	22.4	144.9	0	21	16.2	0	64.3	7.4	0	0	0	0	1.3	0
Other Roundfish	5.3	2.8	0	0	0	3.8	0	0	7.3	13.5	0	1.2	11.2	2.8	11.4
TOTAL ROUNDFISH	51.6	135	214.9	1138.9	536	486.8	1429.8	975	762.6	159.9	564.5	253.3	142.7	105.5	124.8
Arrowtooth Flndr	157.7	285.7	148.8	385.1	325.7	151	294.2	176.1	160.8	154.9	46.3	113.1	163.5	136.6	0
Flathead Sole	494	84.5	845.9	413	307.4	207.4	472.2	362.3	112.6	181.3	472.7	155.6	177.9	217.1	115.2
Rock Sole	0	0	0	0	0	7.6	0	10.2	0	24.7	0	8.5	24.9	0	321
Rex Sole	0	0	0	6	2.6	4.8	6.8	5.1	0	33	0	0	0	5.5	0
Dover Sole	0	0	0	0	0	0	0	0	27.2	0	0	0	24.9	36.9	0
Pac Halibut	3.3	33	10.6	19.7	8.8	13.5	18.4	0	8.5	41.5	0	0	5.8	27.8	14.5
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	0	0	0	0	43.3	0	0	0	71.4	54.7	0	0	312.7
Other Flatfish	0	0	0	0	55.2	60.2	18.2	0	30.9	79.1	0	0	0	0	485.5
TOTAL FLATFISH	655	403.1	1005.3	823.8	699.7	444.6	853.3	553.6	340	514.4	590.4	331.9	396.9	423.8	1248.9
Skates	13.3	74.4	13.5	5	14.4	0	0	0	7.8	32.4	47.2	6.6	31.3	29.8	8.6
Spiny Dogfish	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	97.2	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	1.5	1.1	0.3	13.1	21.9	7.8	28	6.3	0.1	1.9	2.3	1.6	0.9	10.7	1.1
Red King Crab	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0.3	0	0	0	0
Shrimp	9.3	7.5	7.8	2	2.6	1.9	2.3	3.4	2.5	1.6	3.9	0	1.3	2.8	0
Scallop	0.5	0	0	0	0	0.3	0.1	0	0.5	0.8	0.4	3.7	0	0	16.3
Other Inverts	30.1	2.5	11.8	10	2.6	5.7	13.7	11.9	2.5	34.6	7.7	34	15.7	4.1	65.8
TOTAL INVERTS	45.1	11	19.9	25	27.2	15.7	44.1	21.6	5.5	39	14.7	39.3	17.9	17.5	83.3
Other	4.6	1.2	7.8	4	1.3	1	0	1.7	6.2	29.7	1.9	15.8	7.8	2.8	4.1
TOTAL CATCH(kg/km)	771.6	624.7	1358.6	1996.8	1278.6	948.2	2327.2	1551.8	1122	775.4	1218.7	646.9	596.7	579.4	1469.7

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Haul	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Location	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD
Month/Day/Year	7/19/97	7/19/97	7/19/97	7/19/97	7/19/97	7/19/97	7/20/97	7/20/97	7/20/97	7/20/97	7/20/97	7/20/97	7/21/97	7/21/97	7/21/97
Station	614	615	651	729	761	728	688	726	727	760	759	725	892	891	858
Longitude Start	153 27.8	153 24.4	153 15.0	153 11.1	153 16.2	153 19.4	153 38.7	153 35.2	153 29.1	153 27.0	153 34.3	153 48.3	154 7.0	154 11.1	154 16.3
Latitude Start	56 54.5	56 55.1	56 50.8	56 40.7	56 36.8	56 38.7	56 43.5	56 41.8	56 40.5	56 34.8	56 32.9	56 40.6	56 15.2	56 14.5	56 20.0
Heading, Degrees	0	180	150	180	270	10	270	160	155	180	180	232	249	292	280
Average Depth (m)	139	143	174	150	141	146	150	154	146	132	146	101	133	128	91
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.7	1.9	1.9	1.9	1.9
Bottom Temperature	5.8	6.4	4.7	4.6	4.9	4.6	6.3	6	5.7	5.6	5.6	6.4	5.5	5.7	7.3
							----------kilograms/kilometer----------								
Pollock	61.3	41.2	0	0.9	2.7	9.3	14.1	35.5	22.4	20	11.9	0	0	0	0
Pacific Cod	63.2	10.8	17.9	10.8	24.7	23.2	134.2	24.6	19.9	43.3	32.7	12.3	111.6	23.1	67
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	3.8	0	1.6	0.8	3.5	12.9	0.8	0	2.1	1.6	0.5	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0	0	0	1.8	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	4.1	10.3	0	0	0	0	0	15.5	0.8	16.6	0	13.8	0	0	0
Other Roundfish	9	1.6	0	4.3	0.4	3.9	5.3	5.2	2.5	0	6.9	1.7	2.3	1.5	0.2
TOTAL ROUNDFISH	141.5	63.9	19.6	16.8	31.3	49.2	154.3	80.7	47.6	81.5	52	27.9	113.8	26.4	67.2
Arrowtooth Flndr	78.2	138.3	367.3	109.1	53.2	98.6	363.8	17.8	163.8	65.8	45.9	74.2	532	333	9
Flathead Sole	157.5	56.9	65.3	38.1	67.2	17.2	57.9	34.3	67.6	14.7	102.5	141.6	54.3	61.1	0.1
Rock Sole	0	4.7	0	5.1	0	0	23.8	0	0	0	0	326.3	0	0	10.8
Rex Sole	5.1	24.5	0	0	9.2	5.6	0	12.7	0	10.2	2	0	29.4	13.7	0
Dover Sole	9.3	0	15	0	0	0	0	0	0	0	0	0	110.9	22.9	33.7
Pac Halibut	12.9	2.7	60.1	0	9.6	12.4	14.6	14.4	0	11.4	15.2	41.7	37.5	25.6	26.3
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Flatfish	11.3	0	0	0	0	0	0	0	0	0	0	24.2	0	0	2.1
TOTAL FLATFISH	274.4	227.1	507.7	152.3	139.1	133.7	460.1	79.2	231.4	102.2	165.6	608.1	764.2	456.4	81.9
Skates	26.9	6.3	25.6	15.2	3.4	17.3	9.8	45.6	10.3	9.3	14.8	13.7	8.6	4.3	12.1
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	1.8	0.5	4	0.6	0.2	1.1	0.1	0.1	1.1	0.5	0.1	0	0	0.1	0
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	2.1	1.6	0	0.5	0.4	0.4	0	0.5	0.8	0.6	0.7	0	0	0	0
Scallop	1	0	0	0.8	0.9	2.6	0	0.5	0.2	0.1	0.5	4.1	0	0	0
Other Inverts	74.7	17.4	12.3	17	3.5	14.6	23.8	6.6	11.1	25.6	20.9	19	0	4.9	0.2
TOTAL INVERTS	79.5	19.5	16.3	18.8	5.1	18.7	23.8	7.6	13.2	26.8	22.2	23.1	0	4.9	0.2
Other	3.1	0.8	2.7	1.5	0.9	1.3	0	48.8	1.6	7	38.8	3.5	0	1.5	0
TOTAL CATCH(kg/km)	525.4	317.5	571.8	204.6	179.8	220.4	647.9	261.9	304	226.8	293.4	676.1	886.6	493.5	161.4

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Haul	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
Location	S.E.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD
Month/Day/Year	7/21/97	7/22/97	7/22/97	7/22/97	7/22/97	7/22/97	7/22/97	7/22/97	7/22/97	7/23/97	7/23/97	7/23/97	7/23/97	7/23/97	7/23/97
Station	920	881X	815X	816X	781X	748X	750X	676X	677X	646D	646B	646A	645B	646C	682B
Longitude Start	154 24.0	155 47.6	155 46.5	155 42.7	155 40.8	155 45.3	155 35.9	155 28.1	155 19.8	154 20.1	154 22.7	154 26.7	154 29.6	154 27.4	154 29.5
Latitude Start	56 8.8	56 15.9	56 20.4	56 23.1	56 29.3	56 34.1	56 35.2	56 37.5	56 41.3	56 48.8	56 50.2	56 50.8	56 50.8	56 49.2	56 46.9
Heading, Degrees	194	0	47	50	20	340	20	40	33	265	355	100	167	90	167
Average Depth (m)	143	71	75	75	128	229	194	148	112	51	59	60	64	62	64
Distance Fished (km)	1.9	1.5	1.9	1.9	1.7	1.9	1.9	1.5	1.5	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	5.8	5.2	5.2	5.3	4.9	5.6	5.3	4.9	5.4	9.6	9.9	9.2	9.1	9.2	9.3
							----------kilograms/kilometer----------								
Pollock	0	0.9	0	118.1	0	9.9	1.5	92.9	5.2	160.8	1128.2	2093.2	209.1	150	324.5
Pacific Cod	11.4	20.9	55.2	328.8	56.2	1.5	8.9	16.6	4.2	9.9	38.7	18.9	51.3	2.8	1.7
Pac Ocean Perch	0	0	0	0	0	0	0	16.2	1	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	1.6	2.6	0	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	15.7	0.7	0	0	67.9	0	0	2.7	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	10.4	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	1.4
Other Roundfish	2.3	0.1	0	0.8	0	7.9	3.8	0	0	0	1.5	0	1.7	0.4	1.4
TOTAL ROUNDFISH	29.4	22.5	55.2	447.7	124.1	31.3	16.8	128.4	10.4	170.8	1168.4	2112.1	262.2	153.9	329
Arrowtooth Flndr	360.1	0.1	2.5	166.1	905.8	127.4	184.8	786.8	835.2	17.3	30.4	77.7	46.8	17.9	71.1
Flathead Sole	11.4	0.7	9	56.4	26.3	18.2	8.9	69.1	25.9	40.5	50.6	138.8	166.6	73.5	78.3
Rock Sole	0	16.9	1.4	1.5	0	0	0	0	0	0	0	0	0	0	0
Rex Sole	125.4	0	0.4	7.6	65.6	4.7	36.7	0	51.8	0	0	0	0	0.4	0.7
Dover Sole	170.9	0	2	13.7	42.7	34	68.4	45	0	0	0	0	0	0	0
Pac Halibut	9.7	40.6	21.4	98.5	21.4	0	13.4	4.1	57.1	46.8	43.3	13.9	43.7	9.8	27.6
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	0	0	0	0	0	0	0	20.6	0	0	0	0	0
Other Flatfish	0	15.1	0	3	0	0	0	0	0	4.5	18.8	0	13	5.7	0
TOTAL FLATFISH	677.5	73.4	36.7	346.9	1061.8	184.4	312.2	905.1	970	129.7	143.1	230.5	270.1	107.2	177.7
Skates	12.1	28.2	30.4	9.4	1.8	20.5	6.2	29.3	49.5	49.8	44.4	93.1	85.8	86.6	32
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	59.9	0	110	0	0	0	0	0	0	0
Tanner Crab	0	0	0	0	0.4	0.1	0.1	0	0	0	0	0.1	0	0.1	0.3
Red King Crab	0	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	2.3	0	0	0	0	0	0	0	0	0.4	0	0	2.6	1.1	0
Scallop	0	0	0.8	0.9	0.2	0	0	0	0	16.6	36.9	14	5.1	7.3	7.8
Other Inverts	5	0.5	11.5	21.7	0	4.7	5.1	0	9.7	35.6	36.2	0	9.5	2.9	23.5
TOTAL INVERTS	7.3	0.5	13	22.6	0.6	4.8	5.1	0	9.7	52.6	73.1	14	17.2	11.3	31.5
Other	0	0.1	0.7	0	23	6.3	2.5	3	3.2	2.6	5.8	0	1.7	1.1	17.8
TOTAL CATCH(kg/km)	726.2	124.8	136.1	826.7	1211.3	307.2	342.9	1175.8	1042.8	405.5	1434.7	2449.8	637.1	360.2	588

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Haul	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150
Location	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD
Month/Day/Year	7/23/97	7/24/97	7/24/97	7/24/97	7/24/97	7/24/97	7/24/97	7/24/97	7/24/97	7/25/97	7/25/97	7/25/97	7/25/97	7/25/97	7/25/97
Station	683A	684A	683B	683D	684C	ALB	ALC	ALG	ALF	ALD	ALH	ALI	ALJ	ALK	ALM
Longitude Start	154 27.4	154 17.7	154 22.1	154 22.2	154 19.1	154 13.1	154 7.7	154 5.7	154 9.8	154 11.3	154 7.1	154 5.2	154 1.5	153 56.0	153 58.4
Latitude Start	56 45.8	56 46.7	56 46.0	56 44.2	56 44.5	56 50.4	56 49.4	56 51.7	56 51.5	56 52.7	56 53.2	56 54.7	56 54.0	56 56.1	56 56.3
Heading, Degrees	100	120	125	115	110	120	30	42	7	191	23	206	37	254	220
Average Depth (m)	60	46	59	71	68	37	79	57	57	59	64	75	69	62	59
Distance Fished (km)	1.7	1.9	1.9	1.9	1.1	1.9	1.9	1.9	1.9	1.9	1.3	2	1.9	1.5	1.9
Bottom Temperature	9.5	9.8	9.5	9.4	9.4	8.7	7	6.5	7.3	6.4	5.5	3.9	6.3	7	6.4
							----------kilograms/kilometer----------								
Pollock	81.9	7.6	194.3	84.8	133.6	0	177.7	27.9	16.2	2523.6	642.9	358.2	351.8	124.7	263.3
Pacific Cod	3.7	1.2	0	11.1	0	19.8	340	22.5	11.1	31.3	30.9	22	26.6	6.1	5.8
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0.4
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0
Sablefish	0	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	3.6	1.1
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0.4	0	0	0	0	0	4	0	10.7	20.8	0	16.8	21.8	1.8	5.1
Other Roundfish	0.4	2.6	1.8	4.1	3.3	0.8	19.9	0	1	0	14.3	9.3	4.8	9	19.6
TOTAL ROUNDFISH	86.4	12.3	196.1	100	136.9	20.5	541.6	50.4	38.9	2575.7	688.1	406.3	405.4	145.2	295.3
Arrowtooth Flndr	8.1	2	37.8	219.2	49.8	6.2	1.3	1.7	61.2	5.2	131.9	45.5	21.8	1.8	20.4
Flathead Sole	26.5	58.2	51.9	113.6	143.8	16.3	79.8	174.1	137.9	20.8	551.8	60.7	53.2	151.8	132.5
Rock Sole	0	0	0	0	0	11.6	0	0	0	0	0	0	0	0	0
Rex Sole	0	0	0	0	0	0.8	0	1.7	0	0	0	0	0	0	0
Dover Sole	0	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0
Pac Halibut	35.1	11.2	30.8	67.5	177.6	23.2	91.5	0	160.7	59.9	11.1	6.8	49	12.9	20.8
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	35.7	0	0	0	34.9	47.9	196.2	25.3	7.8	31.2	37.9	59.2	133.8	113.8
Other Flatfish	4.1	26.4	0	0	0	23.2	0	37.5	1	0	0	21.9	0	0	0
TOTAL FLATFISH	73.8	133.4	120.5	400.3	371.2	117	220.5	411.2	386	93.7	726	172.8	183.2	300.3	287.5
Skates	21.3	44.4	87.9	47.7	47	0	58.7	0	21.1	21.8	0	0.1	19.8	60.9	32.9
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0.1	0	0	1.1	0	0	50.3	14.3	11.3	0	55.2	66.4	1.3	0.1	0.1
Red King Crab	0	0	0	0	0	0	67	20	2.2	0	0	32.9	1.3	13.9	11.9
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	0	0	0	0	0	0	0	0	0	0	0	0	0	3.6	1.7
Scallop	3.5	8.3	20.3	9.2	11.2	15	0	9.3	5.7	3.7	0.5	0	1.8	3.6	13.6
Other Inverts	9.5	60.8	47.8	73.5	104	67.4	202.1	112.6	35	0	81.5	15.2	41.1	36.1	39.1
TOTAL INVERTS	13.1	69.1	68.1	83.8	115.2	82.4	319.4	156.1	54.1	3.7	137.2	114.5	45.6	57.4	66.3
Other	1.6	22.7	17.1	5.3	5.5	10.1	60.2	51.2	6.8	0	16.8	31.2	291.4	75.9	10.2
TOTAL CATCH(kg/km)	196	281.9	489.7	637.1	675.8	230	1200.3	669	507	2694.9	1568.1	725	945.4	639.8	692.2

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Haul	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165
Location	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	IVANOF	IVANOF	IVANOF	IVANOF	IVANOF	IVANOF	IVANOF	STEPOVAK
Month/Day/Year	7/25/97	7/25/97	7/25/97	7/26/97	7/26/97	7/26/97	7/26/97	8/8/97	8/8/97	8/8/97	8/8/97	8/9/97	8/9/97	8/9/97	8/9/97
Station	ALO	ALP	ALQ	ALR	ALL	684B	ALA	4024	4915	4007	400X	4900	4000	4008	STD
Longitude Start	153 59.3	153 57.4	153 54.1	153 48.4	154 5.1	154 13.6	154 8.8	159 4.0	159 10.8	159 23.6	159 28.9	159 29.7	159 28.8	159 25.5	159 49.4
Latitude Start	56 59.4	57 2.6	57 5.0	57 7.7	56 55.5	56 46.0	56 46.9	55 53.5	55 51.9	55 46.6	55 48.6	55 53.2	55 47.2	55 44.4	55 45.3
Heading, Degrees	228	211	224	221	46	40	44	123	220	245	333	242	177	180	14
Average Depth (m)	132	154	176	113	84	79	62	101	64	82	68	35	75	101	121
Distance Fished (km)	1.5	1.9	1.9	1.9	1.3	0.9	1.3	1.9	1.9	1.9	1.9	0.9	1.9	1.9	1.9
Bottom Temperature	2.8	2.8	2.7	3	3.6		7.9	6.5	8.5	6.6	6	10.1	7.4	5.8	5.5
							----------kilograms/kilometer----------								
Pollock	187.9	134.5	31.4	148.4	300.1	0	12.3	131.3	50.9	142	40.2	33.7	16.6	211.7	39.1
Pacific Cod	27.1	13.7	9.2	21	20.8	30.8	19.3	11.9	5.5	0	4	14.9	3.9	3	15.3
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0.7	1.2	0	0	0	0	0	0.3	0	0	0	0	0	2.3	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0
Sablefish	0	5.5	0	0	0	0	0	0.5	0.4	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	4.8	9.5	3.4	20.4	105.5	0	5.7	26.1	1	0	26	0	0	14.1	0
Other Roundfish	33.4	22.6	7.8	47.9	42.2	16.2	22.8	0	0	0	1	4.2	7.2	0	2.5
TOTAL ROUNDFISH	254	187	51.7	237.7	468.6	47	60.1	170.1	57.9	142	71.2	52.8	28.6	231	56.9
Arrowtooth Flndr	116.3	407.4	112	38.3	31.6	22.2	194.2	21.4	52.9	78.2	51.9	12.5	18.4	83.6	1181.8
Flathead Sole	79.6	15.2	11.2	197.6	263.7	73.3	297	40.7	44.8	185.3	131.9	260	70.2	135.5	538.6
Rock Sole	0	0	0	0	0	0	0	9	0	0	0	10.4	0	0	0
Rex Sole	0	0	0	0	0	0	0	1.3	0	7.2	0	0	2.4	1.8	0
Dover Sole	0	0	0	0	0	0	0	1.3	0	0	0	0	0	0	0
Pac Halibut	0	0	0	0	0	19.3	156.3	17.3	24.3	33	8	0	19.9	11.2	4.7
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0
Yellowfin Sole	0	0	0	19.2	47.5	0	80	3.8	94.6	48.1	105.9	328.6	83	0	0
Other Flatfish	0	0	0	0	79.1	16.2	0	0	0	26.5	0	24.9	18.4	0	0
TOTAL FLATFISH	195.9	422.5	123.2	255.1	422	131	727.4	94.8	216.6	378.3	297.6	663.5	212.3	232.2	1725.1
Skates	0	0	0	0	0	167.3	109.8	40.3	0	0	12.5	72.9	32.3	9.4	1.7
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	13.5	11.3	16.5	40.1	92	0.1	11.3	0.1	0.1	0.2	23.2	0.5	0.1	0.4	0
Red King Crab	0	0	2.2	0	0	0	583.5	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0.6	37.1	0.4	0	0
Shrimp	1.6	5.7	2.2	0	2.6	0.9	0	0.4	1	0	1	0	0	0	0
Scallop	0	0	0	0	0	0	0	1.2	5.1	3	0	0	8.3	2.1	1.4
Other Inverts	17.5	18.5	12	1.2	47.5	41.8	889.2	5.1	82.4	30.1	14.5	4.2	36.8	9.7	44.9
TOTAL INVERTS	32.6	35.4	32.8	41.3	142.1	42.7	1483.9	6.9	88.6	33.3	39.4	41.9	45.6	12.1	46.3
Other	106.7	5.7	3.9	52.8	108.1	21.3	68.5	0	2.1	3.6	4.2	14.6	4.8	1.8	0
TOTAL CATCH(kg/km)	589.2	650.6	211.7	586.9	1140.9	409.3	2449.9	312	365.1	557.2	424.9	845.7	323.5	486.5	1829.9

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Haul	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
Location	STEPOVAK	STEPOVAK	STEPOVAK	STEPOVAK	BEAVER	BEAVER	BEAVER	BEAVER	BEAVER	BEAVER	BEAVER	BEAVER	BEAVER	BEAVER	BEAVER
Month/Day/Year	8/9/97	8/9/97	8/9/97	8/10/97	8/10/97	8/10/97	8/10/97	8/10/97	8/10/97	8/10/97	8/11/97	8/11/97	8/11/97	8/11/97	8/11/97
Station	STA	STB	STE	368A	348	329B	329C	BAF	BAE	311A	312A	311B	BAD	BAC	BAA
Longitude Start	159 48.7	159 45.6	159 46.0	160 8.8	160 18.8	160 25.7	160 29.1	160 33.2	160 36.6	160 34.4	160 36.8	160 33.1	160 34.6	160 36.9	160 41.8
Latitude Start	55 49.1	55 49.5	55 47.6	55 33.9	55 34.4	55 27.7	55 25.9	55 28.7	55 28.8	55 27.3	55 24.5	55 26.0	55 30.7	55 30.2	55 32.3
Heading, Degrees	175	180	180	270	114	47	55	337	180	270	111	90	321	0	115
Average Depth (m)	101	113	123	179	188	174	132	82	113	126	53	133	95	95	31
Distance Fished (km)	1.9	1.9	1.9	1.9	1.5	1.5	1.9	1.9	1.7	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	7	5.9	4.9	4.7	4.4	4.4	5	8	7	4.9	8.7	4.7	7.1	6.8	11
							----------kilograms/kilometer----------								
Pollock	21.8	235.6	363.4	7	51.2	20.2	432.1	0	45.4	60.6	0	88.4	755.1	26.8	0
Pacific Cod	4.9	5.9	8.2	12.6	59.2	79	5	7	12.2	25.6	16.6	14.8	28	8.2	3.3
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0.4	0.1	0.3	0	0	0	0.4	0	0	0	0	0.4	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	0	0	0	0	58.9	0	0	0	0	0	0	0	0	0
Other Roundfish	0	0	0.8	6.5	0	0	0	1.1	0	0	0	0	0	0	4.2
TOTAL ROUNDFISH	27.4	241.6	372.7	26	110.4	158.1	437.5	8.1	57.6	86.2	16.6	103.6	783.1	34.9	7.5
Arrowtooth Flndr	77.4	157.7	233.9	266.5	557	157.4	334.9	66.8	220.7	169.7	14	134.6	216.4	174.2	9.8
Flathead Sole	55.1	125.1	151.2	113.3	148.6	126.1	70.2	10	118	83.6	7	103.1	153.1	243.4	1.4
Rock Sole	4.6	0	2.5	3.3	0	0	0	6.7	12.5	0	36.1	0	0	0	25.3
Rex Sole	0.6	0	0	0	0	0	0	3.3	0	0	0	0	0	0	0
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pac Halibut	47.9	38.3	5.7	23.7	26.3	6.3	43.1	23.7	57.2	22.2	27.3	29.4	21.3	85.3	39.5
Starry Flndr	30.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	27.5	0	20	0	0	0	0	105.8	77.8	50.2	18.4	8.6	67.7	136	73.2
Other Flatfish	0	0	0	0	0	0	0	88	11.1	0	0	22	0	0	36.6
TOTAL FLATFISH	243.3	321	413.3	406.8	731.8	289.8	448.3	304.3	497.2	325.6	102.8	297.6	458.4	639	185.8
Skates	0	0	0	41.6	15.4	3.6	0	5.4	0	0	0	8.2	0	0	4.6
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0.1	0.1	0.3	5.3	2.2	2.2	1	0	0.8	1.6	0	0.9	1.5	0.6	0.1
Red King Crab	2.4	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0.8	0.6	0	0	0	0.2	0	0
Shrimp	0	0	0	1.1	2.2	1.2	0	0	0	1.2	0	0	0	0	1.4
Scallop	1.7	0.8	0	0	0	0	0	6.2	0.5	0	0.5	0.1	0.3	0	0
Other Inverts	17.1	15.2	0.8	7.8	37.2	0	3.7	47.9	5.6	27.5	91.7	4.8	0	31	143.5
TOTAL INVERTS	21.3	18.3	1.1	14.3	41.5	3.4	4.7	54.8	7.4	30.3	92.2	5.7	2	31.7	145
Other	0.6	1.1	1.7	1.1	0	1.2	0	1.1	8.3	1.2	1.6	0	0	7.2	215.3
TOTAL CATCH(kg/km)	292.7	582	788.8	489.9	899.1	456.2	890.4	373.8	570.7	443.3	213.3	415.2	1243.5	712.8	558.2

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Haul	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195
Location	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	SANAK	SANAK	SANAK	SANAK	SANAK
Month/Day/Year	8/13/97	8/13/97	8/13/97	8/13/97	8/13/97	8/13/97	8/13/97	8/13/97	8/13/97	8/13/97	8/14/97	8/14/97	8/14/97	8/14/97	8/14/97
Station	MOU	MOV	MOR	MOS	87A	87C	87D	98C	87B	MOP	113	125	126	138A	138B
Longitude Start	163 13.5	163 10.2	163 9.9	163 5.0	162 59.9	162 59.1	162 55.8	162 53.9	162 57.8	162 58.3	162 40.7	162 32.0	162 33.3	162 25.4	162 25.0
Latitude Start	54 46.8	54 47.7	54 49.5	54 49.9	54 49.6	54 47.3	54 46.2	54 47.5	54 49.8	54 50.9	54 33.9	54 31.0	54 29.1	54 28.6	54 26.9
Heading, Degrees	54	90	54	60	180	177	317	180	139	0	180	90	90	90	114
Average Depth (m)	80	82	90	86	84	60	91	68	84	77	133	148	141	143	143
Distance Fished (km)	1.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.5	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	7.1	6.6	6.6	6.7	7.2	7.1	6.8	7.5	7.2	8.1	4.9	4.5	4.6	4.6	4.5
							----------kilograms/kilometer----------								
Pollock	5.6	18.8	61.9	45.1	40.3	1.1	21.4	0.1	9.4	0.1	2.3	0.6	1.8	0.6	3.7
Pacific Cod	28.1	5	20.1	0.6	2.3	6.1	5.5	5.4	36.4	14.1	0	33.4	10.9	14.3	0
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	0	0	0	0.6	0.8	0.8	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0.4	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	0	67.3	0	14.9	14.6	43.8	7.2	3.7	7.9	0	0	0	0	0
Other Roundfish	24.4	0	0	0	0	1.9	4.4	2.2	1.8	3.9	0	0	1.3	0	0
TOTAL ROUNDFISH	58.1	23.8	149.4	45.7	57.9	23.7	75.1	14.9	51.3	26	2.3	34.7	14.7	15.7	3.7
Arrowtooth Flndr	0	62.4	139.1	80.6	181	22.2	192.7	21.7	31.5	11.2	132.6	151.9	191.5	97.8	137.1
Flathead Sole	97.3	263.9	160	146.7	83	0	98.5	72.4	72.2	8.5	103.5	100	144.9	86.3	75.3
Rock Sole	681	8	9	1	72.4	123.7	168.6	39.1	98	34.8	0	2.9	0	0	0
Rex Sole	0	0	0	1.9	0	0	0	0.7	0	1.3	4	0	5.2	0.6	0
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17.5
Pac Halibut	57.2	10.3	32.5	29.6	15.9	37.7	38.9	10.7	100.8	28.5	11.1	7.1	29.2	38.6	6.4
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	20.8	88.2	49.5	27.7	0	13.1	44.9	149.8	57.9	0	0	0	0	0
Other Flatfish	213.6	0	0	17.5	61.8	0	0	10.2	22.2	31.5	0	0	31	0	0
TOTAL FLATFISH	1049.1	365.3	428.8	326.8	441.8	183.6	511.9	199.6	474.5	173.8	251.2	261.9	401.8	223.3	236.3
Skates	0	0	23	19.8	0	0	24.9	0	0	0	0	3.6	4.1	3.4	0
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0	0.1	2.9	0.2	2.5	0	0.1	0	1.7	8.4	0.3	2.2	0.4	1.8	0.2
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	4.1	1.6	1.5	1.9	2.1	0	2.2	0	0	1.3	0.8	0	1.3	0.6	0
Scallop	0	0	0	0.4	2.1	0.8	0.5	0	0	0.1	0	0	0	0.1	0
Other Inverts	51.3	100.8	28.4	27.2	80.9	84.4	129.2	6.5	105.4	21.7	4.9	11.5	3.9	1.3	1.7
TOTAL INVERTS	55.4	102.5	32.8	29.8	87.6	85.2	132	6.5	107	31.4	5.9	13.7	5.6	3.8	1.8
Other	133.8	31.5	1.5	2.9	100.1	38.4	52.5	37.6	75.9	11.2	2.4	4.6	5.2	4.7	1.7
TOTAL CATCH(kg/km)	1296.3	523.2	635.5	424.9	687.4	330.9	796.4	258.6	708.7	242.3	261.9	318.5	431.4	251	243.5

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Haul	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210
Location	SANAK	SANAK	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	MORZHOV.	COLD BAY
Month/Day/Year	8/14/97	8/14/97	8/15/97	8/15/97	8/15/97	8/15/97	8/15/97	8/15/97	8/15/97	8/15/97	8/15/97	8/15/97	8/16/97	8/16/97	8/16/97
Station	138C	137	MON	MOO	MOK	MOJ	MOL	MOI	MOH	MOG	MOF	MOC	MOD	MOB	BEG
Longitude Start	162 19.9	162 24.3	163 3.6	163 1.1	162 59.3	163 4.4	162 58.3	162 58.1	162 59.9	162 59.6	163 1.7	163 7.2	163 3.1	163 3.7	162 10.2
Latitude Start	54 26.4	54 30.3	54 51.6	54 51.8	54 52.9	54 53.7	54 55.5	54 56.9	54 57.2	54 58.6	54 59.1	55 1.7	55 1.8	55 3.7	54 58.9
Heading, Degrees	90	325	66	69	333	46	163	336	165	332	317	148	333	180	265
Average Depth (m)	146	146	90	88	95	66	119	101	99	88	80	73	82	73	82
Distance Fished (km)	1.9	1.9	0.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.9	1.9	1.3	1.3
Bottom Temperature	4.6	4.6	6.6	6.6	6.6	7.6	6.4	6.4	6.5	6.5	6.6	7.8	6.5	7.1	7.8
							----------kilograms/kilometer----------								
Pollock	0	3	56.2	40	123	0	54.1	600.3	267	343.7	0.8	1.3	244.4	15	3.5
Pacific Cod	4.6	59.6	50	26.5	28.1	22.2	17.2	40.2	10	7.3	8	31.9	31	28.1	8
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0.4	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4	0
Sculpins	0	0	0	2	0	0	10.9	0	0.9	0	0	29.7	7.1	8.6	0
Other Roundfish	0.9	0.7	3.2	1.5	0	1.3	7.3	0	0.9	2.6	1.9	2.3	2.6	1	0
TOTAL ROUNDFISH	5.5	63.6	109.4	69.9	151.1	24	89.5	640.5	278.9	353.6	10.8	65.2	285.2	55.1	11.5
Arrowtooth Flndr	73.4	121.8	44.1	41.9	107.2	71.5	39.8	157.7	111.3	51.6	77.8	27.4	22.1	20	20.6
Flathead Sole	96.2	85.1	142.9	71.7	160.1	101.8	358	407	220.8	179.3	69.8	109.6	246.2	102.7	76.8
Rock Sole	0	4.9	46.2	3.5	7.9	22	361.6	0	13.2	8.7	31.9	22.8	15.1	6.6	9.3
Rex Sole	0	0	0	0	0	0	0	0	2.8	0.9	0	0	0	0	0
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pac Halibut	0	15.2	79.2	6.5	52.8	44.6	3	43.8	43.2	164.1	52.8	19.3	72.9	21.9	37
Starry Flndr	0	0	0	0	0	0	36.2	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	62.3	13.6	27.8	176.1	202.5	55.9	124.6	140.8	121.7	413.4	204.6	637.5	65.6
Other Flatfish	0	0	0	6.6	51.6	0	0	64.4	0	6.1	12	0	6.2	0	0
TOTAL FLATFISH	169.6	227	374.7	143.8	407.5	416.1	1001.2	728.8	515.9	551.6	365.9	592.5	567.1	788.7	209.4
Skates	8.7	0	0	22.5	0	0	7.8	3	1.8	0	0	0	0	0	0
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	4.5	1	2.2	12	12.4	0	17	1.3	2.9	0.1	0.5	0.1	0.3	0.2	0
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	14.1	0.4	0
Dungeness Crab	0	0	0	0	0	0	0	0	0.6	0	0	0	0	1.7	0
Shrimp	0.6	1.4	3.2	0.5	1.3	0	10.9	0	0.9	0	1	2.3	0.9	0	0
Scallop	0	0	0	0	0	3.1	0	0.2	0	0	0	0	0	0	8.1
Other Inverts	4.4	9.8	23.8	5.6	8	31.6	43.4	11.8	50.2	19.2	8.9	50.2	34.4	88.4	96.5
TOTAL INVERTS	9.6	12.2	29.2	18.1	21.8	34.7	71.3	13.3	54.7	19.3	10.4	52.6	49.7	90.6	104.6
Other	13.4	15.9	6.5	1.5	4	1.3	3.6	55.9	15.8	2.6	1	4.5	1.8	1.9	8.4
TOTAL CATCH(kg/km)	206.8	318.7	519.8	255.9	584.4	476.1	1173.4	1441.6	867.1	927.1	388.1	714.8	903.8	936.3	333.9

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Haul	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225
Location	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY
Month/Day/Year	8/16/97	8/16/97	8/16/97	8/17/97	8/17/97	8/17/97	8/17/97	8/17/97	8/17/97	8/17/97	8/17/97	8/17/97	8/17/97	8/18/97	8/18/97
Station	156A	157A	145B	BEB	BEA	BED	BEC	BEE	BEF	COO	132A	COM	COJ	COB	COC
Longitude Start	162 7.1	162 7.5	162 9.8	162 9.1	162 10.4	162 9.6	162 10.4	162 9.0	162 6.9	162 23.2	162 24.0	162 27.5	162 31.8	162 35.8	162 33.2
Latitude Start	54 59.1	54 55.2	54 52.9	55 8.3	55 8.4	55 6.7	55 6.8	55 4.0	55 1.1	55 0.0	54 58.5	55 1.0	55 2.7	55 13.6	55 13.6
Heading, Degrees	180	147	27	194	211	180	170	180	204	90	51	90	107	158	160
Average Depth (m)	90	75	71	69	31	79	71	77	95	102	37	82	62	55	48
Distance Fished (km)	1.9	1.9	1.1	1.9	1.9	1.9	1.7	1.9	1.9	1.9	1.1	1.7	1.1	1.9	1.9
Bottom Temperature	7.5	8.1	8.4	7.6	11.6	7.3	7.6	7.6	7.6	8.1	8.5	8.6	9.2	11	11.5
							----------kilograms/kilometer---------								
Pollock	64.7	23.4	3.7	454.4	0.1	393.7	199.1	464.7	344.2	328.5	0	84.9	29.2	5	0.9
Pacific Cod	2.4	9.4	2.7	11.9	0.8	30.3	2.3	14	6.4	17.5	0	14	360.6	6.3	3.8
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0.3	0	0	0.8	0	0	0	0	1.8	0	0.3	0.5	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	0	0	48.5	0	20.2	9.5	0	0	66.3	0.4	0	0	12.8	3.2
Other Roundfish	3.8	5.6	0	0	6.9	1.8	0.7	1.8	1.9	7.6	0	5.3	4.1	5.5	2.4
TOTAL ROUNDFISH	70.9	38.7	6.4	514.7	8.5	446.1	211.5	480.5	352.6	421.7	0.4	104.6	394.6	29.6	10.4
Arrowtooth Flndr	31.3	17	84.5	62.8	6.1	71.8	46.4	22.9	187.6	42.2	1.1	50.6	24.8	0	0
Flathead Sole	289.4	111.9	190.2	405.2	42.7	504.1	362.7	573.8	375.2	673.6	2.2	239.6	62	76.8	73.1
Rock Sole	7.5	0	0	68.5	38.9	23.9	24.5	80.9	15.7	9	17.5	58.6	636.4	9.1	0
Rex Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dover Sole	0	0	0	0	0.8	0	0	0	0	0	0	0	0	0	0
Pac Halibut	42.1	17.1	6.4	23.8	0.1	42.5	25.9	33.9	11.2	24.7	27.3	24.7	0	33	9.5
Starry Flndr	34.3	0	0	0	7.6	0	143.1	0	0	0	0	189	95	0	27.6
Yellowfin Sole	89.5	162.9	302.2	439.5	106	551.9	410.4	281.6	39.1	119.1	4.2	263.6	603.3	497.1	297.3
Other Flatfish	29.8	0	25.4	28.6	13.7	44.2	53.2	239.4	58.6	13.6	0	0	0	21.9	0
TOTAL FLATFISH	523.8	308.9	608.6	1028.3	215.9	1238.4	1066.2	1232.5	687.4	882.1	52.2	825.9	1421.6	638	407.5
Skates	14.5	0	74.4	0	15.5	2.7	0	0	4.6	23.2	0	51.9	10.4	0	0
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	1.3	0.1	0	0.1	0	0.6	0	0.1	0.2	2.8	0.9	4.6	0	0.6	0.7
Red King Crab	0	0	0	0	0	2.4	0	0	0	0	0	2.8	0	0	0
Dungeness Crab	0	0	0	0.1	0.9	0	0	0	0	0	0	3.2	2.6	0	0
Shrimp	1.5	0	0	0	0	0	0	0	1.9	0	0	0	0	9.1	0.8
Scallop	0	0.6	0	0	0	0	0	0.7	0	0	1.3	0	0	0	0
Other Inverts	4.5	66.9	47.5	0	25.2	103	28.6	7	5.9	75.4	57.4	346.1	45.4	17.1	42.2
TOTAL INVERTS	7.3	67.6	47.5	0.2	26	106	28.6	7.8	8	78.2	59.7	356.7	48.1	26.9	43.7
Other	4.5	1.2	6.3	20	8.4	0	1.4	0	1.9	12	1684	0	0	0	1.6
TOTAL CATCH(kg/km)	620.9	416.4	743.3	1563.2	274.3	1793.2	1307.8	1720.9	1054.5	1417.4	1796.3	1339.1	1874.7	694.4	463.3

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Haul	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
Location	COLD BAY	COLD BAY	COLD BAY	COLD BAY	COLD BAY	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V
Month/Day/Year	8/18/97	8/18/97	8/18/97	8/18/97	8/18/97	8/19/97	8/19/97	8/19/97	8/19/97	8/19/97	8/19/97	8/19/97	8/19/97	8/19/97	8/19/97
Station	COE	COF	COGA	COH	COGB	VOL	VOO	VOP	VOMA	VOFA	VOFB	VOA	VOG	VON	VOR
Longitude Start	162 32.6	162 31.4	162 28.9	162 24.0	162 26.0	161 59.3	161 56.6	161 55.5	161 50.3	161 50.7	161 49.0	161 43.3	161 46.7	161 44.9	161 44.8
Latitude Start	55 11.8	55 9.7	55 8.3	55 6.6	55 7.2	55 13.2	55 11.3	55 11.5	55 13.9	55 15.5	55 15.8	55 17.7	55 15.3	55 14.1	55 11.8
Heading, Degrees	150	120	340	287	317	117	0	60	0	180	45	11	90	231	312
Average Depth (m)	64	88	95	48	59	66	75	99	86	84	99	113	106	121	123
Distance Fished (km)	1.9	1.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	0.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	10.6	10.7	10.6	11.1	10.8	5.7	5.5	5.1	4.4	4.5	4.7	4.6	4.5	4.5	4.6
							----------kilograms/kilometer----------								
Pollock	3.9	1.2	2.9	0	0	151.6	213.9	397.8	544.1	334.2	450.4	592.8	263.6	194.6	509.1
Pacific Cod	24.5	20.1	15.7	7.3	3.3	26	27.7	116.1	10.6	30.6	48.6	18.6	33.5	39.8	53.3
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	1.1	0	2	0	0	0	0	0	0	0	0	0
Sculpins	0	32.9	78.8	0	0	43	0	37.9	43.1	6.4	0	0	0	0	40.7
Other Roundfish	4.4	0	4	4.5	0	0	5.2	6.9	3.1	0	0	0	0	0	3.9
TOTAL ROUNDFISH	32.8	54.3	101.4	12.9	3.3	222.6	246.8	558.6	600.9	371.2	499	612	297	234.4	607.1
Arrowtooth Flndr	0	0	0	0	2.4	40.8	48.9	27.9	67.1	82.9	197.4	185.3	327.9	11.9	54.6
Flathead Sole	184.9	177.9	236.5	77.5	106	461.8	270.4	456.8	168.3	298.7	293.5	148.2	340.2	167.1	208.4
Rock Sole	0	115.3	138.8	9.1	7.2	0	22.7	50.2	17	30	25.3	17.4	0	0	2
Rex Sole	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pac Halibut	53.4	3.5	75.1	0	3	34.2	11	50	38.8	21.6	2.6	19.5	49.4	13.9	0
Starry Flndr	493.1	59.3	0	255.4	265.1	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	255.3	500.7	447.8	301	390.4	192.4	137.8	88	19.1	46.4	50.6	25.5	36.8	21.9	29.8
Other Flatfish	0	0	0	0	0	0	29.6	22.3	0	22.8	31.6	18.5	0	0	29.8
TOTAL FLATFISH	986.7	856.7	898.3	643	774.2	729.1	520.4	695.2	313.3	502.5	601.1	414.4	754.2	214.8	324.5
Skates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	4.1	18.6	120	0.9	17.3	0.1	4.8	13.8	2	1.1	0.4	1.1	5.4	3.7	3.6
Red King Crab	0	0	0	0	1.3	0	4.3	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0.3	0	0	0	0	0	0	0	0	0	0
Shrimp	2.2	3.3	3.1	2.3	1.2	0	0.9	2.2	0	0	0	0	0	0	0
Scallop	0	0	0.3	0	0	0	0.2	0	0	0	0	0	0	0	0
Other Inverts	92.5	72.5	18.9	3.4	9.7	0	12.2	40.1	3	35.5	48	10.4	7.1	101.4	84.3
TOTAL INVERTS	98.8	94.4	142.3	6.5	29.8	0.1	22.3	56.2	5	36.6	48.4	11.5	12.5	105.1	87.9
Other	0	19.7	3.1	0	0	1.1	5.2	3.3	2	5.5	2.5	0	2.1	34.8	0
TOTAL CATCH(kg/km)	1118.3	1025.2	1145.1	662.5	807.3	953	794.8	1313.3	921.2	915.8	1151.1	1037.9	1065.9	589.1	1020.5

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Haul	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255
Location	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V
Month/Day/Year	8/19/97	8/20/97	8/20/97	8/20/97	8/20/97	8/20/97	8/20/97	8/20/97	8/20/97	8/20/97	8/20/97	8/21/97	8/21/97	8/21/97	8/21/97
Station	VOQ	VOMB	VOH	VOI	VOJ	VOD	VOE	PAWA	PAV	VOC	VOB	PAH	PAI	PAE	PAF
Longitude Start	161 47.5	161 48.1	161 40.2	161 37.4	161 30.5	161 32.8	161 28.5	161 32.0	161 34.5	161 34.6	161 40.5	161 36.2	161 34.6	161 33.7	161 31.1
Latitude Start	55 12.0	55 13.4	55 16.1	55 16.7	55 17.3	55 18.9	55 19.1	55 22.1	55 21.2	55 18.3	55 18.2	55 30.7	55 32.0	55 34.2	55 34.0
Heading, Degrees	270	0	45	90	276	69	90	180	180	270	90	182	138	137	133
Average Depth (m)	97	95	101	110	80	113	62	75	97	99	101	59	33	20	27
Distance Fished (km)	1.9	1.9	1.9	1.9	1.3	1.9	1.9	1.3	1.9	1.9	1.9	1.3	1.9	1.9	1.9
Bottom Temperature	4.6	4.6	4.7	4.5	4.9	4.5	6.2	6.2	5	4.5	4.7	8.4	10.1	11.6	10.5
							----------kilograms/kilometer----------								
Pollock	369.5	456.3	376.4	242.1	2	129.5	0.2	23.2	513.1	212.6	228.3	47.9	3.8	0.3	78
Pacific Cod	25.7	40	10.4	37.1	13.8	37.6	17.2	11.3	15.2	17.3	45.5	13.4	61	21	9.1
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.8
Sculpins	72.2	0	0	0	13.6	0	0	8.9	0	0	0	22	0	65.5	18.3
Other Roundfish	0	3.7	2.7	0	0	0	2.8	0	0	0	0	0	1.7	2.5	1.8
TOTAL ROUNDFISH	467.5	500	389.9	279.2	29.4	167.1	20.1	43.4	528.3	230	273.8	83.3	66.4	89.3	110
Arrowtooth Flndr	74.9	40.3	112.5	53.8	91.6	47	58.9	32	68.4	78.5	79	15.7	8.3	0	3.7
Flathead Sole	102.5	228.1	147.8	161.4	294.9	530.3	4.7	42.7	1051.1	534.3	288.8	169.4	8.3	1.2	20.1
Rock Sole	0	0	4.5	19.4	17	40.3	65.4	53.4	21.8	0	11.5	18.8	20	13.9	20.1
Rex Sole	0	0	0	0	0	0	0	5.3	0	0	0	0	0	0	0
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pac Halibut	8.1	36	30.8	16.4	81.5	21.6	87.5	21.5	41.3	0	45.6	83.9	69	53.4	72.1
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	97.2	0	0	0
Yellowfin Sole	49.9	32.9	63.5	65.8	128.8	228.2	52.4	241.8	52.9	52.3	47.4	366.9	382.6	131	282
Other Flatfish	24.9	0	0	0	0	107.4	0	0	0	124.3	0	0	0	7.6	73.2
TOTAL FLATFISH	260.3	337.3	359.2	316.8	613.7	974.8	268.9	396.7	1235.4	789.4	472.3	751.9	488.1	207.1	471.2
Skates	0	0	0	0	0	0	0	0	0	0	0	0	15.4	0	11.1
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	3	0.8	2.5	0.1	0.9	4	0.1	0	1.9	19.2	2.3	0	0	0	0.2
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0	7.5
Shrimp	0.1	0	0	0.8	0	1.7	0	0	0	0	0.7	0	0	0	1.8
Scallop	0	0	0.2	0	0.7	0	1.2	0	0	0	0.2	0	0.2	0	0
Other Inverts	42.1	25.6	24.6	56.8	10.2	46.9	47.7	176	684.1	76.3	70.4	106.6	89.8	90.4	88.8
TOTAL INVERTS	45.1	26.5	27.3	57.7	11.8	52.6	49	176.1	686	95.5	73.5	106.6	90.3	90.4	98.2
Other	1.3	1.2	10	3	8.5	6.7	34.6	7.1	0	3.3	16.7	3.2	5	10.1	23.8
TOTAL CATCH(kg/km)	774.2	865.1	786.3	656.6	663.4	1201.3	372.7	623.2	2449.8	1118.2	836.4	944.9	665.2	396.9	714.4

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Haul	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270
Location	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	PAVLOF/V	BEAVER	BEAVER	BEAVER
Month/Day/Year	8/21/97	8/21/97	8/21/97	8/21/97	8/21/97	8/21/97	8/21/97	8/22/97	8/22/97	8/22/97	8/22/97	8/22/97	8/22/97	8/24/97	8/24/97
Station	PAB	PAC	PAJ	PAM	PAOB	PAOA	PARA	PAP	PARB	PAU	228	245	278	BVB	BVA
Longitude Start	161 28.9	161 25.7	161 31.3	161 32.4	161 39.1	161 40.3	161 40.2	161 34.3	161 35.4	161 40.8	161 18.2	161 14.9	160 56.4	160 52.4	160 54.5
Latitude Start	55 36.3	55 36.3	55 31.7	55 29.8	55 26.7	55 25.8	55 24.2	55 27.3	55 24.8	55 22.1	55 16.0	55 16.4	55 23.2	55 30.0	55 29.5
Heading, Degrees	119	123	180	180	200	180	185	242	160	180	63	90	0	190	185
Average Depth (m)	20	18	37	55	95	90	106	75	82	128	69	80	110	35	44
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.3	1.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	12.1	12.5	9.7	7.7	5.4	5.5	5.1	6.8	6.2	4.8	7.9	7.6	7.8	10.1	9.4
							----------kilograms/kilometer----------								
Pollock	0.8	6.2	1.3	143.6	121.8	171.4	281.6	73.2	70.9	199.4	7.2	2.3	406.7	0	0
Pacific Cod	9.6	4.6	9.8	9	15.3	130.9	37.6	20	10.4	37.4	3.1	11	59.7	1.1	7.2
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sablefish	0	1.1	0	0	0	0	0	0	0	0	0.4	0	0.8	0	10.8
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	10.6	3.2	0	0	26.7	36	0	0	0	8.3	0	0	66.2	0	0
Other Roundfish	8.5	0.8	1	0	0	6.5	0	0	0	5	0	0	22.2	6.4	5.9
TOTAL ROUNDFISH	29.4	17.5	12.1	152.6	163.8	344.9	319.2	93.3	81.3	250	10.7	13.3	555.7	7.6	23.9
Arrowtooth Flndr	2.1	1.6	19.6	12.9	11.9	12.9	103.3	38.7	0	44.6	319.2	33.2	259.9	0	12.9
Flathead Sole	6.4	35	1.9	42.8	817.9	316.8	181.6	124.3	247.7	249.5	197.5	108	202.2	23.5	16.5
Rock Sole	4.2	0	0	85.6	56.3	152	74.9	154.9	36.6	5	73.5	0	111.9	30.9	3.5
Rex Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pac Halibut	25.8	13.7	22.6	35.1	0	8	15.8	54.9	15.5	0	27	0	101.5	7.2	75.9
Starry Flndr	0	41.4	0	0	0	0	0	0	70.4	0	0	0	0	0	83.4
Yellowfin Sole	430.1	346.7	411.8	509.1	56.3	113.3	84.9	179.3	16.9	81	103.3	10	26.5	29.9	193.8
Other Flatfish	125	0	0	0	88.9	30.9	18.3	0	0	0	0	0	25.3	11.8	16.4
TOTAL FLATFISH	593.6	438.3	456	685.3	1031.3	633.9	478.8	552.1	387	380.1	720.6	151.2	727.1	103.2	402.4
Skates	0	16.3	81.4	0	0	0	0	0	0	0	13.4	0	0	5.6	22.9
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0.1	0	0	0.2	1	0.2	1.6	1	1.9	4.6	0	0.1	0.6	0	0
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0.4	0.4	1.5	0.3	0	0	0	0.4	0	0	0	0	16.4	58.7
Shrimp	0	0	0	0	0	0	0.8	0	0	1.7	1.1	0	1.2	0	0
Scallop	0	0	0.6	0	0	0	0	0	0	0	0.3	0	16.5	6.5	7.7
Other Inverts	17	165.3	63.8	53.5	38.5	162.2	46.7	152.8	107	92.5	31	4.5	55.3	125.9	51.8
TOTAL INVERTS	17	165.7	64.8	55.2	39.8	162.4	49.1	153.8	109.4	98.8	32.4	4.6	73.6	148.8	118.2
Other	42.4	7.9	51	0	0	5.2	0	2.1	2.8	0	6.9	4.7	14.4	134.4	9.9
TOTAL CATCH(kg/km)	682.4	645.8	665.2	893.2	1234.9	1146.3	847.1	801.2	580.5	728.9	784.1	173.9	1370.8	399.6	577.4

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Haul	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285
Location	BEAVER	W.NAGAI	W.NAGAI	W.NAGAI	W.NAGAI	W.NAGAI	W.NAGAI	W.NAGAI	W.NAGAI	W.NAGAI	MITROFAN	MITROFAN	MITROFAN	MITROFAN	MITROFAN
Month/Day/Year	8/24/97	8/24/97	8/24/97	8/25/97	8/25/97	8/25/97	8/25/97	8/25/97	8/26/97	8/26/97	8/27/97	8/27/97	8/27/97	8/27/97	8/27/97
Station	BVC	332B	353	354	334	335	301	318	373B	371	4035	4094	4065	4064	4063
Longitude Start	160 54.2	160 22.4	160 18.6	160 19.0	160 22.8	160 27.6	160 44.2	160 34.8	160 3.6	160 9.2	158 49.2	158 47.3	158 34.0	158 35.6	158 34.9
Latitude Start	55 27.4	55 12.3	55 8.7	55 4.6	55 2.7	54 59.4	54 48.0	54 47.7	55 9.3	55 16.8	55 57.9	55 55.8	55 56.8	56 0.1	56 7.9
Heading, Degrees	217	0	27	215	45	238	119	117	317	327	242	115	180	347	222
Average Depth (m)	95	177	192	102	130	110	110	108	77	137	137	143	104	157	154
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.7	1.5	1.9
Bottom Temperature	8.3	6.3	6.3	6.4	6.3	6.3	6	6.2	6.8	6.5	6.6	6.5	7.9	5.5	5.2
							----------kilograms/kilometer----------								
Pollock	0	115	13.5	108.9	34.3	1.2	101.9	0	0.5	104.9	58.8	3.2	0.4	139.4	247.4
Pacific Cod	4.5	9.9	101.4	17.9	13.1	24.1	31.4	20.7	9.4	41.6	1.8	0	4.5	0.6	177.7
Pac Ocean Perch	0	0	1.1	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	0	0	0	0	0	19.9	4.9
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0.4	0.9	1.1	1.2	0	0	0	0	0	0	0	0
Sablefish	0	0.7	0	0	0	0.5	0	0	0.3	0	0	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	6.3	0	0	0	0	0	0	3.6	1.4	5.2	0	0	2.6	123
Other Roundfish	8.5	5	1.3	0	8.3	8.5	0	0	0.9	0	1.7	0.5	0	1.8	16.3
TOTAL ROUNDFISH	13	136.9	117.3	127.3	56.6	35.5	134.6	20.7	14.8	147.9	67.5	3.7	4.9	164.3	569.2
Arrowtooth Flndr	84.9	126	179.8	1657.6	875.8	275.2	129.2	353.8	72.5	650.6	107.2	15.4	162.1	73.4	37.1
Flathead Sole	61.1	66.8	131.2	344.7	175.2	61.9	57	6.4	275.3	77.5	85.6	16.3	45.7	70.8	459.5
Rock Sole	451.6	0	0	0	0	0	0	0	0	44.3	0	2.2	0	0	0
Rex Sole	0	0	0	0	7	34.1	0	17.7	0	0	0	0.8	13.4	0	0
Dover Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pac Halibut	9.2	24.5	21	54.4	81	189.5	45.6	54.7	38.8	167	27	0	29.9	0	0
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	312.4	0	0	0	0	0	0	0	68.8	0	0	0	0	0	0
Other Flatfish	0	0	0	0	0	6.4	60.8	0	0	0	0	0	0	0	0
TOTAL FLATFISH	919.2	217.3	331.9	2056.7	1139	567.2	292.7	432.6	455.3	939.5	219.8	34.7	251.1	144.2	496.7
Skates	0	5.7	21.7	6.9	1.8	0	1.5	0	34.7	0	5.1	1.4	18.2	0.9	0
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0	38.7	4.6	0	0.4	1.5	0.5	0.4	14.3	0.4	1.8	0.4	0.1	26.4	75.4
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	15.3	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0
Shrimp	1.7	2.5	3.6	0	0	0	0	0	0	0	1.7	0.4	1	0.4	2.3
Scallop	18	1.9	0	5.6	1	11	7.6	34.6	21.9	8.4	1.9	0.3	8	0.4	0
Other Inverts	122.2	115.9	150.6	8.2	63.1	169.7	156.3	63.6	31.7	47.1	37.1	12.9	31.3	7.8	64.5
TOTAL INVERTS	157.2	159.1	158.9	13.8	64.5	182.1	164.5	98.7	67.9	55.9	43.1	14	40.4	35	142.2
Other	3.4	12.8	26.7	0	0	12.8	34.2	12.9	32.6	19.4	34.3	6	4	156.5	7
TOTAL CATCH(kg/km)	1092.8	531.9	656.5	2204.6	1261.9	797.6	627.4	564.8	605.4	1162.7	369.8	59.9	318.6	500.9	1214.9

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Haul	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300
Location	MITROFAN	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK
Month/Day/Year	8/27/97	8/28/97	8/28/97	8/28/97	8/28/97	8/28/97	8/28/97	8/28/97	8/28/97	8/28/97	8/29/97	8/29/97	8/29/97	8/29/97	8/29/97
Station	4048	4312	4287	4286	4282	4272	4277	4278	4274	4267	4256	4266	4270	4271	4264
Longitude Start	158 38.1	158 9.0	157 55.5	157 53.5	157 57.8	158 5.6	158 3.3	158 2.0	158 7.6	158 9.9	158 20.0	158 12.6	158 10.8	158 12.2	158 15.6
Latitude Start	56 3.6	56 15.2	56 24.1	56 25.5	56 25.3	56 28.9	56 25.8	56 23.7	56 24.3	56 24.1	56 25.3	56 25.2	56 15.1	56 14.3	56 14.2
Heading, Degrees	180	78	75	230	270	156	173	326	90	317	90	90	58	47	211
Average Depth (m)	168	113	203	165	194	110	179	192	177	126	95	154	102	102	77
Distance Fished (km)	1.9	1.3	1.5	1.9	1.9	1.9	1.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	5.2	8.3	5.5	5.7	5.4	6.9	5.5	5.5	5.5	5.8	7.5	5.5	8.3	8.3	8.6
							----------kilograms/kilometer----------								
Pollock	49.1	6.9	12.1	16.7	6.3	10.6	32.8	2.4	8.1	78	10.6	2.3	17.4	15.8	31.7
Pacific Cod	19.3	3.1	5.4	9.3	6.3	0	21.9	11.8	3.2	0	9.1	29.8	0	22.5	7.3
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0.5	0	3	0	1.3	0	3.1	0	0	0.5	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0
Sablefish	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	7.3	0	9.9	12.1	2.7	8.2	0.6	7.2	6.3	104.3	1.1	1.5	1.3	0
Other Roundfish	0.8	3.6	6.7	4.9	1.4	2.7	0	1.9	0	0	6.2	3.3	0	0	8.5
TOTAL ROUNDFISH	69.7	20.9	27.2	40.9	27.4	16	65.9	16.8	18.5	84.8	130.6	36.6	18.8	39.8	47.6
Arrowtooth Flndr	43	111.9	169.4	150.6	105.4	92	229.8	99.7	261.1	141.1	99	191.8	124.8	147.6	135.9
Flathead Sole	87.6	303.2	15.1	151.7	74.1	549.1	103.8	59	137.7	274.3	201.6	156.2	304.7	220.7	176.2
Rock Sole	0	0	0	0	0	0	0	0	0	30.1	24.8	0	0	0	0
Rex Sole	0	0	0	0	2.2	0	0	0	4.3	0.8	0	0	8.7	0	0
Dover Sole	0	0	6.7	0	0	0	0	0	0	0	0	0	0	0	0
Pac Halibut	0	25.5	0	19.8	31.9	96.7	15.8	18.2	40.8	27	77.5	61.8	7.6	46.6	16.3
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	0	0	0	0	0	0	0	0	14.1	0	0	24.4	60.4
Other Flatfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FLATFISH	130.6	440.7	191.2	322	213.5	737.7	349.4	176.9	444	473.3	417.1	409.8	445.8	439.4	388.8
Skates	0	150	0	0	0	21.4	23.1	0	18.9	6.2	0	0	121.6	54.1	30.1
Spiny Dogfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	4	39.3	74.7	33	23.2	0.6	48.3	56.9	38.2	3	0.2	7.6	29.6	10.3	8.5
Red King Crab	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	14.6	0.8	0	0.9	82.2
Shrimp	0.8	3.6	0.4	3.3	3.5	9.4	3.5	3.9	8.6	4.8	5.3	4.5	4.4	1.3	2.5
Scallop	0	0.4	0.4	0	0	3.1	0.5	0	0	0	0.3	0	0	2.4	0.5
Other Inverts	34	36.2	5.9	15.4	8.5	15.1	2.3	5.6	8.6	21.4	59	9	58	39.8	10.7
TOTAL INVERTS	38.9	79.5	81.4	51.7	35.3	28.2	54.5	67	55.4	29.2	79.3	21.8	92	54.6	104.5
Other	13	1.8	120	3.3	17.5	2.7	88.7	82.1	11.9	3.2	5.3	1.1	4.4	3.8	2.5
TOTAL CATCH(kg/km)	252.1	692.8	419.8	417.9	293.7	806.1	581.8	342.8	548.7	596.7	632.3	469.3	682.6	591.8	573.6

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Haul	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315
Location	CHIGNIK	CHIGNIK	KUJULIK	KUJULIK	KUJULIK	KUJULIK	KUJULIK	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.
Month/Day/Year	8/29/97	8/29/97	8/30/97	8/30/97	8/30/97	8/30/97	8/30/97	9/10/97	9/10/97	9/10/97	9/10/97	9/10/97	9/10/97	9/10/97	9/10/97
Station	4964	4265	4298	4296	4301	4302	4308	222	223	224	198	199	200	174	173
Longitude Start	158 21.0	158 18.2	157 45.2	157 46.6	157 40.4	157 39.4	157 37.1	154 15.5	153 55.4	153 49.7	153 55.5	153 48.3	153 38.5	153 39.1	153 48.6
Latitude Start	56 13.5	56 11.4	56 32.0	56 37.4	56 32.9	56 31.8	56 32.1	58 10.1	58 9.4	58 9.3	58 13.5	58 14.4	58 14.7	58 17.6	58 19.1
Heading, Degrees	104	37	73	161	333	299	159	121	47	42	30	40	0	26	211
Average Depth (m)	68	59	91	73	95	99	132	71	205	198	219	196	179	179	210
Distance Fished (km)	1.9	1.7	1.9	1.9	1.9	1.9	1.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Bottom Temperature	8.9	9	8.6	9.5	6.9	6.8	6.5	9.6	5.3	5.3	5.4	5.2	5.1	5.2	5.3
							----------kilograms/kilometer----------								
Pollock	4.4	10.1	4.3	2.9	190.5	10.3	14.2	28.3	5.2	2.9	4.6	1.8	4.3	4.3	0.8
Pacific Cod	11.8	1.6	7.9	8	15.9	0	67.5	129	3.3	0	1.7	5.9	0	9.1	2.6
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	1.1	5.9	3.2	1.7	3.4	0	0.7
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0.1	0	0	0	0	0	0	0.1	0	0	0	1.1	0.2	5.4	0
Sablefish	0	0.4	0	0	0	0	0	4	0	0.4	4.6	0	0	0	0
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	25	0	0	0	0	0	0	3.1	0	0.4	4.9	0	0	1.4	0.5
Other Roundfish	3.7	0	2.6	6	3	4.2	6.2	1.6	9.7	0.4	0	6.1	4.9	9.8	11.8
TOTAL ROUNDFISH	44.9	12	14.8	16.9	209.3	14.5	87.9	166.1	19.3	10.2	19	16.6	12.8	30.8	16.4
Arrowtooth Flndr	22.6	13.5	42.9	85.4	89.4	97.8	138.5	33.4	136.1	61.9	82.4	94.1	1.5	73.1	50.6
Flathead Sole	61.9	342.3	110.6	332.7	178.8	198.3	93.1	126.5	15.4	12.4	17.2	18.8	0.6	33.7	14.6
Rock Sole	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0
Rex Sole	0	0	0	0	0	0	0	1.6	0	0	0	0	0	0	0
Dover Sole	0	0	0	0	0	0	0	23.3	0	0	9.2	0	0	0	0
Pac Halibut	69.5	2.4	24.7	17.3	39	37.6	27.2	68.3	21	19.7	15.2	0	32.8	18.2	3.6
Starry Flndr	0	67.4	29.2	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	179.7	272.2	8.6	85.4	0	0	0	0	0	0	0	0	0	0	0
Other Flatfish	4.8	0	0	0	0	0	0	8.5	0	0	0	0	0	0	0
TOTAL FLATFISH	338.5	697.7	215.9	529.9	307.3	333.7	258.8	261.5	172.6	94	124	113	34.9	125.1	68.8
Skates	128	37.4	75.4	49.2	26.4	19.9	47.1	148.7	36.4	18	60.3	26.2	20.3	46	55.7
Spiny Dogfish	0	1	0	0	0	0	0	9	0	28.1	2.5	5.5	1.6	6.2	5.1
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	0.4	0.1	0.1	1.2	0.3	0.6	16	0	8.1	8.4	8.4	7.5	11.3	6.9	5.2
Red King Crab	17	65.8	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	14.2	12.1	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	3.6	0	1.8	2.3	2.3	1.4	2.3	1.6	2.1	1.6	1.9	5.7	0	6.3	2.9
Scallop	6.5	0	0.9	2.6	4.9	26.8	1.1	6.3	0	0	0	0	0	0	0
Other Inverts	23.8	29.6	46.9	147.8	56.3	26.6	30.6	14.7	86.8	38.4	58.1	130.7	1	69.5	82.8
TOTAL INVERTS	65.4	107.6	49.8	153.9	63.8	55.5	50.1	22.5	97	48.4	68.4	143.9	12.3	82.8	91
Other	3.6	2.7	10.3	2.3	4.5	4.2	5.7	21.7	4.2	0	0	12.3	0	2.8	4.4
TOTAL CATCH(kg/km)	580.4	858.5	366.2	752.3	611.3	427.8	449.7	629.5	329.4	198.7	274.3	317.4	81.9	293.7	241.4

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Haul	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330
Location	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	N.MAIN.
Month/Day/Year	9/11/97	9/11/97	9/11/97	9/11/97	9/11/97	9/11/97	9/11/97	9/12/97	9/12/97	9/12/97	9/12/97	9/12/97	9/12/97	9/12/97	9/13/97
Station	171	171X	171Y	172	KUG	KUJ	KUK	KUYX	KUY	KUL	KULX	KUM	KUI	RAA	121
Longitude Start	154 15.8	154 11.9	154 6.0	154 2.2	153 26.2	153 19.1	153 16.6	153 12.7	153 11.7	153 12.5	153 13.6	153 7.2	153 23.1	153 13.6	153 11.2
Latitude Start	58 18.2	58 19.5	58 19.1	58 17.2	58 2.3	57 56.7	57 55.6	57 44.5	57 46.6	57 50.0	57 51.8	57 51.8	57 58.4	58 8.5	58 29.0
Heading, Degrees	62	78	95	26	185	125	121	14	0	352	147	296	291	323	37
Average Depth (m)	113	110	73	119	75	159	139	22	69	80	99	69	238	117	172
Distance Fished (km)	1.9	1.9	1.9	1.7	1.1	1.9	1.9	1.5	1.9	1.9	0.9	1.7	1.9	1.9	1.9
Bottom Temperature	8.7	8.9	9.1	7.9	7.6	6.5	6.5	10.6	9.5	7.3	7.3	7.5	6.3	7.6	5
							----------kilograms/kilometer----------								
Pollock	6.7	19.8	10.6	8.1	0	113.8	47.3	1.8	7.8	52.2	28.3	58.8	5.2	383.7	10
Pacific Cod	0.6	25	3.2	6	4.7	7.7	3.7	2.2	18.8	6.2	12.1	0	2.6	33.9	2.9
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0.2	0.1	0	0	0	0	0	1.1	1	0	0	0.3	1.6
Sablefish	0	0.1	0.5	0	0	0	0	1.6	4.3	1	0.6	0.4	0	0	0
Herring	0	0	0	0	0	0	0	0	0.6	0	0	0.5	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	0	6.7	0	0	0	0	13.3	3.9	0	84.3	0	0	0	2.5
Other Roundfish	3	0	7.8	1.1	1	4.4	1.1	37.2	31.3	16.1	9.7	2.3	2	7.3	13.1
TOTAL ROUNDFISH	10.4	44.9	29	15.3	5.7	125.9	52.1	56	66.7	76.7	136.1	62	9.8	425.1	30.8
Arrowtooth Flndr	46.8	58.3	42.9	48.7	6.7	225.9	483.9	0	0	86.7	241	14	94.9	334.9	86.2
Flathead Sole	69.4	87	54.8	3.1	0	115.2	91.4	18.6	1043	151.1	115.8	525.9	122.5	49.4	47.6
Rock Sole	0	0	0	0	9.1	0	0	0	27.3	0	0	102.4	0	0	0
Rex Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dover Sole	0	0	0	0	0	0	0	0	0	4	0	0	0	12	0
Pac Halibut	2.8	41.8	10.1	0.7	42.7	22.8	6.6	41.2	42	49	14.1	37	9.5	12	5.7
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	139.6	0	0	0
Yellowfin Sole	0	0	0	0	0	0	0	228.3	330.8	74.6	53	623.6	0	0	0
Other Flatfish	0	0	13.5	0	17.7	0	0	63.7	0	137	0	0	0	15.7	0
TOTAL FLATFISH	119.1	187.1	121.3	52.5	76.2	363.9	581.9	351.8	1443.1	502.4	423.9	1442.5	226.9	424	139.5
Skates	52.7	53	51.2	94.4	0	16.7	21.4	0	11.1	14.8	36.1	0	44.2	10.2	36.7
Spiny Dogfish	2.3	8	2.8	40.1	0	0	0	0	1.2	0	0	3.6	0	0	2.8
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	16.5	23.1	0	0.1	0	41	35.3	0	0.3	71	0	3	54.5	3	10
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	9.5	5	0	0	0	0	0	0	5.8	16.5	0	0	0	0	0
Shrimp	0.8	1.9	0.9	0.7	0	2.3	0	0	0.2	0	0	0	0	0	4.1
Scallop	0	0	1.2	5.1	0.8	0	0	0	0.5	0.4	0	0	0	1.9	0.2
Other Inverts	22.7	52.9	107	45.1	63.4	15.6	3.8	318.5	87.6	82.6	168.8	83.8	215.9	3	66.9
TOTAL INVERTS	49.5	82.8	109.1	50.9	64.2	58.9	39.1	318.5	94.4	170.5	168.8	86.8	270.4	7.9	81.2
Other	249.9	3.9	4.2	3.9	3.3	3.3	0	472.5	3.9	10.1	16.8	4.7	15.8	9.6	1.6
TOTAL CATCH(kg/km)	483.8	379.6	317.7	257.1	149.4	568.7	694.4	1198.8	1620.5	774.4	781.8	1599.5	567	876.8	292.6

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Haul	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345
Location	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	W.KOD
Month/Day/Year	9/13/97	9/13/97	9/13/97	9/13/97	9/13/97	9/13/97	9/13/97	9/14/97	9/14/97	9/14/97	9/14/97	9/14/97	9/14/97	9/14/97	9/15/97
Station	120	119	147	146	145	117	118	90	91	60	61	31	2	3	PAA
Longitude Start	153 17.6	153 28.5	153 29.5	153 39.7	153 50.3	153 46.9	153 40.8	153 31.7	153 22.7	153 20.7	153 14.5	153 14.0	153 12.3	153 2.1	152 57.0
Latitude Start	58 29.5	58 28.8	58 23.5	58 22.2	58 25.1	58 27.0	58 28.1	58 32.5	58 35.3	58 37.7	58 39.6	58 42.3	58 47.0	58 49.4	58 18.0
Heading, Degrees	38	204	211	27	38	47	60	50	48	45	37	27	0	180	327
Average Depth (m)	172	150	181	172	115	121	139	119	132	121	157	146	139	150	115
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.7	1.9	1.9	1.9	1.3
Bottom Temperature	5	5.2	5.2	5.2	6.3	5.8	5.3	6.5	6.4	6.3	5.2	6	6.3	6.8	7.6
							----------kilograms/kilometer----------								
Pollock	4.5	47.1	5.5	4	5	5.5	4.6	1.3	8.3	9.5	112.7	2.3	7.2	1.7	379.3
Pacific Cod	1.5	13	22.4	3.3	9.4	2.8	1.7	2.6	11.9	52.6	54	9.2	5.7	4.5	13.9
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0.8	0	0	0	0	0	0	0	0	0	0	0	9.1	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0.1	0.1	0	0	0	0	0	0	0	1.7
Sablefish	0	0	0	0	0	0	0	0	0	0	0	0	0	2.2	1.9
Herring	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	0	0	0	0	0	0.7	0	0	0	0	0	0	0	0	7.6
Other Roundfish	28.2	3.9	5.8	10.8	1.3	0.9	2.6	3.6	5.7	4.4	3.5	5.6	1.6	6.1	16.4
TOTAL ROUNDFISH	34.2	64.8	33.7	18.1	15.7	9.9	9	7.4	25.8	66.5	170.2	17	14.4	23.5	420.7
Arrowtooth Flndr	183	113.9	160.3	288.3	68.6	81.9	65.6	88.4	90.4	107.7	116.9	49.8	59.2	169.2	225.8
Flathead Sole	23.6	18.5	18.2	16	30.2	4.8	7.8	15.8	20.5	48.2	4.9	18.3	12.6	37.1	125.5
Rock Sole	0	0	0	0	0	0	0	1	0.5	0.4	0	0.5	0	0	0
Rex Sole	0	0.4	0	2.3	0	0.2	0	0	0	0	1.3	0	0.4	0	0
Dover Sole	0	0	0	0	0	0	12.1	10.2	0	0	0	0.5	0	26.7	0
Pac Halibut	8.5	4.9	20	26	0	1.2	11.8	19.6	40.1	5.9	0	10.9	11.3	34.6	7.8
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34.6
Yellowfin Sole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Flatfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL FLATFISH	215.1	137.7	198.5	332.6	98.8	88.1	97.4	135.1	151.4	162.2	123.1	80.1	83.5	267.6	393.7
Skates	35.4	39.2	37.2	39.1	8.9	34.4	11.7	23.9	27.1	12.5	20.4	13	37.1	34.4	51.5
Spiny Dogfish	2.3	2.2	1.5	2.1	25.4	1.6	0	1.9	0	11.7	17.2	2.2	51.9	40	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	8.2	42.7	21.9	12.7	1.1	0.2	4.1	0.1	0.1	0.1	0.6	0.2	0.1	0	54.5
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	8.4	3.9	4.9	13.7	2.3	0.9	2.3	1.3	1.9	1.5	0.9	1.8	0	1.1	2.6
Scallop	2.3	6.7	0.3	0.6	21.1	16.7	18.1	17.8	15.9	27.4	2.6	12.6	3	0.3	0.5
Other Inverts	34.9	46.2	43.8	17.2	15.1	4.2	10.7	14	11.4	18.4	19.1	32.7	23.3	13.2	67.5
TOTAL INVERTS	53.9	99.6	71	44.3	39.5	22	35.3	33.2	29.3	47.4	23.3	47.2	26.3	14.6	125.1
Other	1.9	9.2	5.8	1.1	8.7	0.8	3.2	2.1	6.6	2.1	21.1	4.6	14.5	8.1	11.8
TOTAL CATCH(kg/km)	342.9	352.7	347.7	437.4	197	156.8	156.5	203.5	240.3	302.4	375.2	164.1	227.8	388.2	1002.8

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Haul	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360
Location	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD
Month/Day/Year	9/15/97	9/15/97	9/15/97	9/15/97	9/16/97	9/16/97	9/16/97	9/16/97	9/16/97	9/16/97	9/16/97	9/16/97	9/17/97	9/17/97	9/18/97
Station	MAA	KUF	KUE	KUD	KUO	KUP	KUQ	KUS	KUT	KUU	KUV	KUW	KUX	KUXX	UYBX
Longitude Start	153 5.2	153 18.0	153 17.0	153 10.4	153 23.0	153 26.8	153 32.2	153 32.8	153 31.3	153 29.9	153 31.6	153 31.3	153 22.6	153 24.6	153 59.9
Latitude Start	58 13.0	58 1.8	58 1.2	57 59.1	57 50.3	57 51.5	57 53.8	57 52.4	57 49.7	57 47.7	57 44.4	57 41.1	57 44.3	57 46.2	57 44.5
Heading, Degrees	288	270	180	90	300	297	146	137	163	149	0	342	0	317	154
Average Depth (m)	132	132	132	40	132	155	183	183	179	155	88	71	106	128	135
Distance Fished (km)	1.9	0.9	0.9	0.9	1.9	1.9	1.9	1.9	1.9	1.9	1.3	1.9	1.7	1.1	1.9
Bottom Temperature	7.2	6.6	6.5	7.9	6.3	6.2	6	6	6	6	6.5	7.9	5.9	5.8	7.2
							----------kilograms/kilometer----------								
Pollock	85.6	390.1	489	0	34.2	5.8	92.6	120	58	120.3	42.7	17.8	106.5	94.2	6.3
Pacific Cod	4.8	4.9	34.3	15.2	28.4	4.6	67.6	34	10.5	32.4	3.9	1.8	10.6	41.8	0
Pac Ocean Perch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Rockfish	0	0	0	0	0	0	0.3	0	0	0	0	0	0	0	0
Sablefish	0	0	0	0	0	0.3	0	0	0	3.3	2.2	12.3	3.1	2.8	0
Herring	0	0	0	0	0	0	0	0	0	0	2.9	0.4	0	0	0
Salmon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sculpins	4.7	0	0	0	1.8	0	4.8	8.3	9.8	3.1	2.3	0	3.5	9	0
Other Roundfish	13.1	11	0	0	3.6	26.6	4	6.5	13.9	13.2	3.5	0	28.2	1.7	0
TOTAL ROUNDFISH	108.1	405.9	523.3	15.2	67.9	37.4	169.4	168.8	92.2	172.3	57.4	32.2	151.8	149.5	6.3
Arrowtooth Flndr	273.1	200.8	83.5	8.7	99.2	585.4	184.9	137.9	71.5	40.7	46.2	68.8	37	382.6	570.2
Flathead Sole	51.8	77.5	31.9	0	93	62.9	102	54.8	46	56.3	123.6	609.6	204.6	71	56
Rock Sole	0	0	0	186.4	0	0	0	0	0	0	13.9	0	0	0	0
Rex Sole	0	0	28.8	0	0	0	0	0	0	0	0	0	0	0	0
Dover Sole	0	40.8	24.3	1.1	1.8	0	0	0	0	0	0	0	0	0	0
Pac Halibut	14.6	0	0	0	37.7	27.2	0	8.8	0.6	0.8	1.2	57.4	11.2	7.6	21.1
Starry Flndr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	0	0	0	0	0	0	0	0	131.7	121.3	0	0	0
Other Flatfish	0	0	0	0	30.4	0	0	0	0	0	63.5	340.8	141.1	0	0
TOTAL FLATFISH	339.5	319.1	168.5	196.2	262.1	675.4	286.9	201.5	118.1	97.7	380	1198	393.9	461.2	647.4
Skates	25.6	28.2	1.3	32.7	2.8	35.1	20.8	13.5	9.7	10	0	38.3	13.4	20.7	29.1
Spiny Dogfish	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Elasmobrh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanner Crab	11.7	38.1	1.3	0	5	24.6	8.7	27.3	33.6	34	0.8	2.6	0	164	0
Red King Crab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dungeness Crab	0	0	0	0	0	0	0	0	0	0	0	3.2	0	0	0
Shrimp	1.8	1.6	1.5	0	3.6	1.4	7.2	5.4	2.4	1.6	0	0	3.5	0	0
Scallop	0.2	1.8	0	0	0	0	0.2	0	0	0.2	6.1	0.1	0.2	0	0.1
Other Inverts	40.1	29.5	384.1	61.3	49.4	77.4	39.1	57.9	18.1	91.3	191.8	32.8	128.3	34.6	42.5
TOTAL INVERTS	53.8	71.1	386.9	61.3	58	103.4	55.3	90.6	54.2	127.1	198.6	38.7	132.1	198.6	42.7
Other	8.3	4.1	3	5.5	7.1	7.2	19.1	3.5	16.3	126.7	35.8	9.8	7.1	8.6	18
TOTAL CATCH(kg/km)	539	828.4	1083	311	398	858.5	551.4	477.8	290.4	533.9	671.8	1317	698.3	838.7	743.5

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Haul	361	362	363	364	365	366	367	368
Location	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD	W.KOD
Month/Day/Year	9/18/97	9/18/97	9/18/97	9/19/97	9/19/97	9/19/97	9/19/97	9/19/97
Station	UYEX	UYFX	UYHX	UYO	UYKX	UYMX	UYQX	UYS
Longitude Start	153 55.4	153 50.3	153 43.1	153 47.7	153 53.0	153 53.9	153 54.3	153 49.1
Latitude Start	57 38.6	57 40.3	57 39.8	57 34.0	57 35.7	57 33.9	57 29.3	57 25.5
Heading, Degrees	0	274	270	321	321	0	336	180
Average Depth (m)	181	155	97	82	133	106	150	71
Distance Fished (km)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.1
Bottom Temperature	7.1	7.8	8	8.7	7.6	7.7	7.8	8.6
		----------kilograms/kilometer----------						
Pollock	20.7	74.4	28.5	40	2.5	2.7	26.2	4.5
Pacific Cod	5.6	41	16.9	12.4	0	0	15.7	1.7
Pac Ocean Perch	0	0	0	0	0	0	0	0
Rougheye Rkfish	0	0	0	0	0	0	0	0
Thornyhead Rkfh	0	0	0	0	0	0	0	0
Other Rockfish	0	0.7	0	0.4	0	0	0	0
Sablefish	0	1.2	1	3.5	0	1.1	0	2.7
Herring	0	0	0	0	0	0	0.1	0
Salmon	0	0	0	0	0	0	0	0
Sculpins	0.5	3.1	0	0	2.3	2.2	0	26
Other Roundfish	0.5	2.6	4.7	5.3	12.6	2.9	8.2	40.2
TOTAL ROUNDFISH	27.3	123	51.1	61.5	17.4	8.8	50.2	75.1
Arrowtooth Flndr	42.1	12.9	12.9	84.7	6.9	21.8	23.5	160.9
Flathead Sole	16.3	47.6	230.7	269.9	68.5	99.6	40.4	208.2
Rock Sole	0	0	0	0	0	0	0	0
Rex Sole	0	0	0	0	2.3	1.5	0	37.9
Dover Sole	0	0	0	0	0	0	17.5	0
Pac Halibut	61	4	8.4	22.7	14.5	18.7	0	0
Starry Flndr	0	0	0	0	0	0	0	0
Yellowfin Sole	0	0	0	0	0	0	0	28.3
Other Flatfish	0	0	71.4	111.1	0	5.8	26.3	56.8
TOTAL FLATFISH	119.4	64.5	323.4	488.4	92.2	147.4	107.8	492.1
Skates	21.8	32.2	29.7	74.6	27.1	15.8	43.5	5.5
Spiny Dogfish	0	0	0	0	0	0	0	11.2
Other Elasmobrh	0	0	0	0	0	0	0	0
Tanner Crab	5.8	54.5	1.5	0.2	0	2.6	0.4	20
Red King Crab	0	0	0	0	2.2	0	0	10.2
Dungeness Crab	0	0	0.7	20.5	0	0	0	1.6
Shrimp	1	5.1	0.1	1.3	0	0.7	1	0.3
Scallop	0	0	2.2	0.6	0.5	0	0	0
Other Inverts	61.2	74.2	73.1	242.1	113	72	66.5	87.6
TOTAL INVERTS	68	133.8	77.6	264.7	115.8	75.3	67.8	119.6
Other	6.9	11.6	4.7	50.3	43.8	12.4	90.8	23.7
TOTAL CATCH(kg/km)	243.4	364.9	486.5	939.5	296.4	259.7	360.1	727.2

Appendix C. Stations fished during the 1997 Westward Region trawl survey, divided by districts, sections, and strata with areas in square kilometers and square nautical miles.

KODIAK DISTRICT

NORTHEAST SECTION

Inner Marmot

Station	KM^2	NM^2
KZA	11.7	3.4
KZB	2.8	0.8
KZC	12.4	3.6
KZD	23.7	6.9
KZE	27.5	8.0
KZF	20.6	6.0
KZG	21.3	6.2
KZJ	21.5	6.3
KZK	21.5	6.3
KZO	21.5	6.3
KZR	13.8	4.0
KZS	3.1	0.9
	201.4	58.6

Middle Marmot

Station	KM^2	NM^2
MOEX	78.4	22.8
MOGX	76.0	22.1
MOLX	77.7	22.6
MONX	86.0	25.0
MOPX	97.7	28.4
MOXX	81.2	23.6
	497.1	144.5

Outer Marmot

Station	KM^2	NM^2
255	129.0	37.5
256	86.0	25.0
257	86.0	25.0
283	129.0	37.5
284	86.0	25.0
	516.0	150.0

Chiniak Gully

Station	KM^2	NM^2
369X	151.4	44
420	86.0	25
443	86.0	25
444	86.0	25
	409.4	119.0

Chiniak

Station	KM^2	NM^2
CHA	5.5	1.6
CHB	7.9	2.3
CHE	20.6	6
CHF	12.7	3.7
CHG	34.7	10.1
CHJ	35.8	10.4
CHK	8.6	2.5
CHL	14.1	4.1
	140.0	40.7

EASTSIDE SECTION

Ugak Bay

Station	KM^2	NM^2
UGAA	16.1	4.7
UGAB	4.7	1.4
UGAC	3.2	0.9
UGB	5.8	1.7
UGC	17.5	5.1
UGD	11.0	3.2
UGE	12.7	3.7
UGF	15.8	4.6
UGG	11.0	3.2
UGI	22.4	6.5
UGJ	21.5	6.3
UGM	16.9	4.9
	158.7	46.1

Kiliuda Bay

Station	KM^2	NM^2
KLA	21.0	6.1
KLB	9.3	2.7
KLC	19.6	5.7
KLE	8.3	2.4
KLF	15.1	4.4
KLG	16.5	4.8
KLH	16.9	4.9
KLI	21.5	6.3
KLL	21.5	6.3
	149.6	43.5

Horseshoe/Barnabas

Station	KM^2	NM^2
486A	28.0	8.1
486B	29.4	8.6
510B	63.2	18.4
510C	40.8	11.9
511A	43.0	12.5
511B	43.0	12.5
533A	43.0	12.5
533B	43.0	12.5
534B	21.5	6.3
534D	28.4	8.3
535A	21.5	6.3
535B	21.5	6.3
535C	21.5	6.3
535D	21.5	6.3
559	86.0	25.0
560	86.0	25.0
561	86.0	25.0
587	86.0	25.0
588	86.0	25.0
619	86.0	25.0
620	86.0	25.0
621	86.0	25.0
654	86.0	25.0
655	86.0	25.0
656	86.0	25.0
695	86.0	25.0
696	86.0	25.0
	1587.3	461.4

SOUTHEAST SECTION

South Sitkalidik

Station	KM^2	NM^2
THA	15.1	4.4
THC	19.6	5.7
THD	28.7	8.3
THF	22.4	6.5
THG	21.5	6.3
THH	19.3	5.6
THI	21.7	6.3
THJ	17.9	5.2
THK	16.5	4.8
THL	9.3	2.7
THM	10.7	3.1
THN	5.2	1.5
	207.7	60.4

Offshore Twoheaded

Station	KM^2	NM^2
586	86.0	25.0
614	64.3	18.7
615	99.8	29.0
651	86.0	25.0
	336.1	97.7

Horse's Head

Station	KM^2	NM^2
618A	43.0	12.5
585X	94.6	27.5
688	86.0	25.0
725	86.0	25.0
726	86.0	25.0
727	86.0	25.0
728	86.0	25.0
729	86.0	25.0
759	86.0	25.0
760	86.0	25.0
761	86.0	25.0
	911.6	265.0

Towers

Station	KM^2	NM^2
858	86.0	25.0
891	86.0	25.0
892	86.0	25.0
920	86.0	25.0
	344.0	100.0

SOUTHWEST SECTION

Alitak Flats

Station	KM^2	NM^2
645B	34.4	10.0
646A	27.2	7.9
646B	16.5	4.8
646C	29.2	8.5
646D	37.5	10.9
682B	23.0	6.7
683A	23.0	6.7
683B	21.0	6.1
683D	9.3	2.7
684A	23.0	6.7
684B	10.3	3.0
684C	8.6	2.5
	263.2	76.5

Alitak Bay

Station	KM^2	NM^2
ALA	3.1	0.9
ALB	17.8	5.2
ALC	8.2	2.4
ALD	13.1	3.8
ALF	21.5	6.3
ALG	20.0	5.8
ALH	16.2	4.7
ALI	16.7	4.9
ALJ	15.1	4.4
ALK	10.0	2.9
ALL	8.3	2.4
ALM	16.2	4.7
ALO	16.9	4.9
ALP	19.3	5.6
ALQ	14.4	4.2
ALR	13.4	3.9
	230.0	66.9

Compass Rose

Station	KM^2	NM^2
676X	172.0	50.0
677X	172.0	50.0
748X	172.0	50.0
750X	172.0	50.0
781X	172.0	50.0
815X	172.0	50.0
816X	172.0	50.0
881X	172.0	50.0
	1376.0	400.0

-Continued-

KODIAK DISTRICT (Continued)

N.MAINLAND SECTION

Station	KM²	NM²
2	86.0	25.0
3	86.0	25.0
31	83.9	24.4
60	86.0	25.0
61	86.0	25.0
90	80.5	23.4
91	86.0	25.0
117	98.0	28.5
118	86.0	25.0
119	86.0	25.0
120	86.0	25.0
121	86.0	25.0
145	86.0	25.0
146	86.0	25.0
147	86.0	25.0
171	11.5	3.3
171X	8.1	2.4
171Y	29.2	8.5
172	89.4	26.0
173	86.0	25.0
174	86.0	25.0
198	86.0	25.0
199	86.0	25.0
200	86.0	25.0
222	113.5	33.0
223	86.0	25.0
224	86.0	25.0
	2148.2	624.5

WESTSIDE SECTION

Uyak Bay

Station	KM²	NM²
UYBX	21.5	6.3
UYEX	30.0	8.7
UYFX	22.1	6.4
UYHX	4.1	1.2
UYKX	13.9	4.0
UYMX	20.9	6.1
UYO	3.4	1.0
UYQX	7.7	2.2
UYS	13.4	3.9
	137.02	39.8

West Afognak

Station	KM²	NM²
RAA	6.7	2.0
PAA	15.1	4.4
MAA	10.6	3.1
	32.4	9.4

Kupreanof-Viekoda

Station	KM²	NM²
KUD	27.2	7.9
KUE	11.4	3.3
KUF	11.3	3.3
KUG	15.5	4.5
KUI	6.4	1.9
KUJ	17.0	5.0
KUK	14.1	4.1
KUM	10.5	3.1
KUY	4.1	1.2
	117.5	34.2

Uganik Bay

Station	KM²	NM²
KUL	2.7	0.8
KULX	2.1	0.6
KUO	8.0	2.3
KUP	13.3	3.9
KUQ	20.6	6.0
KUS	12.2	3.5
KUT	9.4	2.7
KUU	13.7	4.0
KUV	4.1	1.2
KUW	5.2	1.5
KUX	4.1	1.2
KUYX	2.6	0.8
KUXX	5.6	1.6
	103.6	30.1

KODIAK DISTRICT TOTALS

SECTION	KM²	NM²
Northeast	1763.9	512.8
Eastside	1895.6	551.1
Southeast	1799.4	523.1
Southwest	1869.1	543.4
Westside	390.6	113.6
N. Mainland	2148.2	624.5
Kodiak District	9866.8	2868.3

CHIGNIK DISTRICT

CHIGNIK BAY SECT.

Station	KM²	NM²
4256	24.1	7.0
4264	20.2	5.9
4265	6.6	1.9
4266	19.7	5.7
4267	21.5	6.3
4270	17.2	5.0
4271	10.3	3.0
4272	16.0	4.6
4274	21.5	6.3
4277	21.5	6.3
4278	21.5	6.3
4282	21.5	6.3
4312	22.0	6.4
4964	9.6	2.8
4286	21.5	6.3
4287	29.8	8.7
	253.1	88.5

IVANOF SECTION

Station	KM²	NM²
400X	5.6	1.6
4900	10.6	3.1
4000	15.8	4.6
4008	42.2	12.3
4915	51.8	15.1
4007	59.5	17.3
4024	65.9	19.2
	251.3	73.1

KUJULIK SECTION

Station	KM²	NM²
4298	19.3	5.6
4302	21.1	6.1
4301	21.5	6.3
4296	10.3	3.0
4308	17.2	5
	89.4	26.0

MITROFANIA SECTION

Station	KM²	NM²
4035	68.8	20.0
4094	86.0	25.0
4065	80.3	23.3
4064	57.3	16.7
4063	57.3	16.7
4048	14.8	4.3
	364.5	106.0

CHIGNIK DISTRICT TOTALS

SECTION	KM²	NM²
Chignik Bay	304.4	88.5
Ivanof	251.3	73.1
Kujulik	89.4	26.0
Mitrofania	364.5	106.0
	1009.6	293.5

-Continued-

SOUTH PENINSULA DISTRICT

SANAK SECTION

Station	KM^2	NM^2
113	77.4	22.5
125	77.4	22.5
126	84.1	24.45
137	86.0	25
138A	46.4	13.5
138B	18.5	5.37
138C	57.1	16.6
	446.92	129.92

MORZHOVOI SECTION

Station	KM^2	NM^2
87A	22.4	6.5
87B	22.4	6.5
87C	22.4	6.5
87D	22.4	6.5
98C	22.4	6.5
MOB	20.0	5.8
MOC	21.4	6.2
MOD	16.2	4.7
MOF	21.5	6.3
MOG	21.5	6.3
MOH	16.9	4.9
MOI	21.5	6.3
MOJ	21.5	6.3
MOK	21.5	6.3
MOL	21.5	6.3
MON	21.5	6.3
MOO	21.5	6.3
MOP	34.7	10.1
MOR	18.6	5.4
MOS	28.9	8.4
MOU	19.6	5.7
MOV	43.3	12.6
	503.3	146.3

PAVLOF SECTION

Station	KM^2	NM^2
228	93.8	27.3
245	88.0	25.6
PAB	13.5	3.9
PAC	13.7	4.0
PAE	20.8	6.1
PAF	20.8	6.1
PAH	15.0	4.4
PAI	21.5	6.3
PAJ	16.9	4.9
PAM	21.5	6.3
PAOA	6.7	2.0
PAOB	21.5	6.3
PAP	20.8	6.1
PARA	19.1	5.6
PARB	21.1	6.1
PAU	21.5	6.3
PAV	20.6	6.0
PAWA	15.4	4.5
VOA	22.5	6.5
VOB	21.5	6.3
VOC	22.5	6.5
VOD	20.8	6.1
VOE	20.8	6.1
VOFA	5.6	1.6
VOFB	15.6	4.5
VOG	23.1	6.7
VOH	21.8	6.3
VOI	22.2	6.4
VOJ	20.8	6.1
VOL	9.1	2.7
VOMA	11.9	3.5
VOMB	17.0	4.9
VON	22.5	6.5
VOO	18.2	5.3
VOP	21.5	6.3
VOQ	16.0	4.6
VOR	21.2	6.2
	827.1	240.5

COLD BAY SECTION

Station	KM^2	NM^2
132A	24.3	7.1
145B	32.8	9.5
156A	44.3	12.9
157A	21.1	6.1
BEA	4.9	1.4
BEB	11.1	3.2
BEC	8.2	2.4
BED	17.6	5.1
BEE	21.5	6.3
BEF	15.8	4.6
BEG	20.4	5.9
COB	21.2	6.2
COC	15.3	4.5
COE	21.2	6.2
COF	11.5	3.4
COGA	9.8	2.9
COGB	3.6	1.1
COH	7.8	2.3
COJ	20.8	6.1
COM	18.6	5.4
COO	22.5	6.5
	374.2	108.8

WEST NAGAI SECTION

Station	KM^2	NM^2
301	86.0	25.0
318	86.0	25.0
332B	43.0	12.5
334	86.0	25.0
335	86.0	25.0
353	86.3	25.1
354	86.0	25.0
371	80.8	23.5
373B	20.6	6.0
	660.7	192.1

STEPOVAK SECTION

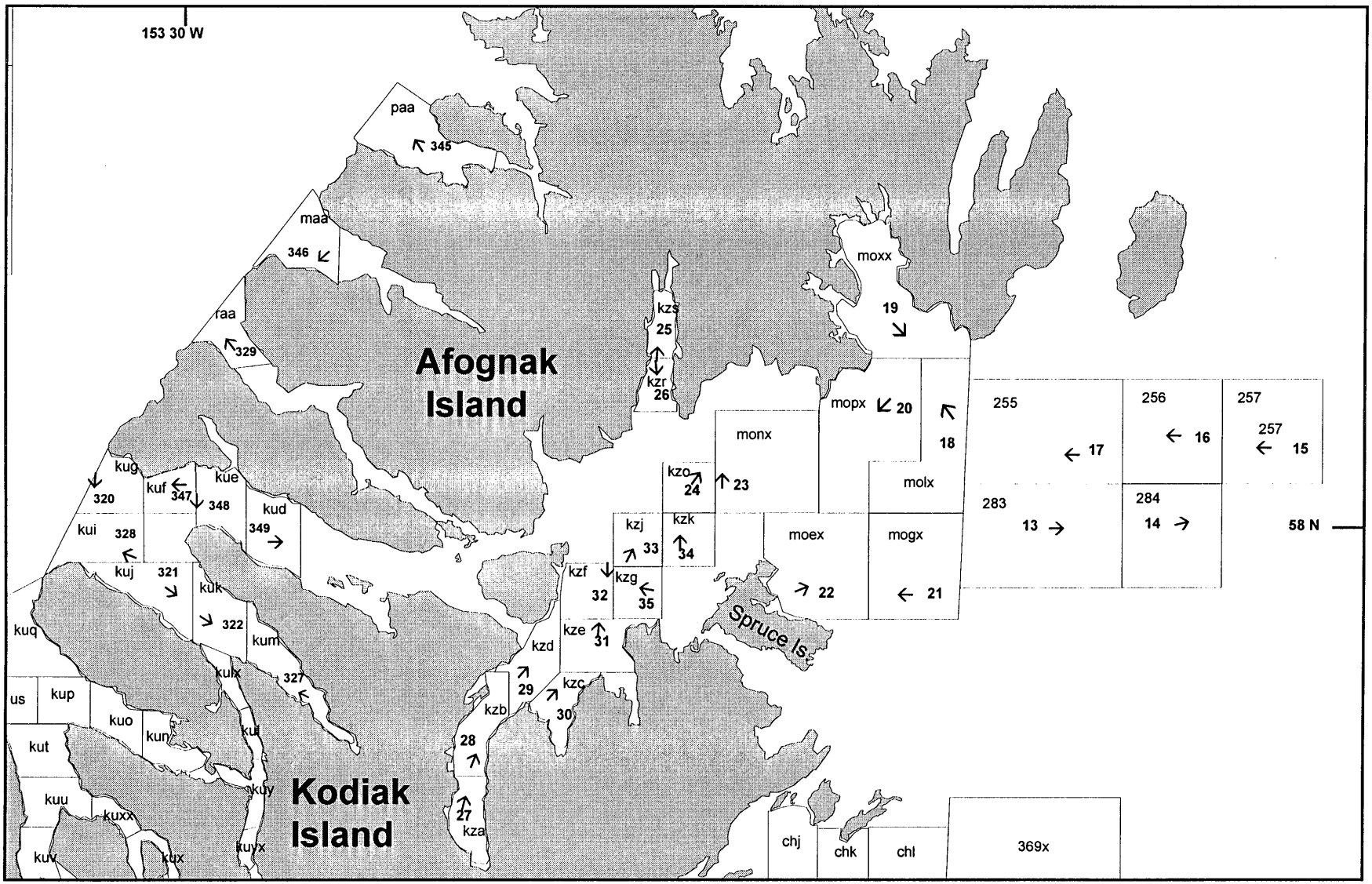
368A	45.6	13.3
STA	21.1	6.1
STB	18.9	5.5
STD	22.8	6.6
STE	15.6	4.5
	123.9	36.0

BEAVER/BALBOA SECTION

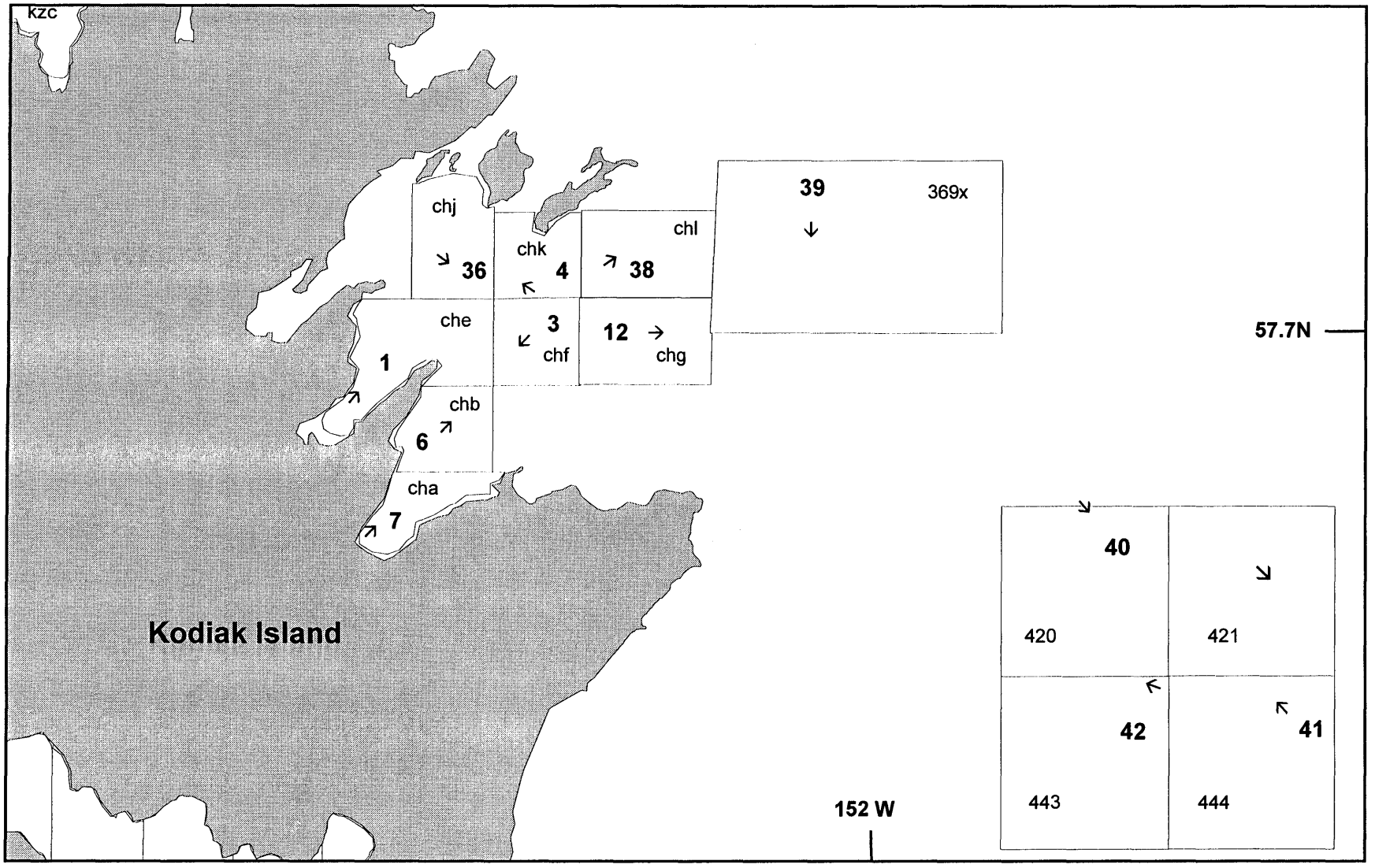
Station	KM^2	NM^2
278	71.7	20.8
311A	15.5	4.5
311B	20.5	6.0
312A	22.4	6.5
329B	21.5	6.3
329C	21.5	6.3
348	86.0	25.0
BAA	12.0	3.5
BAC	16.9	4.9
BAD	10.4	3.0
BAE	12.8	3.7
BAF	10.9	3.2
BVA	15.3	4.5
BVB	14.0	4.1
BVC	18.9	5.5
	370.3	107.6

PENINSULA DISTRICT TOTALS

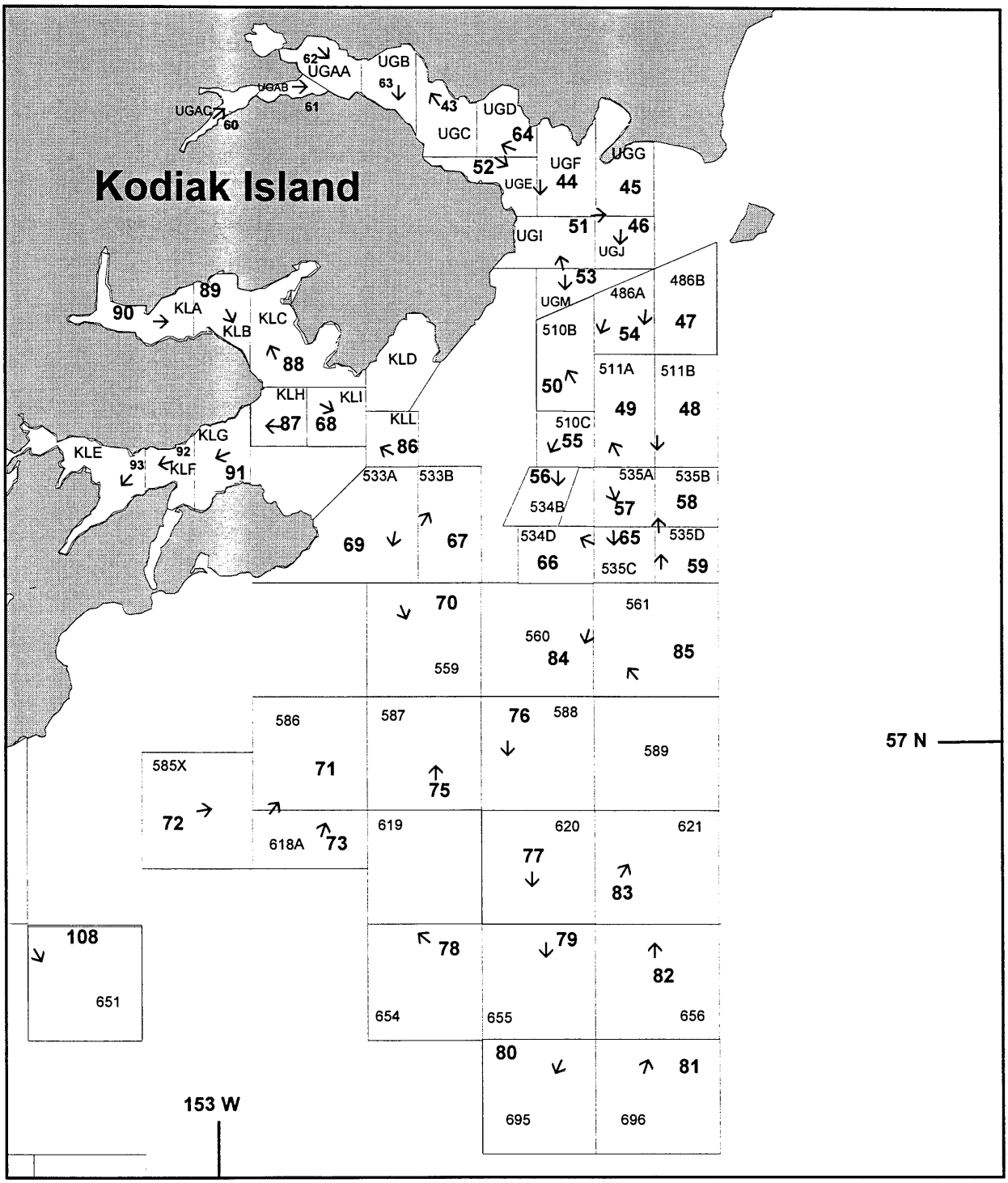
SECTION	KM^2	NM^2
Sanak	446.925	129.9
Morzhovoi	503.344	146.3
Cold Bay	374.238	108.8
Pavlof	827.148	240.5
West Nagai	660.686	192.1
Beaver	370.282	107.6
Stepovak	123.943	36.0
	3306.6	961.2



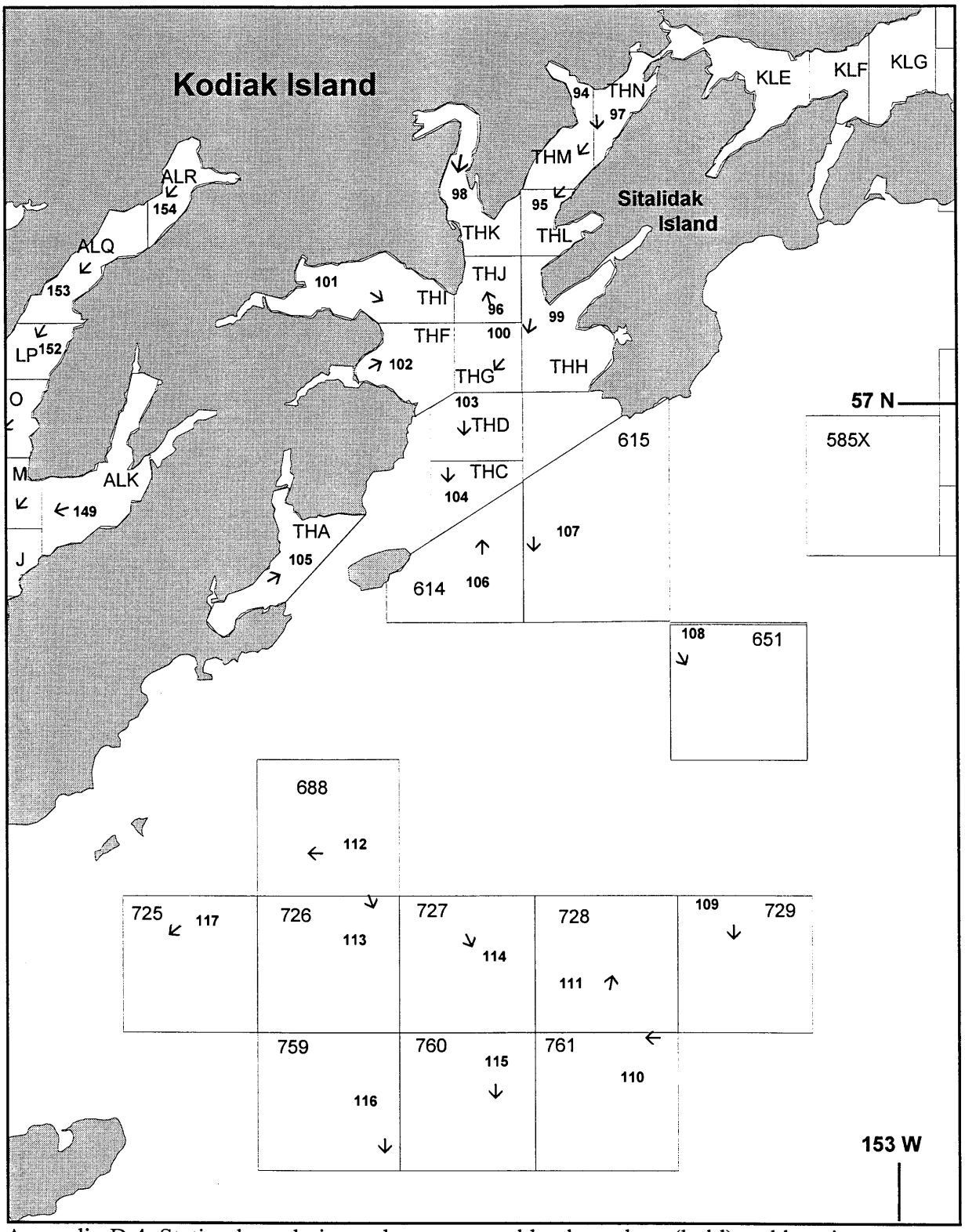
Appendix D.1 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), north Kodiak Island, west Afognak Island and offshore Marmot Bay, July and September, 1997.



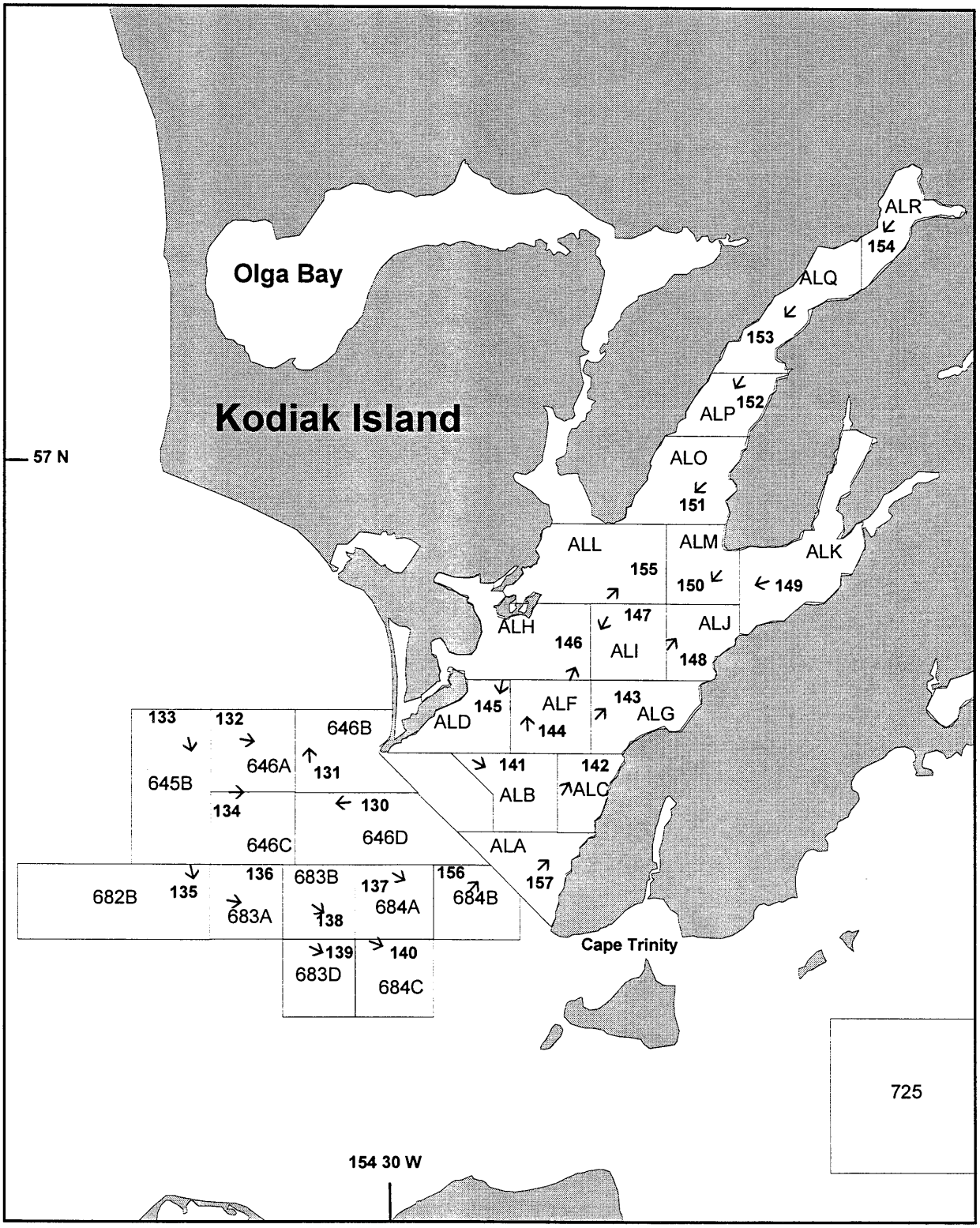
Appendix D.2 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), Chiniak Bay and Chiniak Gully, July 1997.



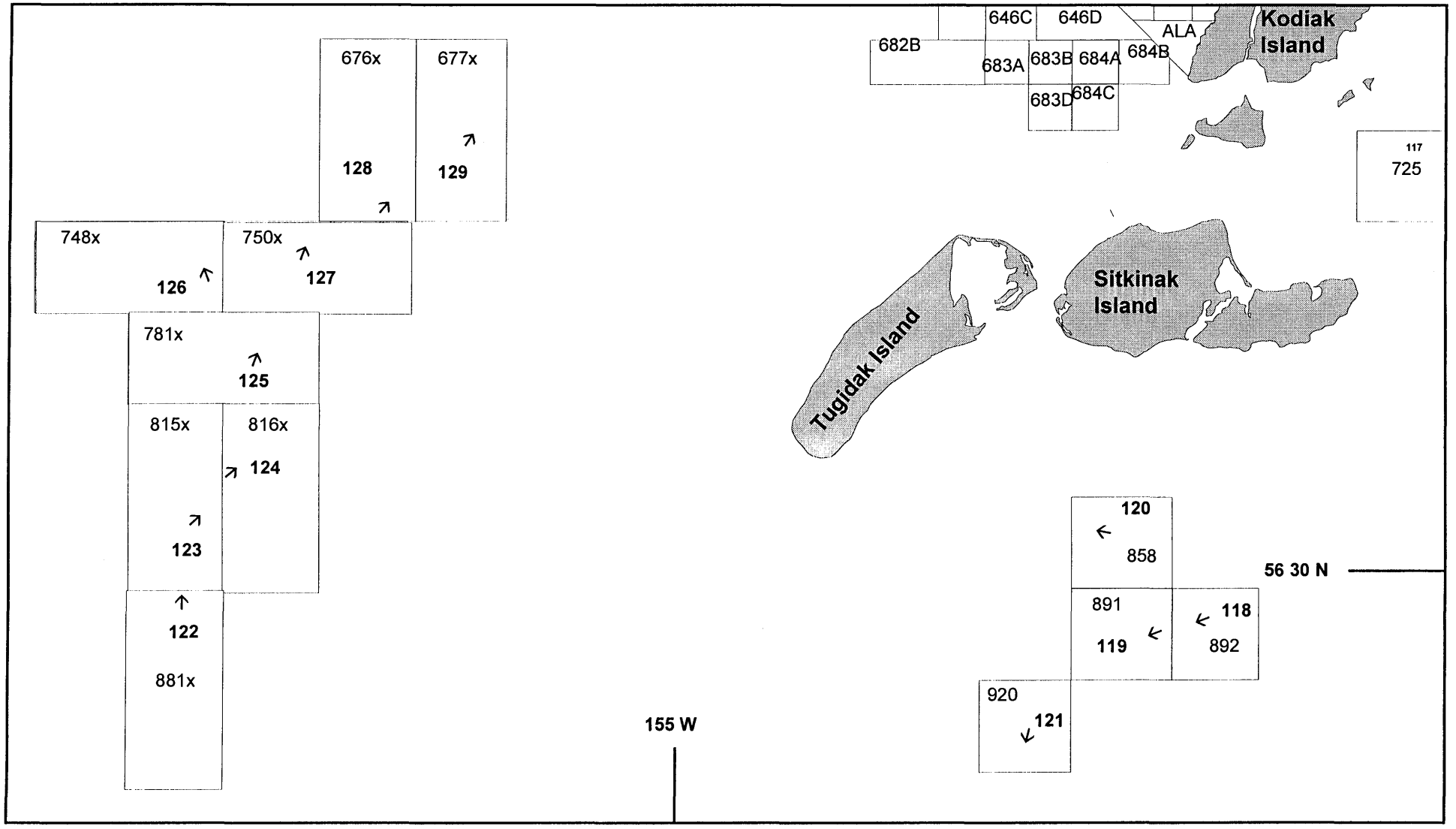
Appendix D.3 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), Ugak Bay, Kiluda Bay and Barnabas Gully, July 1997.



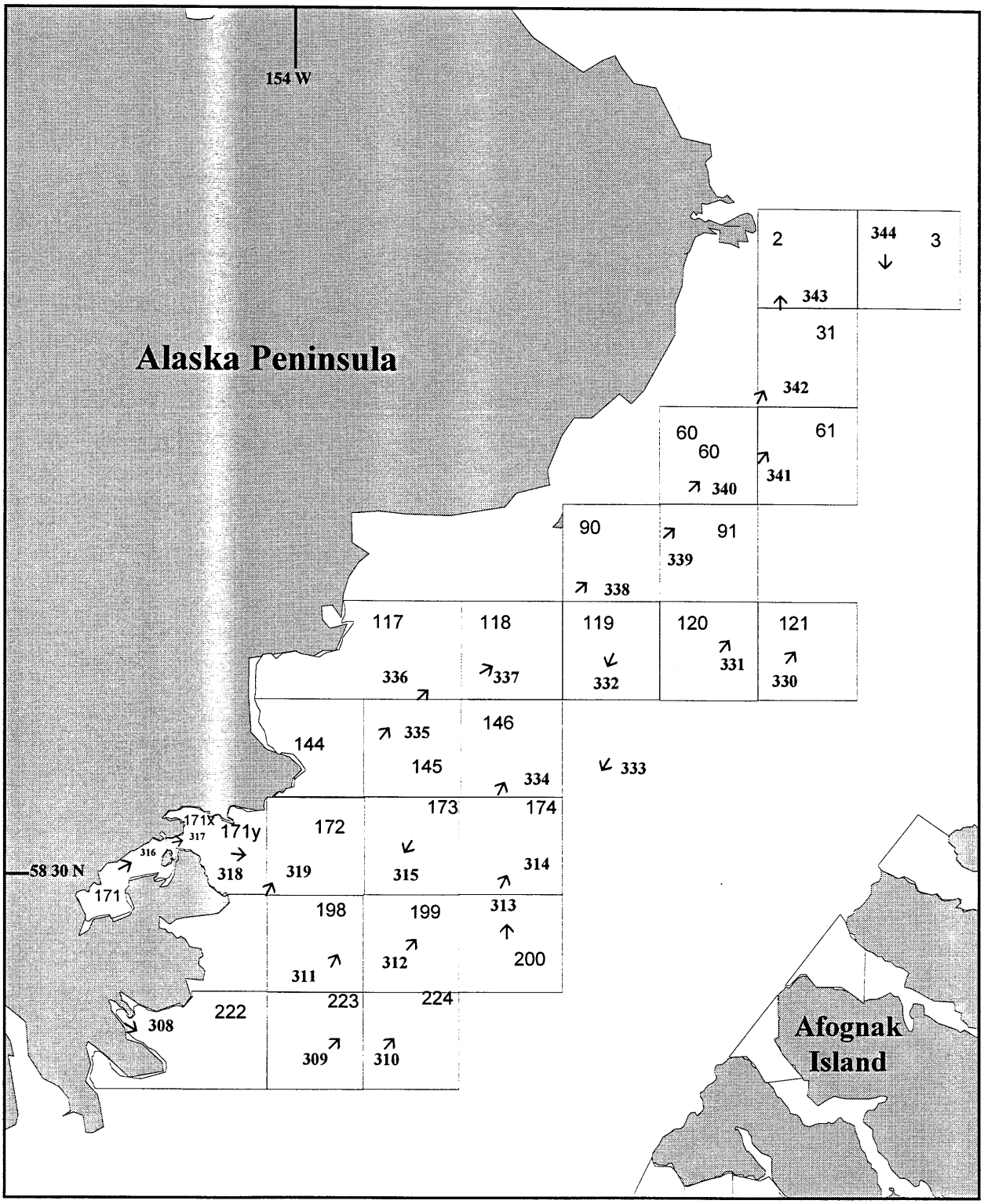
Appendix D.4 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), South Sitkalidak Strait, Two Headed Island, and Horse's Head Area, Kodiak Island, July 1997.



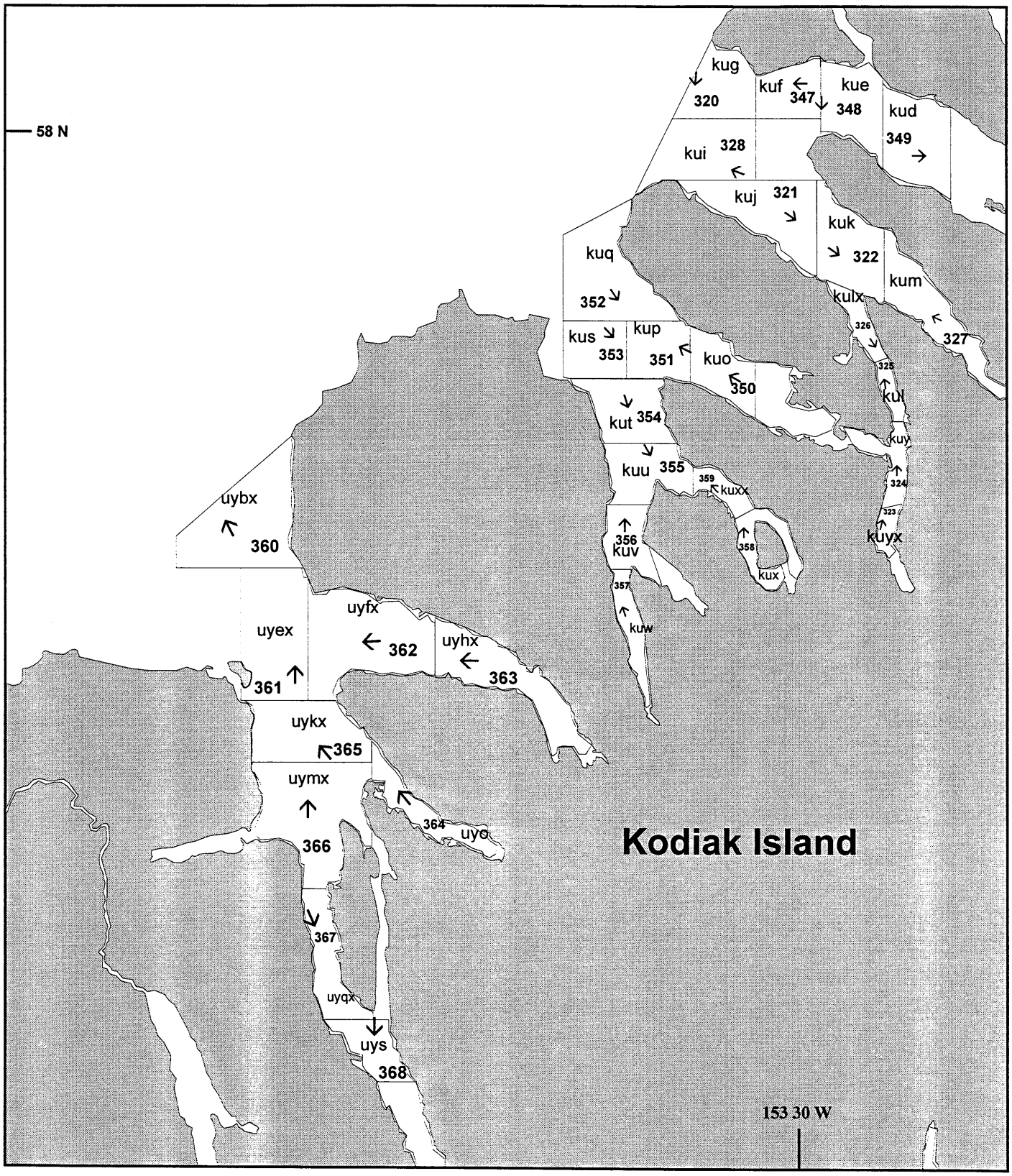
Appendix D.5 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), Alitak Bay and Alitak Flats, Kodiak Island, July 1997.



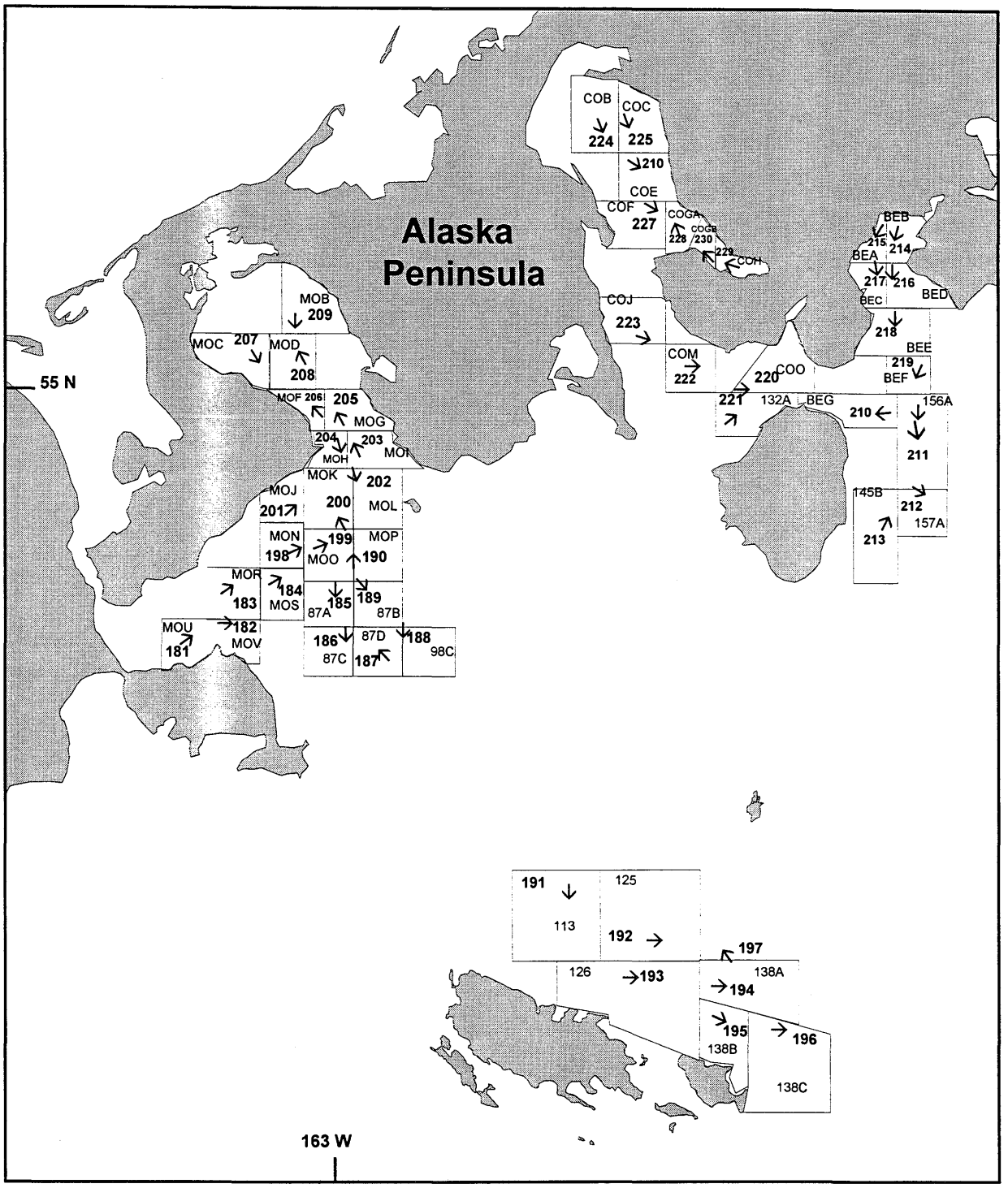
Appendix D.6 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), South Kodiak Island offshore, July 1997.



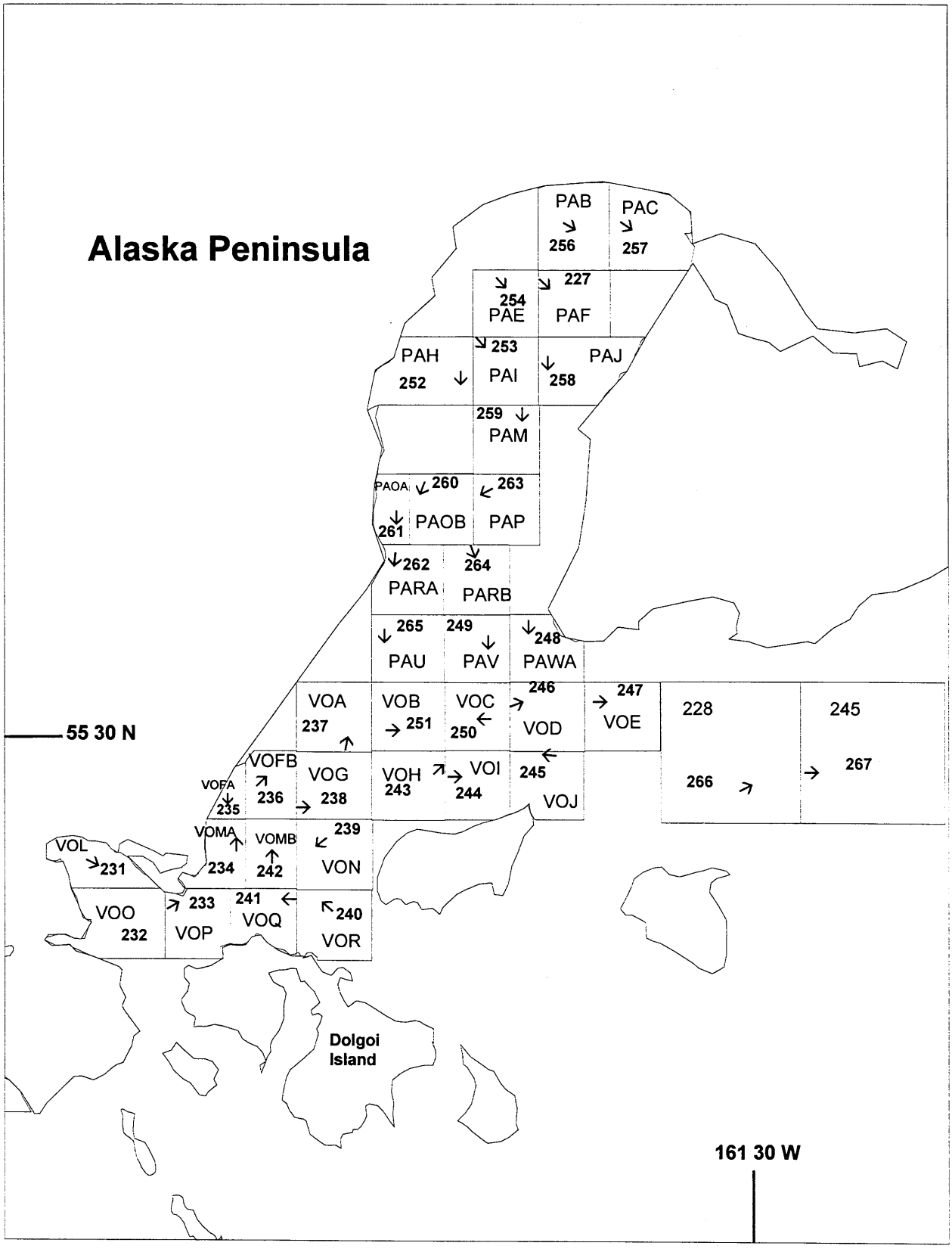
Appendix D.7 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), Shelikof Strait, September 1997.



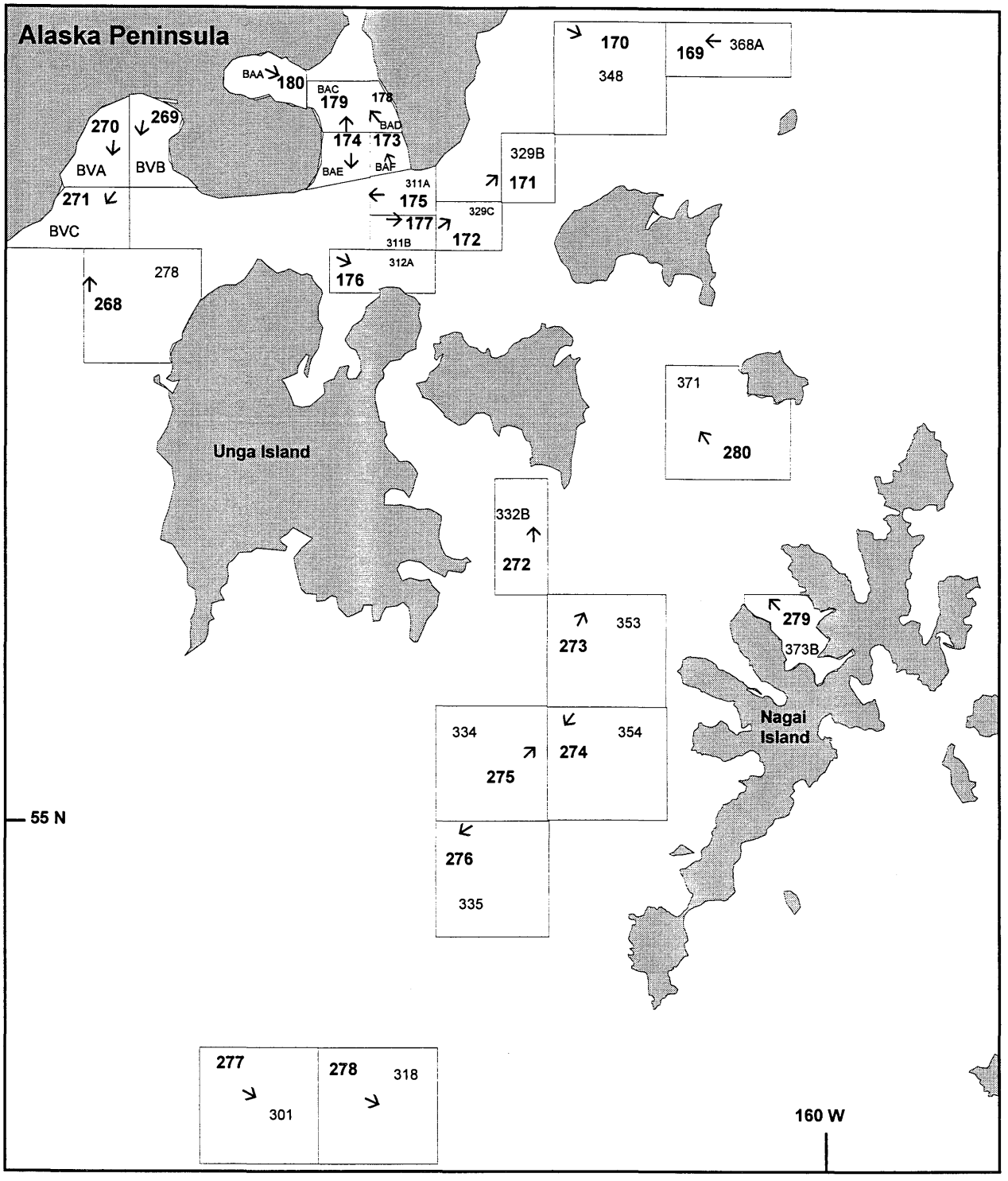
Appendix D.8 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), Uyak Bay, Uganik Bay and Viekoda Bay, September, 1997.



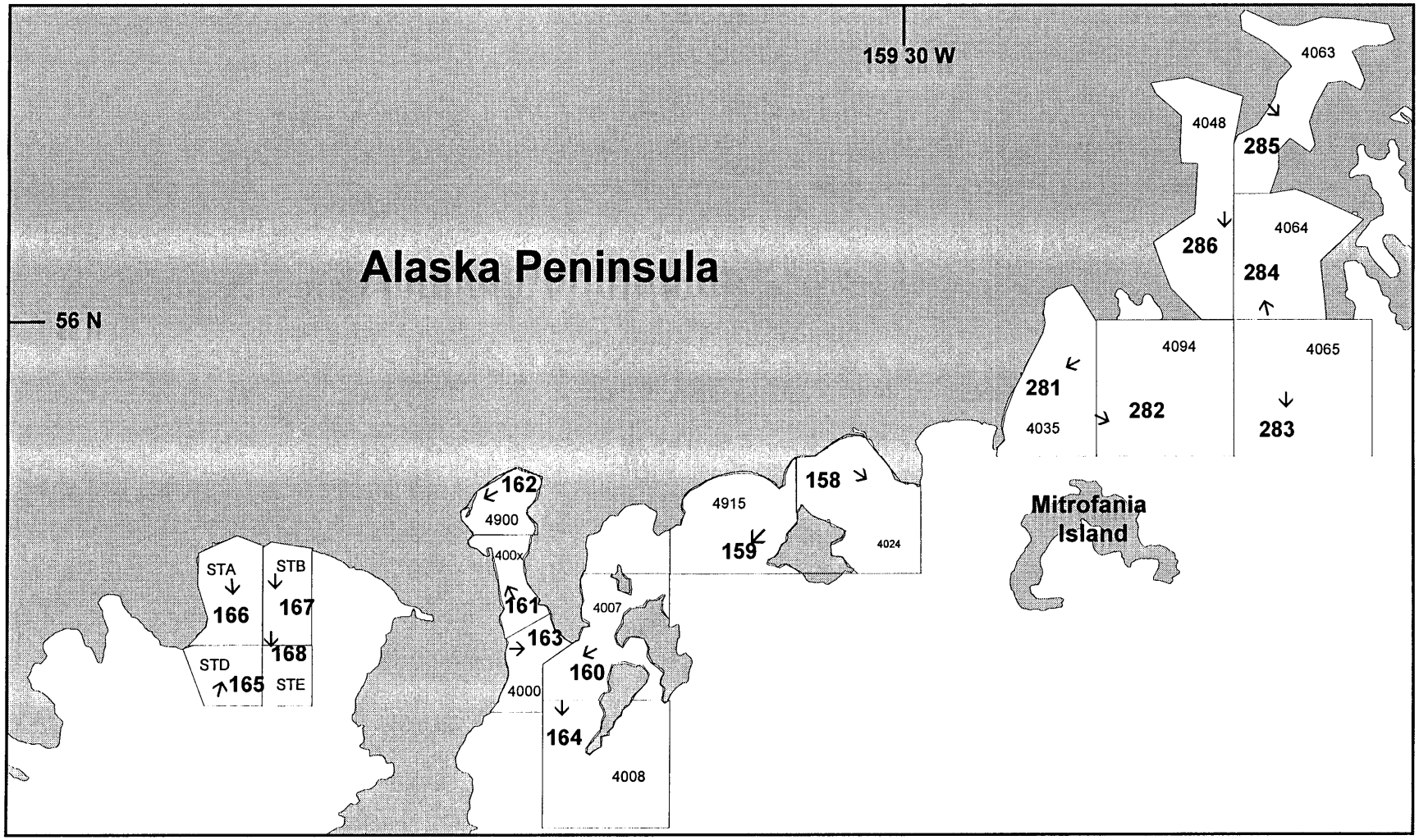
Appendix D.9 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), Morzhovoi Bay, Cold Bay, Belkofski Bay, Deer Island, and Sanak Island, August, 1997.



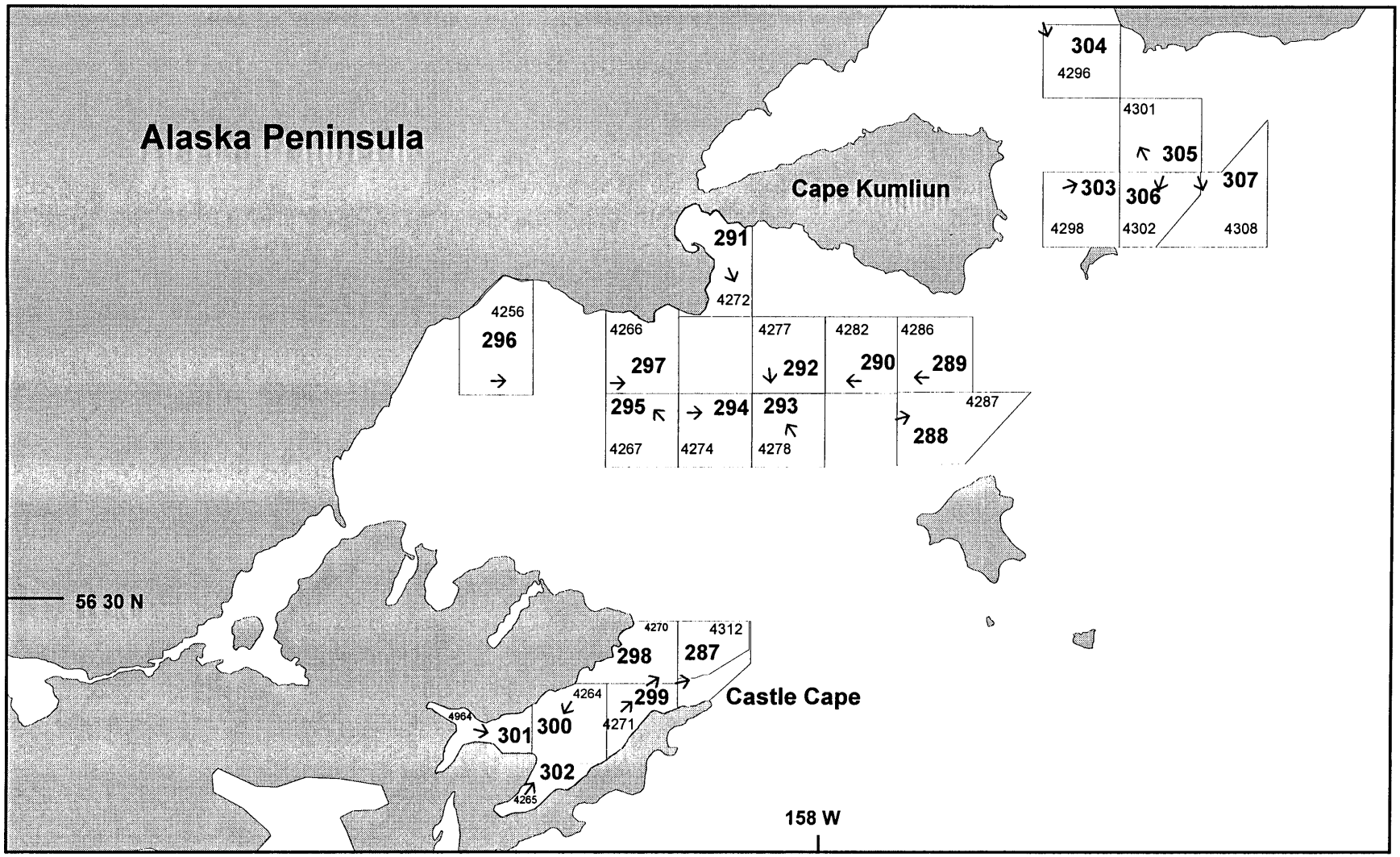
Appendix D.10 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), Pavlof Bay and Volcano Bay, August 1997.



Appendix D.11 Station boundaries and names, trawl haul numbers (bold) and locations (arrows), Unga Strait, Beaver Bay, Balboa Bay, and West Nagai, August, 1997.



Appendix D.12 Station boundaries and names, trawl haul numbers (bold) and locations (arrows) Stepovak Bay, Ivanof Bay, Mitrofania Bay and Kuiukta Bay, August 1997.



Appendix D.13 Station boundaries and names, trawl haul numbers (bold) and locations (arrows) Kujulik Bay, Chignik Bay and Castle Bay, August, 1997.

Appendix E. Numbers of Tanner crab per 1.85 km (1 nautical mile) in the Kodiak Management District with population index by section.

Station	Tow	Females			Sublegal Males				Recruit	Postrecruit		Total	Total	Total
	#	Juv	Adult	Total	<70	70-91	92-114	>114		<165	>164	Legal	Male	Crab
NORTHEAST														
CHE	1	4	0	4	4	0	0	0	0	0	0	0	4	9
CHE	2	2	0	2	0	0	0	0	0	0	0	0	0	2
CHF	3	232	28	260	213	249	63	12	3	3	0	6	543	803
CHK	4	27	78	105	20	76	176	80	44	8	0	52	404	509
CHK	5	114	336	450	64	320	460	188	55	5	0	60	1,092	1,542
CHB	6	3	2	5	0	1	1	0	0	1	0	1	3	8
CHA	7	3	0	3	0	0	0	0	0	0	0	0	0	3
CHA	8	2	0	2	0	0	0	0	0	0	0	0	0	2
CHA	9	2	0	2	3	0	0	0	0	0	0	0	3	5
CHB	10	39	2	41	19	10	4	1	0	0	0	0	34	75
CHB	11	14	4	18	9	4	3	0	0	0	0	0	16	34
CHG	12	1	0	1	1	0	0	0	0	0	0	0	1	2
283	13	2	9	11	4	10	23	17	1	1	0	2	56	67
284	14	0	0	0	1	0	0	0	0	0	0	0	1	1
257	15	0	0	0	0	0	0	0	0	0	0	0	0	0
256	16	3	0	3	0	0	0	0	0	0	0	0	0	3
255	17	1	0	1	2	0	7	28	1	0	0	1	38	39
MOLX	18	3	131	134	14	11	50	15	0	1	0	1	90	224
MOXX	19	7	1	8	7	11	25	6	0	0	0	0	49	57
MOPX	20	2	3	5	5	3	10	3	0	0	0	0	21	26
MOGX	21	2	21	23	11	34	30	11	0	0	0	0	86	109
MOEX	22	9	4	12	26	1	0	1	0	0	0	0	29	41
MONX	23	2	24	26	1	4	8	10	0	2	0	2	25	51
KZO	24	9	66	75	9	16	12	4	1	0	0	1	42	117
KZS	25	57	23	80	63	33	11	21	7	0	0	7	135	215
KZR	26	51	183	234	36	150	183	102	18	6	0	24	495	729
KZA	27	12	18	30	14	17	5	4	0	0	0	0	40	70
KZB	28	21	12	34	27	15	10	6	0	0	0	0	59	92
KZD	29	34	29	62	20	207	92	10	0	0	0	0	330	392
KZC	30	4	6	10	7	19	104	24	0	0	0	0	154	164
KZE	31	6	0	6	3	0	0	0	0	0	0	0	3	9
KZF	32	4	0	4	2	0	0	1	0	0	0	0	3	7
KZJ	33	2	0	2	9	0	4	14	2	0	0	2	29	31
KZK	34	7	10	17	10	54	23	5	1	0	0	1	93	110
KZG	35	4	0	4	5	21	52	12	1	0	0	1	91	95
CHJ	36	1	0	1	2	1	0	1	0	0	0	0	4	6
CHJ	37	1	0	1	2	0	0	0	0	0	0	0	2	3
CHL	38	17	0	17	8	0	0	0	0	0	0	0	8	25
369X	39	0	0	0	0	2	0	0	0	0	0	0	2	2
420	40	1	1	2	0	0	0	0	0	0	0	0	0	2
444	41	0	0	0	2	1	0	0	0	0	0	0	3	3

--Continued--

Appendix E. (Page 2 of 6)

Station	Tow #	Females Juv	Females Adult	Females Total	Sublegal Males <70	Sublegal Males 70-91	Sublegal Males 92-114	Sublegal Males >114	Recruit	Postrecruit <165	Postrecruit >164	Total Legal	Total Male	Total Crab
443	42	1	0	1	0	0	0	0	0	0	0	0	0	1
Population Estimate		423,217	1,021,369	1,444,586	523,906	935,670	1,120,040	604,140	48,509	24,329	0	72,838	3,256,593	4,701,179
EASTSIDE														
UGC	43	3	4	7	0	2	34	37	3	8	1	12	85	92
UGF	44	0	0	0	6	0	1	0	0	0	0	0	7	7
UGG	45	0	0	0	0	0	0	0	0	0	0	0	0	0
UGJ	46	0	0	0	0	0	0	0	0	0	0	0	0	0
486B	47	0	0	0	1	0	0	0	0	0	0	0	1	1
511B	48	0	0	0	0	0	0	0	0	0	0	0	0	0
511A	49	0	0	0	0	0	0	0	0	0	0	0	0	0
510B	50	1	0	1	0	0	0	1	0	1	0	1	2	3
UGI	51	27	27	54	30	2	5	15	0	31	1	32	84	138
UGE	52	2	0	2	2	0	0	5	1	1	0	2	9	11
UGM	53	5	52	57	2	1	1	7	0	11	0	11	22	79
486A	54	6	0	6	6	0	0	2	0	0	0	0	8	14
510C	55	0	0	0	0	0	0	0	0	0	0	0	0	0
534B	56	0	0	0	0	0	0	0	0	0	0	0	0	0
535A	57	0	0	0	0	0	1	0	0	1	0	1	2	2
535B	58	0	0	0	0	0	1	1	0	0	0	0	2	2
535D	59	3	0	3	1	1	0	1	0	0	0	0	3	6
UGAC	60	1	0	1	0	0	1	1	2	0	0	2	4	5
UGAB	61	46	0	46	51	54	27	7	77	0	10	87	227	273
UGAA	62	166	0	166	62	234	56	18	84	0	16	100	470	636
UGB	63	75	6	81	42	164	62	6	0	0	0	0	274	355
UGD	64	28	2	30	17	1	4	6	3	3	1	7	35	65
535C	65	2	0	2	4	0	1	0	0	0	0	0	5	7
534D	66	0	0	0	0	0	0	0	0	0	0	0	0	0
533B	67	0	0	0	0	0	0	0	0	0	0	0	0	0
KLI	68	3	0	3	1	0	0	0	0	0	0	0	1	4
533A	69	0	0	0	0	0	0	0	0	0	0	0	0	0
559	70	6	1	7	8	2	0	3	0	0	0	0	13	20
619	74	1	22	23	0	2	8	10	0	2	0	2	22	45
587	75	4	4	8	2	3	3	8	0	0	0	0	16	24
588	76	19	2	21	21	5	7	21	0	3	0	3	57	78
620	77	28	4	32	25	4	5	11	0	3	0	3	48	80
654	78	0	0	0	1	0	0	0	0	0	0	0	1	1
655	79	2	5	7	8	3	16	19	0	0	0	0	46	53
695	80	24	43	67	29	22	13	4	0	0	0	0	68	135
696	81	46	22	68	46	60	80	64	10	0	0	10	260	328
656	82	9	16	25	10	13	18	12	0	1	0	1	54	79

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Appendix E. (Page 3 of 6)

Station	Tow #	Females Juv	Females Adult	Females Total	Sublegal Males <70	Sublegal Males 70-91	Sublegal Males 92-114	Sublegal Males >114	Recruit	Postrecruit <165	Postrecruit >164	Total Legal	Total Male	Total Crab
621	83	12	32	44	10	4	9	7	0	5	0	5	35	79
560	84	0	1	1	2	0	0	0	0	0	0	0	2	3
561	85	0	0	0	2	0	5	6	0	0	0	0	13	13
KLL	86	0	0	0	1	0	0	1	0	0	0	0	2	2
KLH	87	5	1	6	4	2	1	3	0	1	0	1	11	17
KLC	88	3	0	3	1	0	0	0	0	0	0	0	1	4
KLB	89	4	0	4	1	0	0	0	0	0	0	0	1	5
KLA	90	4	1	5	14	0	0	0	0	0	0	0	14	19
KLG	91	5	3	8	3	2	1	2	0	0	0	0	8	16
KLF	92	3	0	3	5	2	2	0	0	0	0	0	9	12
KLE	93	0	0	0	0	2	0	0	0	0	0	0	2	2
Population Estimate		802,758	652,061	1,454,819	772,755	678,462	724,637	708,745	118,243	104,661	15,679	238,583	3,123,181	4,578,000
SOUTHEAST														
586	71	6	5	11	10	11	8	1	0	1	0	1	31	42
585X	72	4	2	6	0	8	0	0	0	0	0	0	8	14
618A	73	1	25	26	3	3	4	6	0	4	0	4	20	46
THM	94	9	13	22	11	12	19	5	1	4	1	6	53	75
THL	95	9	8	17	4	3	30	10	1	19	0	20	67	84
THJ	96	26	6	32	14	10	8	7	0	0	0	0	39	71
THN	97	6	11	17	10	4	9	15	0	26	0	26	64	81
THK	98	23	0	23	9	17	16	2	0	0	0	0	44	67
THH	99	1	0	1	0	0	0	0	0	0	0	0	0	1
THG	100	5	4	9	2	0	2	0	0	1	0	1	5	14
THI	101	5	0	5	11	6	2	3	0	0	0	0	22	27
THF	102	3	0	3	4	0	0	1	1	1	0	2	7	10
THD	103	1	1	2	0	0	0	0	1	0	0	1	1	3
THC	104	3	4	7	1	3	1	2	0	12	1	13	20	27
THA	105	1	0	1	0	0	0	2	0	0	0	0	2	3
614	106	0	0	0	1	2	0	1	0	2	0	2	6	6
615	107	3	0	3	1	0	1	0	0	0	0	0	2	5
651	108	23	7	30	27	14	4	0	0	0	0	0	45	75
729	109	7	0	7	8	1	1	0	0	0	0	0	10	17
761	110	8	0	8	3	0	0	0	0	0	0	0	3	11
728	111	15	4	19	12	5	0	0	0	0	0	0	17	36
688	112	1	0	1	1	0	0	0	0	0	0	0	1	2
726	113	2	0	2	2	0	0	0	0	0	0	0	2	4
727	114	19	0	19	13	2	2	0	0	0	0	0	17	36
760	115	6	0	6	3	0	0	1	0	0	0	0	4	10
759	116	8	0	8	1	0	0	0	0	0	0	0	1	9
725	117	0	0	0	0	0	0	0	0	0	0	0	0	0
892	118	0	0	0	0	0	0	0	0	0	0	0	0	0

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Appendix E. (Page 4 of 6)

Station	Tow #	Females Juv	Females Adult	Females Total	Sublegal Males <70	Sublegal Males 70-91	Sublegal Males 92-114	Sublegal Males >114	Recruit	Postrecruit <165	Postrecruit >164	Total Legal	Total Male	Total Crab
891	119	1	0	1	0	0	0	0	0	0	0	0	0	1
858	120	0	0	0	0	0	0	0	0	0	0	0	0	0
920	121	0	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		460,018	141,758	601,775	361,124	206,538	114,928	45,616	3,134	45,000	1,337	49,471	777,676	1,379,451
SOUTHWEST														
881X	122	0	0	0	0	0	0	0	0	0	0	0	0	0
815X	123	0	0	0	0	0	0	0	0	0	0	0	0	0
816X	124	0	0	0	0	0	0	0	0	0	0	0	0	0
781X	125	0	0	0	0	0	0	1	0	0	0	0	1	1
748X	126	0	0	0	1	0	0	0	0	0	0	0	1	1
750X	127	0	0	0	5	0	0	0	0	0	0	0	5	5
676X	128	0	0	0	0	0	0	0	0	0	0	0	0	0
677X	129	0	0	0	0	0	0	0	0	0	0	0	0	0
646D	130	0	0	0	0	0	0	0	0	0	0	0	0	0
646B	131	0	0	0	0	0	0	0	0	0	0	0	0	0
646A	132	0	0	0	1	0	0	0	0	0	0	0	1	1
645B	133	0	0	0	0	0	0	0	0	0	0	0	0	0
646C	134	0	0	0	2	0	0	0	0	0	0	0	2	2
682B	135	0	0	0	0	0	0	1	0	0	0	0	1	1
683A	136	2	0	2	0	0	0	0	0	0	0	0	0	2
684A	137	0	0	0	0	0	0	0	0	0	0	0	0	0
683B	138	0	0	0	0	0	0	0	0	0	0	0	0	0
683D	139	6	1	7	5	0	0	0	0	1	0	1	6	13
684C	140	0	0	0	0	0	0	0	0	0	0	0	0	0
ALB	141	0	0	0	0	0	0	0	0	0	0	0	0	0
ALC	142	140	35	175	127	9	8	30	13	36	1	50	224	399
ALG	143	8	6	14	4	0	1	6	17	3	0	20	31	45
ALF	144	1	0	1	3	0	0	6	15	0	1	16	25	26
ALD	145	0	0	0	0	0	0	0	0	0	0	0	0	0
ALH	146	4	4	9	3	0	6	40	67	3	0	70	119	127
ALI	147	21	8	29	44	4	25	92	21	55	2	78	242	271
ALJ	148	6	1	7	4	0	1	2	0	0	0	0	7	14
ALK	149	6	0	6	9	0	0	0	0	0	0	0	9	15
ALM	150	9	0	9	3	0	0	0	0	0	0	0	3	12
ALO	151	16	0	16	29	30	15	9	7	0	0	7	90	106
ALP	152	54	2	56	48	20	11	6	3	0	0	3	88	144
ALQ	153	112	5	117	59	22	10	8	7	0	0	7	106	223
ALR	154	55	48	103	7	63	17	10	6	21	0	27	124	227
ALL	155	17	7	24	11	14	51	91	29	44	1	74	243	267
684B	156	2	0	2	0	0	0	0	0	0	0	0	0	2
ALA	157	9	16	24	9	1	0	4	7	4	0	11	26	50
Population Estimate		265,172	66,131	331,303	255,708	102,022	82,313	185,338	124,784	88,079	3,170	216,033	841,414	1,172,717

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Appendix E. (Page 5 of 6)

Station	Tow #	Females Juv	Females Adult	Females Total	Sublegal Males <70	Sublegal Males 70-91	Sublegal Males 92-114	Sublegal Males >114	Recruit	Postrecruit <165	Postrecruit >164	Total Legal	Total Male	Total Crab
WESTSIDE														
KUG	320	0	0	0	2	0	0	0	0	0	0	0	2	2
KUJ	321	6	75	81	0	5	19	23	11	22	2	35	82	163
KUK	322	45	116	161	9	56	19	12	2	10	0	12	108	269
KUYX	323	0	0	0	0	0	0	0	0	0	0	0	0	0
KUY	324	0	0	0	3	0	2	0	0	0	0	0	5	5
KUL	325	11	13	24	5	19	88	71	40	4	3	47	230	254
KULX	326	304	304	608	72	176	44	68	100	20	8	128	488	1,096
KUM	327	7	3	10	3	2	0	0	2	0	0	2	8	18
KUI	328	40	200	240	7	10	14	34	1	29	0	30	95	335
RAA	329	1	9	10	1	0	4	3	0	1	0	1	9	19
PAA	345	0	73	73	6	6	49	54	7	13	0	20	134	207
MAA	346	6	15	21	2	7	5	5	6	2	0	8	27	48
KUF	347	2	32	34	0	16	68	52	4	4	0	8	144	178
KUE	348	4	0	4	8	4	4	0	0	0	0	0	16	20
KUD	349	0	0	0	0	0	0	0	0	0	0	0	0	0
KUO	350	5	12	17	0	0	3	4	2	0	0	2	9	26
KUP	351	4	68	72	0	8	25	19	4	4	0	8	60	132
KUQ	352	22	36	58	18	3	5	5	0	1	0	1	32	90
KUS	353	6	147	153	1	2	5	9	2	11	0	13	30	183
KUT	354	33	135	168	15	40	28	19	2	3	0	5	107	275
KUU	355	63	27	90	30	146	82	18	2	0	0	2	278	368
KUV	356	3	0	3	0	4	3	0	0	0	0	0	7	10
KUW	357	0	0	0	0	1	0	1	3	1	0	4	6	6
KUX	358	144	51	196	13	120	71	116	9	22	0	31	351	547
KUXX	359	53	97	150	7	60	140	207	80	7	0	87	500	650
UYBX	360	1	0	1	1	0	0	0	0	0	0	0	1	2
UYEX	361	3	65	68	4	0	1	2	0	0	0	0	7	75
UYFX	362	8	20	28	0	64	168	56	4	0	0	4	292	320
UYHX	363	7	0	7	18	0	3	0	0	0	0	0	21	28
UYO	364	7	0	7	2	0	0	0	0	0	0	0	2	9
UYKX	365	2	0	2	1	0	0	0	0	0	0	0	1	3
UYMX	366	3	17	20	1	0	0	0	0	1	0	1	2	22
UYQX	367	3	1	4	0	0	0	0	0	0	0	0	0	4
UYS	368	0	8	8	0	3	17	77	7	0	0	7	103	112
Population Estimate		221,626	679,270	900,896	83,887	293,572	424,991	330,268	70,487	62,404	2,605	135,497	1,268,215	2,169,111
NORTH MAINLAND														
222	308	0	0	0	0	0	0	0	0	0	0	0	0	0
223	309	128	0	128	91	6	0	6	0	0	0	0	103	231
224	310	89	2	91	94	30	1	3	0	0	0	0	128	219
198	311	54	4	58	46	1	0	10	0	4	0	4	61	119

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Station	Tow	Females			Sublegal Males				Recruit	Postrecruit		Total	Total	Total
	#	Juv	Adult	Total	<70	70-91	92-114	>114		<165	>164	Legal	Male	Crab
199	312	50	2	52	52	18	3	6	0	2	0	2	81	133
200	313	23	3	26	38	25	21	2	0	3	0	3	89	115
174	314	28	4	32	28	17	10	6	0	0	0	0	61	93
173	315	32	4	36	37	11	2	5	1	1	0	2	57	93
171	316	0	0	0	1	0	3	5	10	0	6	16	25	25
171X	317	2	0	2	0	0	1	5	16	2	14	32	38	40
171Y	318	0	0	0	0	0	0	0	0	0	0	0	0	0
172	319	0	0	0	3	0	0	0	0	0	0	0	3	3
121	330	40	2	42	38	9	5	5	0	7	0	7	64	106
120	331	7	3	10	8	1	3	11	0	5	0	5	28	38
119	332	4	3	7	6	0	20	82	4	14	0	18	126	133
147	333	57	27	84	38	9	17	13	3	7	0	10	87	171
146	334	8	8	16	8	6	7	10	0	3	0	3	34	50
145	335	4	1	5	7	0	1	0	0	1	0	1	9	14
117	336	10	2	12	14	0	0	0	0	0	0	0	14	26
118	337	39	3	42	45	0	0	7	0	2	0	2	54	96
90	338	5	0	5	3	0	0	0	0	0	0	0	3	8
91	339	7	0	7	5	0	0	0	0	0	0	0	5	12
60	340	3	0	3	5	0	0	0	0	0	0	0	5	8
61	341	10	1	11	8	0	0	1	0	0	0	0	9	20
31	342	15	0	15	23	0	0	0	0	0	0	0	23	38
2	343	11	0	11	9	0	0	0	0	0	0	0	9	20
3	344	6	0	6	10	0	0	4	3	0	0	3	17	23
Population Estimate		2,395,876	263,513	2,659,389	2,345,312	505,068	343,651	654,116	52,567	186,794	8,054	247,415	4,095,561	6,754,950
Grand Total		4,568,667	2,824,101	7,392,768	4,342,691	2,721,331	2,810,559	2,528,223	417,724	511,267	30,844	959,835	13,362,640	20,755,408

Appendix F. Numbers of king crab per 1.85 km (1 nautical mile) in 1997 in the Kodiak Area with population index by district.

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
NORTHEAST													
CHE	1	3	0	3	0	0	0	0	0	0	0	0	3
CHE	2	0	0	0	0	0	0	0	0	0	0	0	0
CHF	3	0	0	0	0	0	0	0	0	0	0	0	0
CHK	4	0	0	0	0	0	0	0	0	0	0	0	0
CHK	5	0	0	0	0	0	0	0	0	0	0	0	0
CHB	6	2	10	12	0	0	0	0	1	0	1	1	13
CHA	7	0	0	0	0	0	0	0	0	0	0	0	0
CHA	8	0	0	0	2	0	0	0	0	0	0	2	2
CHA	9	0	0	0	0	0	0	0	0	0	0	0	0
CHB	10	0	0	0	0	0	0	0	0	0	0	0	0
CHB	11	1	3	4	0	0	0	1	0	0	0	1	5
CHG	12	0	0	0	0	0	0	0	0	0	0	0	0
283	13	0	0	0	0	0	0	0	0	0	0	0	0
284	14	0	0	0	0	0	0	0	0	0	0	0	0
257	15	0	0	0	0	0	0	0	0	0	0	0	0
256	16	0	0	0	0	0	0	0	0	0	0	0	0
255	17	0	0	0	0	0	0	0	0	0	0	0	0
MOLX	18	0	0	0	0	0	0	0	0	0	0	0	0
MOXX	19	0	0	0	0	0	0	0	0	0	0	0	0
MOPX	20	0	0	0	0	0	0	0	0	0	0	0	0
MOGX	21	0	0	0	0	0	0	0	0	0	0	0	0
MOEX	22	0	0	0	0	0	0	0	0	0	0	0	0
MONX	23	0	0	0	0	0	0	0	0	0	0	0	0
KZO	24	0	0	0	0	0	0	0	0	0	0	0	0
KZS	25	0	0	0	0	0	0	0	0	0	0	0	0
KZR	26	0	0	0	0	0	0	0	0	0	0	0	0
KZA	27	0	0	0	0	0	0	0	0	0	0	0	0
KZB	28	0	0	0	0	0	0	0	0	0	0	0	0
KZD	29	0	0	0	0	0	0	0	0	0	0	0	0
KZC	30	0	0	0	0	0	0	0	0	0	0	0	0
KZE	31	0	0	0	0	0	0	0	0	0	0	0	0

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Appendix F. (Page 2 of 7.)

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
KZF	32	0	0	0	0	0	0	0	0	0	0	0	0
KZJ	33	0	0	0	0	0	0	0	0	0	0	0	0
KZK	34	0	0	0	0	0	0	0	0	0	0	0	0
KZG	35	0	0	0	0	0	0	0	0	0	0	0	0
CHJ	36	0	0	0	0	0	0	0	0	0	0	0	0
CHJ	37	0	0	0	0	0	0	0	0	0	0	0	0
CHL	38	0	0	0	0	0	0	0	0	0	0	0	0
369X	39	0	0	0	0	0	0	0	0	0	0	0	0
420	40	0	0	0	0	0	0	0	0	0	0	0	0
444	41	0	0	0	0	0	0	0	0	0	0	0	0
443	42	0	0	0	0	0	0	0	0	0	0	0	0
UGC	43	0	0	0	0	0	0	0	0	0	0	0	0
UGF	44	0	0	0	0	0	0	0	0	0	0	0	0
UGG	45	0	0	0	0	0	0	0	0	0	0	0	0
UGJ	46	0	0	0	0	0	0	0	0	0	0	0	0
486B	47	0	0	0	0	0	0	0	0	0	0	0	0
511B	48	0	0	0	0	0	0	0	0	0	0	0	0
511A	49	0	0	0	0	0	0	0	0	0	0	0	0
510B	50	0	0	0	0	0	0	0	0	0	0	0	0
UGI	51	0	0	0	0	0	0	0	0	0	0	0	0
UGE	52	0	0	0	0	0	0	0	0	0	0	0	0
UGM	53	0	0	0	0	0	0	0	0	0	0	0	0
486A	54	0	0	0	0	0	0	0	0	0	0	0	0
510C	55	0	0	0	0	0	0	0	0	0	0	0	0
534B	56	0	0	0	0	0	0	0	0	0	0	0	0
535A	57	0	0	0	0	0	0	0	0	0	0	0	0
535B	58	0	0	0	0	0	0	0	0	0	0	0	0
535D	59	0	0	0	0	0	0	0	0	0	0	0	0
UGAC	60	0	0	0	0	0	0	0	0	0	0	0	0
UGAB	61	0	0	0	0	0	0	0	0	0	0	0	0
UGAA	62	0	0	0	0	0	0	0	0	0	0	0	0
UGB	63	0	0	0	0	0	0	0	0	0	0	0	0
UGD	64	0	0	0	0	0	0	0	0	0	0	0	0
535C	65	0	0	0	0	0	0	0	0	0	0	0	0

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Appendix F. (Page 3 of 7.)

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
534D	66	0	0	0	0	0	0	0	0	0	0	0	0
533B	67	0	0	0	0	0	0	0	0	0	0	0	0
KLI	68	0	0	0	0	0	0	0	0	0	0	0	0
533A	69	0	0	0	0	0	0	0	0	0	0	0	0
559	70	0	0	0	0	0	0	0	0	0	0	0	0
619	74	0	0	0	0	0	0	0	0	0	0	0	0
587	75	0	0	0	0	0	0	0	0	0	0	0	0
588	76	0	0	0	0	0	0	0	0	0	0	0	0
620	77	0	0	0	0	0	0	0	0	0	0	0	0
654	78	0	0	0	0	0	0	0	0	0	0	0	0
655	79	0	0	0	0	0	0	0	0	0	0	0	0
695	80	0	0	0	0	0	0	0	0	0	0	0	0
696	81	0	0	0	0	0	0	0	0	0	0	0	0
656	82	0	0	0	0	0	0	0	0	0	0	0	0
621	83	0	0	0	0	0	0	0	0	0	0	0	0
560	84	0	0	0	0	0	0	0	0	0	0	0	0
561	85	0	0	0	0	0	0	0	0	0	0	0	0
KLL	86	0	0	0	0	0	0	0	0	0	0	0	0
KLH	87	0	0	0	0	0	0	0	0	0	0	0	0
KLC	88	0	0	0	0	0	0	0	0	0	0	0	0
KLB	89	0	0	0	0	0	0	0	0	0	0	0	0
KLA	90	0	0	0	0	0	0	0	0	0	0	0	0
KLG	91	0	0	0	0	0	0	0	0	1	1	1	1
KLF	92	0	0	0	0	0	0	0	0	0	0	0	0
KLE	93	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		1,651	1,514	3,165	162	0	0	116	116	729	846	1,124	4,289
SOUTHEAST													
586	71	0	0	0	0	0	0	0	0	0	0	0	0
585X	72	0	0	0	0	0	0	0	0	0	0	0	0
618A	73	0	0	0	0	0	0	0	0	0	0	0	0
THM	94	0	0	0	0	0	0	0	0	0	0	0	0
THL	95	0	0	0	0	0	0	0	0	0	0	0	0

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Appendix F. (Page 4 of 7.)

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
THJ	96	0	0	0	0	0	0	0	0	0	0	0	0
THN	97	0	0	0	0	0	0	0	0	0	0	0	0
THK	98	0	0	0	0	0	0	0	0	0	0	0	0
THH	99	0	0	0	0	0	0	0	0	0	0	0	0
THG	100	0	0	0	0	0	0	0	0	0	0	0	0
THI	101	0	0	0	0	0	0	0	0	0	0	0	0
THF	102	0	0	0	0	0	0	0	0	0	0	0	0
THD	103	0	0	0	0	0	0	0	0	0	0	0	0
THC	104	0	0	0	0	0	0	0	0	0	0	0	0
THA	105	0	0	0	0	0	0	0	0	0	0	0	0
614	106	0	0	0	0	0	0	0	0	0	0	0	0
615	107	0	0	0	0	0	0	0	0	0	0	0	0
651	108	0	0	0	0	0	0	0	0	0	0	0	0
729	109	0	0	0	0	0	0	0	0	0	0	0	0
761	110	0	0	0	0	0	0	0	0	0	0	0	0
728	111	0	0	0	0	0	0	0	0	0	0	0	0
688	112	0	0	0	0	0	0	0	0	0	0	0	0
726	113	0	0	0	0	0	0	0	0	0	0	0	0
727	114	0	0	0	0	0	0	0	0	0	0	0	0
760	115	0	0	0	0	0	0	0	0	0	0	0	0
759	116	0	0	0	0	0	0	0	0	0	0	0	0
725	117	0	0	0	0	0	0	0	0	0	0	0	0
892	118	0	0	0	0	0	0	0	0	0	0	0	0
891	119	0	0	0	0	0	0	0	0	0	0	0	0
858	120	0	0	0	0	0	0	0	0	0	0	0	0
920	121	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		0	0	0	0	0	0	0	0	0	0	0	0
SOUTHWEST													
881X	122	0	0	0	0	0	0	0	0	0	0	0	0
815X	123	1	0	1	0	0	0	0	0	0	0	0	1
816X	124	0	0	0	0	0	0	0	0	0	0	0	0
781X	125	0	0	0	0	0	0	0	0	0	0	0	0

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Appendix F. (Page 5 of 7.)

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
748X	126	0	0	0	0	0	0	0	0	0	0	0	0
750X	127	0	0	0	0	0	0	0	0	0	0	0	0
676X	128	0	0	0	0	0	0	0	0	0	0	0	0
677X	129	0	0	0	0	0	0	0	0	0	0	0	0
646D	130	0	0	0	0	0	0	0	0	0	0	0	0
646B	131	0	0	0	0	0	0	0	0	0	0	0	0
646A	132	0	0	0	0	0	0	0	0	0	0	0	0
645B	133	0	0	0	0	0	0	0	0	0	0	0	0
646C	134	0	0	0	0	0	0	0	0	0	0	0	0
682B	135	0	0	0	0	0	0	0	0	0	0	0	0
683A	136	0	0	0	0	0	0	0	0	0	0	0	0
684A	137	0	0	0	0	0	0	0	0	0	0	0	0
683B	138	0	0	0	0	0	0	0	0	0	0	0	0
683D	139	0	0	0	0	0	0	0	0	0	0	0	0
684C	140	0	0	0	0	0	0	0	0	0	0	0	0
ALB	141	0	0	0	0	0	0	0	0	0	0	0	0
ALC	142	0	4	4	0	0	2	5	20	7	27	34	38
ALG	143	6	5	11	8	5	3	4	1	0	1	21	32
ALF	144	0	0	0	1	0	0	0	1	0	1	2	2
ALD	145	0	0	0	0	0	0	0	0	0	0	0	0
ALH	146	0	0	0	0	0	0	0	0	0	0	0	0
ALI	147	0	0	0	0	0	2	1	2	0	2	5	5
ALJ	148	0	0	0	0	0	0	1	0	0	0	1	1
ALK	149	1	7	9	0	0	2	1	1	0	1	5	14
ALM	150	0	6	6	0	0	1	2	1	0	1	4	10
ALO	151	0	0	0	0	0	0	0	0	0	0	0	0
ALP	152	0	0	0	0	0	0	0	0	0	0	0	0
ALQ	153	0	0	0	0	0	0	0	0	1	1	1	1
ALR	154	0	0	0	0	0	0	0	0	0	0	0	0
ALL	155	0	0	0	0	0	0	0	0	0	0	0	0
684B	156	0	0	0	0	0	0	0	0	0	0	0	0
ALA	157	3	411	414	0	0	7	30	49	16	64	101	516
Population Estimate		13,822	69,679	83,501	7,998	4,405	7,494	12,742	18,275	5,306	23,581	56,220	139,721

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Appendix F. (Page 6 of 7.)

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
SHELIKOF													
222	308	0	0	0	0	0	0	0	0	0	0	0	0
223	309	0	0	0	0	0	0	0	0	0	0	0	0
224	310	0	0	0	0	0	0	0	0	0	0	0	0
198	311	0	0	0	0	0	0	0	0	0	0	0	0
199	312	0	0	0	0	0	0	0	0	0	0	0	0
200	313	0	0	0	0	0	0	0	0	0	0	0	0
174	314	0	0	0	0	0	0	0	0	0	0	0	0
173	315	0	0	0	0	0	0	0	0	0	0	0	0
171	316	0	0	0	0	0	0	0	0	0	0	0	0
171X	317	0	0	0	0	0	0	0	0	0	0	0	0
171Y	318	0	0	0	0	0	0	0	0	0	0	0	0
172	319	0	0	0	0	0	0	0	0	0	0	0	0
KUG	320	0	0	0	0	0	0	0	0	0	0	0	0
KUJ	321	0	0	0	0	0	0	0	0	0	0	0	0
KUK	322	0	0	0	0	0	0	0	0	0	0	0	0
KUYX	323	0	0	0	0	0	0	0	0	0	0	0	0
KUY	324	0	0	0	0	0	0	0	0	0	0	0	0
KUL	325	0	0	0	0	0	0	0	0	0	0	0	0
KULX	326	0	0	0	0	0	0	0	0	0	0	0	0
KUM	327	0	0	0	0	0	0	0	0	0	0	0	0
KUI	328	0	0	0	0	0	0	0	0	0	0	0	0
RAA	329	0	0	0	0	0	0	0	0	0	0	0	0
121	330	0	0	0	0	0	0	0	0	0	0	0	0
120	331	0	0	0	0	0	0	0	0	0	0	0	0
119	332	0	0	0	0	0	0	0	0	0	0	0	0
147	333	0	0	0	0	0	0	0	0	0	0	0	0
146	334	0	0	0	0	0	0	0	0	0	0	0	0
145	335	0	0	0	0	0	0	0	0	0	0	0	0
117	336	0	0	0	0	0	0	0	0	0	0	0	0
118	337	0	0	0	0	0	0	0	0	0	0	0	0
90	338	0	0	0	0	0	0	0	0	0	0	0	0
91	339	0	0	0	0	0	0	0	0	0	0	0	0
60	340	0	0	0	0	0	0	0	0	0	0	0	0

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STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
61	341	0	0	0	0	0	0	0	0	0	0	0	0
31	342	0	0	0	0	0	0	0	0	0	0	0	0
2	343	0	0	0	0	0	0	0	0	0	0	0	0
3	344	0	0	0	0	0	0	0	0	0	0	0	0
PAA	345	0	0	0	0	0	0	0	0	0	0	0	0
MAA	346	0	0	0	0	0	0	0	0	0	0	0	0
KUF	347	0	0	0	0	0	0	0	0	0	0	0	0
KUE	348	0	0	0	0	0	0	0	0	0	0	0	0
KUD	349	0	0	0	0	0	0	0	0	0	0	0	0
KUO	350	0	0	0	0	0	0	0	0	0	0	0	0
KUP	351	0	0	0	0	0	0	0	0	0	0	0	0
KUQ	352	0	0	0	0	0	0	0	0	0	0	0	0
KUS	353	0	0	0	0	0	0	0	0	0	0	0	0
KUT	354	0	0	0	0	0	0	0	0	0	0	0	0
KUU	355	0	0	0	0	0	0	0	0	0	0	0	0
KUV	356	0	0	0	0	0	0	0	0	0	0	0	0
KUW	357	0	0	0	0	0	0	0	0	0	0	0	0
KUX	358	0	0	0	0	0	0	0	0	0	0	0	0
KUXX	359	0	0	0	0	0	0	0	0	0	0	0	0
UYBX	360	0	0	0	0	0	0	0	0	0	0	0	0
UYEX	361	0	0	0	0	0	0	0	0	0	0	0	0
UYFX	362	0	0	0	0	0	0	0	0	0	0	0	0
UYHX	363	0	0	0	0	0	0	0	0	0	0	0	0
UYO	364	0	0	0	0	0	0	0	0	0	0	0	0
UYKX	365	0	0	0	0	0	0	1	0	0	0	1	1
UYMX	366	0	0	0	0	0	0	0	0	0	0	0	0
UYQX	367	0	0	0	0	0	0	0	0	0	0	0	0
UYS	368	30	0	30	35	0	0	0	0	0	0	35	65
Population Estimate		17,772	0	17,772	20,734	0	0	614	0	0	0	21,348	39,120
Grand Total		33,246	71,193	104,439	28,894	4,405	7,494	13,472	18,391	6,035	24,427	78,692	183,131

Appendix G.1 *Bathyraja* spp. lengths by area from a trawl survey of the Kodiak area, 1997.

Length	Area Group																		
(cm)	1	2	3	4	5	7	8	10	11	12	13	14	15	16	17	18	19	20	Total
≤10	4	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	10
11	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
12	5	0	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0	1	10
13	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6
14	10	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
15	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	10
16	4	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6
17	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
18	16	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	20
19	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
20	6	0	0	1	0	0	0	0	0	0	2	1	0	0	0	0	0	0	10
21	5	0	0	1	0	1	0	0	0	0	3	2	0	0	0	0	0	1	13
22	3	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	0	7
23	8	0	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0	1	13
24	13	1	0	2	0	0	1	0	0	0	1	0	0	0	0	1	0	0	19
25	8	1	1	9	0	1	0	0	0	0	0	0	0	0	0	0	0	0	20
26	4	0	0	4	0	0	0	0	0	0	1	1	0	0	0	0	0	0	10
27	3	2	0	2	0	3	1	0	0	0	3	1	0	0	0	2	0	0	17
28	12	1	0	4	0	1	1	0	0	1	4	1	0	0	0	0	0	1	26
29	4	0	1	0	0	1	0	0	0	0	3	0	0	0	0	0	1	1	11
30	17	0	0	8	0	1	4	0	0	2	0	1	1	0	0	0	0	1	35
31	27	0	0	4	0	1	0	0	0	0	0	3	0	0	0	1	1	2	39
32	23	4	2	13	0	2	3	0	1	1	2	1	0	0	0	1	3	1	57
33	18	3	3	6	0	0	1	0	2	1	1	1	0	1	0	2	2	0	41
34	24	4	4	5	1	1	1	0	0	1	0	1	0	1	0	3	1	3	50
35	33	0	1	17	0	2	6	0	4	1	3	4	2	1	1	4	1	0	80
36	13	0	2	6	0	2	3	0	1	0	0	0	0	1	0	0	2	2	32
37	9	0	1	1	0	1	0	0	0	1	0	0	0	1	0	1	0	2	17
38	18	0	3	4	1	1	3	0	0	4	2	1	0	0	2	1	1	1	42
39	1	1	0	2	0	1	0	0	0	0	2	0	0	0	0	1	0	1	9
40	0	1	2	3	0	1	1	0	0	0	2	0	0	0	0	0	0	0	10
41	3	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	6
42	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	3
43	1	1	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	6
45	2	0	1	3	0	2	1	0	0	0	1	0	0	0	0	0	0	0	10
46	1	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	1	5
47	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
48	1	1	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	5
49	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
50	1	0	0	1	2	2	0	0	0	0	0	0	0	0	0	1	0	0	7
51	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
52	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
53	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
54	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
55	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
56	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	3
57	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
58	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
59	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
60	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
61	4	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	6
62	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
63	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
64	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
66	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
67	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0	4
68	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
70	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
72	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
74	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
75	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
76	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
77	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
78	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	338	27	21	118	9	37	26	1	10	18	39	25	3	6	3	24	15	23	743

1. Shelikof
2. Marmot offshore
3. Chiniak offshore
4. Barnabas
5. Twoheaded
6. Alitak Flats
7. Geese Islands
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
16. Malina-Raspberry
17. Ugak Bay
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.2 Big skate lengths by area from a trawl survey of the Kodiak area, 1997.

Length	Area Group																
(cm)	1	4	5	6	7	10	11	12	13	14	15	16	17	18	19	20	Total
≤28	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
31	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
32	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
33	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
34	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
35	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
36	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
37	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
38	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
40	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
41	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
43	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
44	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
46	3	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	5
47	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
48	5	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	9
49	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
50	3	0	0	0	0	0	0	0	0	0	0	0	4	0	0	1	8
51	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
52	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
53	3	0	0	2	0	0	1	2	0	0	0	0	0	0	0	0	8
54	4	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	7
55	2	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	6
56	1	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	5
57	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
58	1	0	0	4	0	0	0	0	0	0	0	1	1	0	0	0	7
59	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
60	3	0	2	1	0	0	0	2	0	0	0	0	3	0	0	0	11
61	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	3
62	2	0	1	1	0	0	1	0	0	0	1	0	2	0	0	2	10
63	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
64	1	0	1	1	1	0	1	0	0	0	1	0	1	0	0	0	7
65	3	0	1	0	0	0	0	0	1	0	0	0	3	0	0	0	8
66	2	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	5
67	0	0	0	2	0	2	0	0	0	0	0	0	1	0	0	0	5
68	1	0	1	1	0	2	1	1	0	0	0	0	1	0	1	1	10
69	1	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	7
70	1	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	4
71	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
72	2	0	0	1	0	1	0	0	0	0	0	0	5	0	0	1	10
73	1	0	0	2	0	1	0	1	0	0	0	0	0	0	1	0	6
74	3	1	0	1	0	0	3	0	0	0	0	0	1	0	0	0	9
75	3	0	0	1	0	0	1	2	1	0	0	1	1	0	0	0	10
76	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
77	1	0	0	3	0	0	0	0	0	0	1	1	0	0	0	0	6
78	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	4
79	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	3
80	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
81	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
82	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	3
83	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	3
84	0	0	0	1	0	0	0	0	0	1	1	0	1	0	0	0	4
85	0	0	0	3	0	0	0	2	0	0	0	0	1	0	0	0	6
86	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
87	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3
88	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
89	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
≥90	3	0	2	11	1	6	8	4	0	0	1	0	8	3	0	4	51
	80	5	14	56	2	16	24	16	2	4	5	5	49	3	3	10	294

1. Shelikof
4. Barnabas
5. Twoheaded
6. Alitak Flats
7. Geese Islands
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
16. Malina-Raspberry
17. Ugak Bay
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.3 Longnose skate (*Raja rhina*) lengths by area from a trawl survey of the Kodiak area, 1997.

Length	Area Group																			
(cm)	1	2	3	4	5	6	7	8	10	11	12	13	14	15	16	17	18	19	20	Total
≤ 17	0	0	0	3	0	0	0	0	0	0	1	1	6	0	0	0	0	0	5	16
18	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
19	1	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	4
20	0	0	0	2	0	0	1	0	0	0	0	1	1	0	0	0	0	0	2	7
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
22	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
24	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
25	1	0	0	5	0	0	0	0	0	1	0	0	2	0	1	0	1	0	0	11
26	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
27	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
28	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
29	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
30	2	0	0	2	0	0	1	0	0	0	1	0	4	0	0	0	0	0	0	10
31	2	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	7
32	2	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	6
33	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
34	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
35	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6
36	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4
37	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
38	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	5
39	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	4
40	3	1	0	1	1	0	1	0	0	0	0	0	2	0	0	1	0	0	0	10
41	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
42	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	7
43	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
45	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	2	0	1	6
46	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	3
47	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	3
48	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	1	0	1	1	7
49	0	0	0	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	1	5
50	0	1	0	0	0	1	0	0	0	0	0	2	1	0	0	0	1	0	0	6
51	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3
52	1	0	0	1	1	0	0	0	0	1	0	0	2	0	0	0	0	1	0	7
53	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
54	1	0	0	1	0	0	0	0	0	1	0	0	0	2	0	1	1	0	0	7
55	1	0	0	3	1	0	2	0	0	0	1	0	2	0	0	0	0	2	3	15
56	1	0	0	2	2	0	0	0	0	1	1	1	1	1	1	0	0	0	1	12
57	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	7
58	3	1	0	1	0	0	0	0	0	0	0	2	0	0	0	1	0	4	1	13
59	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	4
60	5	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	2	1	11
61	3	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6
62	1	0	0	1	0	0	0	0	0	0	0	1	0	2	0	0	0	1	1	7
63	2	1	0	1	0	0	0	0	0	1	1	0	1	2	0	0	0	3	3	15
64	3	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	1	7
65	3	0	0	4	1	0	0	0	1	2	0	0	1	2	0	1	0	1	2	18
66	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	2	1	7
67	2	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	1	0	6
68	2	1	1	3	1	0	0	0	0	0	0	2	0	1	0	1	0	0	0	12
69	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
70	2	0	0	1	1	0	0	0	0	1	0	1	1	0	0	0	0	1	0	8
71	1	0	0	1	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	6
72	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	3
73	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	4
74	0	0	0	2	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	6
≥ 75	1	2	0	1	0	0	0	0	2	0	2	4	1	0	0	0	2	0	2	17
	57	16	2	62	17	2	13	1	6	15	8	22	41	17	4	7	12	22	39	363

1. Shelikof
2. Marmot offshore
3. Chiniak offshore
4. Barnabas
5. Twoheaded
6. Alitak Flats
7. Geese Islands
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
16. Malina-Raspberry
17. Ugak Bay
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.4 Arrowtooth flounder lengths by area from a trawl survey of the Kodiak area, 1997.

Length	Area Group																	
(cm)	1	2	4	5	6	7	8	10	11	12	13	14	15	16	18	19	20	Total
12	3	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	6
13	3	0	1	0	0	0	0	1	0	0	0	0	0	0	2	0	0	7
14	3	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	0	8
15	4	0	0	0	4	0	4	3	0	0	2	0	0	0	3	0	0	20
16	8	0	0	0	9	1	0	8	1	0	0	0	0	0	0	0	0	27
17	3	0	0	0	5	0	0	3	0	0	3	0	0	0	0	0	0	14
18	6	0	0	0	4	0	0	0	1	2	3	0	0	0	0	0	0	16
19	7	1	2	0	1	1	0	1	0	1	3	0	0	0	0	0	0	17
20	5	1	6	0	1	0	0	0	0	0	1	0	0	1	0	1	0	16
21	5	1	8	4	0	0	1	0	2	0	2	0	0	0	3	0	0	26
22	7	0	4	1	0	1	5	2	2	1	0	0	0	0	7	3	0	33
23	9	0	6	3	1	1	5	1	3	0	0	1	0	1	10	1	0	42
24	14	1	6	2	5	1	5	5	5	4	1	1	2	0	7	2	1	62
25	13	0	16	0	9	2	5	7	5	3	0	4	2	2	3	1	2	74
26	18	0	8	6	9	3	1	4	6	7	2	4	4	1	2	0	3	78
27	22	1	18	7	12	1	1	2	2	3	4	3	3	0	0	0	3	82
28	15	4	20	13	10	1	2	1	5	2	0	4	5	0	0	3	5	90
29	15	6	22	9	4	4	3	4	4	8	0	3	4	0	1	3	4	94
30	16	5	14	11	1	3	3	4	13	5	2	3	7	1	0	4	8	100
31	12	4	8	9	1	3	4	5	2	5	4	0	10	0	1	4	7	79
32	25	5	13	4	3	5	3	7	7	6	1	2	12	0	1	3	8	105
33	14	1	8	3	4	2	2	4	15	1	0	3	15	0	0	2	8	82
34	9	1	12	7	6	6	1	2	5	5	3	4	9	0	0	2	8	80
35	11	1	14	10	2	5	2	3	4	6	3	5	10	1	3	2	6	88
36	12	2	16	5	3	2	0	4	4	0	2	2	2	1	1	2	2	60
37	11	2	16	8	0	3	2	4	0	2	1	2	1	3	1	1	1	58
38	10	3	17	12	0	3	2	5	1	2	0	0	1	2	1	3	3	65
39	11	4	23	11	0	4	2	6	0	1	0	0	2	1	2	1	4	72
40	17	3	14	5	2	5	1	7	0	0	2	1	2	0	2	1	2	64
41	17	6	11	7	2	1	2	5	1	1	2	1	0	0	4	1	2	63
42	9	7	10	4	0	5	1	5	1	2	1	3	5	0	4	2	1	60
43	9	1	11	6	1	6	4	1	1	2	2	2	4	0	5	4	1	60
44	8	3	16	6	0	2	3	3	0	2	1	0	3	0	4	3	2	56
45	6	3	12	2	1	0	5	4	0	0	1	1	2	0	5	5	1	48
46	4	2	13	6	0	3	6	2	2	0	1	1	1	0	10	3	0	54
47	8	3	6	5	0	3	2	4	2	1	2	0	3	0	7	1	1	48
48	5	3	9	2	1	4	1	4	0	1	1	2	2	0	6	5	1	47
49	5	1	6	8	0	3	3	3	0	1	1	0	4	0	6	4	1	46
50	5	3	6	5	0	1	3	2	1	1	1	1	4	0	4	4	0	41
51	6	6	8	6	0	6	3	1	0	2	4	0	3	0	5	6	0	56
52	7	7	12	3	0	2	1	0	0	1	0	0	3	0	4	4	0	44
53	6	5	3	3	3	2	2	0	0	1	1	2	4	2	3	2	0	39
54	4	2	5	4	1	3	2	0	4	2	1	1	2	2	1	2	0	36
55	5	6	9	1	1	3	1	1	0	1	2	1	0	1	0	2	1	35
56	9	9	10	5	1	1	2	1	4	1	0	0	5	0	5	5	0	58
57	11	3	3	3	4	3	0	0	0	2	1	1	5	2	2	3	0	43
58	0	1	4	2	2	0	2	0	1	1	2	4	1	1	6	1	1	29
59	10	3	6	2	0	0	1	1	1	1	1	1	5	0	1	2	1	36
60	4	3	5	0	2	0	2	2	1	1	1	1	3	3	1	2	0	31
61	2	1	2	0	1	1	0	0	0	3	2	5	1	0	0	0	1	19
62	6	0	2	1	0	0	0	0	0	0	3	4	1	0	1	2	0	20
63	7	1	4	2	0	0	0	2	1	0	1	0	0	1	0	1	1	21
64	3	1	1	0	0	2	0	0	0	1	1	1	2	0	0	4	0	16
65	3	0	2	3	0	1	0	0	2	0	0	0	3	2	1	0	0	17
66	4	0	2	1	0	0	1	0	1	0	0	2	1	1	0	3	0	16
67	2	0	1	0	0	0	0	0	1	0	2	1	1	1	1	0	0	10
68	2	1	1	1	0	1	1	0	0	0	0	1	1	1	1	0	1	12
69	1	1	2	1	1	0	0	1	0	3	0	1	0	0	0	0	1	12
70	1	1	3	0	0	1	0	0	0	1	3	1	1	1	0	1	0	14
71	3	0	1	0	0	0	0	0	1	0	0	3	0	1	0	0	0	9
72	1	0	0	0	0	1	0	0	1	1	1	2	0	0	0	0	0	7

--Continued--

Appendix G.4 (Page 2 of 2.)

Length	Area Group																	
(cm)	1	2	4	5	6	7	8	10	11	12	13	14	15	16	18	19	20	Total
73	1	0	3	0	0	1	0	0	0	0	2	1	0	0	0	0	0	8
74	1	0	1	0	0	0	0	0	0	1	0	0	0	2	0	0	0	5
75	2	0	0	0	0	3	0	0	1	0	1	0	0	1	1	0	0	9
76	2	1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	6
77	0	0	1	0	0	0	0	0	0	0	1	1	0	1	0	2	0	6
78	0	0	1	0	1	1	0	0	0	0	0	0	1	1	0	0	0	5
79	1	0	1	0	0	0	0	0	0	2	1	0	0	0	0	0	0	5
81	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
82	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
84	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	3
85	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	489	131	467	222	118	119	104	135	114	102	84	87	162	39	140	113	93	2719

1. Shelikof
2. Marmot offshore
4. Barnabas
5. Twoheaded
6. Alitak Flats
7. Geese Islands
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
16. Malina-Raspberry
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.5 Halibut lengths from a trawl survey of the Kodiak area, 1997.

Length	Area Group																			
(cm)	1	2	3	4	5	6	7	8	10	11	12	13	14	15	16	17	18	19	20	Total
≤25	1	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	8
26	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
27	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3
29	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
30	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
31	2	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	5
32	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
33	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	4
34	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
35	2	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	5
36	1	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	4
37	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3
38	1	0	0	2	0	0	0	0	2	4	0	0	0	1	0	0	0	0	0	10
40	3	0	0	1	1	0	0	0	0	1	0	0	0	0	0	2	0	0	0	8
41	2	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2	0	1	0	7
42	1	0	0	2	0	2	0	0	1	1	0	0	0	0	0	3	0	0	0	10
43	2	0	0	2	0	1	0	1	0	4	0	0	0	0	0	0	0	0	0	10
44	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	1	4
45	3	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	6
46	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	1	0	0	1	5
47	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	4
48	1	0	0	0	1	0	0	0	1	0	0	0	2	0	0	1	0	0	0	6
49	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	4
50	2	0	0	0	1	0	0	0	0	1	0	0	1	1	0	4	0	0	0	10
51	1	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	0	5
52	1	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	4
53	1	0	0	0	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	7
54	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
55	0	0	0	1	0	1	0	0	1	1	0	1	0	1	0	1	0	0	0	7
56	1	0	0	1	0	0	0	0	0	2	0	0	1	0	0	1	1	0	0	7
57	2	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	4
58	1	0	0	0	0	0	0	1	0	2	1	0	0	1	1	0	1	0	0	8
59	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
60	1	1	0	2	1	1	1	1	1	2	2	0	2	2	0	0	0	0	0	17
61	0	0	0	0	0	2	0	0	0	4	0	2	1	0	0	0	1	0	0	10
62	3	0	0	1	1	0	0	0	0	0	1	2	0	1	0	0	1	0	0	10
63	0	0	0	0	2	0	0	0	1	2	0	1	1	0	0	1	0	1	0	9
64	2	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	1	0	0	6
65	1	1	1	2	0	2	0	1	0	0	0	0	2	1	0	0	1	0	0	12
66	4	0	0	0	1	1	0	2	0	0	0	0	2	1	0	0	0	1	0	12
67	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
68	0	0	0	1	4	6	0	0	1	0	0	2	1	1	0	1	2	1	1	21
69	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	4
70	3	0	0	6	2	1	0	0	1	0	1	0	0	1	0	1	3	0	1	20
71	1	0	0	2	0	2	0	1	1	0	0	1	1	0	0	0	1	0	0	10
72	3	0	0	0	2	1	0	0	1	1	0	1	0	0	0	0	3	0	0	12
73	1	2	0	0	2	1	0	1	0	1	1	0	0	0	0	1	2	1	0	13
74	4	0	0	1	0	0	2	0	1	0	0	0	0	0	0	0	2	0	0	10
75	6	2	1	8	2	1	0	1	1	2	0	2	0	0	1	1	1	1	0	30
76	2	2	1	4	0	1	0	0	0	1	0	0	1	0	1	1	3	0	1	18
77	0	0	0	10	1	2	0	1	0	0	0	0	1	0	0	0	3	0	0	18
78	2	3	1	7	0	4	0	1	1	3	0	0	1	1	1	1	2	0	0	28
79	0	2	0	3	0	2	0	0	2	1	0	0	0	0	0	0	1	1	0	12
80	4	1	3	5	2	2	1	0	1	2	1	0	5	0	0	0	3	1	0	31
81	2	0	0	2	0	0	0	1	2	0	0	0	0	0	0	0	2	0	1	10
82	3	1	0	2	0	1	0	0	0	2	0	0	0	1	0	1	2	0	1	14
83	3	2	1	2	0	0	0	0	0	4	1	1	0	0	0	0	3	1	1	19
84	0	2	1	4	0	4	2	1	2	0	0	0	1	0	0	1	1	0	0	19
85	2	0	1	6	0	3	0	1	2	1	0	2	0	0	0	0	1	1	1	21
86	3	1	1	2	2	1	1	0	1	2	1	1	1	1	1	0	2	0	2	23
87	1	1	0	1	0	4	1	0	2	1	0	0	0	0	0	0	0	1	0	12
88	1	0	3	5	2	2	1	1	1	2	0	0	0	0	1	1	0	0	0	20

--Continued--

Appendix G.5. (Page 2 of 2.)

Length	Area Group																			
(cm)	1	2	3	4	5	6	7	8	10	11	12	13	14	15	16	17	18	19	20	Total
89	0	2	0	1	0	1	0	0	2	0	0	0	1	0	0	0	2	0	2	11
90	0	0	0	9	1	3	0	0	0	1	0	0	1	0	0	0	0	0	0	15
91	1	0	0	1	0	1	0	0	0	1	0	0	1	0	0	0	1	0	0	6
92	3	1	0	0	0	4	0	0	0	1	0	1	0	0	0	0	1	0	1	12
93	0	2	0	2	0	0	2	1	0	0	2	1	1	0	0	1	3	2	0	17
94	0	2	0	3	1	3	2	0	0	0	0	0	0	1	1	0	2	1	0	16
95	2	4	0	6	2	1	0	1	5	1	0	0	0	0	0	0	0	1	0	23
96	1	3	0	1	0	0	0	0	1	1	0	1	2	1	0	0	1	0	0	12
97	0	0	0	1	1	1	1	0	1	1	0	0	0	0	0	1	0	0	0	7
98	1	2	0	4	0	1	0	0	0	1	0	0	0	0	1	0	0	1	0	11
99	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3
100	2	0	0	1	1	1	2	0	0	0	1	1	0	0	0	1	0	0	0	10
101	2	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	4
102	2	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4
103	1	0	0	0	1	2	0	1	3	1	0	0	0	1	0	0	0	0	0	10
104	1	2	0	2	0	2	1	0	2	2	0	0	1	0	0	0	0	0	1	14
105	1	2	0	3	0	1	0	1	5	2	0	1	3	0	0	0	2	1	0	22
106	0	2	0	1	0	3	0	1	0	0	0	0	0	0	0	0	1	0	0	8
107	1	2	0	1	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8
108	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
109	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
110	1	1	0	3	0	0	0	2	4	0	1	1	0	0	0	1	0	1	1	16
111	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
112	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	1	0	5
113	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2
114	1	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	6
115	1	1	0	1	0	3	0	0	0	0	1	0	0	1	0	0	1	0	1	10
116	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	1	0	4
117	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
120	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3
121	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
122	0	0	1	0	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0	5
123	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
124	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
125	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
126	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
127	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
128	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
129	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	3
130	1	0	0	0	1	3	0	0	1	0	0	2	0	0	0	0	0	0	0	8
131	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	3
132	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	4
133	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	4
134	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
135	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
140	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
142	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
143	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
144	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
145	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
150	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	3
151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
155	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
177	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
180	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	116	51	15	134	42	97	23	24	81	87	17	34	41	20	10	37	61	27	24	941

1. Shelikof
2. Marmot offshore
3. Chiniak offshore
4. Barnabas
5. Twoheaded
6. Alitak Flats
7. Geese Islands
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
16. Malina-Raspberry
17. Ugak Bay
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.6 Flathead sole lengths by area from a trawl survey of the Kodiak area, 1997.

Length (cm)	1	2	4	5	6	7	8	10	11	12	13	14	15	16	18	19	20	Total
6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8	3	0	0	0	0	0	0	2	0	1	0	1	0	0	0	0	2	9
9	2	0	0	0	1	0	0	1	0	0	2	1	0	0	0	0	1	8
10	1	0	0	2	3	0	1	3	0	0	0	2	1	0	0	0	2	15
11	1	1	0	2	2	5	0	1	0	0	0	0	2	0	0	0	1	15
12	0	1	1	0	3	0	0	2	2	3	1	0	0	0	1	0	6	20
13	3	1	3	4	2	2	0	1	3	4	1	2	0	0	0	0	2	28
14	10	1	2	2	5	0	2	6	5	5	1	3	3	0	0	0	3	48
15	9	1	6	4	3	4	0	6	1	2	0	2	3	0	1	0	4	46
16	14	4	11	5	8	3	0	9	6	4	3	7	6	0	0	0	4	84
17	12	7	14	20	7	6	0	8	5	5	3	8	3	1	0	2	7	108
18	8	5	12	18	13	8	0	9	4	7	3	9	4	0	0	1	7	108
19	11	3	16	17	11	7	0	11	5	9	4	14	16	1	0	1	9	135
20	16	5	9	14	13	5	0	7	11	6	2	8	9	0	1	1	10	117
21	8	3	11	9	13	8	0	7	10	3	3	10	13	0	0	1	8	107
22	8	2	16	16	18	3	0	4	6	5	8	9	12	0	0	0	10	117
23	4	2	7	18	9	6	0	5	11	4	3	12	11	1	0	1	10	104
24	6	5	10	20	16	9	0	5	13	9	2	8	8	1	0	1	7	120
25	1	4	19	20	3	7	0	11	15	6	4	13	9	1	1	3	14	131
26	5	3	12	22	14	11	0	18	13	2	3	15	13	0	1	2	12	146
27	8	6	13	18	8	9	0	12	12	8	14	25	11	1	1	5	12	163
28	10	1	20	18	11	9	2	22	12	11	14	17	11	2	1	1	16	178
29	6	8	12	23	4	13	0	37	16	4	20	18	16	2	0	4	9	192
30	11	4	15	21	23	11	2	29	20	4	16	17	11	7	0	4	17	212
31	13	5	22	33	20	12	2	38	17	11	19	13	24	3	1	2	9	244
32	18	5	13	25	22	6	1	17	17	3	13	12	27	4	2	10	9	204
33	38	11	18	27	15	20	3	23	15	13	16	12	19	6	3	7	11	257
34	27	6	18	23	18	5	1	11	15	16	17	9	19	8	2	2	13	210
35	36	6	20	27	23	18	0	5	18	14	14	9	24	4	6	4	4	232
36	10	7	11	23	16	9	1	16	7	17	9	11	22	3	0	8	6	176
37	21	7	3	13	16	17	1	7	14	10	10	7	23	5	1	7	4	166
38	17	4	0	8	12	8	0	10	2	10	5	9	15	2	2	8	4	116
39	14	2	2	8	6	8	2	9	6	9	7	5	7	0	4	4	1	94
40	11	3	1	6	3	3	0	3	6	12	2	3	8	2	2	2	1	68
41	10	3	2	6	2	4	0	1	4	15	3	1	7	0	0	6	0	64
42	5	1	0	5	1	4	0	4	1	5	3	0	5	2	1	3	1	41
43	3	0	0	3	0	3	0	1	0	7	1	0	1	0	2	2	0	23
44	0	0	0	1	0	1	0	0	1	2	0	0	0	0	2	1	0	8
45	2	0	0	2	0	2	1	0	0	2	0	0	1	0	1	1	0	12
46	0	0	0	0	0	2	0	0	0	1	0	0	0	0	1	0	0	4
47	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
49	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
51	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	385	127	319	483	344	249	19	361	293	250	226	292	364	56	40	94	236	4138

1. Shelikof
2. Marmot offshore
4. Barnabas
5. Twoheaded
6. Alitak Flats
7. Geese Islands
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
16. Malina-Raspberry
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.7 English sole lengths from a trawl survey of the Kodiak area, 1997.

Length	Area Group				
(cm)	13	14	16	20	Total
28	0	1	0	0	1
30	0	1	0	0	1
31	0	1	0	0	1
32	1	0	0	0	1
33	1	5	0	0	6
34	1	1	0	0	2
35	0	2	0	0	2
36	0	1	0	0	1
37	0	1	0	0	1
38	1	3	0	0	4
39	1	0	0	1	2
40	0	1	0	0	1
41	0	1	0	0	1
42	1	1	0	0	2
45	0	1	0	0	1
46	0	0	0	1	1
≥50	4	1	1	4	10
	10	21	1	6	38

13. Kupreanof-Viekoda
14. Uganik Bay
16. Malina-Raspberry
20. Uyak Bay

Appendix G.8 Dover sole lengths from a trawl survey of the Kodiak area, 1997.

Length	Area Group															
(cm)	1	2	4	5	8	10	11	12	13	14	15	16	18	19	20	Total
19	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
25	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
26	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
28	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
29	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
30	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
34	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
35	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
38	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
39	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
40	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
41	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	3
42	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
43	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	3
44	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
45	1	1	0	0	1	0	0	0	2	0	0	0	0	0	0	5
47	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
48	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
49	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
50	1	0	1	1	1	0	1	1	0	0	0	0	0	1	0	7
51	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
52	0	1	1	0	3	0	0	0	0	0	0	0	1	0	0	6
53	0	1	2	0	1	0	0	0	1	0	0	0	0	0	0	5
54	1	0	4	0	1	0	0	0	0	0	0	0	0	0	0	6
55	2	1	1	0	2	0	0	0	0	0	0	0	0	0	1	7
56	1	1	4	0	1	0	0	0	0	0	0	0	1	0	0	8
57	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
58	0	1	2	1	2	0	0	0	0	0	0	0	1	0	0	7
59	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	3
60	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	4
61	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
62	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
63	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
67	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
	12	7	27	4	14	1	4	2	8	1	1	2	9	3	3	98

1. Shelikof
2. Marmot offshore
4. Barnabas
5. Twoheaded
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
16. Malina-Raspberry
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.9 Rex sole lengths from a trawl survey of the Kodiak area, 1997.

Length	Area Group															
(cm)	1	2	4	5	6	7	8	10	11	12	13	15	18	19	20	Total
≤25	2	0	1	2	1	0	0	1	0	0	0	0	4	0	4	15
26	0	0	0	1	0	1	0	2	0	0	0	0	0	0	1	5
27	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2
29	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
30	0	0	0	2	0	0	0	0	0	1	0	2	0	0	2	7
31	0	0	2	1	0	0	0	0	0	0	2	0	0	0	2	7
32	0	0	1	2	0	0	0	0	0	0	3	0	0	0	1	7
33	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	4
34	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	4
35	0	0	0	1	0	0	1	0	0	0	1	0	0	0	2	5
36	0	0	0	1	0	1	1	0	0	0	0	1	0	0	0	4
37	0	0	0	1	0	0	2	0	0	0	0	0	2	0	0	5
38	0	0	1	0	0	0	1	0	0	0	1	1	0	1	0	5
39	0	0	0	0	0	0	5	0	0	0	0	2	0	0	0	7
40	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	5
41	0	0	1	0	0	0	4	0	0	0	0	0	1	0	0	6
42	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3
43	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
44	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
45	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
46	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
47	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	3
48	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
49	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
50	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
51	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	4
52	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	3
≥53	0	2	3	2	0	5	0	0	0	0	0	0	1	0	0	13
	6	6	17	15	1	8	20	3	2	2	8	11	13	2	14	128

1. Shelikof
2. Marmot offshore
4. Barnabas
5. Twoheaded
6. Alitak Flats
7. Geese Islands
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
16. Malina-Raspberry
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.10 Yellowfin sole lengths from a trawl survey of the Kodiak area, 1997.

Length	Area Group									
(cm)	5	6	10	11	12	13	14	15	20	Total
12	0	0	0	1	0	0	0	0	0	1
13	0	0	0	0	0	1	0	0	0	1
15	0	0	0	1	0	0	0	0	0	1
16	0	0	0	0	0	0	0	1	0	1
17	0	0	0	0	0	1	0	0	0	1
19	0	0	0	0	0	0	0	1	0	1
20	0	0	1	0	0	3	0	1	0	5
21	0	0	0	1	0	3	0	1	0	5
22	0	0	1	5	0	2	0	3	0	11
23	0	1	1	0	0	2	0	2	0	6
24	0	0	3	0	0	5	0	2	0	10
25	0	2	1	0	0	4	1	1	0	9
26	0	3	2	2	0	3	0	2	0	12
27	1	0	1	2	0	8	0	2	0	14
28	0	1	0	2	0	3	1	5	0	12
29	1	0	8	6	0	10	3	5	0	33
30	3	0	12	6	0	11	6	7	0	45
31	1	1	7	5	0	11	1	11	0	37
32	3	0	9	12	0	7	5	7	0	43
33	0	2	12	7	0	14	6	2	0	43
34	2	3	12	4	1	10	5	3	0	40
35	7	3	10	6	1	3	2	1	1	34
36	3	0	8	7	2	2	1	2	1	26
37	0	1	4	12	1	5	3	1	0	27
38	2	0	6	3	1	4	1	1	0	18
39	3	3	5	1	1	0	0	0	0	13
40	1	0	3	0	1	2	0	1	0	8
41	1	0	2	0	0	1	0	0	0	4
44	0	1	0	0	0	0	0	0	0	1
	28	21	108	83	8	115	35	62	2	462

5. Twoheaded
6. Alitak Flats
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
20. Uyak Bay

Appendix G.11 Starry flounder lengths from a trawl survey of the Kodiak area, 1997.

Length (cm)	Area Group					
	11	12	13	15	16	Total
36	0	0	0	1	0	1
40	1	0	0	0	0	1
41	0	0	0	1	0	1
42	1	0	0	0	0	1
43	2	0	0	2	0	4
44	1	0	0	0	0	1
45	1	0	0	1	0	2
47	1	0	0	2	0	3
49	1	0	0	1	0	2
50	2	0	0	0	0	2
51	3	0	0	0	0	3
53	1	0	0	0	0	1
55	1	0	0	0	0	1
57	1	0	0	0	0	1
59	0	0	1	1	0	2
63	0	0	0	0	1	1
64	0	1	0	0	0	1
	16	1	1	9	1	28

11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
15. Inner Marmot
16. Malina-Raspberry

Appendix G.12 Alaska Plaice lengths from a trawl survey of the Kodiak area, 1997.

Length (cm)	Area Group									
	1	5	6	10	11	13	14	15	20	Total
33	0	0	1	0	0	0	0	0	0	1
37	0	0	0	0	0	0	0	0	1	1
41	0	0	0	0	0	1	0	0	0	1
42	0	0	0	0	1	0	0	0	0	1
43	0	0	0	3	0	1	1	0	3	8
44	0	0	0	0	0	0	1	0	2	3
45	1	0	1	0	0	1	1	0	0	4
46	0	0	1	0	1	0	0	0	0	2
47	0	0	0	0	0	0	1	0	1	2
48	0	0	0	0	0	0	1	0	0	1
49	0	0	0	1	0	0	0	0	0	1
51	1	0	0	0	0	0	1	0	0	2
53	0	0	0	0	0	0	0	1	0	1
54	0	0	0	0	0	0	1	0	0	1
55	0	0	0	0	0	0	1	0	0	1
59	0	0	0	1	0	0	1	0	0	2
65	0	1	0	0	0	0	0	0	0	1
	2	1	3	5	2	3	9	1	7	33

1. Shelikof
5. Twoheaded
6. Alitak Flats
10. Alitak Bay
11. Chiniak Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
20. Uyak Bay

Appendix G.13 Sablefish lengths from a trawl survey of the Kodiak area, 1997.

Length	Area Group														
(cm)	1	2	4	6	8	10	11	12	13	14	16	18	19	20	Total
≤33	0	0	0	1	0	0	22	1	0	0	0	0	0	0	24
34	0	0	0	2	0	0	11	0	0	0	0	0	0	0	13
35	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
36	0	0	1	1	0	0	1	0	0	0	0	0	0	0	3
37	0	0	0	1	0	0	0	0	2	0	0	0	0	0	3
38	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
39	0	0	0	0	0	0	0	0	3	2	0	0	0	0	5
40	1	0	0	0	0	0	0	0	4	10	0	0	0	1	16
41	1	0	0	0	0	0	0	0	0	10	0	0	0	3	14
42	2	0	0	0	0	0	0	0	4	10	0	0	0	4	20
43	1	0	0	0	0	0	0	0	2	4	0	0	0	4	11
44	2	0	0	0	0	0	0	0	0	1	0	0	0	2	5
45	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
47	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
48	1	0	2	0	0	0	0	0	0	1	0	0	0	0	4
49	0	0	0	0	0	0	0	0	0	2	0	0	0	1	3
50	0	0	0	0	0	0	0	0	3	2	2	0	0	1	8
51	1	0	1	0	0	0	0	0	0	3	0	0	0	1	6
52	0	0	1	0	0	0	0	0	1	1	0	0	0	0	3
53	2	0	0	0	1	0	0	0	0	1	0	0	0	1	5
54	0	0	1	0	0	2	0	0	0	1	0	0	0	0	4
55	1	0	1	0	1	0	0	0	0	0	0	0	0	0	3
57	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2
58	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
60	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
61	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
62	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
63	0	1	0	0	0	1	0	0	0	0	0	1	0	0	3
64	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
66	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
67	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
68	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
69	0	0	1	0	0	0	0	0	0	0	0	2	0	0	3
≥70	0	2	0	0	0	0	0	0	0	0	0	0	2	0	4
	12	4	18	5	2	6	41	2	19	51	2	5	2	18	187

1. Shelikof
2. Marmot offshore
4. Barnabas
6. Alitak Flats
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
16. Malina-Raspberry
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.14 Butter sole lengths from a trawl survey of the Kodiak area, 1997.

Length	Area Group								
(cm)	5	6	7	8	10	11	18	20	Total
≤20	0	0	0	0	1	1	1	0	3
21	0	0	0	0	0	1	0	0	1
22	0	0	0	0	0	0	1	0	1
23	0	0	0	0	0	0	1	0	1
25	0	0	1	0	0	0	0	0	1
27	0	0	0	0	1	0	0	0	1
28	0	0	0	0	0	0	1	0	1
29	0	1	0	0	1	0	1	0	3
30	2	2	0	0	2	2	1	0	9
31	1	2	1	0	0	1	2	0	7
32	1	1	0	0	0	3	2	0	7
33	3	2	0	0	1	4	0	0	10
34	4	2	0	0	0	9	2	0	17
35	6	2	0	0	3	4	1	0	16
36	2	3	0	0	0	4	4	0	13
37	6	2	0	0	1	4	2	0	15
38	2	0	0	0	0	5	4	0	11
39	2	1	0	0	0	1	6	0	10
≥40	24	12	0	0	5	33	15	0	89

5. Twoheaded
6. Alitak Flats
7. Geese Islands
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
18. Southwest offshore
20. Uyak Bay

Appendix G.15 Pacific cod lengths by area from a trawl survey of the Kodiak area, 1997.

Legnth	Area Group																	
(cm)	1	2	4	5	6	7	8	10	11	12	13	14	15	16	18	19	20	Total
≤25	0	0	0	0	0	0	0	2	62	0	0	0	0	0	1	0	0	65
26	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
27	0	0	0	0	0	1	0	0	4	0	1	0	0	0	3	0	0	9
28	1	0	0	0	0	0	0	0	1	0	1	1	0	0	3	0	0	7
29	1	0	0	0	0	0	0	0	1	0	5	0	0	0	1	0	0	8
30	2	0	0	0	0	0	0	0	1	0	11	0	0	0	0	0	0	14
31	1	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	5
32	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4
33	1	0	0	0	0	0	0	2	1	0	1	0	0	0	0	0	0	5
34	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
35	1	0	0	0	0	0	0	0	4	0	0	1	0	0	0	0	0	6
36	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	3
37	0	0	1	0	0	1	0	1	1	0	0	2	1	0	0	0	0	7
38	2	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	6
39	2	0	0	0	0	0	0	0	3	0	0	2	0	0	0	0	0	7
40	4	0	2	0	0	3	0	3	4	0	0	1	2	0	0	0	0	19
41	2	1	3	0	0	1	0	1	4	1	0	2	7	0	0	0	0	22
42	11	0	1	0	0	4	0	1	1	0	1	1	7	0	0	0	0	27
43	9	0	2	1	0	3	1	2	3	1	2	1	3	0	0	0	0	28
44	18	0	3	0	0	4	2	2	3	1	0	4	3	0	0	0	0	40
45	7	0	2	0	0	2	2	2	3	3	2	3	6	1	2	0	0	35
46	7	0	0	1	0	1	2	1	2	0	1	3	2	2	1	1	0	24
47	6	0	1	3	0	2	4	5	2	1	2	3	6	1	0	0	2	38
48	4	1	0	1	0	1	3	7	3	6	2	4	5	1	1	0	2	41
49	8	4	1	2	0	1	3	3	1	1	1	4	5	0	0	1	2	37
50	4	1	2	2	2	3	0	2	1	5	0	2	8	2	0	3	2	39
51	3	1	4	2	0	0	4	6	2	5	1	8	7	2	0	0	0	45
52	0	2	0	1	0	3	5	1	0	3	0	4	6	0	2	3	4	34
53	4	3	2	2	0	5	0	4	2	4	2	6	7	0	1	3	5	50
54	0	7	7	3	2	1	1	6	3	4	0	7	14	0	1	4	5	65
55	4	6	7	9	0	1	7	6	8	5	0	9	7	1	2	4	4	80
56	6	15	8	4	1	5	0	3	3	10	2	11	7	0	6	7	6	94
57	8	7	7	4	2	5	2	1	3	3	2	20	10	0	2	4	1	81
58	7	4	6	13	2	2	3	2	6	5	0	10	8	0	2	5	2	77
59	8	5	2	14	2	9	4	6	7	7	1	13	6	0	2	7	0	93
60	6	3	3	19	0	9	2	5	6	1	6	4	9	0	5	4	1	83
61	13	4	4	11	0	4	2	7	5	8	2	7	8	2	1	5	2	85
62	8	5	5	12	2	7	3	6	4	4	1	5	6	0	2	9	1	80
63	7	1	2	8	6	1	2	2	6	9	0	5	4	0	2	2	1	58
64	11	2	4	8	2	14	1	4	1	3	1	3	3	0	3	1	0	61
65	7	3	6	7	2	5	1	4	6	4	1	6	4	0	4	3	1	64
66	8	0	2	5	4	3	0	10	3	1	2	1	4	2	6	0	1	52
67	3	1	0	8	2	5	5	7	2	1	0	4	2	3	6	6	1	56
68	5	2	2	6	3	9	2	5	2	6	1	0	0	1	5	4	1	54
69	5	2	1	10	1	0	0	5	1	4	1	1	3	0	2	2	2	40
70	2	2	2	4	2	10	1	4	2	3	2	0	2	0	3	3	0	42
71	0	0	3	6	1	4	3	3	0	2	0	0	2	0	3	0	0	27
72	2	2	5	2	2	8	1	5	2	3	1	2	6	1	13	0	0	55
73	2	0	5	9	6	1	3	3	1	4	2	1	2	1	11	1	1	53
74	3	1	1	3	3	2	2	6	3	3	0	0	2	0	3	2	1	35
75	1	1	3	10	2	6	0	8	2	3	1	0	0	1	3	3	1	45
76	1	2	1	4	6	1	1	6	1	1	0	0	1	0	2	0	1	28
77	2	1	0	5	4	1	7	6	1	6	0	0	0	0	2	4	0	39
78	2	0	0	1	2	1	1	2	1	4	1	0	1	0	1	3	0	20
79	1	0	2	3	3	0	2	3	0	2	0	0	2	0	2	1	0	21
80	1	0	2	7	0	0	0	3	0	2	0	0	2	0	0	1	0	18
81	1	0	1	6	0	3	2	3	0	1	0	1	0	0	1	1	0	20
82	1	0	2	2	3	0	0	2	1	1	1	0	0	0	0	0	0	13
83	0	1	0	2	1	0	1	1	0	3	0	0	0	0	1	1	0	11
84	0	0	0	8	1	1	0	1	0	0	0	0	1	0	0	0	1	13
85	1	0	0	6	0	0	0	0	0	2	0	0	1	0	0	0	0	10
86	0	1	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	5
87	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
88	0	1	0	1	0	0	1	1	1	1	0	0	0	0	0	0	0	6
≥90	0	0	0	8	0	0	0	1	0	1	0	0	1	0	3	0	0	14
	226	92	117	246	72	154	86	184	192	148	69	162	196	21	115	98	51	2229

1. Shelikof
2. Marmot offshore
4. Barnabas
5. Twoheaded
6. Alitak Flats
7. Geese Islands
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
16. Malina-Raspberry
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.16 Pollock lengths by area from a trawl survey of the Kodiak area, 1997.

Length	Area Group																
(cm)	1	2	4	5	6	7	10	11	12	13	14	15	16	18	19	20	Total
9	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
10	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3
11	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3
16	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
18	0	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	5
19	1	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	4
20	10	0	0	0	1	0	7	0	0	0	0	0	0	0	0	0	18
21	11	0	0	0	1	0	2	0	0	0	0	0	3	0	0	0	17
22	9	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	13
23	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	5
24	2	0	0	0	0	0	0	0	3	1	1	1	0	0	0	2	10
25	9	0	0	0	0	0	0	1	10	1	1	0	0	0	0	2	24
26	3	0	0	0	0	0	1	2	15	0	0	0	0	0	0	0	21
27	3	0	0	0	0	0	7	3	21	0	0	0	0	0	1	0	35
28	3	0	0	0	0	0	16	0	5	1	1	0	0	0	0	0	26
29	7	0	0	0	0	0	29	9	3	0	0	0	0	2	0	0	50
30	10	0	0	0	0	0	14	5	3	2	3	1	0	2	0	0	40
31	10	0	0	0	0	0	11	5	2	5	5	0	0	3	1	2	44
32	11	0	0	0	0	0	7	6	0	2	4	0	1	5	0	0	36
33	17	0	0	0	0	0	3	5	1	4	0	0	3	6	0	2	41
34	10	0	0	0	0	0	5	4	0	0	2	0	1	9	1	3	35
35	10	0	0	0	0	0	4	7	1	1	1	0	0	2	0	4	30
36	15	0	0	0	0	0	17	4	0	2	3	1	0	4	1	5	52
37	14	0	0	0	0	0	23	2	0	2	3	0	2	1	1	8	56
38	10	0	0	0	0	0	21	10	1	2	0	1	4	3	0	10	62
39	21	0	0	0	0	0	21	8	0	7	2	0	5	3	0	16	83
40	14	0	0	1	0	0	7	5	0	6	5	1	5	1	0	13	58
41	14	0	1	1	0	0	8	2	2	4	11	0	5	3	0	16	67
42	15	0	0	0	0	0	2	1	0	9	4	1	6	1	0	6	45
43	15	0	0	2	0	0	4	2	0	5	4	1	7	3	1	11	55
44	11	0	1	1	0	0	3	1	0	6	5	0	12	1	0	18	59
45	20	0	1	0	1	0	7	3	1	6	5	1	14	1	1	9	70
46	10	0	1	8	0	0	0	2	1	5	3	2	8	1	0	6	47
47	10	0	1	0	0	0	6	1	0	10	6	4	9	1	0	5	53
48	22	0	1	2	3	0	4	0	5	11	5	3	8	0	0	6	70
49	7	0	1	6	2	1	7	1	3	7	7	3	5	0	3	2	55
50	15	0	2	5	13	4	12	1	2	8	3	4	10	0	0	2	81
51	10	2	3	5	24	1	11	3	2	14	9	10	8	2	2	7	113
52	8	2	5	10	57	6	17	1	3	17	4	6	5	3	3	8	155
53	18	4	10	32	48	6	22	11	11	16	18	9	4	0	9	12	230
54	20	8	14	37	63	9	23	4	11	24	9	10	5	4	6	11	258
55	31	32	22	36	59	12	31	3	15	22	16	25	7	6	5	18	340
56	17	16	36	47	75	14	37	9	18	11	14	18	6	3	6	4	331
57	22	14	21	42	31	19	24	6	14	17	15	28	8	3	4	10	278
58	17	18	31	56	26	18	23	5	13	15	5	21	3	10	4	6	271
59	13	13	23	49	27	14	18	7	16	6	6	27	4	10	4	7	244
60	8	7	19	40	18	17	17	5	23	8	8	25	4	3	7	3	212
61	9	4	16	34	13	5	11	2	7	6	10	20	0	6	2	0	145
62	8	2	11	14	5	9	6	7	9	2	5	19	1	2	4	2	106
63	5	1	3	18	6	3	9	5	8	4	5	12	0	3	0	1	83
64	2	1	4	9	3	5	9	2	10	4	4	4	0	2	3	3	65
65	3	0	1	6	0	3	1	2	7	2	1	7	1	2	1	4	41
66	0	0	0	7	0	0	5	0	5	1	0	4	0	1	0	1	24
67	0	0	0	1	1	0	3	3	3	1	1	2	0	0	1	1	17
68	1	0	0	4	0	0	0	1	6	0	0	8	0	0	0	0	20
69	0	0	0	3	1	0	2	0	4	1	1	3	0	0	0	0	15
70	0	0	0	0	0	0	0	1	5	0	3	4	0	0	0	1	14
71	0	0	0	1	0	0	2	0	5	0	1	3	0	0	1	0	13
72	0	0	0	0	0	0	0	0	3	0	0	2	1	0	1	0	7
73	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
74	0	0	0	1	0	0	0	0	2	1	0	2	0	0	0	0	6
75	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	3
76	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	534	124	228	479	482	146	525	168	281	284	223	296	167	112	73	249	4371

1. Shelikof
2. Marmot offshore
4. Barnabas
5. Twoheaded
6. Alitak Flats
7. Geese Islands
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
13. Kupreanof-Viekoda
14. Uganik Bay
15. Inner Marmot
16. Malina-Raspberry
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.17 Rougheye rockfish lengths by area from a trawl survey of the Kodiak area, 1997.

Length	Area Group											
(cm)	1	2	4	5	7	10	11	12	15	18	19	Total
11	1	0	0	1	0	0	0	0	0	0	0	2
14	0	0	1	0	0	0	0	0	0	0	0	1
15	0	0	3	0	0	0	0	0	0	0	0	3
16	0	0	1	0	0	0	0	0	0	0	0	1
17	1	0	0	0	1	0	0	0	0	0	1	3
18	0	0	2	0	0	0	1	0	0	0	2	5
19	0	0	0	0	0	0	0	0	0	0	1	1
20	0	0	3	0	0	0	2	0	0	0	0	5
21	0	0	2	0	0	0	0	0	0	0	1	3
22	0	0	2	0	0	0	0	0	0	0	1	3
23	1	0	2	1	0	1	1	0	0	0	1	7
24	1	0	1	1	0	2	0	0	0	0	0	5
25	2	0	2	0	0	0	2	0	0	0	0	6
26	3	0	2	0	0	0	0	0	1	0	0	6
27	2	0	5	0	0	0	1	0	0	0	0	8
28	3	0	7	0	0	0	0	0	0	0	0	10
29	7	0	6	0	1	0	0	0	0	1	0	15
30	6	0	10	0	0	0	0	0	0	0	0	16
31	3	0	15	0	2	1	0	0	0	0	1	22
32	1	0	6	2	3	0	0	0	0	0	1	13
33	2	0	5	0	1	0	0	0	0	0	0	8
34	2	0	8	2	0	0	1	0	0	0	0	13
35	1	0	12	2	2	0	0	0	0	0	2	19
36	4	0	8	1	2	0	0	0	0	0	3	18
37	0	0	9	2	1	0	2	0	0	0	0	14
38	5	0	9	2	1	1	2	0	0	0	1	21
39	2	0	11	2	3	1	0	0	1	0	0	20
40	1	0	11	4	4	1	1	1	0	0	0	23
41	0	0	6	1	4	0	1	0	0	1	0	13
42	4	0	9	1	3	0	0	1	0	0	0	18
43	1	1	8	0	5	0	0	0	0	1	0	16
44	0	0	10	0	1	0	0	0	0	0	0	11
45	0	2	5	0	2	0	0	0	0	1	0	10
46	4	0	5	1	1	0	0	0	0	0	0	11
47	1	0	3	0	0	0	0	0	0	1	0	5
48	0	0	2	0	1	0	0	0	0	0	0	3
51	0	0	0	0	1	0	0	0	0	0	0	1
53	1	0	0	1	0	0	0	0	0	0	0	2
63	1	0	0	0	0	0	0	0	0	0	0	1
	60	3	191	24	39	7	14	2	2	5	15	362

1. Shelikof
2. Marmot offshore
4. Barnabas
5. Twoheaded
7. Geese Islands
10. Alitak Bay
11. Chiniak Bay
12. Kiliuda Bay
15. Inner Marmot
18. Southwest offshore
19. Marmot-Izhut Bay
20. Uyak Bay

Appendix G.18 Northern rock sole lengths from a trawl survey of the Kodiak area, 1997.

Length	Area Group										
(cm)	1	2	5	7	8	10	11	13	14	18	Total
≤15	2	0	0	0	0	7	1	1	0	1	12
16	1	0	0	0	0	1	1	2	0	0	5
17	0	0	0	0	0	5	0	0	0	1	6
18	0	0	0	0	0	1	0	2	0	1	4
19	0	0	0	0	0	0	0	0	0	1	1
20	2	0	0	0	0	2	0	0	0	0	4
21	0	0	0	0	0	0	0	2	0	0	2
22	0	0	0	0	0	1	0	2	0	0	3
23	1	0	0	0	0	0	1	1	0	0	3
24	0	0	0	0	0	0	1	1	0	1	3
25	0	0	0	0	1	0	0	1	0	0	2
26	0	0	0	0	0	0	2	0	0	0	2
27	0	0	0	0	0	0	0	1	0	0	1
28	0	0	0	0	0	1	1	0	0	0	2
29	0	0	0	0	0	0	1	1	0	1	3
30	0	0	0	0	0	0	1	2	0	0	3
31	0	0	0	0	0	0	0	2	0	0	2
32	0	0	0	1	2	0	1	1	0	0	5
33	0	0	0	0	0	1	2	2	0	0	5
34	0	0	0	1	0	0	3	1	0	3	8
35	0	0	0	0	0	0	3	1	0	0	4
36	0	0	0	0	1	0	4	0	2	0	7
37	0	0	1	2	0	0	2	0	2	3	10
38	0	0	1	1	0	0	2	0	0	0	4
39	0	0	0	0	0	0	6	0	0	1	7
40	0	1	0	0	0	0	6	1	0	2	10
41	0	0	0	2	1	0	0	0	0	2	5
42	0	0	1	1	0	0	2	0	0	1	5
43	0	0	0	2	0	0	0	0	0	0	2
44	0	0	0	0	1	0	1	0	0	0	2
45	0	0	1	1	1	0	0	0	1	1	5
46	0	0	0	1	0	0	0	0	0	0	1
47	0	0	1	0	1	0	0	0	0	1	3
49	0	0	0	2	0	0	0	0	0	0	2
51	0	0	0	0	1	0	0	0	0	2	3
52	0	0	1	0	0	0	0	0	0	2	3
54	0	0	0	0	0	0	0	0	0	1	1
	6	1	6	14	9	19	41	24	5	25	150

1. Shelikof
2. Marmot offshore
5. Twoheaded
7. Geese Islands
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
13. Kupreanof-Viekoda
14. Uganik Bay
18. Southwest offshore

Appendix G.19 Southern rock sole lengths by area from a trawl survey of the Kodiak area, 1997.

Length	Area Group							
(cm)	5	7	8	11	13	15	18	Total
≤20	0	0	1	7	7	0	2	17
21	0	0	0	3	0	0	0	3
22	0	0	1	1	3	0	0	5
23	1	1	0	2	0	0	0	4
24	0	1	0	3	1	0	1	6
25	1	1	0	2	1	0	0	5
26	0	0	0	1	1	0	0	2
27	0	0	0	2	4	0	0	6
28	0	1	0	2	3	0	0	6
29	0	0	0	4	1	0	0	5
30	0	0	0	1	1	0	0	2
31	1	0	0	3	2	0	0	6
32	0	0	0	3	3	0	0	6
33	1	0	0	2	5	1	0	9
34	0	1	1	3	3	2	1	11
35	2	1	0	3	3	0	0	9
36	0	2	1	5	2	0	1	11
37	1	1	0	0	1	0	0	3
38	2	0	0	1	2	0	0	5
39	0	0	0	1	0	1	0	2
40	0	0	0	0	1	1	1	3
41	0	0	0	1	1	0	0	2
43	1	1	0	0	1	0	0	3
46	0	1	0	0	0	0	0	1
	10	11	4	50	46	5	6	132

5. Twoheaded
7. Geese Islands
8. Sitkinak Island
11. Chiniak Bay
13. Kupreanof-Viekoda
15. Inner Marmot
18. Southwest offshore

Appendix G.20 Lengths of red-banded, northern, redstripe, dusky and yelloweye rockfish, Pacific Ocean Perch, shortspine thornyhead, herring and greenling taken during a trawl survey of the Kodiak area, 1997.

Length (cm)	Red-banded rockfish	Northern Rockfish	Redstripe Rockfish	Dusky Rockfish	Yelloweye Rockfish	Pacific Ocean Perch	Shortspine Thornyhead	Herring	Greenling
8	0	1	0	0	0	0	0	0	0
12	0	1	0	0	0	0	0	0	0
13	0	1	0	0	0	0	1	0	0
15	0	1	0	0	0	0	0	0	0
16	0	3	0	0	0	0	0	0	0
17	1	2	0	0	0	0	0	0	0
18	0	2	0	0	0	0	0	0	0
19	1	1	1	0	0	0	4	0	0
20	0	1	0	0	0	0	1	0	0
21	0	0	2	0	0	0	0	0	0
22	0	0	3	0	0	0	0	0	0
23	1	0	0	0	0	0	0	0	0
24	0	0	1	0	0	0	4	1	0
25	1	0	0	0	0	0	4	3	0
26	0	0	2	0	0	0	2	0	0
27	1	0	1	0	0	0	3	0	0
28	1	0	1	1	0	0	0	0	0
29	1	1	1	0	0	0	1	1	2
30	0	0	1	0	0	0	0	2	1
31	0	1	2	1	0	0	0	0	0
32	0	2	1	0	0	1	0	0	1
33	0	2	2	2	1	0	0	0	0
34	1	2	2	2	0	0	0	0	1
35	0	1	0	1	0	0	0	0	0
36	0	4	1	1	0	1	0	0	0
37	0	4	0	0	0	0	0	0	0
38	0	7	0	5	0	1	0	0	0
39	0	4	0	6	0	3	0	0	0
40	0	2	0	4	0	0	0	0	0
41	0	5	0	6	0	5	0	0	0
42	0	2	0	9	0	4	0	0	0
43	0	1	0	5	0	10	0	0	0
44	1	0	0	8	0	2	0	0	0
45	0	0	0	4	0	2	0	0	0
46	0	0	0	1	1	1	0	0	0
47	1	0	0	3	0	0	0	0	0
49	0	0	0	0	0	1	0	0	0
50	0	0	0	2	0	0	0	0	0
	10	51	21	61	2	31	20	7	5

1. Shelikof
4. Barnabas
8. Sitkinak Island
10. Alitak Bay
11. Chiniak Bay
13. Kupreanof-Viekoda
14. Uganik Bay
16. Malina-Raspberry
20. Uyak Bay
18. Southwest offshore

Appendix H. Numbers of Tanner crab per 1.85 km (1 nautical mile) in the South Peninsula District with population index by area.

Station	Tow	Females			Sublegal Males				Recruit	Postrecruit		Total	Total	Total
	#	Juv	Adult	Total	<70	70-91	92-114	>114		<165	>164	Legal	Male	Crab
SANAK ISLAND														
113	191	5	1	6	1	1	0	0	0	0	0	0	2	8
125	192	5	3	8	9	10	4	0	0	0	0	0	23	31
126	193	5	0	5	3	1	1	0	0	0	0	0	5	10
138A	194	1	4	5	4	5	3	1	0	0	0	0	13	18
138B	195	1	0	1	1	0	1	0	0	0	0	0	2	3
138C	196	9	11	20	1	5	4	6	0	0	0	0	16	36
137	197	7	1	8	6	3	1	0	0	0	0	0	10	18
Population Estimate		104,890	53,408	158,298	79,644	75,563	38,236	17,180	0	0	0	0	210,623	368,921
MORZHOVOI BAY														
MOU	181	0	0	0	0	0	0	0	0	0	0	0	0	0
MOV	182	1	0	1	0	0	0	0	0	0	0	0	0	1
MOR	183	14	0	14	15	25	0	0	0	0	0	0	40	54
MOS	184	4	0	4	4	0	0	0	0	0	0	0	4	8
87A	185	2	3	5	0	0	0	4	0	1	0	1	5	10
87C	186	0	0	0	0	0	0	0	0	0	0	0	0	0
87D	187	0	0	0	2	0	0	0	0	0	0	0	2	2
98C	188	0	0	0	0	0	0	0	0	0	0	0	0	0
87B	189	0	1	1	0	0	1	1	0	1	0	1	4	5
MOP	190	0	32	32	2	0	0	5	0	3	0	3	10	42
MON	198	14	0	14	6	8	2	0	0	0	0	0	16	30
MOO	199	0	27	27	4	2	4	10	2	4	0	6	26	53
MOK	200	70	12	82	20	28	12	3	0	0	0	0	63	145
MOJ	201	0	0	0	0	0	0	0	0	0	0	0	0	0
MOL	202	6	13	19	1	11	36	12	5	0	0	5	65	84
MOI	203	10	1	11	16	4	8	0	0	0	0	0	28	39
MOH	204	15	0	15	7	10	4	2	0	0	0	0	23	38
MOG	205	0	0	0	3	0	0	0	0	0	0	0	3	3
MOF	206	8	0	8	9	0	0	0	0	0	0	0	9	17
MOC	207	4	0	4	2	0	0	0	0	0	0	0	2	6

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Appendix H. (Page 2 of 5)

Station	Tow	Females			Sublegal Males				Recruit	Postrecruit		Total	Total	Total
	#	Juv	Adult	Total	<70	70-91	92-114	>114		<165	>164	Legal	Male	Crab
MOD	208	4	0	4	7	0	0	0	0	0	0	0	7	11
MOB	209	1	0	1	3	1	0	0	0	0	0	0	4	6
Population Estimate		142,085	103,607	245,692	93,088	79,525	63,073	38,078	6,646	10,622	0	17,267	291,030	536,722
COLD BAY/BELKOFSKI														
BEG	210	0	0	0	0	0	0	0	0	0	0	0	0	0
156A	211	2	1	3	1	0	1	2	0	0	0	0	4	7
157A	212	1	0	1	0	0	0	0	0	0	0	0	0	1
145B	213	0	0	0	0	0	0	0	0	0	0	0	0	0
BEB	214	1	0	1	2	0	0	0	0	0	0	0	2	3
BEA	215	1	0	1	1	0	0	0	0	0	0	0	1	2
BED	216	0	0	0	0	0	0	1	0	0	0	0	1	1
BEC	217	0	0	0	1	0	0	0	0	0	0	0	1	1
BEE	218	2	0	2	2	0	0	0	0	0	0	0	2	4
BEF	219	6	0	6	1	1	0	0	0	0	0	0	2	8
COO	220	4	1	5	3	2	2	3	1	0	0	1	11	16
132A	221	23	0	23	5	0	0	0	0	0	0	0	5	28
COM	222	3	2	6	3	2	7	4	1	0	0	1	18	23
COJ	223	0	0	0	0	0	0	0	0	0	0	0	0	0
COB	224	6	0	6	7	3	0	0	0	0	0	0	10	16
COC	225	8	0	8	2	0	0	0	0	0	0	0	2	10
COE	226	17	0	17	9	16	4	0	0	1	0	1	30	47
COF	227	33	13	46	7	23	27	7	7	0	0	7	71	117
COGA	228	45	2	47	8	44	142	148	72	0	0	72	414	461
COH	229	2	0	2	3	3	0	1	0	0	0	0	7	9
COGB	230	68	0	68	15	34	12	6	3	0	3	6	73	141
Population Estimate		118,157	12,184	130,341	44,101	59,543	90,588	80,558	37,302	936	483	38,721	313,512	443,854
PAVLOF BAY/VOLCANO														
VOL	231	1	0	1	1	0	0	0	0	0	0	0	1	2
VOO	232	14	15	29	2	3	2	1	0	0	0	0	8	37

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Appendix H. (Page 3 of 5)

Station	Tow	Females			Sublegal Males				Recruit	Postrecruit		Total	Total	Total
	#	Juv	Adult	Total	<70	70-91	92-114	>114		<165	>164	Legal	Male	Crab
VOP	233	16	1	17	11	16	22	9	1	6	1	8	66	83
VOMA	234	10	2	12	4	2	3	1	0	0	0	0	10	22
VOFA	235	2	4	6	0	0	2	0	0	0	0	0	2	8
VOFB	236	1	4	5	0	0	0	0	1	0	0	1	1	6
VOA	237	1	0	1	0	0	1	2	0	0	0	0	3	4
VOG	238	0	1	1	0	1	2	6	0	5	0	5	14	15
VON	239	1	2	3	2	1	8	5	0	0	0	0	16	19
VOR	240	7	0	7	0	3	8	2	1	0	0	1	14	21
VOQ	241	5	0	5	2	10	10	0	0	0	0	0	22	27
VOMB	242	1	1	2	0	2	2	0	0	0	0	0	4	6
VOH	243	2	1	3	0	0	2	3	0	1	0	1	6	9
VOI	244	1	2	3	3	1	4	0	0	0	0	0	8	11
VOJ	245	0	4	4	0	0	0	1	0	0	0	0	1	6
VOD	246	1	14	15	2	5	2	1	0	0	0	0	10	25
VOE	247	1	0	1	0	0	0	0	0	0	0	0	0	1
PAWA	248	1	0	1	0	0	0	0	0	0	0	0	0	1
PAV	249	0	2	2	1	0	1	2	0	1	0	1	5	7
VOC	250	0	24	24	0	0	2	16	0	13	0	13	31	55
VOB	251	5	3	8	1	1	2	1	1	1	0	2	7	15
PAH	252	4	0	4	1	0	0	0	0	0	0	0	1	6
PAI	253	0	0	0	0	0	0	0	0	0	0	0	0	0
PAE	254	0	0	0	0	0	0	0	0	0	0	0	0	0
PAF	255	1	0	1	2	0	0	0	0	0	0	0	2	3
PAB	256	1	0	1	0	0	0	0	0	0	0	0	0	1
PAC	257	0	0	0	0	0	0	0	0	0	0	0	0	0
PAJ	258	0	0	0	1	0	0	0	0	0	0	0	1	1
PAM	259	1	1	2	0	0	0	0	0	0	0	0	0	2
PAOB	260	1	0	1	1	3	0	0	1	0	0	1	5	6
PAOA	261	1	0	1	0	1	0	0	0	0	0	0	1	3
PARA	262	5	2	7	1	0	1	2	0	0	0	0	5	12
PAP	263	1	1	2	0	1	2	1	0	0	0	0	4	6
PARB	264	1	2	3	1	0	5	0	1	0	0	1	7	10
PAU	265	1	4	5	0	6	11	2	0	2	0	2	21	26

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Appendix H. (Page 4 of 5)

Station	Tow #	Females Juv	Females Adult	Females Total	Sublegal Males <70	Sublegal Males 70-91	Sublegal Males 92-114	Sublegal Males >114	Recruit	Postrecruit <165	Postrecruit >164	Total Legal	Total Male	Total Crab
228	266	0	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		70,299	79,456	149,755	31,066	48,449	82,056	53,514	5,405	28,417	949	34,771	249,857	399,612
BEAVER/BALBOA BAY/UNGA														
348	170	10	5	15	2	5	0	0	0	0	0	0	7	22
329B	171	20	0	20	20	2	0	2	0	0	0	0	25	45
329C	172	3	1	4	4	2	3	0	0	0	0	0	9	13
BAF	173	0	0	0	0	0	0	0	0	0	0	0	0	0
BAE	174	13	0	13	9	2	0	0	0	0	0	0	11	24
311A	175	11	1	12	4	1	2	1	0	0	0	0	8	20
312A	176	0	0	0	0	0	0	0	0	0	0	0	0	0
311B	177	9	2	11	7	1	0	0	0	0	0	0	8	19
BAD	178	12	2	14	4	3	0	1	0	0	0	0	8	22
BAC	179	11	0	11	6	1	0	0	0	0	0	0	7	18
BAA	180	2	0	2	2	0	0	0	0	0	0	0	2	4
278	268	3	0	3	1	2	0	1	0	0	0	0	4	7
BVB	269	0	0	0	1	0	0	0	0	0	0	0	1	1
BVA	270	0	0	0	0	0	0	0	0	0	0	0	0	0
BVC	271	0	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		107,308	23,353	130,661	57,536	34,559	4,218	6,683	0	0	0	0	102,996	233,657
STEPOVAK BAY														
STD	165	2	0	2	3	0	0	0	0	0	0	0	3	5
STA	166	2	0	2	7	0	0	0	0	0	0	0	7	9
STB	167	2	0	2	8	0	0	0	0	0	0	0	8	10
STE	168	6	0	6	10	0	0	0	0	0	0	0	10	16
368A	169	8	9	17	22	20	7	0	0	1	0	1	50	67
Population Estimate		25,774	18,114	43,888	67,372	40,254	14,089	0	0	2,013	0	2,013	123,727	167,616

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Appendix H. (Page 5 of 5)

Station	Tow	Females			Sublegal Males				Recruit	Postrecruit		Total	Total	Total
	#	Juv	Adult	Total	<70	70-91	92-114	>114		<165	>164	Legal	Male	Crab
WEST NAGAI														
332B	272	101	70	171	49	107	56	8	0	2	0	2	222	393
353	273	22	16	38	7	11	6	0	0	0	0	0	24	62
354	274	0	0	0	1	0	0	0	0	0	0	0	1	1
334	275	2	1	3	0	0	1	0	0	0	0	0	1	4
335	276	3	6	9	3	8	2	0	0	0	0	0	13	22
301	277	3	2	5	5	0	1	0	0	0	0	0	6	11
318	278	1	2	3	6	2	0	0	0	0	0	0	8	11
373B	279	7	27	34	0	10	28	11	0	1	0	1	50	84
371	280	5	1	6	1	0	1	0	0	0	0	0	2	8
Population Estimate		334,022	263,780	597,802	180,257	292,164	173,397	25,182	0	4,706	0	4,706	675,706	1,273,508
Grand Total		902,536	553,903	1,456,439	553,065	630,056	465,658	221,195	49,352	46,693	1,432	97,478	1,967,451	3,423,890

Appendix l. Numbers of Tanner crab per 1.85km (1 nautical mile) in 1997 Chignik District with population index by area.

Station	Tow	Females			Sublegal Males				Recruit	Postrecruit		Total	Total	Total
	#	Juv	Adult	Total	<70	70-91	92-114	>114		<165	>164	Legal	Male	Crab
IVANOF BAY														
4024	158	5	0	5	8	0	0	0	0	0	0	0	8	13
4915	159	1	0	1	3	0	0	0	0	0	0	0	3	4
4007	160	3	0	3	3	1	0	0	0	0	0	0	4	7
400X	161	12	19	31	5	8	24	17	15	2	1	18	72	103
4900	162	12	0	12	14	0	0	0	0	0	0	0	14	26
4000	163	2	0	2	4	0	0	0	0	0	0	0	4	6
4008	164	3	0	3	4	0	1	0	0	0	0	0	5	8
Population Estimate		40,249	4,675	44,924	56,022	4,595	7,770	4,183	3,691	492	246	4,429	77,000	121,924
MITROFANIA														
4035	281	40	0	40	50	6	0	0	0	0	0	0	56	96
4094	282	29	0	29	16	0	0	0	0	0	0	0	16	45
4065	283	2	0	2	2	0	0	0	0	0	0	0	2	4
4064	284	14	42	56	2	20	31	14	1	10	0	11	79	135
4063	285	113	8	121	52	300	130	26	2	0	4	6	514	635
4048	286	33	3	36	28	6	6	1	0	0	0	0	41	77
Population Estimate		581,969	129,834	711,804	376,751	832,433	412,232	101,307	8,230	25,322	10,129	43,680	1,766,404	2,478,207
CHIGNIK BAY														
4312	287	13	26	39	7	1	14	17	41	3	3	47	87	126
4287	288	47	31	79	21	34	37	54	32	34	1	67	214	292
4286	289	31	44	75	40	1	12	33	13	6	0	19	105	180
4282	290	176	106	282	127	17	6	3	0	2	0	2	155	437
4272	291	17	1	18	24	0	0	1	0	0	0	0	25	43
4277	292	56	46	102	45	7	12	42	24	15	0	39	146	249
4278	293	246	50	296	150	127	31	18	15	8	1	24	350	646
4274	294	294	30	324	366	62	14	4	0	0	0	0	446	770
4267	295	68	3	71	47	7	0	0	0	0	0	0	54	125
4256	296	6	0	6	7	0	0	0	0	0	0	0	7	13

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Appendix I. (Page 2 of 2)

Station	Tow #	Females			Sublegal Males				Recruit	Postrecruit		Total Legal	Total Male	Total Crab
		Juv	Adult	Total	<70	70-91	92-114	>114		<165	>164			
4266	297	151	1	152	161	8	1	0	1	0	0	1	171	323
4270	298	13	2	15	16	1	26	50	14	1	0	15	108	123
4271	299	49	1	50	56	3	7	6	13	0	0	13	85	135
4264	300	24	0	24	35	6	10	15	1	0	0	1	67	91
4964	301	44	0	44	30	0	0	0	0	0	0	0	30	74
4265	302	6	0	6	13	0	0	0	0	0	0	0	13	19
Population Estimate		1,125,526	334,726	1,460,252	1,020,376	270,496	167,556	237,470	150,391	77,358	5,367	233,116	1,929,015	3,389,267
KUJULIK BAY														
4298	303	2	0	2	3	0	0	0	0	0	0	0	3	5
4296	304	34	0	34	57	1	1	0	0	0	0	0	59	93
4301	305	15	0	15	11	0	0	0	0	0	0	0	11	26
4302	306	16	2	18	20	0	0	0	0	0	0	0	20	38
4308	307	4	79	83	7	0	4	19	0	7	0	7	37	120
Population Estimate		49,589	61,537	111,126	63,018	456	3,711	14,105	0	5,425	0	5,425	86,714	197,841
Total		1,797,334	530,773	2,328,106	1,516,168	1,107,980	591,269	357,066	162,312	108,597	15,742	286,651	3,859,133	6,187,239

Appendix J. Numbers of king crab per 1.85 km (1 nautical mile) in 1997 in Alaska Peninsula District with population index by area.

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
SANAK ISLAND													
113	191	0	0	0	0	0	0	0	0	0	0	0	0
125	192	0	0	0	0	0	0	0	0	0	0	0	0
126	193	0	0	0	0	0	0	0	0	0	0	0	0
138A	194	0	0	0	0	0	0	0	0	0	0	0	0
138B	195	0	0	0	0	0	0	0	0	0	0	0	0
138C	196	0	0	0	0	0	0	0	0	0	0	0	0
137	197	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		0	0	0	0	0	0	0	0	0	0	0	0
MORZHOVOI BAY													
MOU	181	0	0	0	0	0	0	0	0	0	0	0	0
MOV	182	0	0	0	0	0	0	0	0	0	0	0	0
MOR	183	0	0	0	0	0	0	0	0	0	0	0	0
MOS	184	0	0	0	0	0	0	0	0	0	0	0	0
87A	185	0	0	0	0	0	0	0	0	0	0	0	0
87C	186	0	0	0	0	0	0	0	0	0	0	0	0
87D	187	0	0	0	0	0	0	0	0	0	0	0	0
98C	188	0	0	0	0	0	0	0	0	0	0	0	0
87B	189	0	0	0	0	0	0	0	0	0	0	0	0
MOP	190	0	0	0	0	0	0	0	0	0	0	0	0
MON	198	0	0	0	0	0	0	0	0	0	0	0	0
MOO	199	0	0	0	0	0	0	0	0	0	0	0	0
MOK	200	0	0	0	0	0	0	0	0	0	0	0	0
MOJ	201	0	0	0	0	0	0	0	0	0	0	0	0
MOL	202	0	0	0	0	0	0	0	0	0	0	0	0
MOI	203	0	0	0	0	0	0	0	0	0	0	0	0

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Appendix J. (Page 2 of 7.)

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
MOH	204	0	0	0	0	0	0	0	0	0	0	0	0
MOG	205	0	0	0	0	0	0	0	0	0	0	0	0
MOF	206	0	0	0	0	0	0	0	0	0	0	0	0
MOC	207	0	0	0	0	0	0	0	0	0	0	0	0
MOD	208	13	1	14	9	14	3	2	1	0	1	29	43
MOB	209	3	0	3	0	0	0	0	0	0	0	0	3
Population Estimate		11,798	714	12,512	6,425	9,995	2,142	1,428	714	0	714	20,704	33,216
COLD BAY/BELKOFSKI													
BEG	210	0	0	0	0	0	0	0	0	0	0	0	0
156A	211	0	0	0	0	0	0	0	0	0	0	0	0
157A	212	0	0	0	0	0	0	0	0	0	0	0	0
145B	213	0	0	0	0	0	0	0	0	0	0	0	0
BEB	214	0	0	0	0	0	0	0	0	0	0	0	0
BEA	215	0	0	0	0	0	0	0	0	0	0	0	0
BED	216	1	0	1	1	0	0	0	0	1	1	2	3
BEC	217	0	0	0	0	0	0	0	0	0	0	0	0
BEE	218	0	0	0	0	0	0	0	0	0	0	0	0
BEF	219	0	0	0	0	0	0	0	0	0	0	0	0
COO	220	0	0	0	0	0	0	0	0	0	0	0	0
132A	221	0	0	0	0	0	0	0	0	0	0	0	0
COM	222	0	0	0	0	0	0	0	0	1	1	1	1
COJ	223	0	0	0	0	0	0	0	0	0	0	0	0
COB	224	0	0	0	0	0	0	0	0	0	0	0	0
COC	225	0	0	0	0	0	0	0	0	0	0	0	0
COE	226	0	0	0	0	0	0	0	0	0	0	0	0
COF	227	0	0	0	0	0	0	0	0	0	0	0	0
COGA	228	0	0	0	0	0	0	0	0	0	0	0	0

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Appendix J. (Page 3 of 7.)

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
COH	229	0	0	0	0	0	0	0	0	0	0	0	0
COGB	230	0	1	1	0	0	0	0	0	0	0	0	1
Population Estimate		776	161	937	776	0	0	0	0	1,688	1,688	2,464	3,401
PAVLOF BAY/VOLCANO													
VOL	231	0	0	0	0	0	0	0	0	0	0	0	0
VOO	232	0	0	0	0	0	0	0	1	1	2	2	2
VOP	233	0	0	0	0	0	0	0	0	0	0	0	0
VOMA	234	0	0	0	0	0	0	0	0	0	0	0	0
VOFA	235	0	0	0	0	0	0	0	0	0	0	0	0
VOFB	236	0	0	0	0	0	0	0	0	0	0	0	0
VOA	237	0	0	0	0	0	0	0	0	0	0	0	0
VOG	238	0	0	0	0	0	0	0	0	0	0	0	0
VON	239	0	0	0	0	0	0	0	0	0	0	0	0
VOR	240	0	0	0	0	0	0	0	0	0	0	0	0
VOQ	241	0	0	0	0	0	0	0	0	0	0	0	0
VOMB	242	0	0	0	0	0	0	0	0	0	0	0	0
VOH	243	0	0	0	0	0	0	0	0	0	0	0	0
VOI	244	0	0	0	0	0	0	0	0	0	0	0	0
VOJ	245	0	0	0	0	0	0	0	0	0	0	0	0
VOD	246	0	0	0	0	0	0	0	0	0	0	0	0
VOE	247	0	0	0	0	0	0	0	0	0	0	0	0
PAWA	248	0	0	0	0	0	0	0	0	0	0	0	0
PAV	249	0	0	0	0	0	0	0	0	0	0	0	0
VOC	250	0	0	0	0	0	0	0	0	0	0	0	0
VOB	251	0	0	0	0	0	0	0	0	0	0	0	0
PAH	252	0	0	0	0	0	0	0	0	0	0	0	0
PAI	253	0	0	0	0	0	0	0	0	0	0	0	0

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STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
PAE	254	0	0	0	0	0	0	0	0	0	0	0	0
PAF	255	0	0	0	0	0	0	0	0	0	0	0	0
PAB	256	0	0	0	0	0	0	0	0	0	0	0	0
PAC	257	0	0	0	0	0	0	0	0	0	0	0	0
PAJ	258	0	0	0	0	0	0	0	0	0	0	0	0
PAM	259	0	0	0	0	0	0	0	0	0	0	0	0
PAOB	260	0	0	0	0	0	0	0	0	0	0	0	0
PAOA	261	0	0	0	0	0	0	0	0	0	0	0	0
PARA	262	0	0	0	0	0	0	0	0	0	0	0	0
PAP	263	0	0	0	0	0	0	0	0	0	0	0	0
PARB	264	0	0	0	0	0	0	0	0	0	0	0	0
PAU	265	0	0	0	0	0	0	0	0	0	0	0	0
228	266	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		0	0	0	0	0	0	0	805	805	1,610	1,610	1,610
BEAVER/BALBOA BAY/UNGA													
348	170	0	0	0	0	0	0	0	0	0	0	0	0
329B	171	0	0	0	0	0	0	0	0	0	0	0	0
329C	172	0	0	0	0	0	0	0	0	0	0	0	0
BAF	173	0	0	0	0	0	0	0	0	0	0	0	0
BAE	174	0	0	0	0	0	0	0	0	0	0	0	0
311A	175	0	0	0	0	0	0	0	0	0	0	0	0
312A	176	0	0	0	0	0	0	0	0	0	0	0	0
311B	177	0	0	0	0	0	0	0	0	0	0	0	0
BAD	178	0	0	0	0	0	0	0	0	0	0	0	0
BAC	179	0	0	0	0	0	0	0	0	0	0	0	0
BAA	180	0	0	0	0	0	0	0	0	0	0	0	0
278	268	0	0	0	0	0	0	0	0	0	0	0	0

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Appendix J. (Page 5 of 7.)

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
BVB	269	0	0	0	0	0	0	0	0	0	0	0	0
BVA	270	0	0	0	0	0	0	0	0	0	0	0	0
BVC	271	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		0	0	0	0	0	0	0	0	0	0	0	0
STEPOVAK BAY													
STD	165	0	0	0	0	0	0	0	0	0	0	0	0
STA	166	0	0	0	0	0	0	0	0	1	1	1	1
STB	167	0	0	0	0	0	0	0	0	1	1	1	1
STE	168	0	0	0	0	0	0	0	0	0	0	0	0
368A	169	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		0	0	0	0	0	0	0	0	1,765	1,765	1,765	1,765
WEST NAGAI													
332B	272	0	0	0	0	0	0	0	0	0	0	0	0
353	273	0	0	0	0	0	0	0	0	0	0	0	0
354	274	0	0	0	0	0	0	0	0	0	0	0	0
334	275	0	0	0	0	0	0	0	0	0	0	0	0
335	276	0	0	0	0	0	0	0	0	0	0	0	0
301	277	0	0	0	0	0	0	0	0	0	0	0	0
318	278	0	0	0	0	0	0	0	0	0	0	0	0
373B	279	0	0	0	0	0	0	0	0	0	0	0	0
371	280	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		0	0	0	0	0	0	0	0	0	0	0	0

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Appendix J. (Page 6 of 7.)

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
IVANOF BAY													
4024	158	0	0	0	0	0	0	0	0	0	0	0	0
4915	159	0	0	0	0	0	0	0	0	0	0	0	0
4007	160	0	0	0	0	0	0	0	0	0	0	0	0
400X	161	0	0	0	0	0	0	0	0	0	0	0	0
4900	162	0	0	0	0	0	0	0	0	0	0	0	0
4000	163	0	0	0	0	0	0	0	0	0	0	0	0
4008	164	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		0	0	0	0	0	0	0	0	0	0	0	0
MITROFANIA													
4035	281	0	0	0	0	0	0	0	0	0	0	0	0
4094	282	0	0	0	0	0	0	0	0	0	0	0	0
4065	283	0	0	0	0	0	0	0	0	0	0	0	0
4064	284	0	0	0	0	0	0	0	0	0	0	0	0
4063	285	0	0	0	0	0	0	0	0	0	0	0	0
4048	286	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		0	0	0	0	0	0	0	0	0	0	0	0
CHIGNIK BAY													
4312	287	0	0	0	0	0	0	0	0	0	0	0	0
4287	288	0	0	0	0	0	0	0	0	0	0	0	0
4286	289	0	0	0	0	0	0	0	0	0	0	0	0
4282	290	0	0	0	0	0	0	0	0	0	0	0	0
4272	291	0	0	0	0	0	0	0	0	0	0	0	0
4277	292	0	0	0	0	0	0	0	0	0	0	0	0
4278	293	0	0	0	0	0	1	0	0	0	0	1	1

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Appendix J. (Page 7 of 7.)

STN	Tow #	Females			Sublegal Males				Recruit	Post	Total	Total	Total
		Juv.	Adult	Total	Four	Three	Two	One		recruit	Legal	Male	Crab
4274	294	0	0	0	0	0	0	0	0	0	0	0	0
4267	295	0	0	0	0	0	0	0	0	0	0	0	0
4256	296	0	0	0	0	0	0	0	0	0	0	0	0
4266	297	0	0	0	0	0	0	0	0	0	0	0	0
4270	298	0	0	0	0	0	0	0	0	0	0	0	0
4271	299	0	0	0	0	0	0	0	0	0	0	0	0
4264	300	0	0	0	0	0	0	0	0	0	0	0	0
4964	301	51	1	52	31	3	3	0	0	0	0	37	89
4265	302	136	7	142	109	40	33	2	0	0	0	184	327
Population Estimate		61,354	2,378	63,733	45,060	12,998	11,993	651	0	0	0	70,703	134,436
KUJULIK BAY													
4298	303	1	0	1	0	0	0	0	0	0	0	0	1
4296	304	1	0	1	0	0	0	0	0	0	0	0	1
4301	305	0	0	0	0	0	0	0	0	0	0	0	0
4302	306	0	0	0	0	0	0	0	0	0	0	0	0
4308	307	0	0	0	0	0	0	0	0	0	0	0	0
Population Estimate		1,306	0	1,306	0	0	0	0	0	0	0	0	1,306
Grand Total		75,235	3,253	78,488	52,262	22,993	14,135	2,079	1,519	4,258	5,777	97,246	175,734

Appendix K.1 Big skate lengths by area from a trawl survey of the Alaska Peninsula area, 1997.

Length	Area Group										
(cm)	22	23	24	25	26	27	61	62	63	64	Total
15	0	0	0	0	0	0	0	0	1	0	1
25	0	0	0	0	0	1	0	0	0	0	1
30	0	0	0	0	0	1	0	0	0	0	1
44	0	0	0	0	0	0	0	0	1	0	1
45	0	0	0	0	0	0	0	0	1	0	1
46	0	0	0	1	0	0	0	0	0	1	2
47	0	2	0	0	0	0	0	0	0	0	2
48	0	0	0	1	0	0	0	0	1	0	2
49	0	0	0	0	0	0	0	0	2	0	2
50	0	0	0	1	0	0	0	0	1	1	3
51	0	0	0	0	0	0	0	0	1	0	1
52	0	0	0	1	0	0	0	0	1	1	3
53	0	0	0	0	0	0	0	0	2	0	2
54	0	0	0	0	0	0	0	0	1	0	1
55	0	0	1	0	0	0	0	0	2	0	3
56	0	1	0	1	0	1	0	0	8	1	12
57	0	1	0	0	0	0	0	0	2	0	3
58	1	0	0	0	0	0	0	1	2	1	5
59	0	0	0	1	1	0	0	0	0	0	2
60	0	0	0	0	0	1	0	0	0	3	4
61	0	0	0	1	0	0	0	0	1	1	3
62	0	1	0	0	0	0	0	0	2	1	4
63	0	0	1	0	0	0	0	0	3	0	4
64	0	0	1	0	0	1	0	0	0	0	2
65	0	0	0	1	0	1	0	0	3	1	6
66	0	1	0	0	0	0	0	0	0	1	2
67	0	1	0	0	0	0	0	0	2	0	3
68	0	0	0	1	0	0	0	0	2	1	4
69	0	0	0	0	0	0	0	0	1	0	1
70	0	0	2	0	0	0	0	0	1	0	3
71	0	0	0	0	0	0	1	0	0	0	1
72	0	0	2	0	0	0	1	0	0	1	4
74	0	0	0	0	0	0	0	0	1	0	1
75	0	0	2	0	0	0	0	0	0	0	2
76	0	0	0	0	0	0	0	0	1	0	1
78	0	0	0	0	0	0	2	0	0	0	2
79	0	0	0	0	0	0	0	0	1	0	1
80	0	0	1	0	0	0	0	0	1	1	3
82	0	2	0	0	0	0	0	0	0	0	2
83	0	0	1	0	0	0	0	0	1	1	3
84	0	0	1	0	0	0	1	0	1	0	3
85	0	0	1	0	0	0	0	0	0	1	2
88	1	0	0	0	0	0	0	0	1	0	2
89	0	0	0	0	0	0	0	0	1	1	2
90	0	1	0	0	0	0	0	0	1	1	3
91	1	0	0	0	0	0	0	0	0	0	1
93	0	0	0	0	0	0	0	0	1	0	1
94	0	0	0	0	0	1	0	0	0	0	1
95	1	0	0	0	0	0	1	0	2	0	4
96	0	1	0	0	0	0	0	0	1	0	2
97	1	0	0	0	0	0	1	0	2	0	4
98	0	1	0	0	0	0	1	0	1	0	3
99	0	1	0	0	0	0	0	0	0	1	2
100	0	0	0	0	0	0	0	0	1	0	1
	5	13	13	9	1	7	8	1	58	20	135

22 Morzhovoi Bay
23 Cold Bay/Belkofski
24 Pavlof/Volcano
25 Beaver/Balboa/Unga
26 Stepovak Bay
27 West Nagai
61 Ivanof Bay
62 Mitrofania Bay
63 Chignik Bay
64 Kujulik Bay

Appendix K.2 Arrowtooth flounder lengths by area from a trawl survey of the Alaska Peninsula area, 1997.

Length	Area Group										
(cm)	21	22	23	24	25	26	61	62	63	64	Total
7	0	0	0	0	0	0	0	0	1	0	1
13	0	0	2	0	1	0	0	0	0	0	3
14	0	1	3	0	0	0	1	1	0	0	6
15	0	0	2	0	1	0	0	0	0	0	3
16	0	0	2	0	2	1	0	1	1	0	7
17	0	2	2	3	2	1	2	0	4	1	17
18	0	1	4	2	2	0	2	1	0	1	13
19	0	0	0	4	3	4	6	0	0	1	18
20	0	2	2	0	4	8	7	0	1	1	25
21	1	7	3	4	9	13	7	5	2	0	51
22	1	9	5	10	15	4	7	2	1	0	54
23	0	11	17	24	8	6	9	2	3	0	80
24	2	20	13	25	9	3	11	2	6	0	91
25	2	12	26	30	17	4	8	3	6	1	109
26	1	10	23	27	8	1	14	2	5	1	92
27	2	11	17	19	16	6	7	5	8	6	97
28	2	11	10	12	7	7	6	5	5	2	67
29	5	5	3	17	8	4	7	4	5	1	59
30	7	7	4	26	11	3	6	3	3	0	70
31	4	3	2	20	9	3	10	2	5	3	61
32	5	3	1	25	9	4	2	0	7	0	56
33	5	2	1	24	9	2	7	1	5	2	58
34	4	5	1	16	4	1	0	1	4	3	39
35	7	5	2	12	6	2	1	0	3	0	38
36	5	4	1	6	5	4	1	3	2	0	31
37	3	3	1	7	2	3	2	3	5	0	29
38	3	7	1	2	4	0	1	3	5	1	27
39	7	5	0	5	3	2	0	1	2	0	25
40	6	1	0	7	4	3	1	2	5	1	30
41	5	3	1	4	3	3	0	3	3	2	27
42	7	4	1	10	5	5	1	4	10	3	50
43	6	3	1	3	4	5	2	0	4	2	30
44	10	2	1	7	8	1	0	2	5	1	37
45	4	4	1	11	2	4	1	2	12	2	43
46	3	2	0	6	3	0	2	2	10	4	32
47	2	8	0	6	4	1	0	2	7	1	31
48	3	5	0	7	3	1	0	2	6	1	28
49	4	9	0	5	0	1	0	2	12	0	33
50	2	5	0	1	3	1	2	1	5	3	23
51	1	1	1	3	3	1	1	1	3	1	16
52	1	2	0	0	1	2	0	0	4	0	10
53	2	6	0	1	3	3	2	1	3	0	21
54	0	2	0	2	3	1	0	0	2	0	10
55	2	1	0	2	1	1	0	1	1	1	10
56	1	1	0	1	0	2	0	3	5	0	13
57	1	2	1	0	0	0	0	1	3	0	8
58	0	1	0	0	0	0	0	0	1	1	3
59	0	1	0	1	0	0	0	0	2	0	4
60	1	1	0	3	0	0	0	0	1	1	7
61	1	1	1	3	0	1	0	0	0	0	7
62	0	2	0	1	0	0	0	0	0	0	3
63	0	0	2	1	1	1	0	0	0	0	5
64	0	0	0	1	1	0	0	0	0	0	2
65	0	0	0	1	2	0	0	0	0	0	3
66	0	0	0	1	0	0	0	0	1	0	2
67	4	0	0	1	0	1	0	1	1	0	8
68	1	0	0	1	2	0	0	0	0	0	4
69	1	2	0	0	1	0	0	0	0	1	5
70	1	0	0	0	1	0	0	1	3	0	6
71	1	0	0	0	1	0	0	1	0	1	4
72	0	1	0	1	1	1	1	0	0	0	5

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Appendix K.2 (Page 2 of 2.)

Length (cm)	Area Group 21	22	23	24	25	26	61	62	63	64	Total
73	1	0	0	1	0	0	0	0	0	0	2
74	0	0	0	0	2	1	0	0	1	0	4
76	1	0	0	0	2	0	0	0	2	0	5
77	0	0	0	0	1	1	0	1	1	0	4
78	0	0	0	0	2	0	0	0	0	0	2
79	0	0	0	0	1	0	0	0	0	0	1
81	0	0	0	0	1	0	0	0	0	0	1
85	0	0	0	0	1	0	0	0	0	0	1
	138	216	158	412	244	127	137	83	202	50	1767

21 Sanak Island
22 Morzhovoi Bay
23 Cold Bay/Belkofski
24 Pavlof/Volcano
25 Beaver/Balboa/Unga
26 Stepovak Bay
61 Ivanof Bay
62 Mitrofania Bay
63 Chignik Bay
64 Kujulik Bay

Appendix K.3 Yellowfin sole lengths by area from a trawl survey of the Alaska Peninsula area, 1997.

Length (cm)	Area Group 22	23	24	25	26	61	63	64	Total
9	0	0	1	0	0	0	0	0	1
10	0	0	1	0	0	0	0	0	1
11	0	1	2	0	0	0	0	0	3
12	0	1	4	0	0	0	0	0	5
13	0	1	3	0	0	0	0	0	4
15	0	1	5	0	0	0	0	0	6
16	0	2	7	0	0	0	0	0	9
17	0	2	7	0	0	0	0	0	9
18	0	1	3	0	0	0	0	0	4
19	0	4	4	0	0	0	0	0	8
20	1	2	8	0	0	0	0	0	11
21	2	2	2	0	0	0	0	0	6
22	0	2	3	0	0	0	0	0	5
23	1	3	3	1	0	1	0	0	9
24	0	2	1	0	0	0	0	0	3
25	1	6	7	0	0	1	0	0	15
26	7	4	7	3	0	1	1	0	23
27	3	9	15	2	0	5	0	0	34
28	3	14	24	1	0	3	0	0	45
29	4	22	29	6	0	6	0	0	67
30	8	36	48	8	2	9	3	0	114
31	14	55	59	6	0	5	4	0	143
32	21	51	58	11	2	4	6	0	153
33	26	64	69	9	1	8	6	0	183
34	24	63	57	12	0	11	10	2	179
35	24	54	32	13	0	8	11	0	142
36	38	48	35	4	1	6	8	0	140
37	24	23	17	5	2	5	1	2	79
38	23	25	11	5	0	5	5	1	75
39	26	12	15	2	1	2	2	1	61
40	10	6	3	1	1	2	1	0	24
41	17	4	1	0	0	3	3	1	29
42	7	0	0	0	1	3	1	0	12
43	5	0	0	0	0	1	0	0	6
44	2	1	0	0	0	0	0	0	3
45	1	0	0	0	0	0	0	0	1
	292	521	541	89	11	89	62	7	1612

22 Morzhovoi Bay
23 Cold Bay/Belkofski
24 Pavlof/Volcano
25 Beaver/Balboa/Unga
26 Stepovak Bay
61 Ivanof Bay
63 Chignik Bay
64 Kujulik Bay

Appendix K.4 Halibut lengths by area from a trawl survey of the Alaska Peninsula area, 1997.

Length	Area Group											
(cm)	21	22	23	24	25	26	27	61	62	63	64	Total
12	0	0	0	1	0	0	0	0	0	0	0	1
22	0	1	0	0	0	0	0	0	0	0	0	1
25	0	0	0	2	1	0	0	0	0	0	0	3
26	0	0	1	3	1	0	0	0	0	0	0	5
27	0	0	0	7	1	0	0	0	0	0	0	8
28	0	1	0	4	0	0	0	0	0	0	0	5
29	0	0	1	3	0	0	0	0	0	0	0	4
30	0	0	0	6	1	0	0	0	0	0	0	7
31	0	0	0	5	2	0	0	0	0	0	0	7
32	0	0	0	3	3	0	0	0	0	0	0	6
33	0	0	0	2	0	0	0	0	0	0	0	2
34	0	0	0	4	2	0	0	0	0	0	1	7
35	0	0	1	1	3	0	0	0	0	0	0	5
36	0	0	0	1	2	0	0	0	0	0	0	3
37	0	1	0	3	1	0	0	0	0	0	0	5
38	0	2	1	3	2	0	0	0	0	0	0	8
39	0	0	0	4	1	0	0	0	0	0	0	5
40	0	2	0	2	1	0	0	0	0	0	0	5
41	0	2	1	4	0	0	0	0	0	0	0	7
42	0	0	0	3	1	0	0	0	1	0	0	5
43	0	1	2	5	1	0	0	0	0	2	0	11
44	0	2	0	4	1	0	0	0	0	1	0	8
45	0	0	0	4	0	0	0	0	0	0	0	4
46	0	3	0	0	3	0	0	0	0	0	0	6
47	0	2	2	0	1	0	0	0	1	0	0	6
48	0	2	0	2	0	0	1	0	0	1	0	6
49	0	0	1	1	0	0	0	0	0	1	0	3
50	0	1	1	1	2	0	0	0	0	2	0	7
51	0	4	0	2	2	0	0	0	0	3	0	11
52	0	5	0	2	1	0	0	0	1	0	0	9
53	0	2	0	0	0	0	0	0	0	3	1	6
54	0	4	2	2	0	0	0	0	0	0	0	8
55	0	5	1	8	0	1	1	0	0	5	2	23
56	0	3	1	10	1	0	2	0	2	2	0	21
57	0	9	1	7	2	1	0	0	0	3	1	24
58	0	11	3	7	5	0	0	0	2	5	2	35
59	0	2	0	2	1	0	0	1	0	0	0	6
60	0	4	0	8	3	1	2	0	0	3	2	23
61	0	5	1	0	0	0	2	0	1	0	0	9
62	0	1	0	4	3	1	1	0	0	1	1	12
63	0	3	1	3	1	0	1	0	0	3	0	12
64	0	4	2	3	3	0	0	1	0	0	0	13
65	0	4	2	6	7	1	3	2	0	8	1	34
66	0	3	0	3	0	0	0	0	0	2	0	8
67	1	5	1	1	2	0	4	0	0	2	0	16
68	0	10	0	6	3	1	2	0	0	3	0	25
69	1	2	0	1	0	0	1	0	0	2	0	7
70	0	6	0	6	4	0	9	1	0	3	0	29
71	0	7	0	2	1	0	3	1	0	1	0	15
72	0	6	1	3	3	0	4	1	1	5	0	24
73	0	3	1	4	0	0	5	0	1	3	2	19
74	2	4	0	2	1	1	6	0	1	0	2	19
75	0	6	2	4	3	0	5	1	0	1	0	22
76	1	5	1	5	4	2	9	0	1	3	1	32
77	0	2	1	2	1	1	2	0	1	1	0	11
78	1	5	1	3	4	3	7	0	0	2	1	27
79	0	2	1	2	2	0	1	0	0	3	1	12
80	0	2	2	1	1	0	5	2	0	4	1	18
81	0	5	0	1	3	0	7	0	0	0	2	18
82	0	1	2	3	2	0	2	0	0	0	1	11
83	0	2	1	2	3	0	2	1	0	4	0	15
84	1	3	2	3	0	0	2	1	0	4	0	16
85	1	5	5	6	2	0	8	1	0	0	1	29
86	4	4	1	3	1	1	6	1	0	3	1	25

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Appendix K.4 (Page 2 of 2.)

Length (cm)	Area Group											
	21	22	23	24	25	26	27	61	62	63	64	Total
87	0	1	1	4	1	1	2	0	0	4	0	14
88	1	4	1	1	3	1	3	0	0	1	0	15
89	0	2	0	4	1	0	6	1	0	4	0	18
90	2	2	0	3	0	0	4	0	0	1	1	13
91	1	1	1	1	1	0	3	0	0	0	0	8
92	1	2	1	1	0	0	4	0	0	2	0	11
93	1	2	2	2	3	0	2	0	1	1	0	14
94	0	1	0	1	1	0	0	0	0	1	1	5
95	1	0	3	6	1	0	3	0	0	1	0	15
96	0	3	1	2	2	0	3	1	0	4	0	16
97	2	2	0	3	0	0	0	2	0	0	1	10
98	0	2	0	5	1	1	3	1	0	2	0	15
99	0	1	0	1	1	0	3	0	0	1	0	7
100	0	1	0	3	1	0	0	0	0	2	1	8
101	0	0	1	0	0	1	1	1	0	0	1	5
102	0	3	1	0	1	0	2	0	0	0	0	7
103	0	2	2	6	4	0	2	0	1	4	0	21
104	0	1	1	2	1	1	0	0	0	0	0	6
105	0	3	0	7	3	0	1	0	0	1	1	16
106	0	0	0	0	0	0	2	0	0	1	0	3
107	0	2	0	0	1	0	1	1	0	1	1	7
108	0	2	0	0	0	0	1	0	0	0	0	3
109	0	1	0	1	1	0	1	1	0	0	0	5
110	0	0	0	1	1	0	4	0	0	1	1	8
111	0	1	0	0	2	2	0	0	0	0	0	5
112	1	1	1	2	2	0	1	0	0	0	0	8
113	1	2	0	1	0	1	0	0	2	1	0	8
114	0	0	2	1	2	0	0	1	0	0	0	6
115	0	1	1	1	0	0	0	0	0	2	0	5
116	0	1	1	2	0	0	0	0	0	0	0	4
117	0	1	1	0	1	0	0	1	0	1	0	5
118	0	2	1	1	1	0	0	0	0	2	0	7
119	0	0	1	1	0	0	1	0	0	1	0	4
120	0	1	1	2	2	0	1	0	0	0	0	7
121	0	0	1	2	1	0	0	0	0	0	0	4
122	0	0	1	1	0	0	1	0	0	0	0	3
123	0	0	1	1	1	0	0	0	0	0	0	3
124	0	0	0	1	0	0	0	0	0	0	0	1
125	0	2	0	0	0	2	1	0	0	0	2	7
126	0	0	0	1	1	0	0	0	0	0	0	2
127	0	1	0	0	0	0	0	0	0	0	0	1
130	0	0	0	0	0	0	0	0	0	1	0	1
131	0	1	0	2	0	0	0	0	0	0	0	3
132	0	2	1	0	0	0	0	0	0	0	0	3
133	0	0	0	0	0	0	1	0	0	0	0	1
135	0	0	0	2	0	0	0	0	0	0	0	2
136	0	0	0	0	0	0	0	0	0	1	0	1
137	0	0	0	1	0	0	0	0	0	0	0	1
138	0	0	0	1	0	0	0	0	0	1	0	2
139	0	0	0	1	1	0	0	0	0	0	0	2
140	0	0	0	0	0	0	0	0	0	1	0	1
141	0	0	0	0	0	0	0	0	0	1	0	1
145	0	0	1	0	0	0	0	0	0	0	0	1
148	0	0	0	0	1	0	0	0	0	0	0	1
149	0	0	0	0	1	0	0	0	0	0	0	1
150	0	0	0	1	0	0	0	0	0	0	0	1
152	0	1	0	0	0	0	0	0	0	0	0	1
160	0	0	1	0	0	0	0	0	0	0	0	1
167	0	0	0	1	0	0	0	0	0	0	0	1
182	0	0	0	1	0	0	0	0	0	0	0	1
203	0	0	1	0	0	0	0	0	0	0	0	1
212	0	1	0	0	0	0	0	0	0	0	0	1
	23	230	78	286	143	24	160	24	17	133	34	1152

21 Sanak Island
22 Morzhovoi Bay
23 Cold Bay/Belkofski
24 Pavlof/Volcano
25 Beaver/Balboa/Unga
26 Stepovak Bay
27 West Nagai
61 Ivanof Bay
62 Mitrofania Bay
63 Chignik Bay
64 Kujulik Bay

Appendix K5. Flathead sole lengths by area from a trawl survey of the Alaska Peninsula area, 1997.

Length	Area Group										
(cm)	21	22	23	24	25	26	61	62	63	64	Total
5	0	0	0	0	0	0	0	0	1	0	1
6	0	0	0	0	0	0	0	0	1	1	2
7	0	0	0	0	0	0	0	0	0	1	1
8	0	0	1	0	0	0	0	0	0	0	1
9	0	0	0	0	0	0	0	0	1	1	2
10	1	0	2	3	0	0	0	0	2	1	9
11	2	2	0	0	0	0	1	0	0	5	10
12	1	1	1	3	1	1	0	0	1	5	14
13	5	1	0	3	0	1	2	1	1	5	19
14	1	5	1	4	1	2	3	1	7	2	27
15	7	5	6	6	0	1	3	1	2	2	33
16	5	13	10	15	1	2	10	0	7	4	67
17	6	16	11	13	0	0	4	0	9	2	61
18	3	9	14	11	3	5	9	2	8	3	67
19	7	11	14	11	3	3	7	1	5	1	63
20	8	16	20	28	4	4	5	6	7	1	99
21	7	7	10	23	5	3	4	2	4	0	65
22	4	7	13	23	8	4	5	3	2	1	70
23	8	7	14	16	6	3	10	4	7	2	77
24	5	7	15	22	3	6	8	4	6	1	77
25	13	9	10	16	3	8	12	6	10	2	89
26	5	6	11	16	6	13	13	6	7	3	86
27	15	11	21	19	6	10	20	5	9	1	117
28	9	8	18	18	16	11	8	8	19	4	119
29	8	10	14	36	16	7	14	13	10	8	136
30	18	15	28	35	16	7	10	8	25	4	166
31	18	11	23	30	14	7	10	13	18	4	148
32	15	29	33	39	18	10	11	13	20	6	194
33	9	32	34	62	19	5	7	17	33	9	227
34	9	38	27	49	16	5	4	11	37	9	205
35	12	26	24	77	21	6	9	18	43	10	246
36	12	33	13	65	13	4	4	16	30	14	204
37	2	27	25	41	9	4	2	6	24	7	147
38	5	25	10	30	13	0	1	9	21	11	125
39	1	20	10	22	12	1	5	10	12	3	96
40	1	24	14	24	8	2	0	8	16	2	99
41	1	16	8	43	9	2	5	3	18	4	109
42	0	17	5	51	3	0	2	2	13	4	97
43	0	15	5	31	3	1	0	0	4	3	62
44	0	4	6	22	1	1	0	0	3	2	39
45	0	5	6	25	1	0	0	0	5	4	46
46	0	7	3	12	0	0	0	0	3	2	27
47	0	2	0	11	0	0	0	0	1	3	17
48	0	4	0	16	0	0	1	0	0	0	21
49	0	1	0	13	0	0	0	0	0	0	14
50	0	2	0	8	1	0	0	0	0	0	11
51	0	0	1	6	1	0	0	0	0	0	8
52	0	0	0	3	0	0	0	0	0	0	3
53	0	0	0	3	0	0	0	0	0	0	3
54	0	0	1	3	0	0	0	0	0	0	4
57	0	0	0	1	0	0	0	0	0	0	1
	223	504	482	1008	260	139	209	197	452	157	3631

21 Sanak Island
22 Morzhovoi Bay
23 Cold Bay/Belkofski
24 Pavlof/Volcano
25 Beaver/Balboa/Unga
26 Stepovak Bay
61 Ivanof Bay
62 Mitrofania Bay
63 Chignik Bay
64 Kujulik Bay

Appendix K.6 Pollock lengths from a trawl survey of the Alaska Peninsula area, 1997.

Length (cm)	Area Group 21	22	23	24	25	26	61	62	63	64	Total
4	0	0	1	0	0	0	0	0	0	0	1
6	0	0	3	0	0	0	0	0	1	0	4
7	0	1	5	4	0	0	0	0	0	0	10
8	0	1	3	6	0	0	0	0	0	0	10
9	0	1	4	2	0	0	0	0	0	0	7
10	0	0	1	0	0	0	0	0	0	0	1
11	0	0	2	0	0	0	0	0	0	0	2
17	0	7	2	1	0	1	1	0	1	0	13
18	0	15	1	7	1	0	0	0	0	0	24
19	0	25	10	8	0	0	2	0	2	0	47
20	0	34	24	7	0	0	0	0	3	0	68
21	0	13	18	5	0	0	0	0	1	0	37
22	0	9	8	3	0	0	0	0	0	0	20
23	0	6	4	5	0	0	1	0	0	0	16
24	0	2	3	3	0	0	0	0	0	0	8
27	0	0	1	6	0	1	0	0	0	0	8
28	0	0	0	7	0	0	0	0	1	0	8
29	0	0	2	11	0	1	0	0	1	0	15
30	0	0	2	14	0	2	0	0	1	0	19
31	0	3	2	40	0	1	0	0	2	0	48
32	0	3	4	61	0	1	1	0	6	0	76
33	0	2	13	62	0	3	0	0	1	0	81
34	0	3	5	31	0	2	1	0	4	0	46
35	0	1	12	30	11	3	0	0	2	0	59
36	0	0	5	21	7	3	0	0	2	0	38
37	0	0	10	11	4	2	0	0	0	0	27
38	0	1	3	10	5	1	0	1	0	0	21
39	0	2	1	4	3	4	0	2	0	0	16
40	0	2	1	18	1	4	0	3	0	0	29
41	0	1	0	24	1	6	0	1	2	0	35
42	0	0	1	38	1	3	0	1	2	0	46
43	0	4	0	47	2	2	2	0	2	0	59
44	0	12	0	67	1	1	0	1	2	0	84
45	0	11	0	66	0	1	2	0	4	0	84
46	2	14	1	61	2	0	7	1	3	0	91
47	1	15	2	35	0	2	0	2	3	0	60
48	0	12	3	28	2	0	1	1	1	1	49
49	0	16	3	15	3	2	1	1	2	1	44
50	1	16	5	10	3	9	1	8	3	3	59
51	0	24	3	15	4	4	3	13	7	3	76
52	1	34	5	24	13	9	5	11	13	11	126
53	0	53	7	37	16	15	10	22	23	14	197
54	3	38	11	42	12	11	11	23	19	10	180
55	3	53	16	60	22	13	30	25	26	14	262
56	1	46	11	66	23	13	17	24	37	13	251

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Length (cm)	Area Group										
	21	22	23	24	25	26	61	62	63	64	Total
57	3	41	25	66	18	11	18	28	34	7	251
58	2	22	16	49	20	12	11	21	19	16	188
59	0	12	18	38	22	10	13	16	27	8	164
60	1	13	24	40	13	7	16	10	12	2	138
61	0	9	27	53	13	5	8	3	16	2	136
62	1	3	14	27	10	1	5	3	2	2	68
63	0	3	11	21	4	4	2	1	8	1	55
64	0	0	9	21	3	2	2	2	5	1	45
65	0	1	14	11	2	1	2	1	5	0	37
66	0	2	2	10	1	2	0	0	2	0	19
67	0	0	4	5	1	1	0	0	3	0	14
68	0	0	1	7	3	1	0	1	0	0	13
69	0	0	2	3	2	0	0	1	1	0	9
70	0	1	2	6	0	0	0	1	1	0	11
71	0	0	0	2	0	0	0	0	0	0	2
72	0	0	3	1	1	1	0	0	0	0	6
73	0	0	0	1	0	0	0	0	0	0	1
74	0	0	0	1	2	0	0	0	2	0	5
75	0	0	1	1	0	0	0	0	0	0	2
77	0	0	1	0	0	0	0	0	0	0	1
	19	587	392	1375	252	178	173	228	314	109	3627

21 Sanak Island
22 Morzhovoi Bay
23 Cold Bay/Belkofski
24 Pavlof/Volcano
25 Beaver/Balboa/Unga
26 Stepovak Bay
61 Ivanof Bay
62 Mitrofania Bay
63 Chignik Bay
64 Kujulik Bay

Appendix K.7 Pacific cod lengths by area from a trawl survey of the Alaska Peninsula area, 1997.

Length (cm)	Area Group										
	21	22	23	24	25	26	61	62	63	64	Total
6	0	0	1	3	0	0	0	0	0	0	4
7	0	0	0	8	0	0	0	0	0	0	8
8	0	0	5	20	0	0	0	0	0	0	25
9	0	0	6	13	0	0	0	0	0	0	19
10	0	0	5	9	0	0	0	0	0	0	14
21	0	1	0	1	0	0	0	0	0	0	2
22	0	0	0	6	0	0	0	0	0	0	6
23	0	1	0	13	0	0	0	0	0	0	14
24	0	1	0	15	0	0	1	0	0	0	17
25	0	1	0	22	0	0	0	0	0	0	23
26	0	3	1	14	0	0	0	0	0	0	18
27	0	3	0	14	0	0	0	0	0	0	17
28	0	3	1	5	0	0	0	0	0	0	9
29	0	0	1	4	0	0	0	0	0	0	5
30	0	0	0	1	0	0	0	0	0	0	1
32	0	0	0	0	1	0	0	0	0	0	1
33	0	1	0	1	0	0	0	0	0	0	2
34	0	2	2	0	0	0	0	0	0	0	4
35	0	3	0	0	0	0	0	0	0	0	3
36	0	5	4	4	0	0	0	0	0	0	13
37	0	11	4	8	2	0	0	0	0	0	25
38	0	6	6	17	5	0	0	0	0	0	34
39	0	17	4	15	4	0	0	0	0	1	41
40	0	16	11	14	12	0	0	0	0	1	54
41	0	10	10	25	7	0	1	1	0	0	54
42	0	12	8	18	14	0	0	0	0	0	52
43	0	7	4	25	12	0	0	2	0	0	50
44	0	9	3	18	11	0	0	0	0	0	41
45	0	7	1	19	4	0	0	1	0	0	32
46	0	5	3	16	2	0	0	1	0	0	27
47	0	5	3	18	1	0	0	2	0	0	29
48	0	8	2	9	1	0	0	0	0	0	20
49	1	8	3	13	0	0	0	1	0	0	26
50	1	4	4	16	4	0	0	0	0	0	29
51	1	10	5	15	1	0	1	3	0	0	36
52	1	7	8	16	3	1	0	3	0	0	39
53	0	8	7	22	3	0	0	1	0	0	41
54	1	6	6	13	1	0	0	0	1	0	28
55	0	12	5	19	2	0	0	3	1	0	42
56	1	8	3	23	4	0	1	1	0	0	41
57	1	12	15	21	5	0	0	3	1	0	58
58	1	13	13	18	8	2	0	3	0	0	58
59	3	10	10	18	2	0	0	1	0	0	44
60	1	11	7	22	4	3	0	4	1	1	54
61	2	7	6	19	8	4	0	6	1	0	53
62	5	3	6	20	5	0	2	5	1	0	47
63	2	4	3	17	6	4	1	6	4	1	48
64	1	9	6	28	7	0	2	11	4	0	68
65	1	7	4	23	7	1	1	9	3	0	56
66	3	0	4	18	8	4	3	6	4	1	51
67	2	3	3	19	6	2	1	12	5	0	53
68	1	3	6	23	6	0	3	8	2	1	53
69	1	5	2	16	0	0	0	4	6	0	34
70	2	1	3	13	4	0	2	7	6	1	39
71	0	0	3	7	3	0	0	3	4	0	20
72	0	1	2	8	4	1	1	4	2	0	23
73	1	1	0	8	5	3	0	1	2	5	26
74	2	2	3	12	2	1	0	2	2	0	26
75	0	3	0	2	1	0	0	1	1	1	9
76	1	0	0	3	5	0	0	3	0	1	13
77	0	0	0	5	0	0	0	1	0	1	7

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Appendix K.7 (Page 2 of 2.)

Length (cm)	Area Group										
	21	22	23	24	25	26	61	62	63	64	Total
78	2	1	0	2	0	0	2	1	2	0	10
79	0	0	0	3	0	0	0	0	0	0	3
80	0	0	0	2	1	1	0	0	1	0	5
81	0	0	0	2	0	0	0	0	0	1	3
82	0	0	0	1	1	1	0	0	0	0	3
83	1	0	0	1	0	0	0	0	0	0	2
84	0	0	0	2	0	0	0	0	0	0	2
85	0	0	0	1	0	0	0	0	0	0	1
86	1	0	0	0	0	0	0	0	0	0	1
87	1	0	0	1	1	0	0	0	0	0	3
89	0	0	0	2	0	0	0	0	0	0	2
95	0	0	0	1	0	0	0	0	0	0	1
	41	296	222	830	193	28	22	120	54	16	1822

21 Sanak Island
22 Morzhovoi Bay
23 Cold Bay/Belkofski
24 Pavlof/Volcano
25 Beaver/Balboa/Unga
26 Stepovak Bay
61 Ivanof Bay
62 Mitrofania Bay
63 Chignik Bay
64 Kujulik Bay

Appendix K.8 Alaska plaice lengths by area from a trawl survey of the Alaska Peninsula area, 1997.

Length	Area Group						
(cm)	21	22	23	24	25	61	Total
25	0	0	0	1	0	0	1
33	0	0	0	0	1	0	1
35	0	0	0	0	1	0	1
37	0	0	0	1	1	0	2
38	0	1	0	0	2	0	3
39	0	0	0	1	1	0	2
40	0	0	0	1	1	1	3
41	0	2	1	1	0	0	4
42	0	3	1	0	1	0	5
43	0	0	2	3	0	1	6
44	0	0	1	0	0	0	1
45	0	2	3	0	1	0	6
46	0	1	2	0	0	2	5
47	0	1	1	1	0	0	3
48	0	1	2	1	0	0	4
49	0	0	0	1	0	0	1
50	0	0	0	1	0	0	1
51	1	0	1	0	1	0	3
52	0	1	0	1	0	0	2
53	0	0	1	0	0	0	1
55	0	1	1	3	1	0	6
56	0	0	0	2	0	0	2
58	0	2	1	1	0	0	4
59	0	0	0	1	0	0	1
60	0	0	0	3	0	0	3
61	0	1	0	2	0	0	3
62	0	0	1	0	0	0	1
	1	16	18	25	11	4	75

21 Sanak Island
22 Morzhovoi Bay
23 Cold Bay/Belkofski
24 Pavlof/Volcano
25 Beaver/Balboa/Unga
61 Ivanof Bay

Appendix K.9 Sablefish lengths by area from a trawl survey of the Alaska Peninsula area 1997.

Length	Area Group							
(cm)	22	23	24	25	26	61	63	Total
35	0	1	0	0	0	0	0	1
36	0	0	2	0	0	0	0	2
37	0	1	0	0	0	0	0	1
38	0	2	0	0	0	0	0	2
39	2	1	0	1	0	0	0	4
40	0	1	2	0	0	1	1	5
41	0	0	0	0	1	0	0	1
42	0	0	0	1	0	0	0	1
44	0	0	0	0	0	0	1	1
45	0	0	0	0	0	1	0	1
69	0	1	0	0	0	0	0	1
	2	7	4	2	1	2	2	20

22 Morzhovoi Bay
23 Cold Bay/Belkofski
24 Pavlof/Volcano
25 Beaver/Balboa/Unga
26 Stepovak Bay
61 Ivanof Bay
63 Chignik Bay

Appendix K.10 Northern rocksole lengths by area from a trawl survey of the Alaska Peninsula area, 1997.

Length	Area Group										
(cm)	21	22	23	24	25	26	61	62	63	64	Total
14	0	0	0	1	0	0	0	0	0	0	1
16	0	0	0	0	1	0	0	0	0	0	1
17	0	1	1	0	1	0	0	0	0	0	3
18	0	1	0	0	0	0	0	0	0	0	1
19	0	1	0	0	0	0	0	0	0	0	1
20	0	1	0	0	0	0	0	0	0	0	1
21	0	3	0	0	0	0	0	0	0	0	3
22	0	1	1	0	0	0	0	0	0	0	2
23	0	3	0	0	1	0	0	0	0	1	5
24	0	6	0	0	3	0	0	0	0	0	9
25	0	5	0	0	1	0	0	0	0	0	6
26	0	10	1	2	5	0	0	0	0	0	18
27	0	10	4	8	3	0	0	0	0	0	25
28	0	17	14	11	8	1	0	0	0	0	51
29	0	28	18	23	5	0	0	0	0	0	74
30	1	25	17	20	7	1	0	0	0	0	71
31	0	11	14	13	8	1	0	0	0	0	47
32	2	15	11	15	4	0	0	0	0	0	47
33	0	13	7	17	4	0	0	0	0	0	41
34	0	6	10	8	5	0	0	0	0	0	29
35	0	7	7	8	2	0	0	0	0	0	24
36	0	11	7	12	0	0	1	0	0	0	31
37	0	5	1	5	0	0	0	0	0	0	11
38	0	5	1	4	1	0	0	0	1	0	12
39	0	3	3	0	0	0	0	0	0	0	6
40	0	2	1	4	0	0	0	0	0	0	7
41	0	1	1	3	0	0	0	0	0	0	5
42	0	3	2	6	0	0	0	1	0	0	12
43	0	1	0	1	0	0	0	0	0	0	2
44	0	1	0	1	0	0	0	0	0	0	2
46	0	0	0	0	0	0	0	0	1	0	1
49	0	0	0	0	0	0	0	0	1	0	1
	3	196	121	162	59	3	1	1	3	1	550

21 Sanak Island
22 Morzhovoi Bay
23 Cold Bay/Belkofski
24 Pavlof/Volcano
25 Beaver/Balboa/Unga
26 Stepovak Bay
61 Ivanof Bay
62 Mitrofania Bay
63 Chignik Bay
64 Kujulik Bay

Appendix K.11 Southern rocksole lengths by area from a trawl survey of the Alaska Peninsula area, 1997.

Length	Area Group					
(cm)	21	22	23	25	61	Total
21	1	0	0	0	0	1
22	2	0	0	1	0	3
29	0	1	0	0	0	1
30	1	2	0	0	0	3
32	2	2	0	2	2	8
33	1	0	0	0	0	1
34	1	1	0	0	0	2
35	1	1	0	0	0	2
36	2	0	0	0	0	2
37	0	0	0	0	1	1
38	3	0	0	1	0	4
39	2	1	0	0	0	3
40	0	0	1	0	0	1
41	4	0	0	0	0	4
42	3	0	0	0	1	4
43	2	0	0	0	0	2
44	3	0	0	0	0	3
45	1	0	0	0	0	1
48	1	0	0	0	0	1
	30	8	1	4	4	47

21 Sanak Island
22 Morzhovoi Bay
23 Cold Bay/Belkofski
25 Beaver/Balboa/Unga
61 Ivanof Bay

Appendix K.12 Miscellaneous fish lengths including skates, flounder, sole, rockfish and salmon from a trawl survey of the Alaska Peninsula area, 1997.

Length (cm)	*Bathyraja* spp.	Longnose skate	Starry Flounder	Rex sole	Butter sole	English sole	Dover sole	Rougheye rockfish	Northern rockfish	Atka Mackeral	Black Rockfish	Pink Salmon	Chum Salmon
12	0	0	0	2	0	0	0	1	0	0	0	0	0
13	0	0	0	0	0	0	0	1	0	0	0	0	0
14	0	0	0	0	0	0	0	3	2	0	0	0	0
15	0	0	0	0	0	0	0	2	0	0	0	0	0
16	0	0	0	0	0	0	0	1	0	0	0	0	0
17	0	0	0	0	0	0	0	3	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	1	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	1	0	0	0	0	0	0	0	0	0
22	0	0	0	2	0	0	1	1	0	0	0	0	0
23	0	0	0	4	0	0	0	1	0	0	0	0	0
24	0	0	0	2	0	0	0	0	0	0	0	0	0
25	2	0	0	5	0	0	0	1	0	0	0	0	0
26	1	0	0	1	0	0	0	3	0	0	0	0	0
27	2	0	0	1	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	2	0	0	0	0	0
29	0	0	0	4	0	0	0	3	0	0	0	0	0
30	1	0	0	2	2	0	0	4	0	0	0	0	0
31	2	0	0	4	0	0	0	4	0	0	0	0	0
32	4	0	0	3	2	0	0	6	1	0	0	0	0
33	1	0	0	2	7	0	0	11	0	0	0	0	0
34	1	0	0	0	4	0	1	18	0	0	0	0	0
35	1	0	0	0	2	0	0	11	0	0	0	0	0
36	0	0	3	2	4	0	0	6	0	0	0	0	0
37	0	0	1	1	2	0	0	3	0	0	0	0	0
38	1	0	0	0	1	0	0	2	0	0	0	0	0
39	2	0	4	1	1	0	0	4	0	0	0	0	0
40	3	0	1	0	1	0	0	2	0	0	0	0	0
41	0	0	3	0	0	0	0	4	0	0	0	0	0
42	2	0	3	0	0	0	1	3	0	0	0	0	0
43	0	0	3	0	0	0	0	2	0	0	0	0	0
44	0	0	3	1	0	0	0	1	0	0	1	0	0
45	2	0	2	1	0	0	0	0	0	0	0	0	0
46	1	0	3	0	0	0	0	0	0	1	0	0	0
47	1	0	4	0	0	0	0	0	0	0	0	0	0
48	2	0	3	0	0	0	0	1	0	0	0	0	0
49	0	0	3	0	0	0	0	0	0	0	0	0	0
50	2	0	3	0	0	0	0	0	0	0	0	0	0
51	2	1	2	0	0	0	0	0	0	0	0	0	0
52	2	0	5	0	0	0	0	0	0	0	0	1	0
53	2	0	0	0	0	0	0	0	0	0	0	0	0
54	0	0	2	0	0	0	1	0	0	0	0	0	0
55	0	0	1	1	0	1	0	0	0	0	0	0	0
56	0	0	0	2	0	0	0	0	0	0	0	0	0
57	1	0	1	0	0	0	0	0	0	0	0	0	0
58	2	0	0	0	0	0	0	0	0	0	0	0	0
59	0	0	1	0	0	0	0	0	0	0	0	0	1
60	0	1	1	1	0	1	0	0	0	0	0	0	0
61	0	0	2	0	0	0	0	0	0	0	0	0	0
62	0	1	0	0	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	0	0	0	0	0	0	0	0
64	0	0	0	1	0	0	0	0	0	0	0	0	0
65	2	1	0	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0	0	0	0	0
67	0	0	1	1	0	0	0	0	0	0	0	0	1

--Continued--

Appendix K.12 (Page 2 of 2.)

Length (cm)	*Bathyraja* spp.	Longnose skate	Starry Flounder	Rex sole	Butter sole	English sole	Dover sole	Rougheye rockfish	Northern rockfish	Atka Mackeral	Black Rockfish	Pink Salmon	Chum Salmon
68	1	0	0	0	0	0	0	0	0	0	0	0	0
69	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	0	0	0	0	0	0	0
71	0	0	0	0	0	0	0	0	0	0	0	0	0
72	0	0	0	0	0	0	0	0	0	0	0	0	0
73	0	0	0	1	0	0	0	0	0	0	0	0	0
74	0	0	0	0	0	0	0	0	0	0	0	0	1
75	0	0	0	0	0	0	0	0	0	0	0	0	0
76	0	1	0	1	0	0	0	0	0	0	0	0	0
77	1	0	0	0	0	0	0	0	0	0	0	0	0
	44	5	55	47	26	2	4	105	3	1	1	1	3

21 Sanak Island
22 Morzhovoi Bay
23 Cold Bay/Belkofski
24 Pavlof/Volcano
25 Beaver/Balboa/Unga
26 Stepovak Bay
27 West Nagai
61 Ivanof Bay
62 Mitrofania Bay
63 Chignik Bay
64 Kujulik Bay

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