



NOAA Technical Memorandum NMFS-AFSC-181

Results of the 2007 Eastern Bering Sea Continental Shelf Bottom Trawl Survey of Groundfish and Invertebrate Resources

by
E. Acuna and R. R. Lauth

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
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Abstract

The Resource Assessment and Conservation Engineering Division of the Alaska Fisheries Science Center conducts annual bottom trawl surveys to monitor the condition of the demersal fish and crab stocks of the eastern Bering Sea continental shelf. The standard study area, surveyed each year since 1979, encompasses a major portion of the eastern Bering Sea shelf between the 20-m and the 200-m isobaths and from the Alaska Peninsula north to approximately the latitude of St. Matthew Island (60°50'N). In 2007, two chartered trawlers, the 40-m FV *Arcturus* and the 40-m FV *Aldebaran* surveyed this area.

Demersal populations were sampled by trawling for 30 minutes at stations centered within 20 × 20 nautical mile grids covering the survey area. At each station, species composition of the catch was determined. Length distributions and age structure samples were collected from ecologically and commercially important species.

All 356 standard survey stations were sampled successfully. Twenty additional survey stations were sampled northwest of the standard survey area primarily to investigate the distribution and abundance of walleye pollock and opilio crabs. Walleye pollock, yellowfin sole, and rock sole dominated fish biomass estimates (8.3 million metric tons combined). A total of 179 invertebrate species were identified to the species level in the survey.

Survey results presented in this report include abundance estimates for fish and invertebrates, geographic distributions of important fish species and size composition of principal fish species, and contour plots of surface and bottom temperatures during the survey sampling period.

Appendices provide station data, summarized catch data by station, species listings, and detailed analyses of abundance and biological data of the sampled populations.

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Introduction

The eastern Bering Sea continental shelf supports one of the most productive groundfish and crab fisheries in the world (Bakkala 1993). Since 1970, groundfish such as walleye pollock (*Theragra chalcogramma*), yellowfin sole (*Limanda aspera*) and Pacific cod (*Gadus macrocephalus*) have been the primary target species among commercial catches. Although many species of groundfish are caught commercially, walleye pollock is the most abundant with catches ranging from 1.2 to 1.5 million metric tons (t) per year for the past 30 years, and marketed products represent 40% of the global whitefish market (Ianelli et al. 2007).

Since 1971, the National Marine Fisheries Service (NMFS) Resource Assessment and Conservation Engineering (RACE) Division of the Alaska Fisheries Science Center (AFSC) has conducted an annual bottom trawl survey in the eastern Bering Sea to determine the distribution and abundance of groundfish and crab resources.

The first large-scale survey of the eastern Bering Sea shelf was conducted in 1975 under contract from the Bureau of Land Management in response to a need for baseline data to assess the potential impact of proposed offshore oil exploration and development on fishery resources (Pereyra et al. 1976). During this baseline survey, sampling was conducted over the eastern Bering Sea shelf between the 20-m and 200-m isobaths from the Alaska Peninsula north to approximately 62°N.

In subsequent years, the area coverage of the annual surveys was reduced until 1979 when the most comprehensive survey of the Bering Sea shelf was undertaken in cooperation with the Japan Fisheries Agency (Bakkala and Wakabayashi 1985). That survey encompassed the entire region sampled in the 1975 baseline study plus the continental slope waters between

St. Matthew and St. Lawrence Islands. A hydroacoustic survey was also conducted in 1979 to assess the midwater component of the walleye pollock population.

Subsequent annual bottom trawl surveys have essentially resampled the stations established during the 1975 survey, with slight modifications each year. This region encompasses the major portion of economically important eastern Bering Sea groundfish and crab populations, except those primarily located in the deep continental slope waters. Commercial crab stocks managed by the Alaska Department of Fish and Game (ADF&G), are covered by the North Pacific Fishery Management Council's Fishery (NPFMC) Management Plan for the Commercial King and Tanner Crab Fisheries in the Bering Sea and Aleutian Islands Regions. Crab species of interest include Tanner crab (*Chionoecetes bairdi*), snow crab (*C. opilio*), two stocks of blue king crab (*Paralithodes platypus*), red king crab (*P. camtschaticus*), and hair crab (*Erimacrus isenbeckii*). Detailed results from the most recent crab survey are available in Rugulo et al. (2006).

Beginning in 1979 and on a triennial basis through 1991, the survey was extended to include bottom trawl sampling of the continental slope and in the region between St. Matthew and St. Lawrence Islands. The continental slope was not surveyed in 1994 or 1997 but the survey was resumed in 2000 as an independent bottom trawl survey series that is surveyed on a biennial basis. The most recent continental slope survey was conducted in 2004 (Hoff and Britt 2005).

The groundfish information gathered by the annual biological surveys serves to: 1) provide annual fishery-independent estimates of abundance and biological condition of commercially exploited stocks to the NPFMC; 2) provide updates on the distribution and abundance information to commercial fishermen; and 3) continue a time-series database critical

to our improved understanding of the population dynamics and interactions of groundfish species. This report presents information collected by the AFSC on the eastern Bering Sea shelf during the 2007 bottom trawl survey, which represents the twenty-sixth contribution to the time series.

Methods

Survey area and sampling design

The standard station pattern for the eastern Bering Sea survey is based on 356 systematic 37.04×37.04 km (20×20 nautical mile) grids with a fixed sampling station at the center of each grid square (Fig. 1). In areas surrounding St. Matthew and the Pribilof Islands, a high-density sampling of “corner stations” was implemented to better assess local blue king crab concentrations (Fig. 1). The original sampling design includes 356 sampling stations that have been sampled annually since 1982. An additional 20 stations were sampled northwest of the standard area primarily to investigate the distribution and abundance of opilio crabs and the northern distribution of walleye pollock (Fig. 2). For all 376 stations, a general description of the fish and invertebrate species caught by trawl is presented in the results section and a detailed list in Appendix A. Other than relative abundance for the top 25 fish species in the 20 northwest stations, all data analyses presented in the results section include only the 356 standard survey stations.

Sampling logistics and stratification scheme

Survey trawl sampling began in Bristol Bay and stations were sampled along alternate, longitudinal columns (Fig. 2). When possible, using two vessels, this pattern of sampling

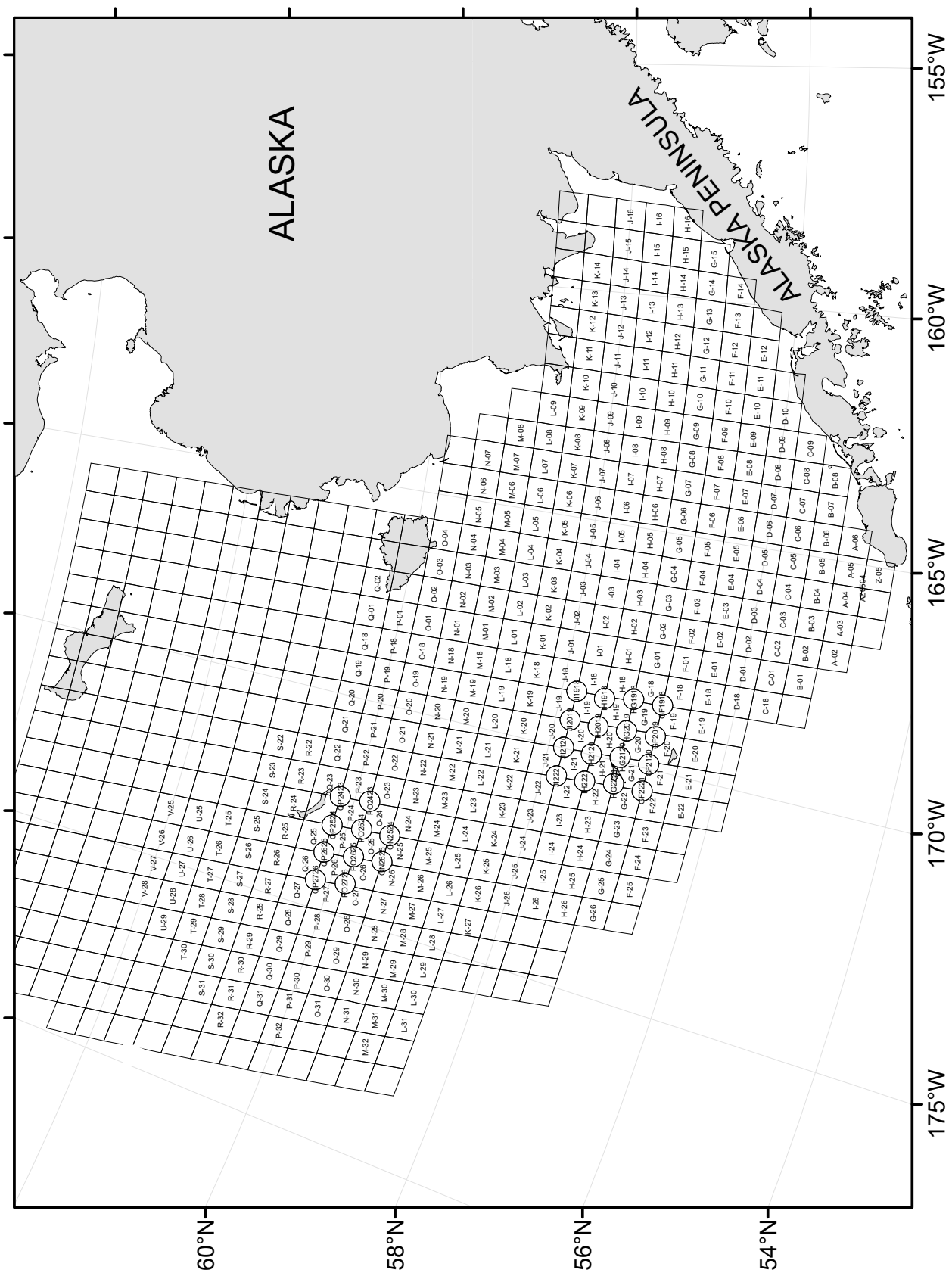


Figure 1. -- Grid map of sample stations for the eastern Bering Sea continental shelf bottom trawl survey.

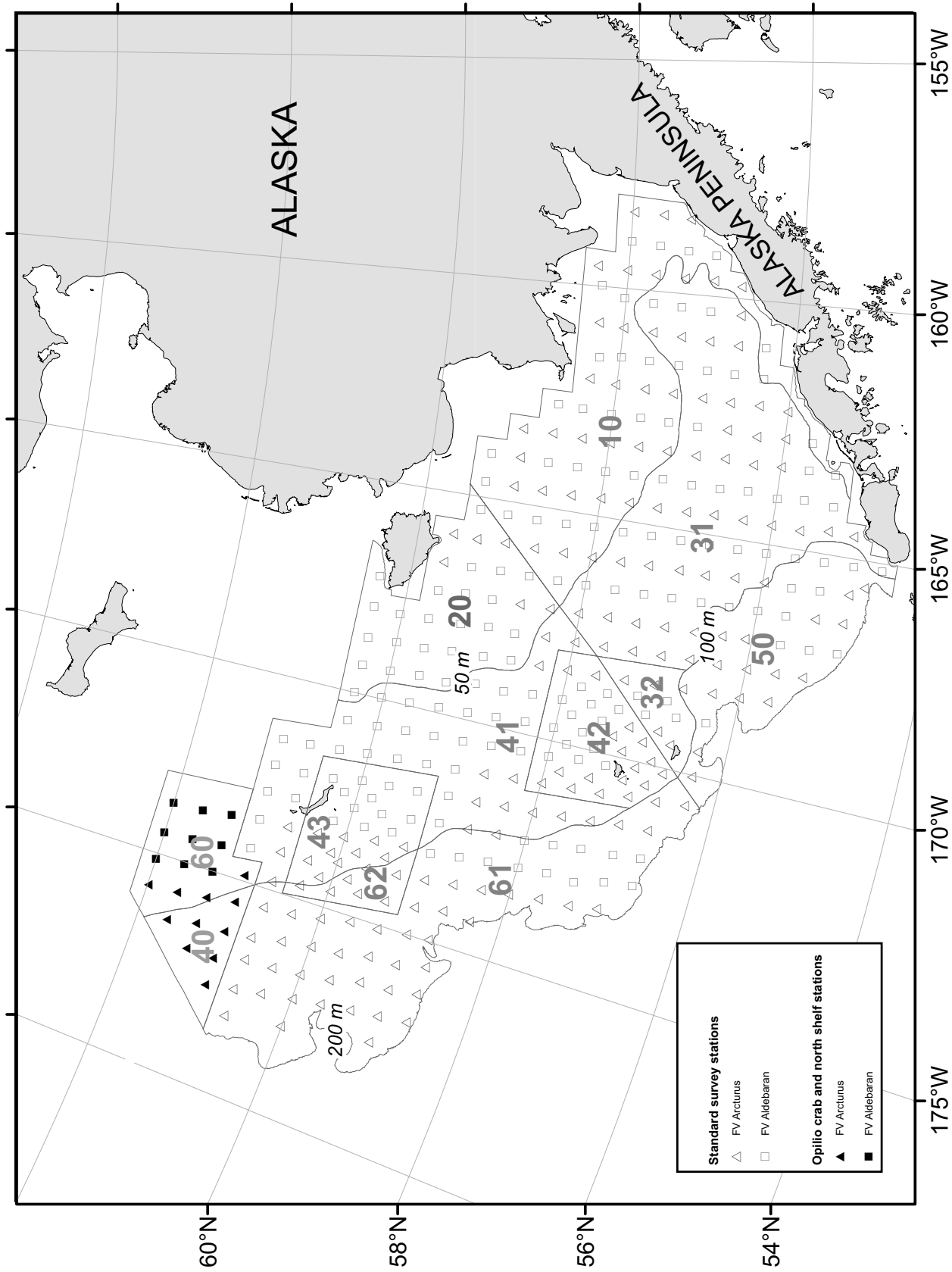


Figure 2. -- Sampled survey stations by vessel and the stratification scheme used for data analysis of the 2007 eastern Bering Sea bottom trawl survey.

proceeded westward to the shelf edge. This practice is designed to balance the coverage of the survey area between vessels. The progression from east to west was established in response to movements by yellowfin sole and perhaps other species, which may be migrating eastward during the course of the survey (Smith and Bakkala 1982).

For catch analysis, the survey region was divided into six strata bounded by the 50-m, 100-m, and 200-m isobaths and into two geographic strata that separate the northwest and southeast portions of the study area (Fig. 2). This stratification scheme best reflects the differences observed in Bering Sea groundfish across the different oceanographic domains, and the intention of the design was to reduce the variances of population and biomass estimates (Bakkala 1993). Localized high-density sampling for blue king crab in Strata 30, 40, and 60 necessitated a further subdivision into high-density and standard-density sample strata, resulting in a total of 10 strata.

The overall sampling density for the entire survey area was one station per 1,313 km² (Table 1). However, because of the high-density sampling in Strata 30, 40, and 60, and the irregular stratum boundaries, sampling density within the 10 subdivided strata varied from one station per 775 km² (Stratum 42) to one per 1,494 km² (Stratum 61).

Survey vessels and sampling gear

From 4 June to 2 August 2007, the survey was conducted aboard the chartered commercial stern-trawlers FV *Arcturus* and FV *Aldebaran*. All fishing operations were conducted in strict compliance to national and regional protocols detailed in Stauffer (2004). Both vessels were equipped with standard 83-112 Eastern otter trawls, which have 25.3-m (83 ft) headropes and 34.1-m (112 ft) footropes (Fig. 3). These nets were attached to tail chains with

Table 1. -- Stratum areas and sampling densities for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Stratum subdivisions	Representative area (km ²)	Stations successfully sampled	Sampling density (km ² / station)
10	--	77,871	58	1,343
20	--	41,027	31	1,323
30	--	103,300	77	1,342
	31	94,526	69	1,370
	32	8,774	8	1,097
40	--	107,822	94	1,147
	41	62,703	43	1,458
	42	24,011	31	775
	43	21,108	20	1,055
50	--	38,792	26	1,492
60	--	94,562	67	1,411
	61	88,134	59	1,494
	62	6,429	8	804
Strata combined		463,374	353	1,313

83/112 EASTERN

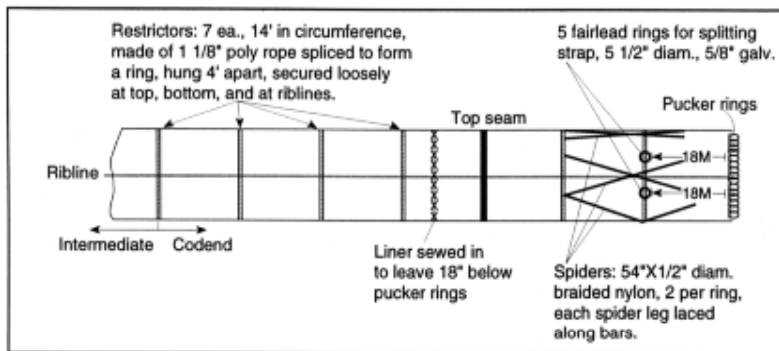
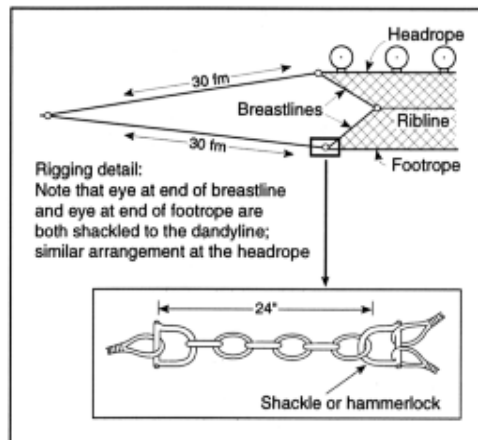
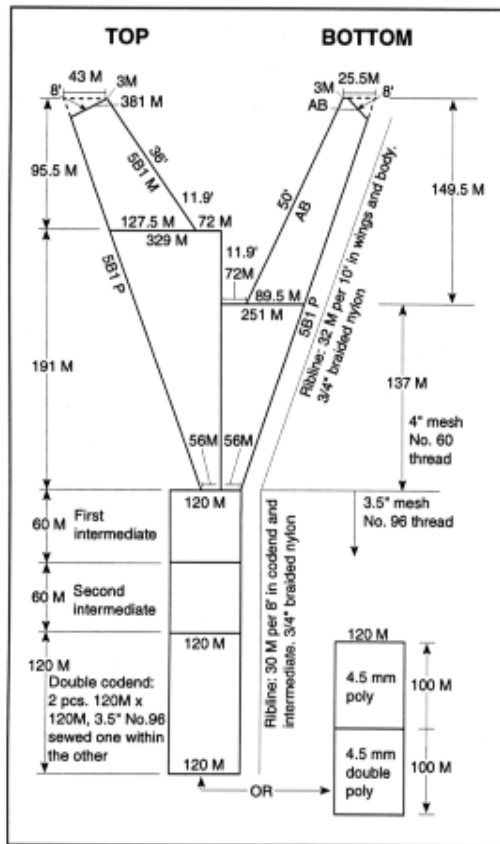


Figure 3. -- Schematic diagram of 83/112 Eastern otter trawl net used during the 2007 eastern Bering Sea bottom trawl survey.

54.9-m (30 fathom) paired dandyline. Each lower dandyline had a 0.61-m chain extension connected to the lower wing edge to improve bottom-tending characteristics. Steel "V"-doors measuring 1.8×2.7 m and weighing 816 kg each were used.

Netmind net mensuration systems (Northstar Technical Inc., St. John's, Newfoundland) were used aboard each vessel to monitor and record net height and width during fishing operations. Net width was measured as the distance between two sensors attached to the upper starboard and port dandyline, about 0.61 m in front of the net, and net height was measured from the headrope to the seafloor bottom. Estimates of mean net width were used in calculations of the area-swept per tow (Rose and Walters 1990). For tows without observed net width values a mean net width-inverse scope regression (Zar 1999) was used because it accounts for a majority of the variation for the eastern Bering Sea standard survey trawl (Rose and Walters 1990; Fig. 4).

Catch sampling procedures

Detailed sampling procedures used in RACE eastern Bering Sea assessment surveys are described in detail by Wakabayashi et al. (1985) and Stauffer (2004). A brief summary of sampling procedures is outlined in this section.

Samples were collected by trawling near the center of each 37.04×37.04 km grid square (or corner station, in the case of high-density strata) for a target fishing time of 30 minutes and towing at a speed of 1.54 m/sec (3 knots). If the seafloor appeared to be untrawlable at the specified location, the nearest trawlable site within the same grid square was used. If the net was damaged or the net impacted by bottom structure during the trawl, the catch was discarded and a new sample obtained.

Catches estimated to be less than 1,150 kg (2,500 lb) were enumerated entirely while larger catches were subsampled. After sorting the subsample, individual species were weighed in aggregate and counted and these weights and numbers were expanded to the total catch.

Fishes and invertebrates were identified and sorted to the lowest taxonomic level practicable. Similar morphological features between flathead sole (*Hippoglossoides elassodon*) and Bering flounder (*H. robustus*) make accurate identification of these species difficult in areas where the two species overlap; thus, in the analysis for this report these species are grouped by genus (*Hippoglossoides* spp.). Due to low abundance (believed to be < 1%) of southern rock sole (*Lepidopsetta bilineata*) and its morphological similarities to northern rock sole (*L. polyxystra*; Orr and Matarese 2000), these species were also grouped by genus (*Lepidopsetta* spp.) for this report.

Catch weights and numbers by species or species group were either estimated directly when subsampled, or estimated by extrapolating the proportion in the subsample to that of the entire catch weight. Pacific halibut (*Hippoglossus stenolepis*), Greenland turbot (*Reinhardtius hippoglossoides*), skates, and commercial crab species were weighed and enumerated from the entire catch. Depending on size and catch composition, other fish species (such as certain sculpins, rarely encountered species, sharks) may have been completely sorted from the catch as well.

A random sample of approximately 200 fish of each selected abundant species was set aside for length measurements. Size composition data was collected for each commercially important groundfish species and many co-occurring species (Table 2). Length measurements were collected from randomly chosen samples of each species. The sex of each specimen was determined then each was measured to the nearest centimeter from the tip of the snout to the end

of the middle rays of the caudal fin (fork length measurement). Unless retained for sampling by the International Pacific Halibut Commission (IPHC) for management purposes, Pacific halibut were measured immediately upon capture and returned to the sea in an effort to reduce mortality; weights were estimated using an IPHC regression.

Sagittal otoliths were collected from 12 fish species in both the northwestern and southeastern divisions of the survey area (Table 3). The eastern Bering Sea was divided into low and high density strata for pollock otolith sampling. This division was based on historical pollock density data and a depth contour of approximately 70 m. Otoliths were collected from all hauls in which total number of pollock was 20 or more. Walleye pollock samples for otolith collection were selected at random from fish samples prior to sex determination. Six pairs of otoliths were collected in high-density strata and four otoliths in low-density strata. Three otolith pairs per sex-centimeter interval per vessel (six pairs total) were collected for Pacific cod, Greenland turbot (*Reinhardtius hippoglossoides*), Bering flounder (*Hippoglossoides robustus*), marbled eelpout (*Lycodes raridens*), and yellow Irish lord (*Hemilepidotus jordani*). Five otolith pairs per sex-centimeter interval by vessel (10 pairs total) were collected for yellowfin sole (*Limanda aspera*). Northern rock sole (*Lepidopsetta polyxystra*), flathead sole (*Hippoglossoides elassodon*), and Alaska plaice (*Pleuronectes quadrituberculatus*) were also collected at five otolith pairs per sex-centimeter interval, but on only one vessel. Pacific halibut otoliths were collected by the IPHC for population and growth analyses.

Individual fish weights were collected for all species for which age structures were taken. Age structures for roundfish were preserved in 70% ethanol; flatfish otoliths were preserved in 50% glycerol-thymol solution.

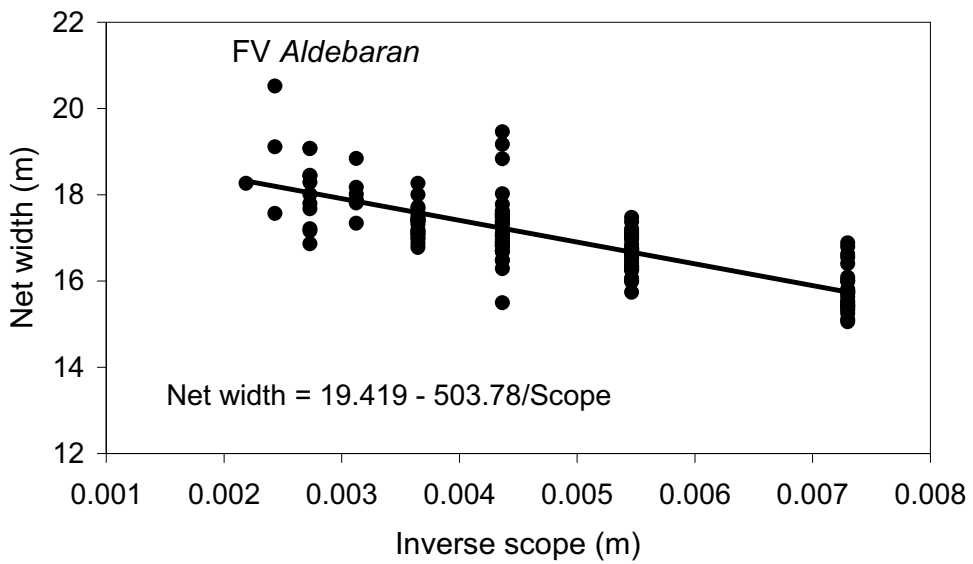
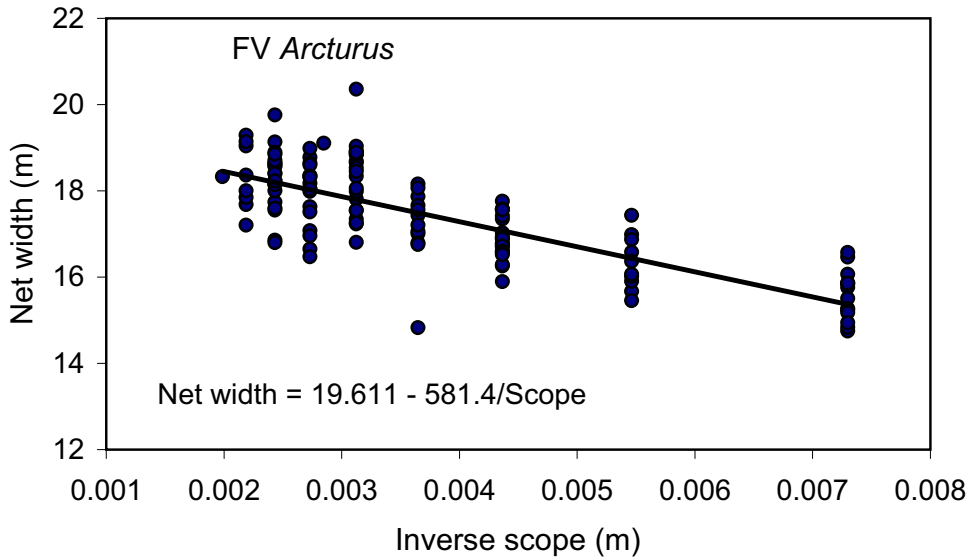


Figure 4.-- Net width-inverse scope (wire-out) relationship for each vessel participating in the 2007 eastern Bering Sea trawl survey.

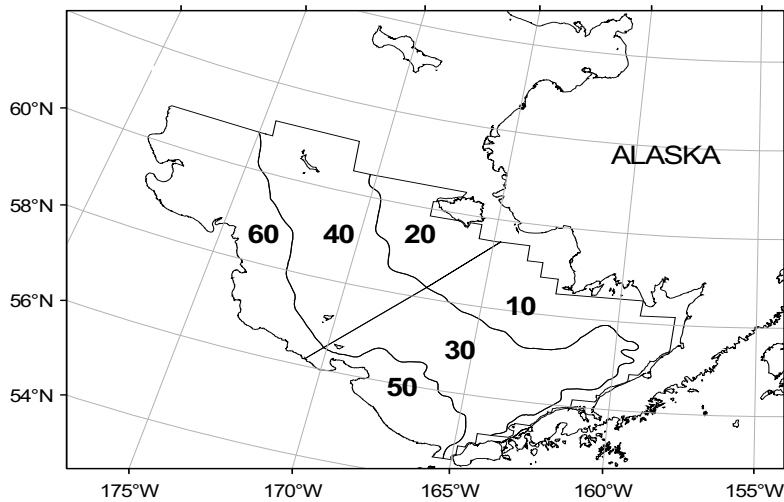
Table 2. -- Number of length measurements by stratum taken during the 2007 eastern Bering Sea bottom trawl survey.

Common name	Stratum						Total
	10	20	30	40	50	60	
Alaska plaice	1,306	820	1,472	1,279		54	4,931
Alaska skate	613	454	872	1,417	111	909	4,376
Aleutian skate					1	8	9
Arctic cod		21		466			487
arrowtooth flounder	28		1,326	425	1,305	1,555	4,639
Atka mackerel				1			1
Bering flounder		5		402		64	471
Bering skate	1		41	19	81	65	207
bigmouth sculpin			2	25	11	87	125
butter sole	4		11	1			16
butterfly sculpin				62			62
chinook salmon				1			1
Dover sole			2		4	1	7
flathead sole	320	4	2,304	849	911	1,932	6,320
great sculpin	157	17	281	155	1	93	704
Greenland turbot			2	85		185	272
Kamchatka flounder			183	88	438	851	1,560
longhead dab	417	171					588
marbled eelpout				39			39
northern rock sole	2,893	1,039	2,773	1,943	52	373	9,073
northern rockfish					21		21
Pacific cod	975	600	1,361	2,541	147	1,060	6,684
Pacific halibut	1,040	409	465	320	36	135	2,405
Pacific ocean perch					16	12	28
plain sculpin	954	442	80	60		2	1,538
prowfish					3		3
rex sole	5		79	4	353	178	619
rougheye rockfish					3		3
sablefish			2				2
saffron cod	35	16					51
Sakhalin sole		1		8			9
shortfin eelpout			35	261	45	352	693
southern rock sole			51				51
starry flounder	426	87	72				585
walleye pollock	356	206	2,359	1,852	400	2,006	7,179
warty sculpin	3	2	5	201		13	224
wattled eelpout			63	433	5	84	585
whiteblotched skate					10		10
yellow Irish lord			54	194	1	23	272
yellowfin sole	2,693	1,274	2,226	1,338	1		7,532

Table 3. -- Number of fish from which age structures (otoliths) were collected by species and by stratum during the 2007 eastern Bering Sea bottom trawl survey.

Common name	Stratum						Total
	10	20	30	40	50	60	
Alaska plaice	139	37	78	74		12	340
Alaska skate	22	3	36	2	11	37	111
Bering flounder				183		21	204
flathead sole	33		163	48	101	238	583
Greenland turbot			2	71		158	231
marbled eelpout				35		35	35
northern rock sole	168	53	102	131	2	21	477
Pacific cod	210	172	363	456	37	184	1,422
Pacific halibut ^a							1,570
walleye pollock	84	71	366	472	72	329	1,394
yellow Irish lord			30	42		1	73
yellowfin sole	296	256	167	58			777

^aAge structure collection analyzed and managed by the International Pacific Halibut Commission (IPHC); data were not tallied by strata.



Surface and bottom water temperatures, as well as temperature and depth profiles, were taken at each station using a Sea-Bird SBE-39 datalogger (Sea-Bird Electronics Inc., Bellevue, WA) attached to the headrope of the net. Depth to bottom was obtained by adding net height to headrope depth.

Data analysis

Several analyses were performed on RACE survey data which included estimates of: 1) relative abundance; 2) population biomass; 3) population numbers, and 4) population abundance by size class. A brief description of the procedures used in the analysis of RACE Bering Sea survey data follows (for a detailed description see Wakabayashi et al. 1985). Note: some of the species collected were grouped by family for data analysis because of their limited commercial value or uncertain identification.

Mean catch per unit effort (CPUE) values for each species were calculated in kilograms per hectare (1 ha = 10,000 m²) and number per hectare for each of the 10 strata; area swept (hectares) was computed as the distance towed multiplied by the mean net width (Alverson and Pereyra 1969). Mean CPUE values were calculated for individual strata and for the overall survey area. Biomass and population estimates were derived for each stratum by multiplying the stratum mean CPUE by the stratum area. Stratum totals were then summed to produce estimates for each of the six main strata and the total survey area.

In estimating the population size composition of principal commercial species, the proportion of fish at each length interval (from subsamples at each station) was weighted by CPUE (number of fish/ha) and then expanded to the stratum population. Stratum estimates were

summed to derive the estimated size composition for each of the six main strata and for the overall survey area.

Except for Pacific halibut, otolith samples collected during the survey were read by staff of the Age and Growth Program of the AFSC's Resource Ecology and Fisheries Management (REFM) Division. Age, growth, and population analyses will be presented in separate reports (e.g., Ianelli et al. 2007).

Additional research projects

In addition to the operations involved with the core sampling, there were 26 additional research projects undertaken during the 2007 survey (Table 4). The RACE Division projects included studies of: 1) gear performance and monitoring; 2) fish behavior in response to light and vessel noise; 3) fish and crab reproduction and pathology; 4) summer zooplankton biomass; 5) octopus populations, and 5) additional biological sampling of Bering flounder, eelpouts, and miscellaneous fish species. The REFM Division and the AFSC's Auke Bay Laboratories (ABL) special studies projects included: 1) fish stomach scans and collections (Table 5); 2) a seabird survey; 3) biological sampling of sculpins and forage fishes; 4) collections of fish prey for stable isotope analysis, and 5) tissue collections for a DNA-based identification library. The two projects from outside the agency involved halibut otolith, tag and size collections by the International Pacific Halibut Commission (IPHC), and collection of fish specimens for stable isotope analysis of fur seal prey by the University of Alaska Fairbanks (UAF).

Table 4. -- Research projects and collections undertaken during the 2007 eastern Bering Sea bottom trawl survey.

Project title	Principal Investigator	Agency
Walleye pollock acoustic abundance study	Taina Honkalehto / Patrick Ressler	AFSC ¹ -RACE ² -MACE ³
Light intensity on the distribution of walleye pollock	Stan Kotwicki	AFSC - RACE
Net swapping procedures on survey trawl performance	Stan Kotwicki	AFSC - RACE
ES-60 transects at cruising speeds	Paul von Szalay	AFSC - RACE
Monitoring trawl gear performance	Ken Weinberg	AFSC - RACE
Zooplankton biomass on the eastern Bering Sea shelf	Jeff Napp	AFSC - RACE
Weight-length data for commercial crab species	Liz Chilton	AFSC-RACE
Reproductive potential of snow and Tanner crabs	Laura Slater / Joel Webb	ADFG ⁴
Reproductive potential of Bristol Bay red king crab	Kathy Swiney	AFSC-RACE
Keys to decapod crustaceans	Aaron Baldwin	UAF ⁵
Forage fish DNA tissue collection	Mike Canino	AFSC-RACE
Stationary seabird surveys	Shannon Fitzgerald	AFSC - REFM ⁶
Trophic interactions and feeding ecology	Kerim Aydin / Troy Buckley	AFSC- REFM
Alaska skate verterae collection	Gerald Hoff	AFSC-RACE
Bering Sea octopus population study	Elaina Jorgensen	AFSC - RACE
Pacific cod visual maturity and ovary collection	Sandi Neidetcher / Libby Loggerwell	AFSC-REFM
Sand lance taxonomy	James Orr	AFSC-RACE
Molecular species identification of deepwater corals	Linda Park	NWFSC ⁷
Stable isotope analysis (stomach collection)	Kerim Aydin / Katie Dodd	AFSC - REFM
Bitter Crab Syndrome in North Pacific <i>Chionoecetes</i> spp.	Frank Morado	AFSC - RACE
DNA-based identification library of prey items	Frank Morado and Kerim Aydin	AFSC - RACE/REFM
<i>Ichthyophonus</i> in walleye pollock	Frank Morado	AFSC - RACE
Yellow Irish lord ovary collection	Kerim Aydin / Todd TenBrink	AFSC - REFM
Stable isotope analysis (stomach scans)	Kerim Aydin and Katie Dodd	AFSC - REFM
Live skate egg collection	Gerald Hoff	AFSC-RACE
IPHC sampler aboard one vessel to collect halibut data	Lauri Sadorus	IPHC ⁸

¹Alaska Fisheries Science Center, Seattle, Washington

²Resource Assessment and Conservation Engineering Division, Seattle, Washington

³Midwater Assessment and Conservation Engineering, Seattle, Washington

⁴Alaska Department of Fish and Wildlife, Kodiak, Alaska

⁵University of Alaska Fairbanks, Fairbanks, Alaska

⁶Resource Ecology and Fisheries Management Division, Seattle, Washington

⁷Northwest Fisheries Science Center, Seattle, Washington

⁸International Halibut Commission, Seattle, Washington

Table 5. -- Stomach samples collected and scanned onboard during the 2007 eastern Bering Sea bottom trawl survey.

Species	Stomachs collected	Stomachs scanned
Alaska plaice	157	-
Alaska skate	330	-
Arrowtooth flounder/ Kamchatka flounder	536	315
Bering skate	47	-
Great sculpin	41	-
Greenland turbot	223	6
Misc. skates	3	-
Misc. species	138	21
Pacific cod	609	-
Pacific halibut	193	246
Starry flounder	183	-
Walleye pollock	435	668
Warty sculpin	11	-
Yellow Irish lord	53	-
Total	2,441	2,441

Results and Discussion

Station data

A total of 376 stations were successfully sampled in 2007, which included 356 stations in the standard survey area and an additional 20 stations northwest of the standard survey area (Fig. 2). The additional northwest stations are in Strata 82 and 90 and they have been sampled annually since 1987. In order to maintain the time series for the longest possible period, the 20 northwest stations are excluded as part of the standard survey area. Data from all 376 stations from the 2007 survey are listed in Appendix B. Relevant information such as position, tow parameters (net width, depth, distance fished, and duration of haul), time, and environmental measurements (surface and gear temperatures) are listed for each vessel for all standard bottom trawl stations used in the analyses.

Any hauls that experienced significant gear damage or debris such as discarded crab pots were re-sampled immediately following the original haul. There were no stations skipped in 2007; however, 32 stations in Bristol Bay were resampled by the FV *Aldebaran* for crab at the end of the survey to allow additional time for female red king crab to molt successfully and develop clutches of eggs. A minimum threshold population of 8.4 million female red king crab ≥ 90 mm carapace length must be present for the fishery to remain open. The delayed spawning may have been in response to lower water temperatures at the onset of the survey (Dew in review).

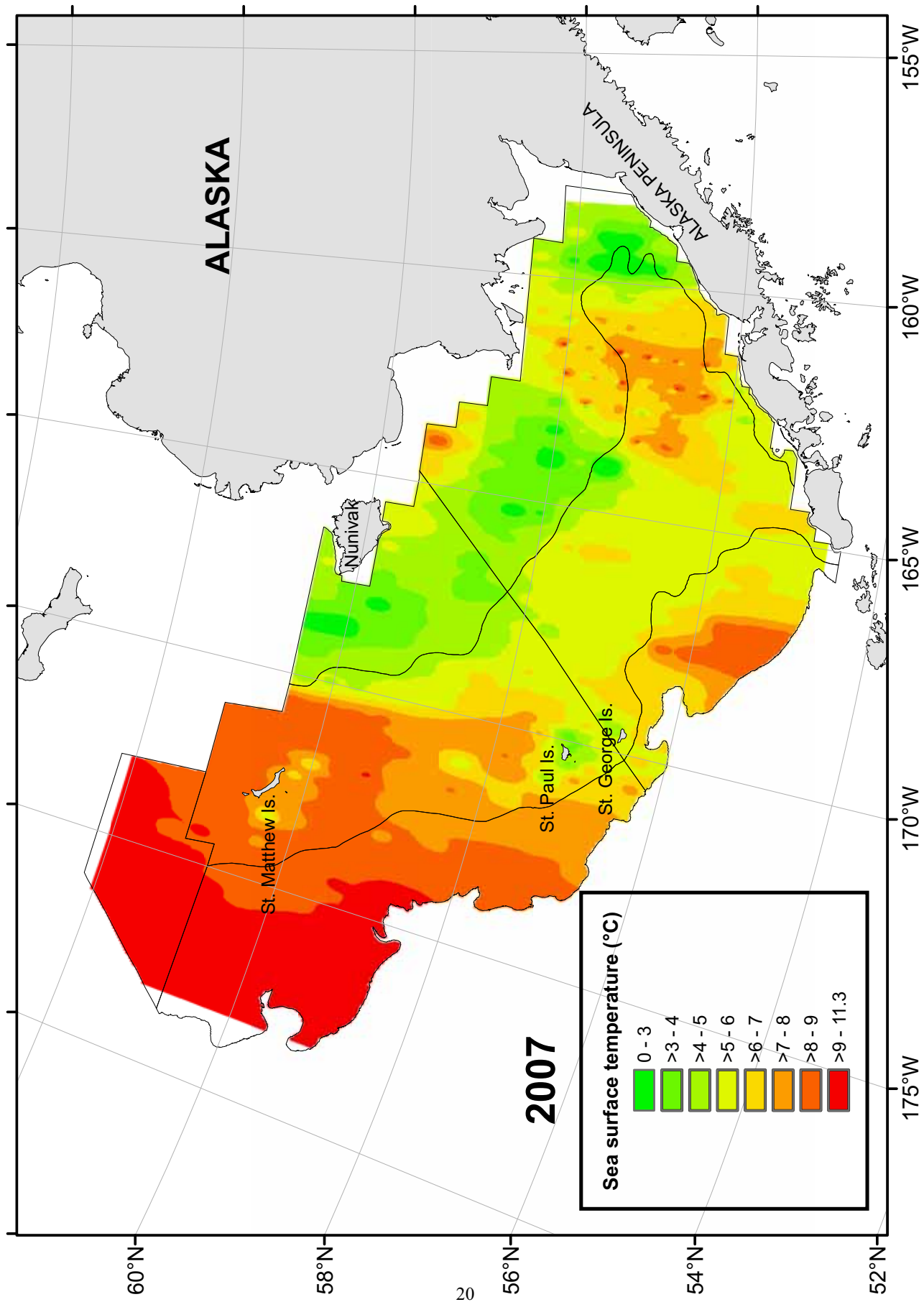


Figure 5. -- Distribution of sea surface water temperatures (°C) observed during the 2007 eastern Bering Sea bottom trawl survey.

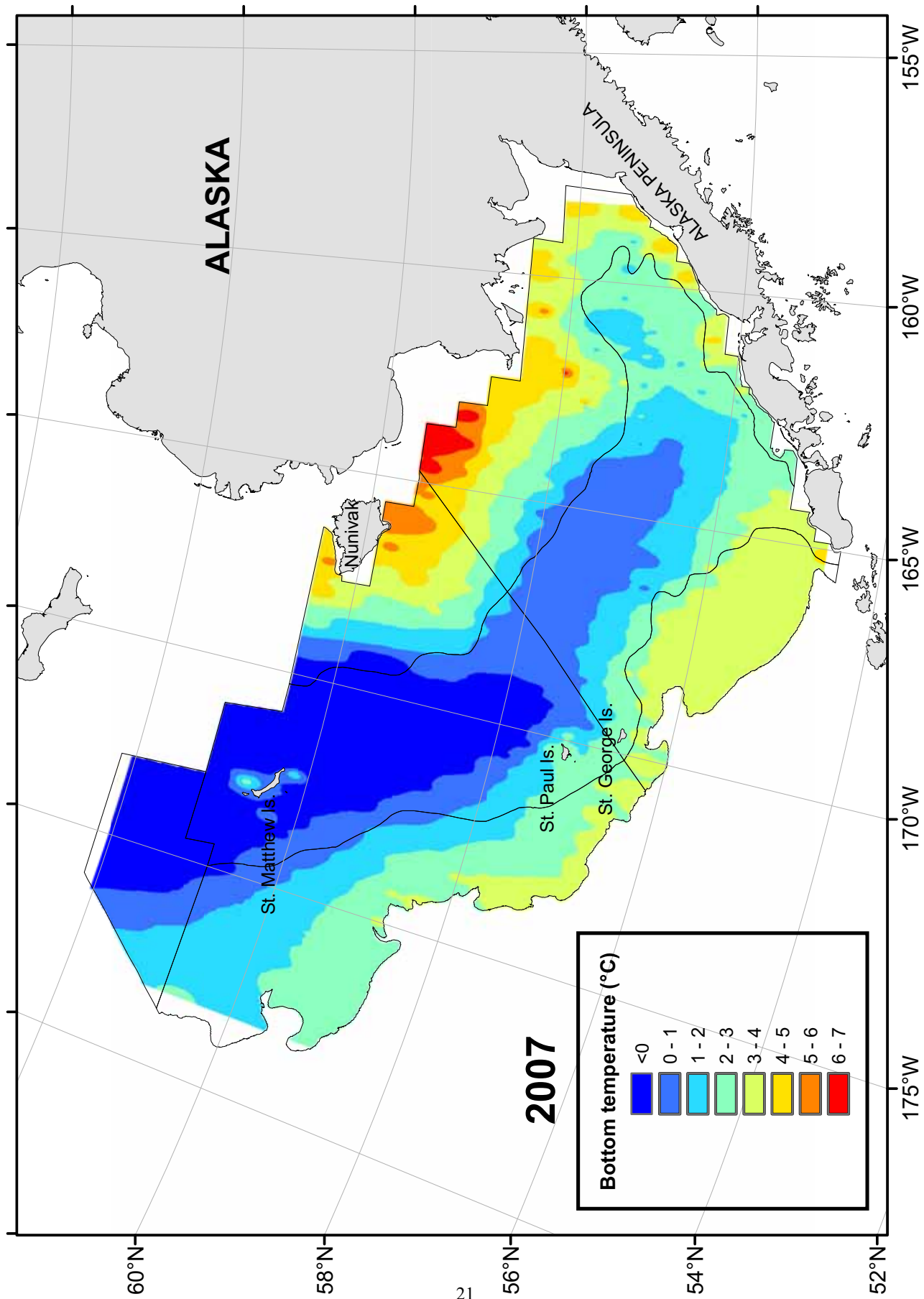


Figure 6. -- Distribution of bottom water temperatures ($^{\circ}\text{C}$) observed during the 2007 eastern Bering Sea bottom trawl survey.

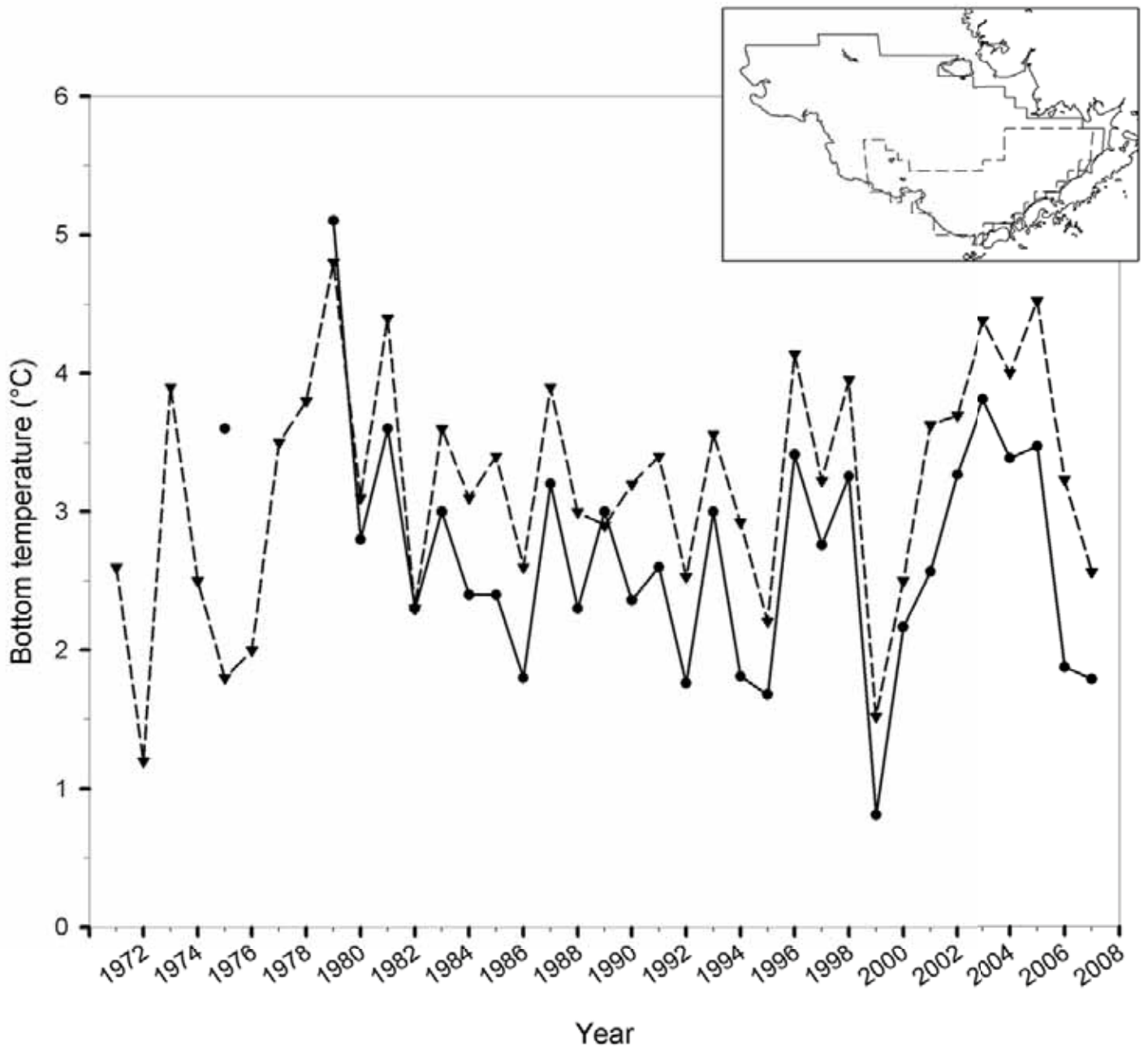


Figure 7. -- Mean summer bottom temperatures based on expendable bathythermograph casts or dataloggers attached to the net headrope during the Alaska Fisheries Science Center bottom trawl surveys. The 1971-2007 means (dashed line) are from southeast Bering Sea (see insert) and the 1975 and 1979-2007 means (solid line) are from the larger survey area outlined on the inset. The 1975 data point for the overall survey area is based on data collected from August through September, while those in all other years and areas were collected from June through early August.

Environmental conditions

Sea surface temperatures recorded during the survey ranged from 1.8° to 11.3°C (Fig. 5). As in most previous surveys, surface temperature increased from east to west across the shelf, reflecting the progression of summer warming as the survey proceeded from east to west.

Sea bottom temperatures ranged from -1.6° to 8.2°C (Fig. 6). Warmer bottom temperatures (above 3.0° C) occurred along the inner shelf from the northern portion of Bristol Bay to Nunivak Island, and most of the outer shelf west of the Pribilof Islands. A cold pool (<2°C) occupied most of the mid-shelf at depths between 50 and 100 m and extended south to the Alaska Peninsula and into Bristol Bay.

In general, water temperatures were lower than the long-term mean from 1982 to 2007. The 2007 sea surface temperature averaged 6.31°C; lower than the long-term mean of 6.71°C. Mean bottom temperature was 0.08°C lower than 2006 with an average of 1.79 °C (Fig. 7), and approximately 0.8°C cooler than the long-term average of 2.59°C.

Relative fishing powers of survey vessels

Historically, two vessels, fishing alternate columns, have been used to conduct the eastern Bering Sea shelf bottom-trawl survey. Fishing power corrections (FPC) have been applied when statistical differences of mean CPUE values were detected between the two vessels (Kappenman 1992). The underlying assumption for using an FPC is that one survey vessel was less efficient at catching fish than the other survey vessel (e.g., speed effects, operator effects, fishing gear effects) and this systematic error needed to be corrected. Table 6 shows the calculated FPCs, by fish species, which were applied to CPUE estimates for the less-efficient survey vessel for survey years 1982-2005. Due to uncertainties of the FPC and the risk of

Table 6. --Calculated fishing power corrections (FPC), by fish species, that were applied to CPUE estimates for the less-efficient survey vessel for survey years 1982-2005.

Year	Rajidae	Alaska skate	Arrowtooth flounder	Kamchatka flounder	<i>Atheresthes</i> spp.	Pacific halibut	<i>Hippoglossoides</i> spp.	Yellowfin sole	<i>Lepidopsetta</i> spp.	Alaska plaice	Pacific cod	Walleye pollock
1982	--	--	--	--	--	0.952	--	--	--	--	--	--
1983	--	--	0.787	--	--	0.826	--	0.943	--	0.741	--	0.885
1984	--	--	--	--	--	--	0.73	--	--	0.943	0.901	0.807
1985	--	--	--	--	--	--	0.909	0.901	0.935	--	--	0.971
1986	--	--	0.952	--	--	--	--	--	0.98	0.98	--	0.98
1987	--	--	0.901	--	--	--	--	0.926	--	0.935	0.87	--
1988	0.723	--	--	--	--	--	0.957	0.776	0.977	0.907	--	0.969
1989	--	--	--	--	0.877	0.685	0.949	--	0.976	0.907	--	--
1990	0.776	--	--	--	--	0.951	0.869	--	--	0.898	--	0.994
1991	--	--	--	--	--	0.902	--	--	--	--	--	--
1992	--	--	--	--	0.781	0.847	0.877	0.901	0.909	0.943	0.917	0.971
1993	--	--	0.787	--	--	--	--	--	0.885	--	0.917	0.87
1994	0.862	--	0.855	--	--	0.97	0.909	0.99	0.877	--	0.99	--
1995	0.787	--	--	--	--	--	--	--	--	--	--	--
1996	0.893	--	--	--	--	0.926	--	0.926	0.885	--	--	0.833
1997	0.98	--	--	--	--	0.877	0.943	--	0.926	0.971	--	0.877
1998	--	--	--	--	--	0.962	0.98	0.901	--	--	0.909	0.93
1999	0.807	--	--	--	--	--	0.994	0.921	0.916	0.77	0.945	--
2000	--	--	--	--	--	--	0.982	--	0.944	--	--	0.898
2001	--	--	--	--	--	0.91	--	0.767	0.922	--	0.951	--
2002	--	0.733	--	--	0.906	--	0.92	0.883	0.952	0.979	0.901	0.972
2003	--	--	--	--	0.941	--	--	0.913	--	--	0.989	--
2004	--	0.96	--	--	--	--	--	--	--	0.939	0.874	--
2005	--	0.765	0.829	--	--	0.881	--	--	--	0.979	--	0.815

increasing overall error in CPUE estimates (Munro 1998), the application of an FPC was discontinued starting in 2006.

Applying these FPCs may have corrected for systematic bias, however, their application did not guarantee a lower overall error, even when the differences between mean CPUE values were statistically significant (Munro 1998). Moreover, application of an FPC to the eastern Bering Sea trawl survey data does not take into account recent advances to reduce systematic errors between vessels using improved monitoring of survey trawls (Somerton and Weinberg 2001, Zimmerman et al. 2003), and recent knowledge from scientific studies regarding gear performance and survey trawl catching efficiency (Weinberg and Kotwicki in review, Weinberg 2003, Kotwicki and Weinberg 2005, Kotwicki et al. 2006, Somerton et al. 2007, Weinberg and Somerton 2006). Furthermore, real spatial and temporal differences can occur between alternate columns, and the application of FPCs can potentially mask these differences.

The RACE Groundfish Assessment Program is currently investigating sources for systematic errors in area swept calculations and developing methods for improving the precision and accuracy of area-swept estimates of abundance. Another critical aspect currently underway is the development of a relational database that will enable staff to analyze data using the improved methods. Until the methods under investigation are reviewed and finalized and the new database is fully operational, the FPC adjustments to catch for years prior to 2006 will remain unchanged.

Relative abundance

The relative abundance of the 11 most abundant species and species groups of fishes are presented in Figure 8. These taxa accounted for 74.9% (238.4 kg/ha) of total catch mean CPUE

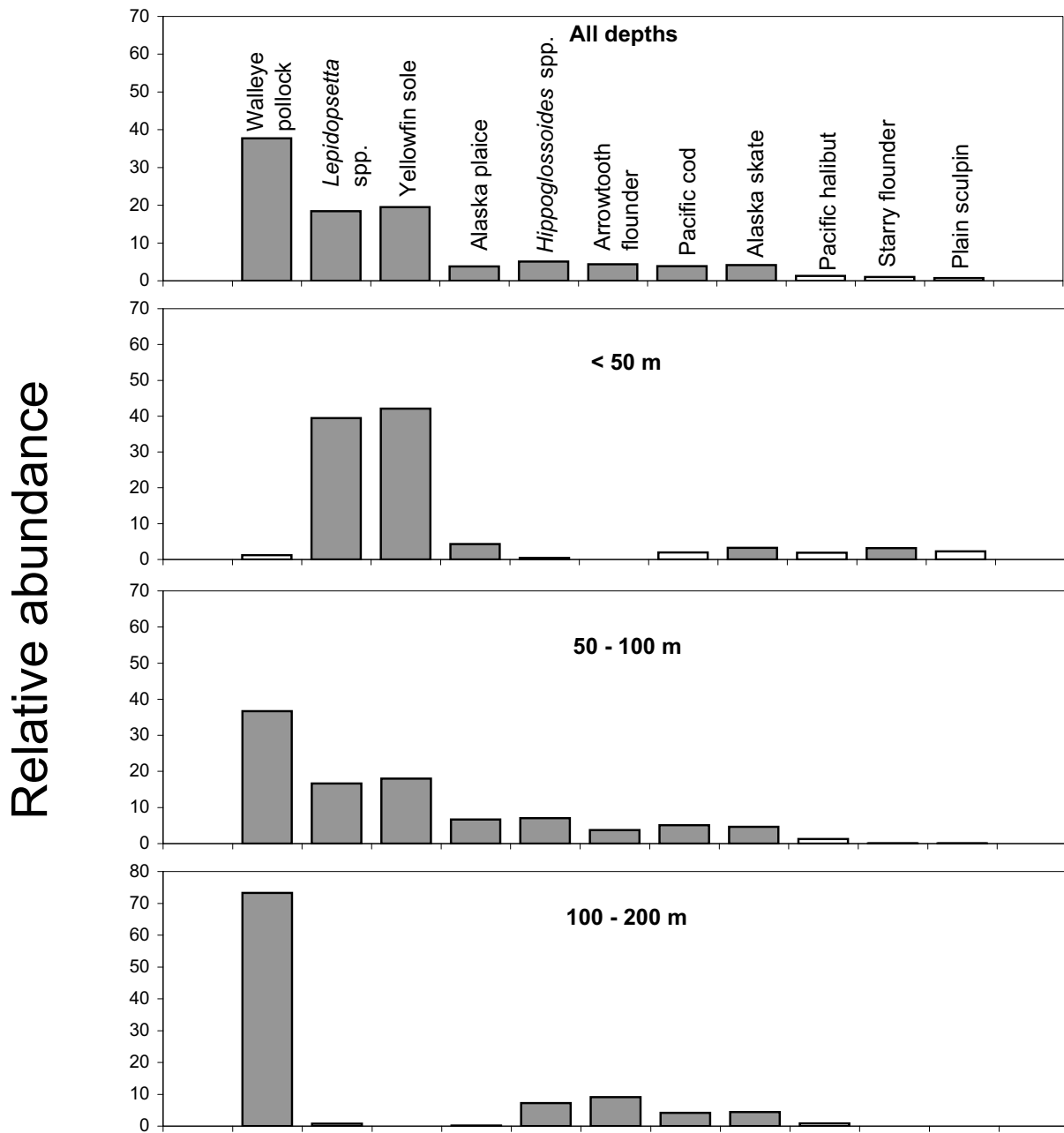


Figure 8. -- Relative abundance (%CPUE in kg/ha) of principal groundfish species (top 11 for all depths combined) by depth zones and for all depths combined for the 2007 eastern Bering Sea bottom trawl survey.

(318.3 kg/ha) and 96.6% of total fish mean CPUE (246.7 kg/ha). The walleye pollock mean CPUE for all areas combined was 89.7 kg/ha. Walleye pollock was the dominant groundfish species at depths between 50 and 200 m. This species was encountered at nearly all sampling stations, with the largest mean catches observed in the outer shelf stations. Pacific cod were also caught primarily in the 50-200 m-depth zone with an overall mean CPUE of 9.1 kg/ha. Both northern and southern rock sole, as well as yellowfin sole with overall mean catch rates of 44.0 and 46.5 kg/ha, respectively, were abundant in water less than 70 m. Snow crab was the most abundant commercially important crab species encountered, with a total average catch rate of 5.7 kg/ha. Red king crab and Bairdi Tanner crab mean CPUEs were slightly less at 2.0 kg/ha and 2.7 kg/ha, while blue king crab had the lowest overall catch rate at 0.2 kg/ha. See Appendix C for a descending rank of all organisms caught.

Biomass, abundance, distribution, CPUE, and size composition of principal species and species groups

A total of 89 species of fish representing 16 families and 60 genera were identified in the catches from the entire survey area, including the 20 northwest stations (Appendix A1). In addition a total of 281 individual invertebrate taxa were identified from 15 phyla with 178 identified to the species level (Appendix A2).

Total demersal animal biomass for the standard survey area was estimated at 15.4 million t, of which fish species accounted for 77% (11.8 million t; Table 7) and invertebrates 23% (3.6 million t; Table 8). Greatest concentrations of fish biomass were located in Bristol Bay, along the Alaska Peninsula, around the Pribilof Islands, and in the outer shelf north of the Pribilofs (Fig. 9). The fish biomass was dominated by pleuronectids (6.4 million t)

and gadids (4.6 million t; Table 7). The biomass of invertebrates was composed primarily of crustaceans (1.4 million t), echinoderms (1.3 million t), and crab (1.3 million t; Table 8). Fish catches from the 20 northwest stations were similar to the rest of the survey also dominated by pleuronectids and gadids (Table 9).

Geographic distributions, population numbers, biomass estimates, and size composition are presented in Figures 10 - 28 and Tables 11 - 20 for each of the following commercially important eastern Bering Sea groundfish: walleye pollock; Pacific cod; yellowfin sole; northern and southern rock sole grouped (*Lepidopsetta* spp.); flathead sole and Bering flounder grouped (*Hippoglossoides* spp.); Alaska plaice; Greenland turbot; arrowtooth flounder; Kamchatka flounder (*Atheresthes evermanni*); and Pacific halibut. Estimates are given separately for each of the 10 geographic strata used in the analysis (Table 1).

Estimated biomass, population numbers, and mean size (by length and weight) are summarized by stratum and the entire survey area. Size composition data are illustrated in histograms relating the population percentage by 1 cm interval of length for each stratum and in population numbers for the total survey area. Catch-per-unit-effort (CPUE), population, and biomass estimates and associated variances and confidence limits are listed for each species by stratum.

Appendices to the report contain detailed results of the survey including population estimates by sex and size classes, and rank of fish and invertebrate taxa by unweighted total CPUE (kg/ha).

Total fish

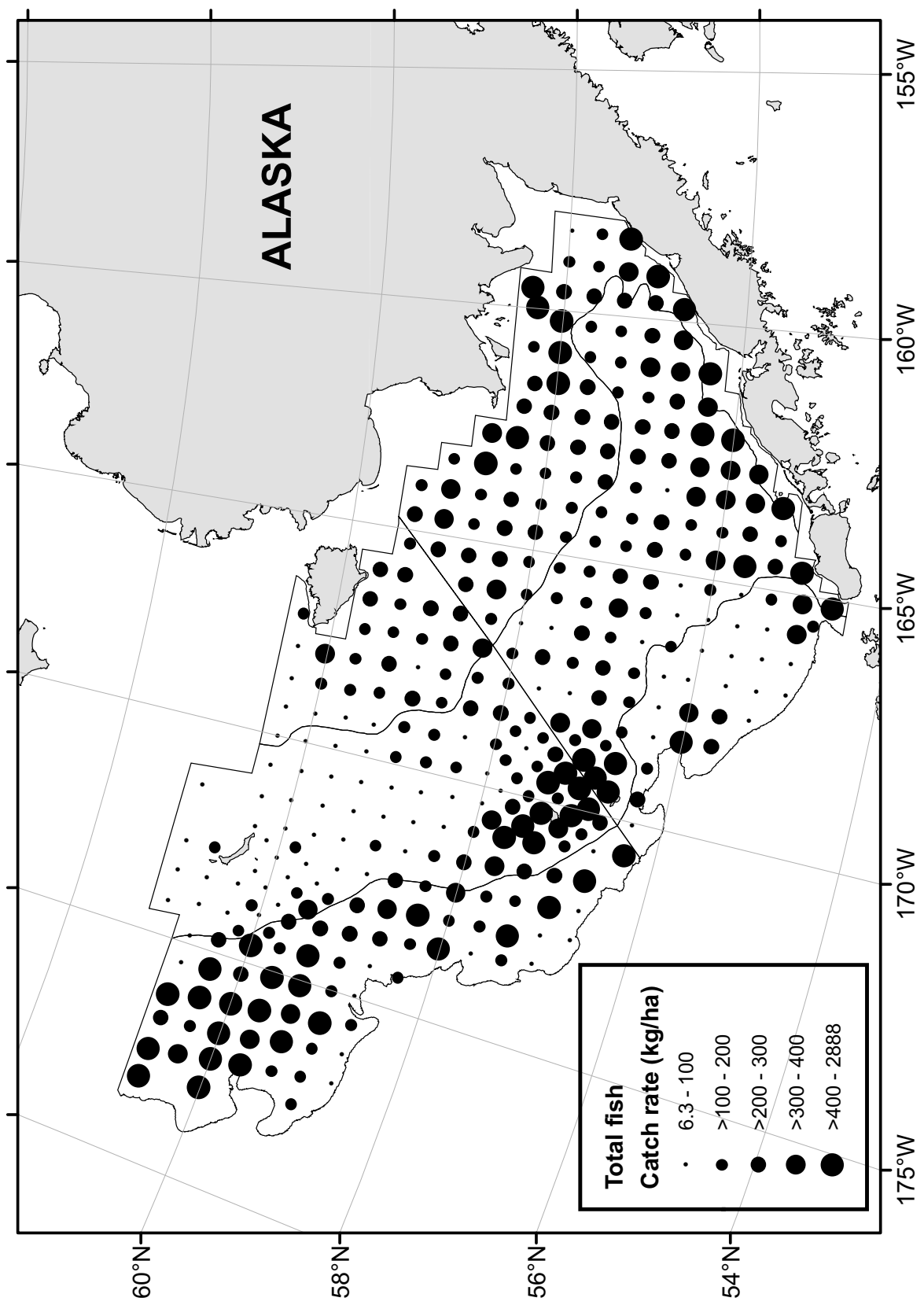


Figure 9. -- Distribution and relative abundance (kg/ha) of total fish caught during the 2007 eastern Bering Sea bottom trawl survey.

Table 7. -- Biomass estimates (t) for major fish species and groups taken during the 2007 eastern Bering Sea bottom trawl survey.

Taxon	Estimated total		Proportion of total animal biomass ^b	Estimated biomass by stratum (t)					
	biomass (t) ^a and 95% confidence			10	20	30	40	50	60
Gadidae (cods)									
Walleye pollock	4,156,687 ±	21%	0.2695	24,554	14,975	1,076,871	415,995	273,844	2,350,446
Pacific cod	423,703 ±	16%	0.0275	45,535	19,840	67,630	140,785	13,793	136,121
Other cods	3,877 ±	64%	0.0003	1,855	281	0	1,719	0	22
Total cods	4,584,267 ±	19%	0.2972	71,944	35,096	1,144,501	558,499	287,637	2,486,590
Anoplopomatidae									
Sablefish	37 ±	164%	0.0000	0	0	37	0	0	0
Scorpaenidae (rockfish)									
Pacific ocean perch	2,060 ±	65%	0.0001	0	0	0	0	1,912	148
Other rockfish	6,019 ±	204%	0.0004	0	0	0	0	6,019	0
Total rockfish	8,079 ±	201%	0.0005	0	0	0	0	7,931	148
Pleuronectidae (flatfishes)									
Yellowfin sole	2,152,738 ±	18%	0.1396	987,483	431,976	599,760	133,456	63	0
Rock sole	2,036,355 ±	27%	0.1320	934,583	395,296	367,272	311,003	2,268	25,932
<i>Hippoglossoides</i> spp.	562,396 ±	18%	0.0365	15,922	161	198,152	88,380	63,551	196,230
Alaska plaice	421,765 ±	17%	0.0273	82,703	63,411	141,685	129,378	0	4,588
Arrowtooth flounder	482,184 ±	15%	0.0313	973	0	130,459	23,768	151,387	175,598
Kamchatka flounder	64,299 ±	16%	0.0042	0	0	5,495	3,372	10,813	44,618
Greenland turbot	12,993 ±	39%	0.0008	0	0	505	893	0	11,595
Pacific halibut	144,201 ±	14%	0.0093	39,620	23,070	30,365	20,762	6,873	23,511
Other flatfish	555,288 ±	14%	0.0360	172,764	76,956	159,177	129,484	8,970	7,937
Total flatfish	6,432,219 ±	26%	0.4170	2,234,048	990,871	1,632,870	840,496	243,925	490,010
Clupeidae (Pacific herring)									
Clupeidae (Pacific herring)	27,846 ±	60%	0.0018	9,061	4,541	13,747	449	0	47
Cottidae (sculpins)									
Cottidae (sculpins)	215,872 ±	15%	0.0140	66,740	23,701	39,335	44,057	3,041	38,998
Zoaridae (eelpouts)									
Zoaridae (eelpouts)	31,938 ±	29%	0.0021	0	0	1,135	11,141	428	19,235
Osmeridae (smelts)									
Osmeridae (smelts)	4,503 ±	41%	0.0003	1,639	31	899	16	1,910	8
Agonidae (poachers)									
Agonidae (poachers)	19,071 ±	17%	0.0012	3,434	5,181	4,821	5,246	339	50
Cyclopteridae (snailfishes)									
Cyclopteridae (snailfishes)	1,982 ±	51%	0.0001	0	32	0	1,873	8	69
Alaska skate									
Alaska skate	457,941 ±	14%	0.0297	57,221	52,137	91,001	99,821	28,135	129,627
Other skates									
Other skates	17,295 ±	47%	0.0011	49	0	3,681	943	6,626	5,997
Other fish									
Other fish	9,416 ±	63%	0.0006	411	508	490	647	3,442	3,919
Total fish	11,810,464 ±	11%	0.7657	2,444,547	1,112,097	2,932,515	1,563,186	583,421	3,174,698

^aDifferences in sums of estimates and totals are due to rounding.

^bProportion of total estimated biomass, fish and invertebrates combined, for the total survey area = 15,425,051 t.

Table 8. -- Biomass estimates (t) for major invertebrate species and groups taken during the 2007 eastern Bering Sea bottom trawl survey.

Taxon	Estimated total biomass (t) ^a and 95% confidence	Proportion of total animal biomass ^b	Estimated biomass by stratum (t)					
			10	20	30	40	50	60
Crustacea								
Crabs	791,333 ± 11%	0.0530	66,072	24,381	207,962	328,857	37,895	126,167
Shrimps	3,258 ± 35%	0.0002	16	18	27	513	416	2,268
Other crustaceans	103,771 ± 29%	0.0070	42,699	2,179	43,342	14,723	73	755
Total crustaceans	898,361 ± 11%	0.0602	42,715	2,197	43,369	15,236	489	3,023
Mollusca								
Gastropoda (snails)	271,369 ± 14%	0.0182	14,669	5,363	123,244	53,614	6,099	68,380
Pelecypoda (bivalves)	17,454 ± 106%	0.0012	1,622	180	13,631	1,462	218	342
Squids	11 ± 137%	0.0000	0	0	0	0	2	9
Octopuses	2,192 ± 59%	0.0001	0	0	344	442	0	1,406
Other mollusks	7,371 ± 49%	0.0005	591	266	1,718	4,266	43	487
Total mollusks	298,396 ± 15%	0.0200	16,882	5,809	138,935	59,784	6,362	70,624
Echinodermata								
Asteroidea (starfish)	987,263 ± 14%	0.0661	447,575	114,148	194,269	174,931	655	55,686
Ophiuroidea (brittle stars)	255,686 ± 27%	0.0171	5,602	2,805	73,756	48,298	122	125,102
Echinoidea (sea urchin)	55,581 ± 112%	0.0037	300	0	34,205	13,514	6,118	1,445
Holothuroidea (sea cucumbers)	7,030 ± 60%	0.0005	732	0	2,765	3,523	8	2
Total echinoderms	1,305,560 ± 14%	0.0875	454,209	116,953	304,994	240,266	6,903	182,234
Ascidiacea								
Porifera (sponges)	400,043 ± 32%	0.0268	51,977	39,766	125,613	182,601	9	77
Coelenterata	73,302 ± 98%	0.0049	1,585	18	68,901	938	934	927
Other invertebrates	136,703 ± 27%	0.0092	6,035	2,843	46,628	50,687	14,176	16,335
	3,543 ± 46%	0.0002	48	44	920	709	102	1,719
Total invertebrates	3,115,908 ± 27%	0.2088	573,450	167,629	729,360	550,221	28,975	274,940

^aDifferences in sums of estimates and totals are due to rounding.

^bProportion of total estimated biomass, fish and invertebrates combined, for the total survey area = 15,425,051 t.

Table 9. -- Relative abundance of fish species collected from the 20 northwest non-standard survey stations during the 2007 eastern Bering sea bottom trawl survey.

Common name	Scientific name	Biomass (t)	Population numbers
Bering skate	<i>Bathyraja interrupta</i>	153	55,821
Alaska skate	<i>Bathyraja parmifera</i>	21,692	8,429,937
Kamchatka flounder	<i>Atheresthes evermanni</i>	1,013	849,286
Greenland turbot	<i>Reinhardtius hippoglossoides</i>	3,733	5,015,279
Pacific halibut	<i>Hippoglossus stenolepis</i>	1,657	363,674
flathead sole (grouped)	<i>Hippoglossoides</i> sp.	13,623	72,012,967
yellowfin sole	<i>Limanda aspera</i>	111	441,024
rock sole (grouped)	<i>Lepidopsetta</i> sp.	1,391	3,348,569
Alaska plaice	<i>Pleuronectes quadrituberculatus</i>	1,339	1,010,209
Pacific herring	<i>Clupea pallasii</i>	0	34,899
butterfly sculpin	<i>Hemilepidotus papilio</i>	349	566,456
great sculpin	<i>Myoxocephalus polyacanthocephalus</i>	2,868	1,353,826
plain sculpin	<i>Myoxocephalus jaok</i>	98	102,645
Pacific cod	<i>Gadus macrocephalus</i>	27,514	21,944,781
walleye pollock	<i>Theragra chalcogramma</i>	180,856	667,440,274
capelin	<i>Mallotus villosus</i>	9	591,938
marbled eelpout	<i>Lycodes raridens</i>	2,368	2,414,476
wattled eelpout	<i>Lycodes palearis</i>	1,470	11,808,242
shortfin eelpout	<i>Lycodes brevipes</i>	3,234	35,487,668

Walleye pollock

The total biomass and abundance of walleye pollock for the entire survey area was 4.16 million t and 6.61 billion fish and individual walleye pollock weighed an average of 0.63 kg and averaged 39.5 cm in length (Table 10a). The 2007 biomass estimate was higher than the 2006 estimate of 2.85 million t (Lauth and Acuna 2007). This estimate may in part be due to a shift of the population away from the survey area caused by the colder than average water temperatures on the Bering Sea shelf during 2007 (Ianelli et al. 2007, Kotwicki et al. 2005).

Walleye pollock were captured at 95% of the standard survey stations (Fig. 10). Catch rates were lowest on the inner shelf compared to the middle and outer shelves and the highest densities were north of the Alaska Peninsula, around the Pribilof Islands, and along the outer shelf (Fig. 10). Stratum 62 had the highest catch rate of walleye pollock compared to all other strata (Table 10b). Length measurement data collected from 334 hauls showed higher proportion of smaller walleye pollock in Strata 10, 20, and 40 compared to the outer shelf strata (Fig. 11).

Pacific cod

Like walleye pollock, Pacific cod was also broadly distributed across the shelf being observed in 98% of the trawls (Fig. 12). The highest catch rates of Pacific cod were observed in the northwestern half of the shelf in Stratum 60 (Table 11a), especially in Strata 42, 43, and 62 around St. Matthew Island and the Pribilof Islands (Table 11b; Fig. 12). Similar to walleye pollock, the highest proportions of juvenile Pacific cod were along the inner shelf in Stratum 10 (Fig. 13).

Compared to 2006, there was a decrease in Pacific cod biomass from 0.52 to 0.42 million t, however, population size increased from 394 to 733 million while length measurement data collected from 348 hauls showed that the average fish length decreased from 37.9 to 24.8 cm suggesting a strong incoming year class (Table 11b).

Yellowfin sole

The highest catch rates of yellowfin sole occurred on the inner shelf (Table 12a; Fig. 14). The lowest catch rates were in the vicinity of St. Matthew Island and the Pribilof Islands. Yellowfin sole were very low in abundance or absent from Strata 50 and 60 (Table 12b). Yellowfin sole in the 10-20 cm length range were found on the inner shelf and were mostly absent from the middle shelf strata (Fig. 15).

The biomass of yellowfin sole in 2007 was 2.15 million t and the population was 8.51 billion (Table 12a), remaining relatively unchanged from 2006. There was also little change in mean weight of yellowfin sole (+0.01 kg) or the mean length (-0.4 cm) (Table 12a).

Northern and southern rock sole

The distribution of rock sole was very similar to that of yellowfin sole except rock sole occurred at higher densities around the Pribilof Islands (Stratum 42) and the distribution extended onto the outer shelf (Tables 13a and 13b; Fig. 16). The composition of rock sole shifted from smaller to larger sizes from inshore to offshore strata (Fig. 17).

Biomass decreased slightly from 2.2 to 2.0 million t and population numbers decreased from 15.1 to about 11.0 billion (Table 13a). Compared to 2006, mean weight and length of rock

sole increased from 0.15 to 0.19 kg and from 20.8 to 22.7 cm (Table 13a). Length measurements were collected from 316 hauls (Table 13b).

Flathead and Bering sole

Flathead and Bering sole (*Hippoglossoides* spp.) were distributed on the middle and outer eastern Bering Sea shelf. The highest CPUEs were in the northwest outer shelf (Stratum 60), near the Pribilof Islands (Stratum 42), and in the southern middle shelf region (Stratum 31) (Tables 14a and 14b; Fig. 18). Most *Hippoglossoides* spp. ranged in size between 10 and 50 cm and length distributions were somewhat bimodal which may be partly due to the combination of species within the genus (Fig. 19).

Biomass decreased from 0.64 million t in 2006 to 0.56 million t in 2007 with a proportional decrease in population from 2.1 to 1.9 billion (Table 14a). The overall mean length and mean weight remained virtually unchanged 2006 to 2007 (Table 14a).

Alaska plaice

Alaska plaice was most abundant on the inner and middle shelf centering along the 50 m contour with lower densities occurring on the shallow inner shelf stations and deeper middle shelf stations (Fig. 20). Stratum 30 had the highest proportion of biomass of all the strata (Table 15a) and Stratum 41 had the highest catch rate by weight compared to other strata (Table 15b). Smaller Alaska plaice (< 20 cm) occurred in Strata 10 and 20, while the deeper strata had higher percentages of plaice > 40 cm (Fig. 21).

Biomass decreased from 0.64 million t to 0.42 million t, and the population from 1.0 billion to 0.8 billion (Table 15a). The mean length of 35.1 cm decreased to 32.3 in 2007 and mean weight decreased from 0.62 kg to 0.52 kg (Table 15a). Length measurements were collected from 253 hauls (Table 15b).

Greenland turbot

Greenland turbot is an arctic flatfish species inhabiting the upper continental slope, although juveniles may spend several years on the continental shelf (Alton et al. 1988). Greenland turbot were captured in 67 out of 356 tows, and most of these tows were in the northwest part of the outer shelf (Fig. 22). Greenland turbot were absent in strata 10 and 20 while present only in low numbers in strata 30 and 40 (Table 16a; Fig. 23).

Biomass estimates in 2007 decreased slightly from 17.5 thousand t in 2006 to 13.0 thousand t in 2007 (Table 16a), however, population numbers increased from 7.9 to 9.3 million. The mean size and weight of turbot decreased from 54.8 cm and 2.2 kg in 2006 to 40.8 cm and 1.7 kg in 2007 (Table 16a). Stratum 61 had the highest mean CPUE by weight and stratum 62 had the highest mean CPUE by number (Table 16b).

Arrowtooth flounder

Arrowtooth flounder were observed all along the outer shelf and on the middle shelf south of latitude 58°N (Fig. 24). Catch rates were generally higher at the deeper more southern stations (Fig. 24) and no arrowtooth flounder were present in Stratum 20 (Table 17a; Fig. 25). Estimates of both biomass and population size decreased in 2007 compared to 2006; biomass decreased from 0.61 to 0.48 million t and population from 1.3 to 1.0 billion (Table 17a). Stratum

50 had the highest proportion of biomass and the highest CPUEs of any strata for both weight and number (Table 17b).

Kamchatka flounder

Kamchatka flounder were observed at all but two of the outer shelf stations but were absent in Strata 10 and 20 (Table 18a; Fig. 26). The highest catch rates on the outer shelf were observed north of latitude 56°N in Stratum 61 (Table 18b; Fig. 26). Compared to 2006, the biomass increased from 60.4 to 64.3 thousand t and the population decreased from 187 to 144 million fish. There was an increase in both mean weight (0.32 to 0.44 kg) and length (31.3 to 34.1 cm) (Table 18a). Length measurements were collected from 127 hauls (Table 18b).

Pacific halibut

Pacific halibut were widely distributed and captured at 80% of the stations, but were generally absent in trawl catches at or north of 60°N (Fig. 28). Pacific halibut were present in all strata, with juveniles prevalent along the coast of the inner strata 10 and 20 and southern edge of strata 30 (Fig. 29). Estimated biomass and population decreased from 156 thousand t and 134 million halibut in 2006 to 144 thousand t and 119 million in 2007 (Table 19a). Catch rates in terms of weight and numbers were lower in the outer shelf Strata 50, 61, and 62 (Table 19b) however, this is where the largest specimens were observed on the outer shelf with a mean weight and length of 1.2 kg and 39.3 cm (Table 19a).

Other fishes

Geographic distributions for some common ecologically important fish species are presented in Figures 30-44 and Tables 21-31. These species are Bering skate (*Bathyraja interrupta*), Alaska skate, warty sculpin, great sculpin, plain sculpin, bigmouth sculpin, wattled eelpout (*Lycodes palearis*), shortfin eelpout (*L. brevipes*), marbled eelpout, sturgeon poacher, Bering poacher (*Occella dodecaedron*), butterfly sculpin, eulachon (*Thaleichthys pacificus*), capelin (*Mallotus villosus*), and Pacific herring (*Clupea pallasii*), respectively.

Biomass and population estimates, as well as mean weight per individual, are given by stratum and total area. These tables are not provided for the pelagic species such as eulachon, capelin, and Pacific herring due to the bottom sampling nature of the survey. These species may be inadequately represented in the samples; however, plots are shown to give approximate geographic distribution.

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Walleye pollock

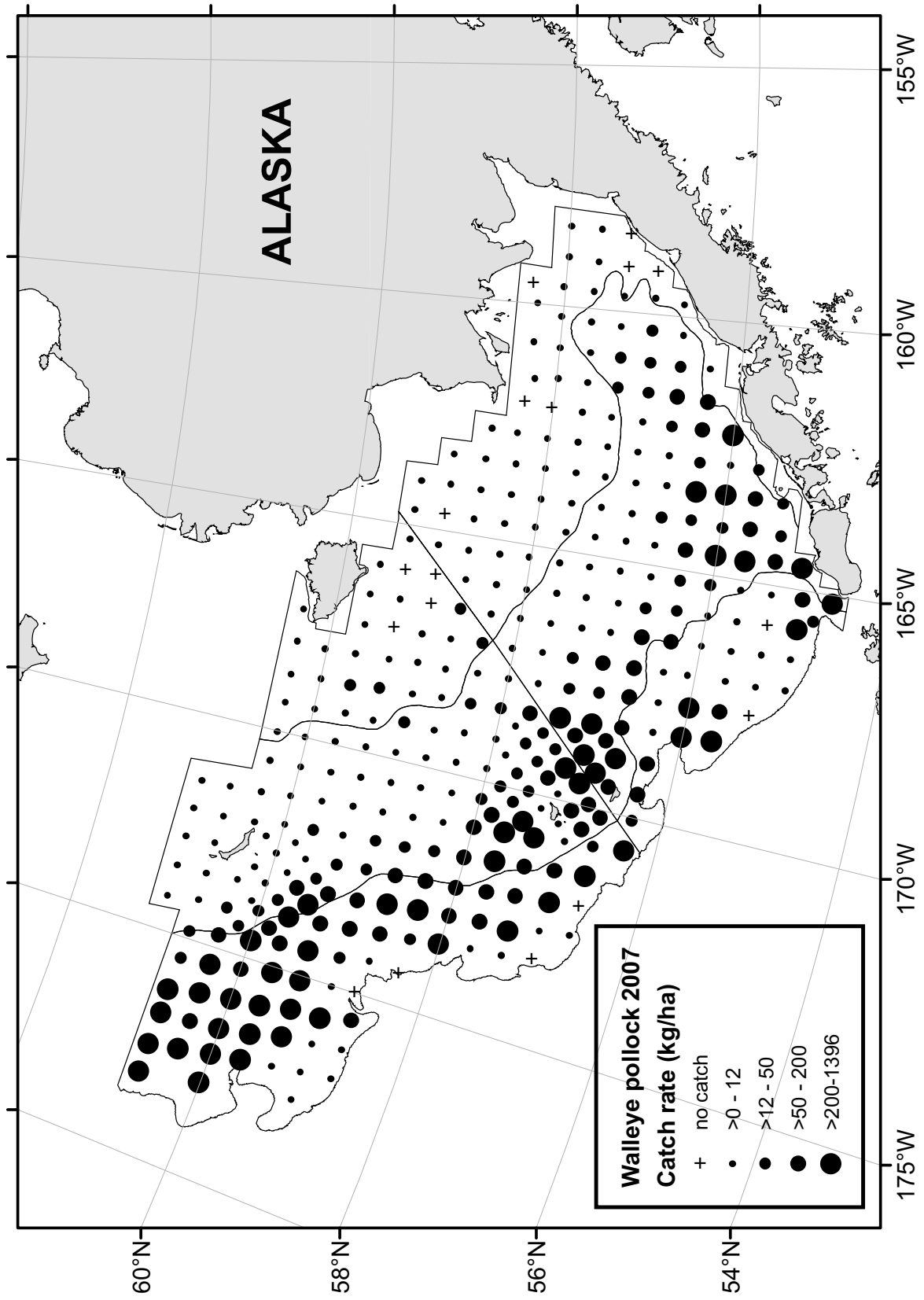


Figure 10. -- Distribution and relative abundance (kg/ha) of walleye pollock (*Theragra chalcogramma*) for the 2007 eastern Bering Sea bottom trawl survey.

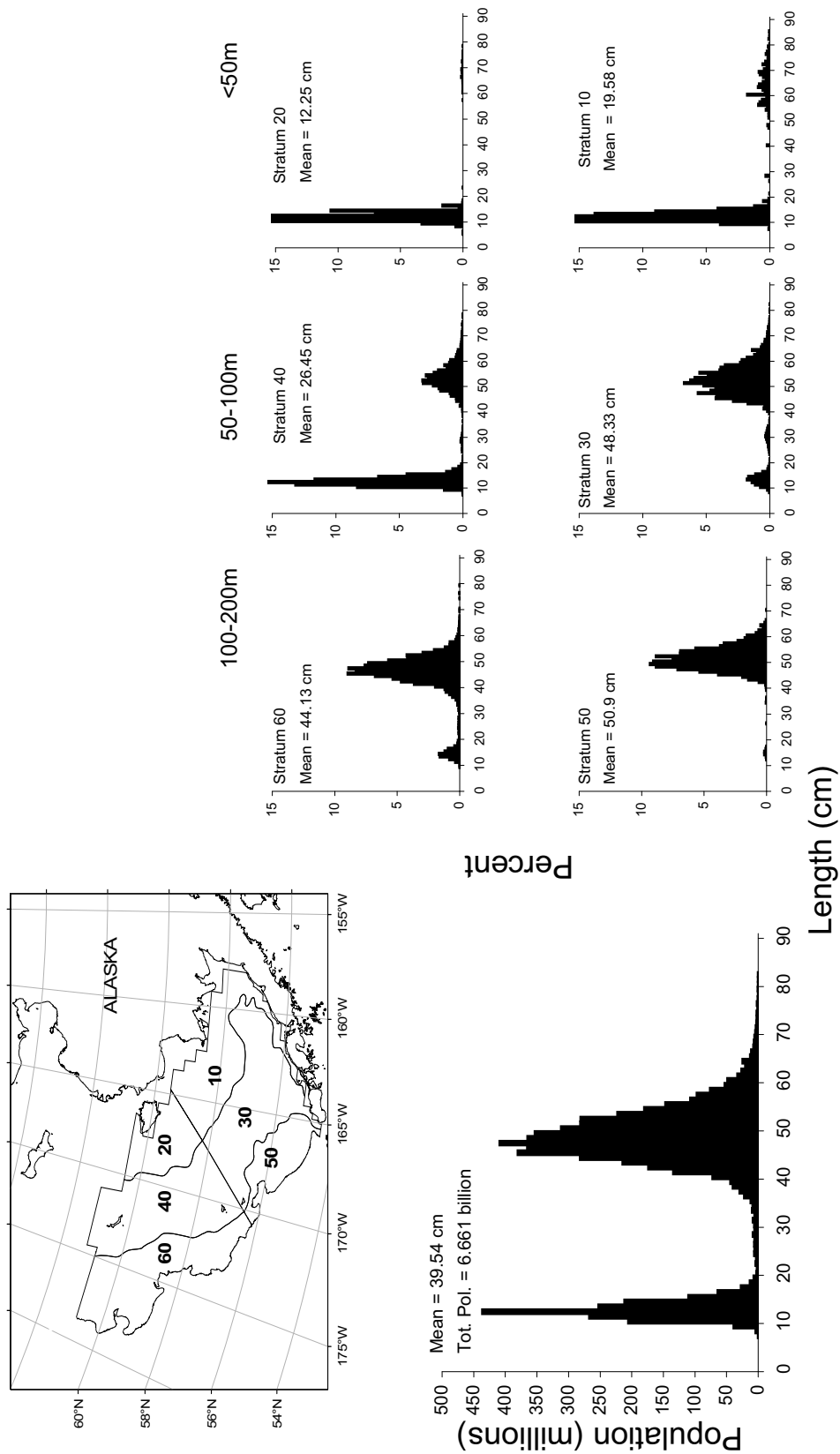


Figure 11. -- Estimated relative size distributions (sexes combined) of **walleye pollock** (*Theragra chalcogramma*) in terms of population numbers and percent by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Table 10a. -- Abundance estimates and mean size of **walleye pollock** (*Theragra chalcogramma*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	3.15	24,554	0.006	10.72	83,486,149	0.013	0.294	19.6
20	3.65	14,975	0.004	117.94	483,873,432	0.073	0.031	12.3
30	104.25	1,076,871	0.259	111.72	1,154,109,612	0.175	0.933	48.3
40	38.58	415,995	0.100	102.99	1,110,493,206	0.168	0.375	26.5
50	70.59	273,844	0.066	72.29	280,416,266	0.042	0.977	50.9
60	248.56	2,350,446	0.565	370.01	3,498,935,333	0.529	0.672	44.1
All Strata	89.70	4,156,687	1.000	142.68	6,611,313,999	1.000	0.629	39.5
95% confidence interval		± 876,681			± 1,273,658,618			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Table 10b. -- CPUE, population, and biomass estimates for **walleye pollock** (*Theragra chalcogramma*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Total hauls	Hauls with catch	Hauls with numbers	Hauls with length measurements	Mean CPUE (kg/ha)	Variance CPUE (kg/ha)	Mean CPUE (no./ha)	Variance CPUE (no./ha)
10	58	51	51	49	3.15	2.02	10.72	6.61
20	31	27	27	26	3.65	0.89	117.94	3,580.03
Subtotal	89	78	78	75	3.32	0.97	47.72	429.10
31	69	69	69	69	84.99	755.41	90.92	955.62
32	8	8	8	8	311.69	14,186.21	335.82	17,935.65
41	44	44	44	44	18.30	51.52	56.82	131.42
42	31	31	31	31	100.92	579.24	224.86	5,882.99
43	22	22	22	22	27.92	155.40	101.51	762.65
Subtotal	174	174	174	174	70.71	189.52	107.26	317.85
50	26	24	24	22	70.59	530.50	72.29	624.19
61	60	56	56	56	242.27	1,246.45	363.09	2,461.86
62	7	7	7	7	334.81	16,035.19	464.91	26,197.84
Subtotal	93	87	87	85	196.79	626.58	283.41	1,189.00
Total	356	339	339	334	89.70	91.30	142.68	192.71

Table 10b. -- Continued.

Population					
Stratum	Population	Variance population	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	83,486,149	4.01040E+14	57.00	43,013,703	123,958,595
20	483,873,432	6.02600E+16	30.00	0	985,877,679
Subtotal	567,359,581	6.06610E+16	30.39	74,770,892	1,059,948,271
31	859,454,912	8.53860E+16	68.00	275,036,127	1,443,873,698
32	294,654,700	1.38080E+16	7.00	16,750,096	572,559,304
41	356,308,149	5.16690E+15	43.00	211,036,410	501,579,887
42	539,913,605	3.39170E+16	30.00	163,292,920	916,534,290
43	214,271,452	3.39790E+15	21.00	93,025,222	335,517,682
Subtotal	2,264,602,818	1.41680E+17	114.95	1,511,804,301	3,017,401,335
50	280,416,266	9.39310E+15	25.00	80,764,800	480,067,733
61	3,200,064,903	1.91230E+17	59.00	2,316,293,873	4,083,835,933
62	298,870,430	1.08270E+16	6.00	44,255,409	553,485,452
Subtotal	3,779,351,600	2.11450E+17	69.48	2,859,686,630	4,699,016,569
Total	6,611,313,999	4.13790E+17	186.81	5,337,655,381	7,884,972,617

Biomass					
Stratum	Biomass (t)	Variance biomass	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	24,554	1.22326E+08	57.00	2,202	46,907
20	14,975	1.50137E+07	30.00	7,052	22,899
Subtotal	39,530	1.37340E+08	70.00	16,091	62,968
31	803,387	6.74980E+10	68.00	283,781	1,322,994
32	273,484	1.09210E+10	7.00	26,328	520,639
41	114,750	2.02552E+09	43.00	23,793	205,706
42	242,314	3.33948E+09	30.00	124,137	360,491
43	58,932	6.92356E+08	21.00	4,202	113,662
Subtotal	1,492,867	8.44760E+10	84.10	911,570	2,074,163
50	273,844	7.98331E+09	25.00	89,785	457,904
61	2,135,211	9.68180E+10	59.00	1,506,363	2,764,058
62	215,235	6.62688E+09	6.00	16,036	414,435
Subtotal	2,624,290	1.11430E+11	73.59	1,956,672	3,291,909
Total	4,156,687	1.96040E+11	153.30	3,280,006	5,033,367

Pacific cod

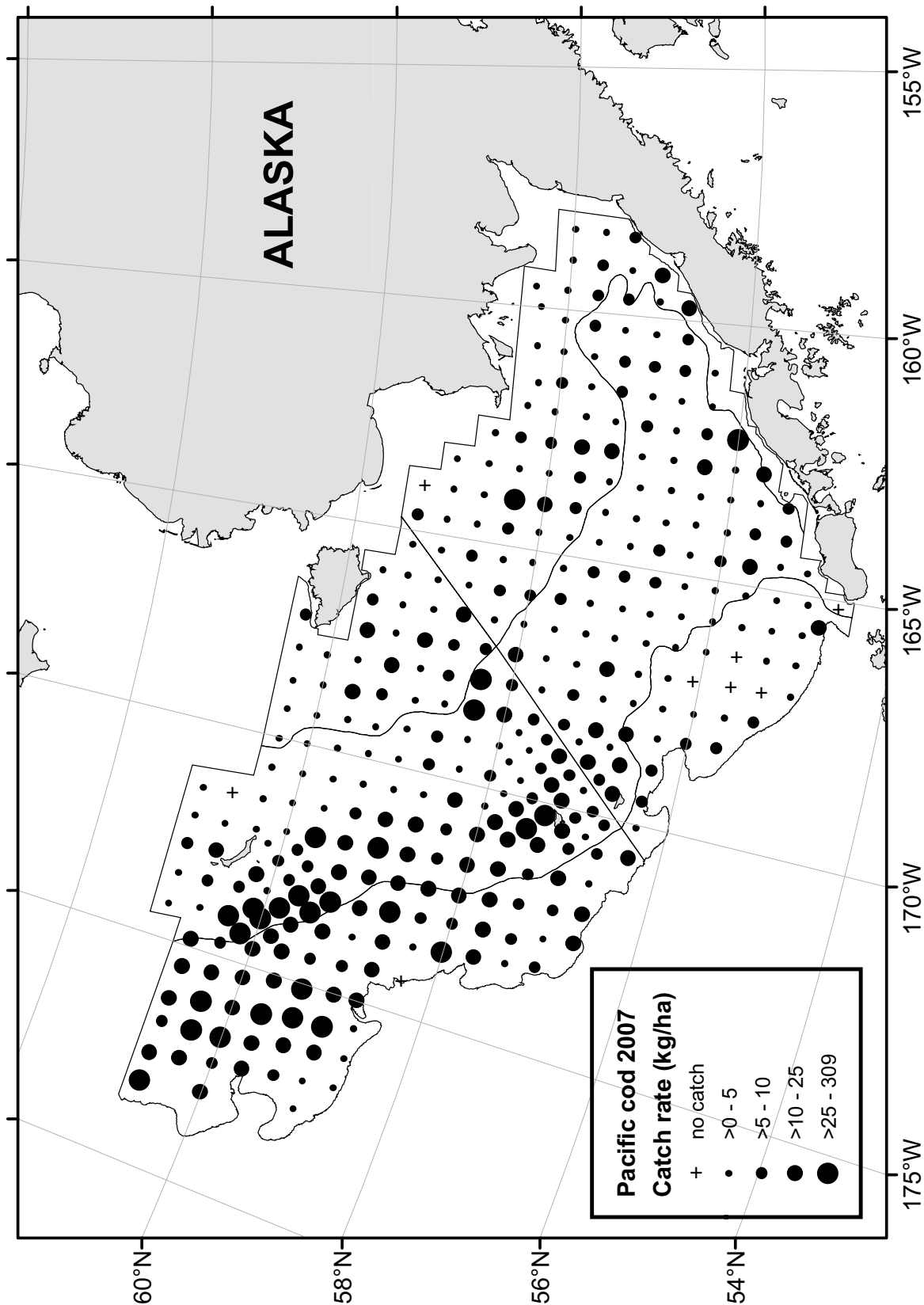


Figure 12. -- Distribution and relative abundance (kg/ha) of Pacific cod (*Gadus macrocephalus*) for the 2007 eastern Bering Sea bottom trawl survey.

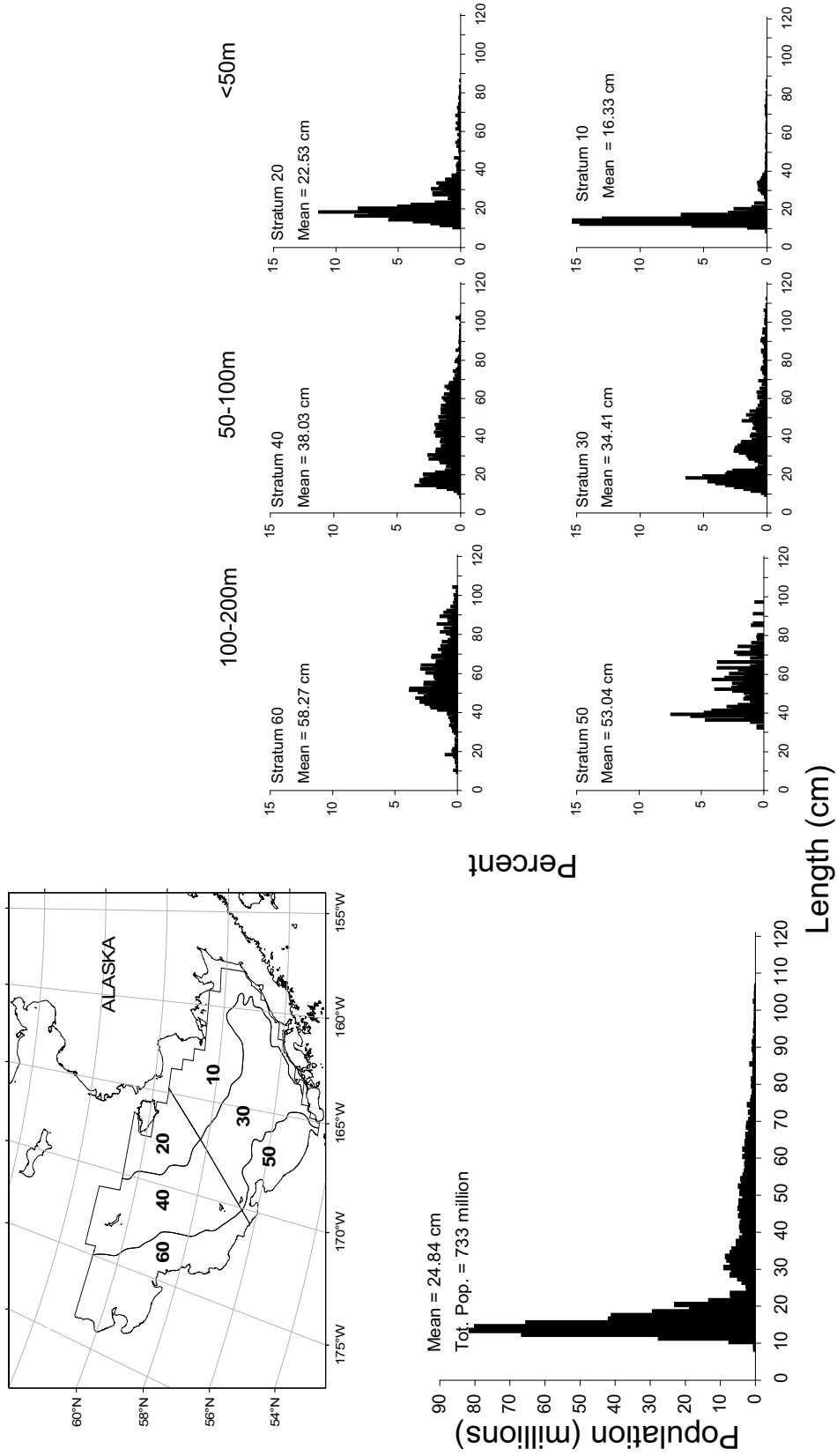


Figure 13. -- Estimated relative size distributions (sexes combined) of Pacific cod (*Gadus macrocephalus*) in terms of population numbers and percent by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Table 11a. -- Abundance estimates and mean size of **Pacific cod** (*Gadus macrocephalus*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	5.85	45,535	0.107	54.48	424,250,691	0.578	0.107	16.3
20	4.84	19,840	0.047	19.14	78,521,691	0.107	0.253	22.5
30	6.55	67,630	0.160	5.64	58,246,039	0.079	1.161	34.4
40	13.06	140,785	0.332	11.43	123,287,102	0.168	1.142	38.0
50	3.56	13,793	0.033	1.60	6,211,752	0.008	2.220	53.0
60	14.39	136,121	0.321	4.53	42,856,868	0.058	3.176	58.3
All Strata	9.14	423,703	1.000	15.83	733,374,144	1.000	0.578	24.8
95% confidence interval		± 69,623		±	391,911,782			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Table 11b. -- CPUE, population, and biomass estimates for **Pacific cod** (*Gadus macrocephalus*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Total hauls	Hauls with catch	Hauls with numbers	Hauls with length measurements	Mean CPUE (kg/ha)	Variance CPUE (kg/ha)	Mean CPUE (no./ha)	Variance CPUE (no./ha)
10	58	57	57	57	5.85	1.07	54.48	620.05
20	31	31	31	31	4.84	0.86	19.14	33.52
Subtotal	89	88	88	88	5.50	0.56	42.29	269.96
31	69	68	68	68	6.16	3.00	5.77	0.61
32	8	8	8	8	10.76	5.39	4.25	1.28
41	44	43	43	43	7.64	2.28	7.14	1.78
42	31	31	31	31	20.21	95.22	14.73	9.04
43	22	22	22	22	21.00	14.02	20.45	8.47
Subtotal	174	172	172	172	9.87	2.18	8.60	0.48
50	26	22	22	22	3.56	0.54	1.60	0.22
61	60	59	59	59	14.42	1.92	4.27	0.19
62	7	7	7	7	14.07	3.91	8.13	2.33
Subtotal	93	88	88	88	11.24	0.89	3.68	0.11
Total	356	348	348	348	9.14	0.56	15.83	17.88

Table 11b. -- Continued.

Population					
Stratum	Population	Variance population	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	424,250,691	3.76000E+16	57.00	32,366,659	816,134,724
20	78,521,691	5.64300E+14	30.00	29,942,842	127,100,540
Subtotal	502,772,382	3.81640E+16	58.72	112,061,055	893,483,709
31	54,519,263	5.48380E+13	68.00	39,708,788	69,329,737
32	3,726,777	9.86740E+11	7.00	1,377,513	6,076,040
41	44,762,136	7.00000E+13	43.00	27,853,261	61,671,011
42	35,367,451	5.21440E+13	30.00	20,622,052	50,112,850
43	43,157,515	3.77230E+13	21.00	30,382,352	55,932,678
Subtotal	181,533,142	2.15690E+14	145.83	152,160,315	210,905,969
50	6,211,752	3.25830E+12	25.00	2,493,309	9,930,195
61	37,628,450	1.47160E+13	59.00	29,875,560	45,381,341
62	5,228,418	9.61430E+11	6.00	2,829,077	7,627,759
Subtotal	49,068,620	1.89360E+13	84.45	40,365,547	57,771,693
Total	733,374,144	3.83990E+16	59.36	341,462,362	1,125,285,925

Biomass					
Stratum	Biomass (t)	Variance biomass	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	45,535	6.51080E+07	57.00	29,228	61,842
20	19,840	1.44520E+07	30.00	12,065	27,614
Subtotal	65,375	7.95599E+07	78.02	47,536	83,214
31	58,191	2.68313E+08	68.00	25,431	90,952
32	9,438	4.15309E+06	7.00	4,619	14,258
41	47,934	8.94702E+07	43.00	28,817	67,050
42	48,527	5.48967E+08	30.00	683	96,371
43	44,324	6.24510E+07	21.00	27,886	60,761
Subtotal	208,414	9.73354E+08	80.02	146,017	270,812
50	13,793	8.13308E+06	25.00	7,918	19,667
61	127,076	1.49167E+08	59.00	102,393	151,760
62	9,045	1.61488E+06	6.00	5,935	12,155
Subtotal	149,914	1.58915E+08	66.46	124,702	175,126
Total	423,703	1.21184E+09	119.07	354,080	493,326

Yellowfin sole

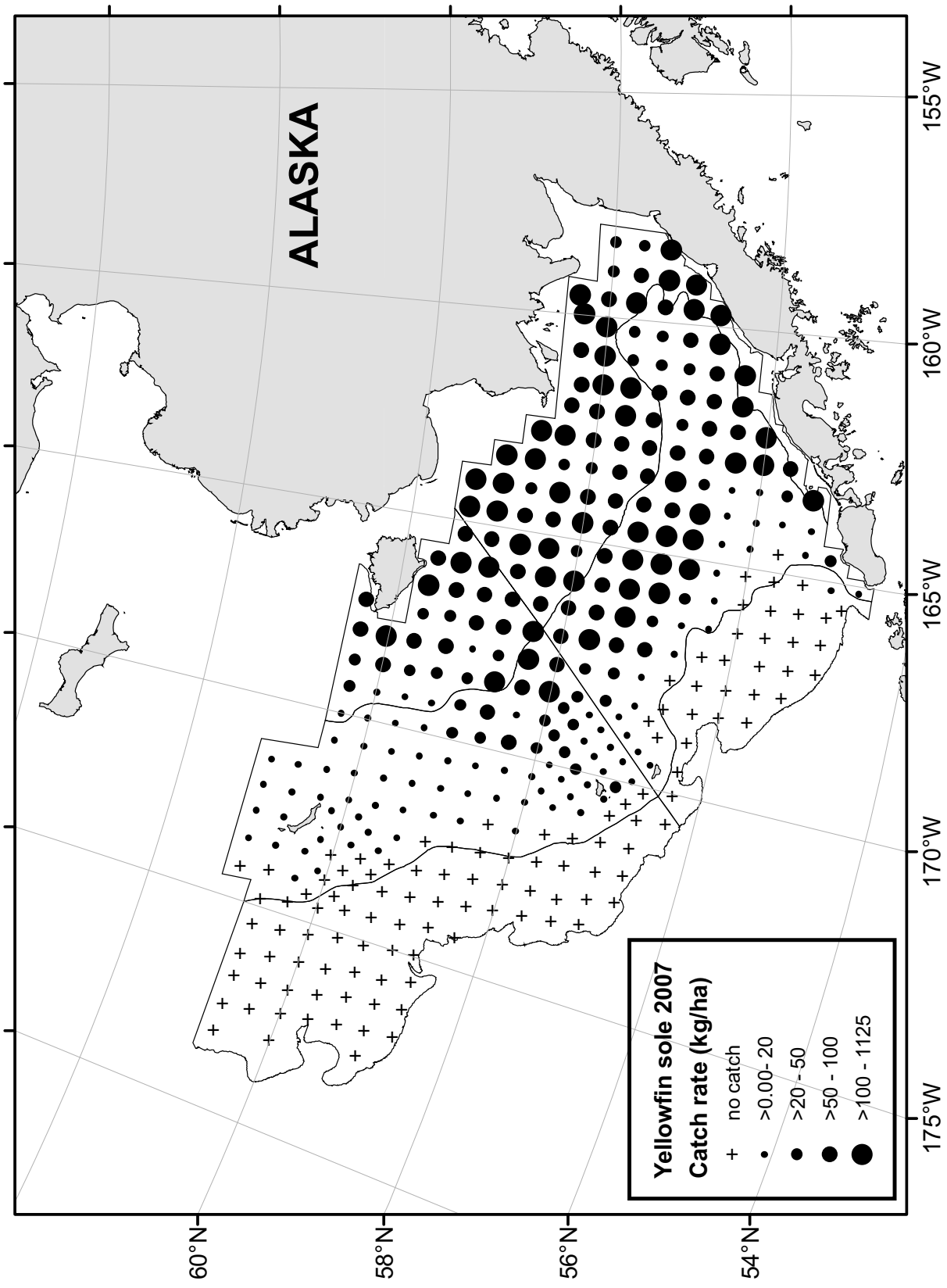


Figure 14. -- Distribution and relative abundance (kg/ha) of yellowfin sole (*Limanda aspera*) for the 2007 eastern Bering Sea bottom trawl survey.

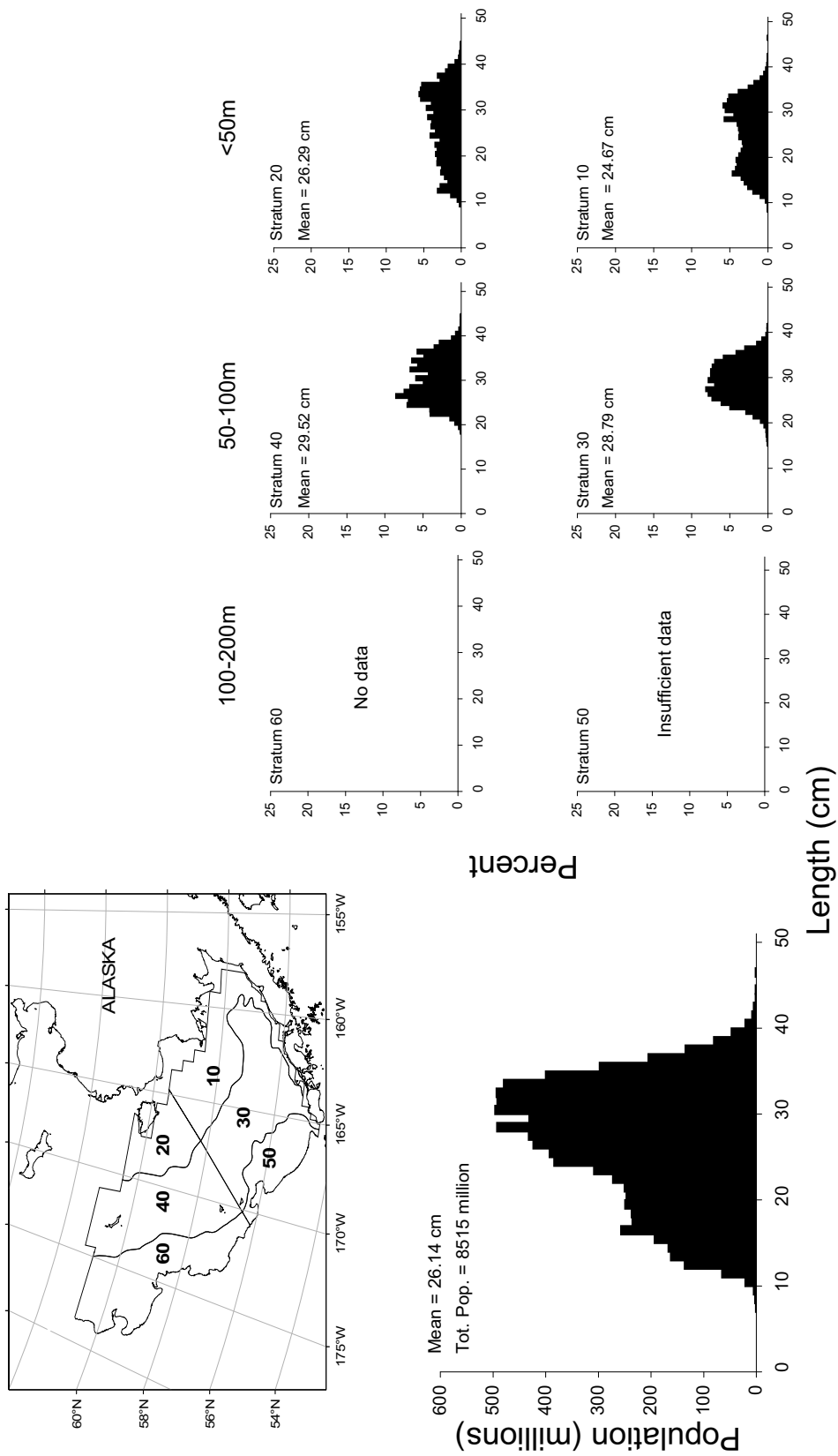


Figure 15. -- Estimated relative size distributions (sexes combined) of yellowfin sole (*Limanda aspera*) in terms of population numbers and percent by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Table 12a. -- Abundance estimates and mean size of **yellowfin sole** (*Limanda aspera*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	126.81	987,483	0.459	589.65	4,591,670,937	0.539	0.215	24.7
20	105.29	431,976	0.201	382.18	1,567,979,807	0.184	0.275	26.3
30	58.06	599,760	0.279	190.67	1,969,594,883	0.231	0.305	28.8
40	12.38	133,456	0.062	35.81	386,135,807	0.045	0.346	29.5
50	0.02	63	0.000	0.03	118,012	0.000	0.531	35.0
60	0.00	0	0.000	0.00	0	0.000	0.000	
All Strata	46.46	2,152,738	1.000	183.77	8,515,499,446	1.000	0.253	26.1
95% confidence interval		± 385,253			± 1,194,762,291			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Table 12b. -- CPUE, population, and biomass estimates for **yellowfin sole** (*Limanda aspera*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Total hauls	Hauls with catch	Hauls with numbers	Hauls with length measurements	Mean CPUE (kg/ha)	Variance CPUE (kg/ha)	Mean CPUE (no./ha)	Variance CPUE (no./ha)
10	58	58	58	58	126.81	181.54	589.65	3,222.48
20	31	31	31	31	105.29	1,260.70	382.18	6,466.90
Subtotal	89	89	89	89	119.38	227.98	518.06	2,152.26
31	69	64	64	64	62.53	45.57	206.07	502.53
32	8	6	6	6	9.87	13.54	24.69	98.35
41	44	37	37	36	12.99	14.62	40.45	155.93
42	31	28	28	28	20.94	37.77	52.60	257.77
43	22	15	15	15	0.82	0.09	2.93	1.30
Subtotal	174	150	150	149	34.73	10.94	111.58	118.01
50	26	1	1	1	0.02	0.00	0.03	0.00
61	60	0	0	0	0.00	0.00	0.00	0.00
62	7	0	0	0	0.00	0.00	0.00	0.00
Subtotal	93	1	1	1	0.00	0.00	0.01	0.00
Total	356	240	240	239	46.46	17.28	183.77	166.20

Table 12b. -- Continued.

Population					
Stratum	Population	Variance population	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	4,591,670,937	1.95410E+17	57.00	3,698,286,141	5,485,055,732
20	1,567,979,807	1.08850E+17	30.00	894,267,760	2,241,691,853
Subtotal	6,159,650,743	3.04260E+17	86.90	5,056,453,297	7,262,848,190
31	1,947,928,195	4.49020E+16	68.00	1,524,125,162	2,371,731,227
32	21,666,688	7.57190E+13	7.00	1,087,287	42,246,090
41	253,659,591	6.13090E+15	43.00	95,415,599	411,903,582
42	126,297,280	1.48610E+15	30.00	47,577,306	205,017,254
43	6,178,936	5.77790E+12	21.00	1,179,172	11,178,701
Subtotal	2,355,730,690	5.26010E+16	90.46	1,897,033,619	2,814,427,761
50	118,012	1.39270E+10	25.00	0	361,590
61	0	0.00000E+00	59.00	0	0
62	0	0.00000E+00	6.00	0	0
Subtotal	118,012	1.39270E+10	64.36	0	354,037
Total	8,515,499,446	3.56860E+17	112.49	7,320,737,155	9,710,261,737

Biomass					
Stratum	Biomass (t)	Variance biomass	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	987,483	1.10090E+10	57.00	775,435	1,199,531
20	431,976	2.12200E+10	30.00	134,513	729,439
Subtotal	1,419,459	3.22290E+10	60.27	1,060,410	1,778,509
31	591,097	4.07219E+09	68.00	463,469	718,724
32	8,663	1.04232E+07	7.00	1,028	16,298
41	81,437	5.74864E+08	43.00	32,981	129,893
42	50,280	2.17734E+08	30.00	20,148	80,411
43	1,739	4.21692E+05	21.00	388	3,090
Subtotal	733,216	4.87563E+09	94.08	593,564	872,867
50	63	3.92315E+03	25.00	0	192
61	0	0.00000E+00	59.00	0	0
62	0	0.00000E+00	6.00	0	0
Subtotal	63	3.92315E+03	63.42	0	188
Total	2,152,738	3.71050E+10	76.24	1,767,485	2,537,991

Rock sole

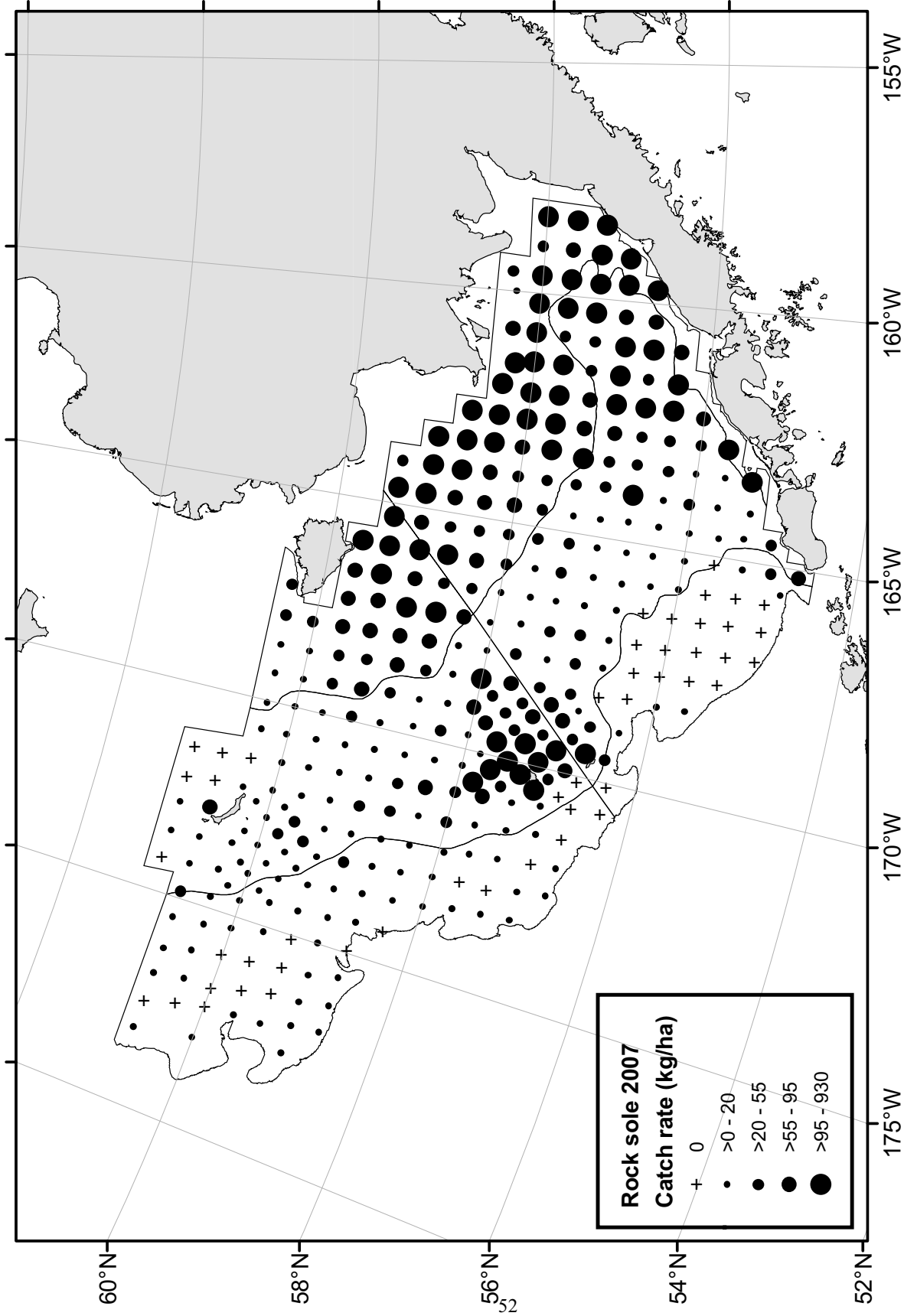


Figure 16. -- Distribution and relative abundance (kg/ha) of northern and southern rock sole (*Lepidopsetta* spp.) for the 2007 eastern Bering Sea bottom trawl survey.

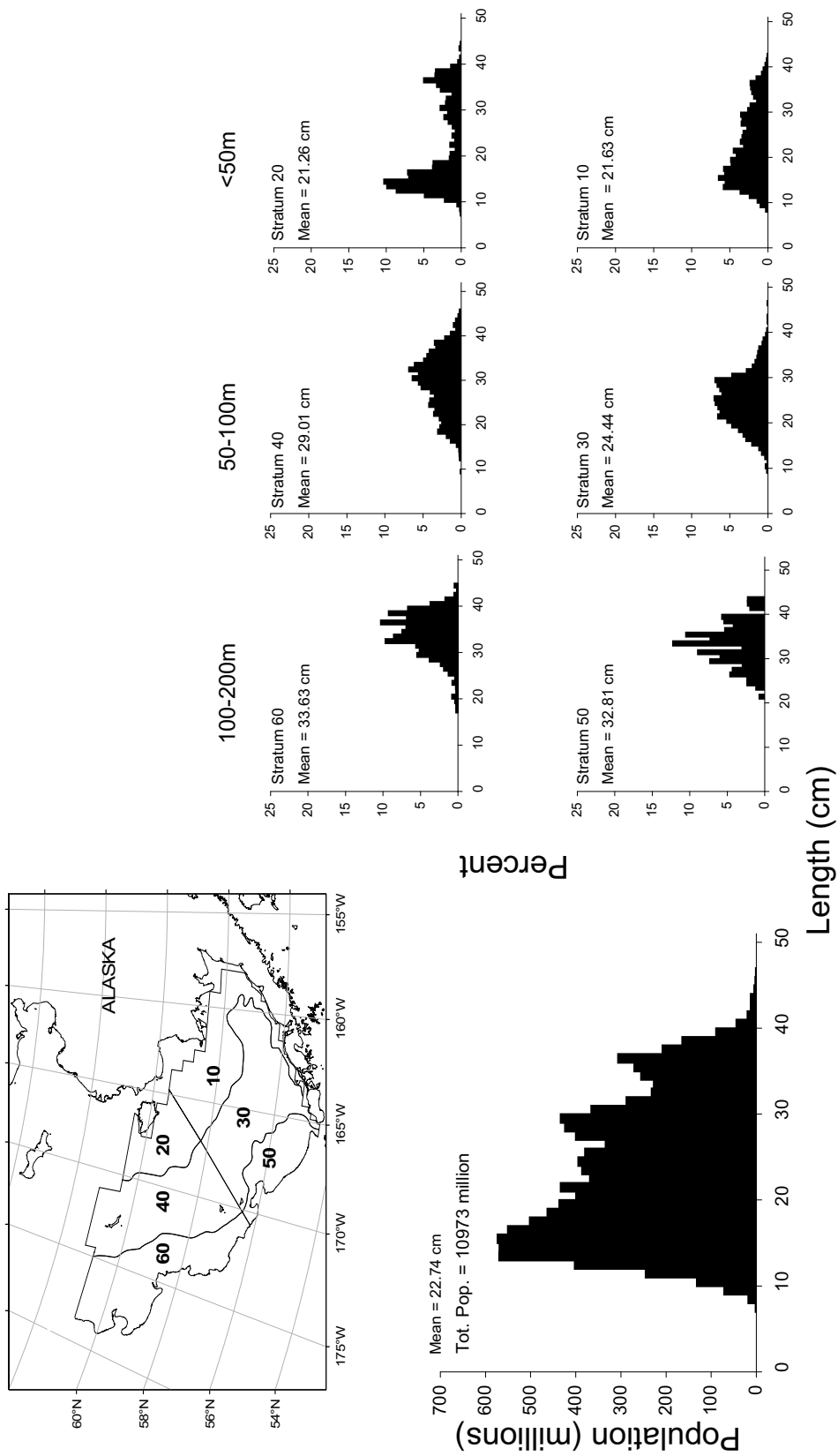


Figure 17. -- Estimated relative size distributions (sexes combined) of **northern** and **southern rock sole** (*Lepidopsetta* spp.) in terms of population numbers and percent by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Table 13a. -- Abundance estimates and mean size of **northern** and **southern rock sole** (*Lepidopsetta* spp.) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	120.02	934,583	0.459	770.28	5,998,283,952	0.547	0.156	21.6
20	96.35	395,296	0.194	505.12	2,072,357,488	0.189	0.191	21.3
30	35.55	367,272	0.180	184.75	1,908,423,409	0.174	0.192	24.4
40	28.84	311,003	0.153	87.16	939,742,545	0.086	0.331	29.0
50	0.58	2,268	0.001	1.17	4,544,431	0.000	0.499	32.8
60	2.74	25,932	0.013	5.21	49,276,554	0.004	0.526	33.6
All Strata	43.95	2,036,355	1.000	236.80	10,973,000,000	1.000	0.186	22.7
95% confidence interval		± 558,053			± 1,534,476,733			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Table 13b. -- CPUE, population, and biomass estimates for **northern** and **southern rock sole** (*Lepidopsetta* spp.) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Total hauls	Hauls with catch	Hauls with numbers	Hauls with length measurements	Mean CPUE (kg/ha)	Variance CPUE (kg/ha)	Mean CPUE (no./ha)	Variance CPUE (no./ha)
10	58	58	58	58	120.02	198.99	770.28	3,446.13
20	31	31	31	30	96.35	3,042.78	505.12	14,878.37
Subtotal	89	89	89	88	111.85	447.65	678.79	3,249.72
31	69	66	66	66	35.46	27.70	187.64	683.12
32	8	7	7	7	36.57	103.65	153.59	2,536.27
41	44	43	43	43	4.69	1.31	16.42	16.07
42	31	31	31	31	108.91	2,060.50	326.61	11,249.08
43	22	21	21	21	9.51	12.42	24.89	83.73
Subtotal	174	168	168	168	32.13	32.62	134.91	289.08
50	26	8	8	8	0.58	0.09	1.17	0.45
61	60	45	45	45	2.68	0.37	5.03	1.26
62	7	7	7	7	3.62	3.43	7.66	10.32
Subtotal	93	60	60	60	2.11	0.18	4.04	0.61
Total	356	317	317	316	43.95	36.26	236.80	274.02

Table 13b. -- Continued.

Population					
Stratum	Population	Variance population	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	5,998,283,952	2.08970E+17	57.00	5,074,417,386	6,922,150,518
20	2,072,357,488	2.50440E+17	30.00	1,050,468,032	3,094,246,945
Subtotal	8,070,641,440	4.59410E+17	73.52	6,700,816,792	9,440,466,088
31	1,773,662,510	6.10380E+16	68.00	1,279,543,520	2,267,781,501
32	134,760,898	1.95260E+15	7.00	26,632,964	242,888,832
41	102,966,834	6.31730E+14	43.00	52,170,424	153,763,244
42	784,229,414	6.48550E+16	30.00	264,202,230	1,304,256,598
43	52,546,297	3.73040E+14	21.00	12,372,552	92,720,041
Subtotal	2,848,165,953	1.28850E+17	83.07	2,122,713,317	3,573,618,590
50	4,544,431	6.78010E+12	25.00	0	9,908,394
61	44,349,648	9.77390E+13	59.00	24,369,439	64,329,856
62	4,926,906	4.26320E+12	6.00	0	9,979,365
Subtotal	53,820,985	1.08780E+14	70.92	32,961,241	74,680,728
Total	10,973,000,000	5.88370E+17	108.83	9,438,523,267	12,507,000,000

Biomass					
Stratum	Biomass (t)	Variance biomass	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	934,583	1.20660E+10	57.00	712,582	1,156,585
20	395,296	5.12170E+10	30.00	0	857,423
Subtotal	1,329,880	6.32830E+10	44.31	821,474	1,838,285
31	335,187	2.47477E+09	68.00	235,693	434,681
32	32,085	7.97937E+07	7.00	10,226	53,943
41	29,413	5.13190E+07	43.00	14,935	43,891
42	261,510	1.18790E+10	30.00	38,946	484,073
43	20,080	5.53566E+07	21.00	4,604	35,556
Subtotal	678,275	1.45410E+10	43.37	434,573	921,977
50	2,268	1.35251E+06	25.00	0	4,664
61	23,607	2.86626E+07	59.00	12,787	34,427
62	2,325	1.41828E+06	6.00	0	5,239
Subtotal	28,201	3.14334E+07	68.86	16,987	39,414
Total	2,036,355	7.78560E+10	61.89	1,478,302	2,594,408

Flathead sole

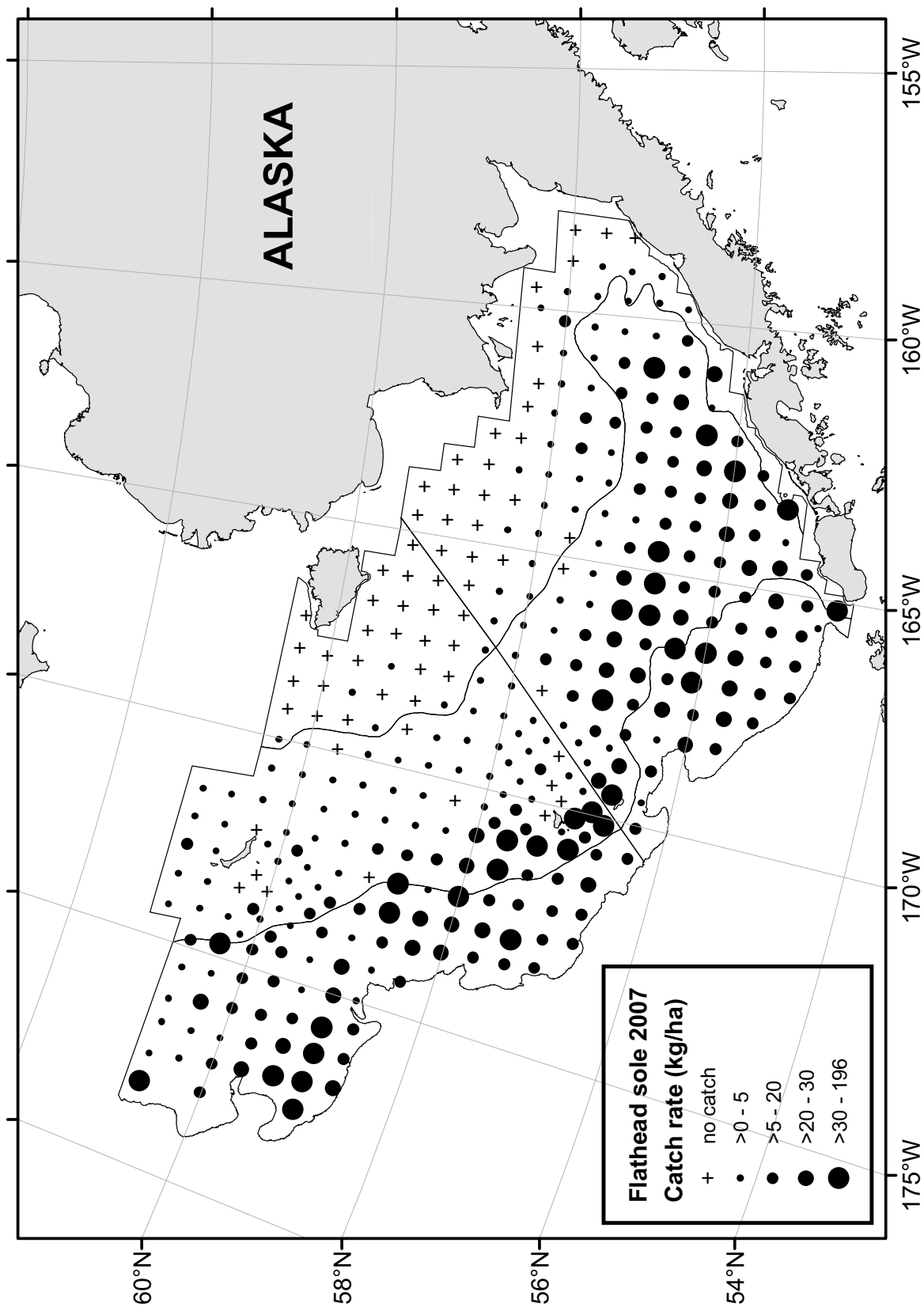


Figure 18. -- Distribution and relative abundance (kg/ha) of flathead sole and Bering flounder (*Hippoglossoides* spp.) for the 2007 eastern Bering Sea bottom trawl survey.

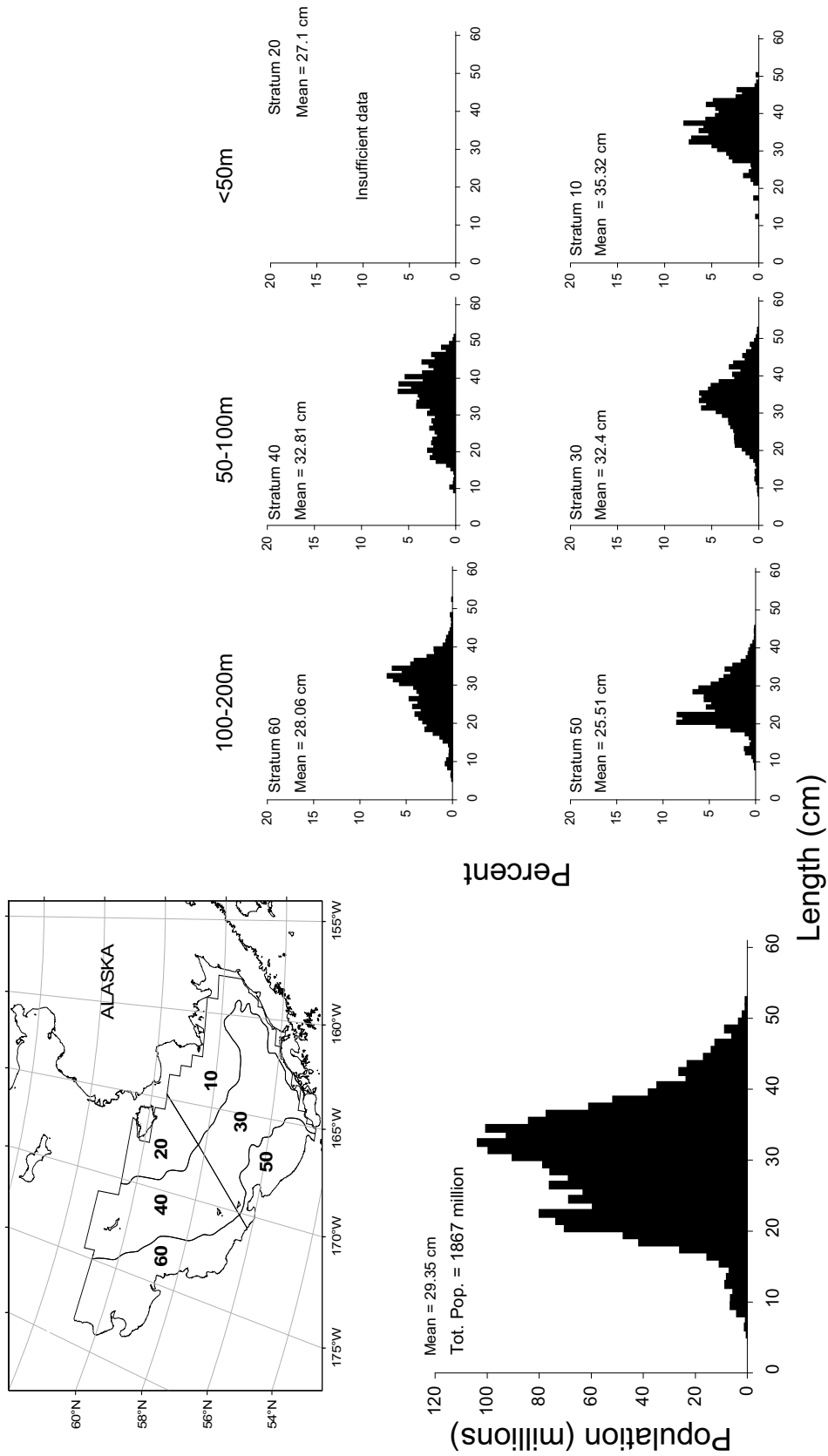


Figure 19. -- Estimated relative size distributions (sexes combined) of flathead sole and Bering flounder (*Hippoglossoides* spp.) in terms of population numbers and percent by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Table 14a. -- Abundance estimates and mean size of **flathead sole** and **Bering flounder** (*Hippoglossoides* spp.) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	2.04	15,922	0.028	4.01	31,255,110	0.017	0.509	35.3
20	0.04	161	0.000	0.13	553,161	0.000	0.291	27.1
30	19.18	198,152	0.352	48.87	504,859,341	0.270	0.392	32.4
40	8.20	88,380	0.157	18.48	199,239,138	0.107	0.444	32.8
50	16.38	63,551	0.113	97.32	377,518,740	0.202	0.168	25.5
60	20.75	196,262	0.349	79.73	753,943,816	0.404	0.260	28.1
All Strata	12.14	562,427	1.000	40.30	1,867,369,306	1.000	0.301	29.4
95% confidence interval		± 102,227			± 298,423,333			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Table 14b. -- CPUE, population, and biomass estimates for **flathead sole** and **Bering flounder** (*Hippoglossoides* spp.) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Total hauls	Hauls with catch	Hauls with numbers	Hauls with length measurements	Mean CPUE (kg/ha)	Variance CPUE (kg/ha)	Mean CPUE (no./ha)	Variance CPUE (no./ha)
10	58	34	34	34	2.04	0.35	4.01	2.34
20	31	6	6	6	0.04	0.00	0.13	0.00
Subtotal	89	40	40	40	1.35	0.15	2.68	1.00
31	69	67	67	67	19.28	9.43	49.89	49.66
32	8	8	8	8	18.13	66.15	37.95	154.21
41	44	40	40	39	4.92	4.92	12.28	27.32
42	31	27	27	27	22.05	76.73	45.38	204.08
43	22	18	18	18	2.16	0.43	6.31	3.73
Subtotal	174	160	160	159	13.57	3.44	33.35	15.31
50	26	26	26	26	16.38	3.80	97.32	141.40
61	60	61	61	60	21.25	13.30	82.57	172.98
62	7	7	7	7	13.98	55.29	40.74	452.30
Subtotal	93	94	94	93	19.48	6.26	84.85	88.57
Total	356	294	294	292	12.14	1.24	40.30	10.58

Table 14b. -- Continued.

Population					
Stratum	Population	Variance population	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	31,255,110	1.41930E+14	57.00	7,178,460	55,331,760
20	553,161	7.17390E+10	30.00	5,426	1,100,896
Subtotal	31,808,271	1.42000E+14	57.06	7,725,536	55,891,006
31	471,562,010	4.43690E+15	68.00	338,341,490	604,782,530
32	33,297,331	1.18720E+14	7.00	6,635,409	59,959,254
41	76,970,184	1.07410E+15	43.00	10,733,768	143,206,599
42	108,956,004	1.17660E+15	30.00	38,809,251	179,102,757
43	13,312,951	1.66210E+13	21.00	4,808,552	21,817,350
Subtotal	704,098,480	6.82300E+15	128.17	540,547,546	867,649,414
50	377,518,740	2.12780E+15	25.00	282,310,352	472,727,128
61	727,750,903	1.34360E+16	59.00	493,486,561	962,015,245
62	26,192,913	1.86920E+14	6.00	0	59,648,075
Subtotal	1,131,462,556	1.57510E+16	76.54	880,456,389	1,382,468,723
Total	1,867,369,306	2.27160E+16	146.85	1,568,945,973	2,165,792,639

Biomass					
Stratum	Biomass (t)	Variance biomass	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	15,922	2.10935E+07	57.00	6,640	25,204
20	161	8.74174E+03	30.00	0	352
Subtotal	16,083	2.11022E+07	57.05	6,799	25,367
31	182,246	8.42616E+08	68.00	124,190	240,302
32	15,906	5.09284E+07	7.00	0	33,369
41	30,873	1.93418E+08	43.00	2,766	58,980
42	52,939	4.42360E+08	30.00	9,928	95,951
43	4,567	1.93152E+06	21.00	1,668	7,466
Subtotal	286,531	1.53125E+09	127.64	209,052	364,011
50	63,551	5.72416E+07	25.00	47,935	79,167
61	187,277	1.03319E+09	59.00	122,316	252,239
62	8,984	2.28501E+07	6.00	0	20,681
Subtotal	259,813	1.11328E+09	67.68	193,081	326,545
Total	562,427	2.66565E+09	195.96	460,200	664,655

Alaska plaice

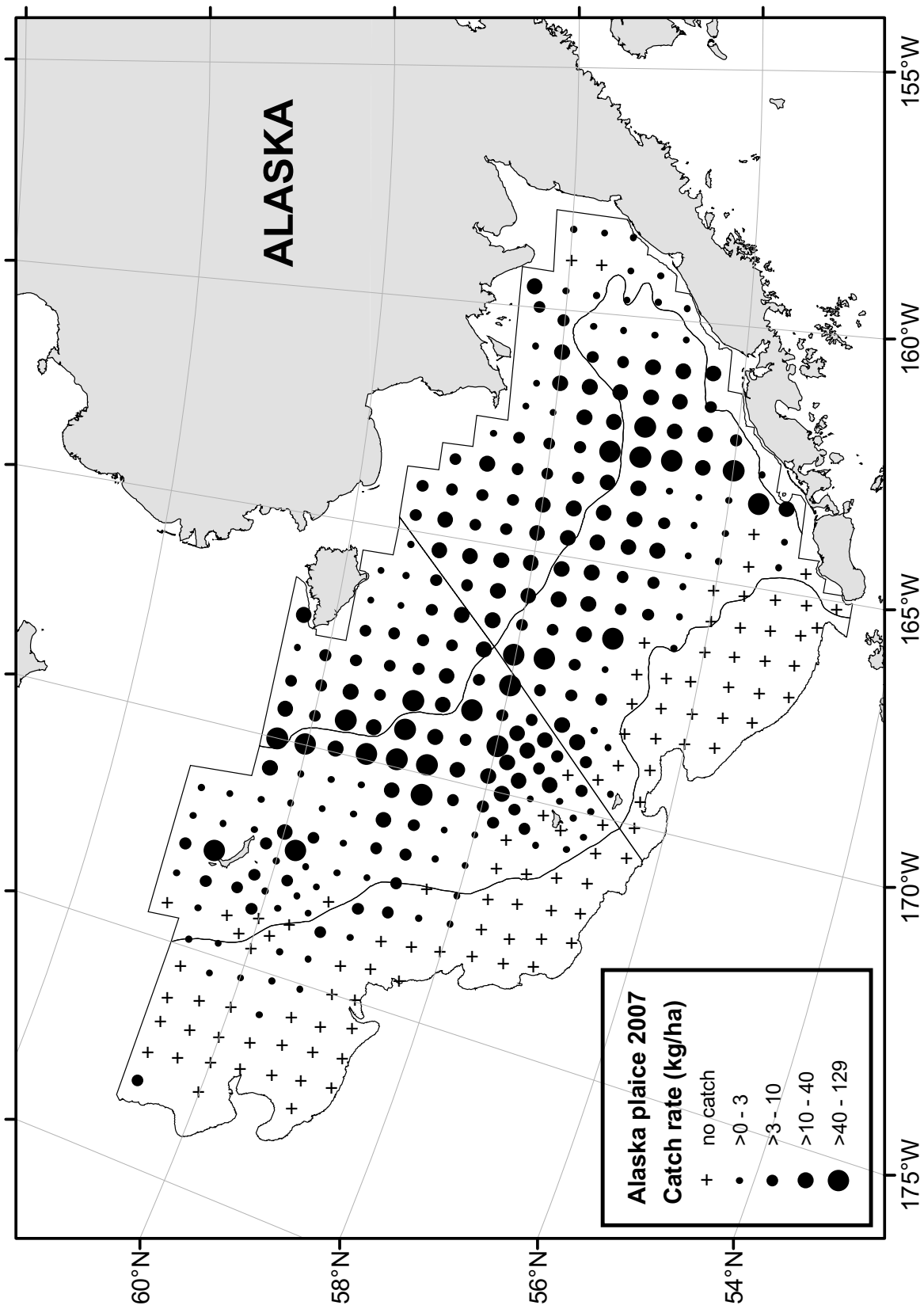


Figure 20. -- Distribution and relative abundance (kg/ha) of Alaska plaice (*Pleuronectes quadrituberculatus*) for the 2007 eastern Bering Sea bottom trawl survey.

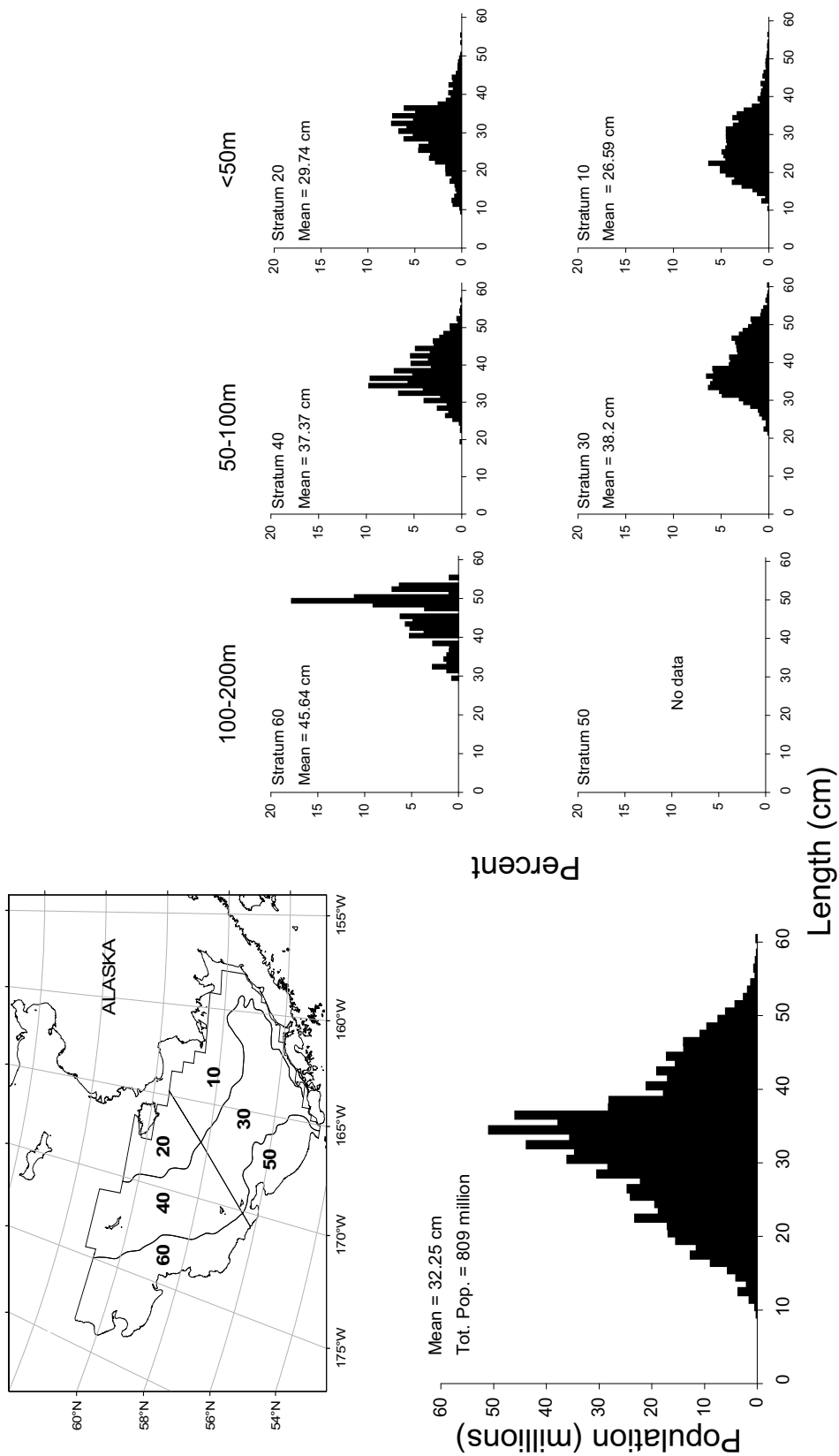


Figure 21. -- Estimated relative size distributions (sexes combined) of **Alaska plaice** (*Pleuronectes quadrituberculatus*) in terms of population numbers and percent by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Table 15a. -- Abundance estimates and mean size of **Alaska plaice** (*Pleuronectes quadrituberculatus*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	10.62	82,703	0.196	35.97	280,076,031	0.346	0.295	26.6
20	15.46	63,411	0.150	41.27	169,311,815	0.209	0.375	29.7
30	13.72	141,685	0.336	17.21	177,775,067	0.220	0.797	38.2
40	12.00	129,378	0.307	16.54	178,350,384	0.221	0.725	37.4
50	0.00	0	0.000	0.00	0	0.000	0.000	0.0
60	0.49	4,588	0.011	0.33	3,083,583	0.004	1.488	45.6
All Strata	9.10	421,765	1.000	17.45	808,596,880	1.000	0.522	32.3
95% confidence interval		± 74,149			± 132,644,896			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Table 15b. -- CPUE, population, and biomass estimates for **Alaska plaice** (*Pleuronectes quadrituberculatus*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Total hauls	Hauls with catch	Hauls with numbers	Hauls with length measurements	Mean CPUE (kg/ha)	Variance CPUE (kg/ha)	Mean CPUE (no./ha)	Variance CPUE (no./ha)
10	58	56	56	55	10.62	1.80	35.97	22.75
20	31	31	31	31	15.46	19.23	41.27	83.38
Subtotal	89	87	87	86	12.29	3.06	37.80	19.69
31	69	59	59	59	14.59	5.40	18.39	7.45
32	8	6	6	6	4.25	3.95	4.45	4.89
41	44	41	41	41	15.72	11.24	21.92	24.43
42	31	26	26	26	7.99	3.06	10.86	6.72
43	22	18	18	18	5.51	4.96	7.02	7.94
Subtotal	174	150	150	150	12.84	2.17	16.87	3.82
50	26	0	0	0	0.00	0.00	0.00	0.00
61	60	13	13	13	0.45	0.02	0.31	0.01
62	7	4	4	4	0.91	0.30	0.57	0.11
Subtotal	93	17	17	17	0.34	0.01	0.23	0.01
Total	356	254	254	253	9.10	0.65	17.45	2.09

Table 15b. -- Continued.

Population					
Stratum	Population	Variance population	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	280,076,031	1.37950E+15	57.00	205,014,075	355,137,988
20	169,311,815	1.40340E+15	30.00	92,814,107	245,809,522
Subtotal	449,387,846	2.78290E+15	77.87	342,774,277	556,001,416
31	173,870,781	6.65690E+14	68.00	122,268,906	225,472,657
32	3,904,285	3.76340E+12	7.00	0	8,492,277
41	137,444,406	9.60440E+14	43.00	74,811,554	200,077,259
42	26,085,951	3.87490E+13	30.00	13,374,780	38,797,122
43	14,820,027	3.53880E+13	21.00	2,410,919	27,229,135
Subtotal	356,125,450	1.70400E+15	104.43	273,565,610	438,685,290
50	0	0.00000E+00	25.00	0	0
61	2,719,581	1.00570E+12	59.00	692,782	4,746,380
62	364,002	4.48640E+10	6.00	0	882,304
Subtotal	3,083,583	1.05060E+12	85.59	1,033,597	5,133,569
Total	808,596,880	4.48800E+15	150.51	675,951,984	941,241,775

Biomass					
Stratum	Biomass (t)	Variance biomass	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	82,703	1.09398E+08	57.00	61,564	103,841
20	63,411	3.23706E+08	30.00	26,672	100,151
Subtotal	146,114	4.33104E+08	50.40	104,055	188,173
31	137,959	4.82496E+08	68.00	94,028	181,891
32	3,726	3.03901E+06	7.00	0	7,849
41	98,567	4.41969E+08	43.00	56,079	141,055
42	19,185	1.76677E+07	30.00	10,602	27,769
43	11,626	2.21144E+07	21.00	1,816	21,435
Subtotal	271,063	9.67286E+08	117.75	208,861	333,266
50	0	0.00000E+00	25.00	0	0
61	4,001	1.91484E+06	59.00	1,204	6,797
62	588	1.23535E+05	6.00	0	1,448
Subtotal	4,588	2.03838E+06	87.72	1,733	7,444
Total	421,765	1.40244E+09	167.26	347,616	495,915

Greenland turbot

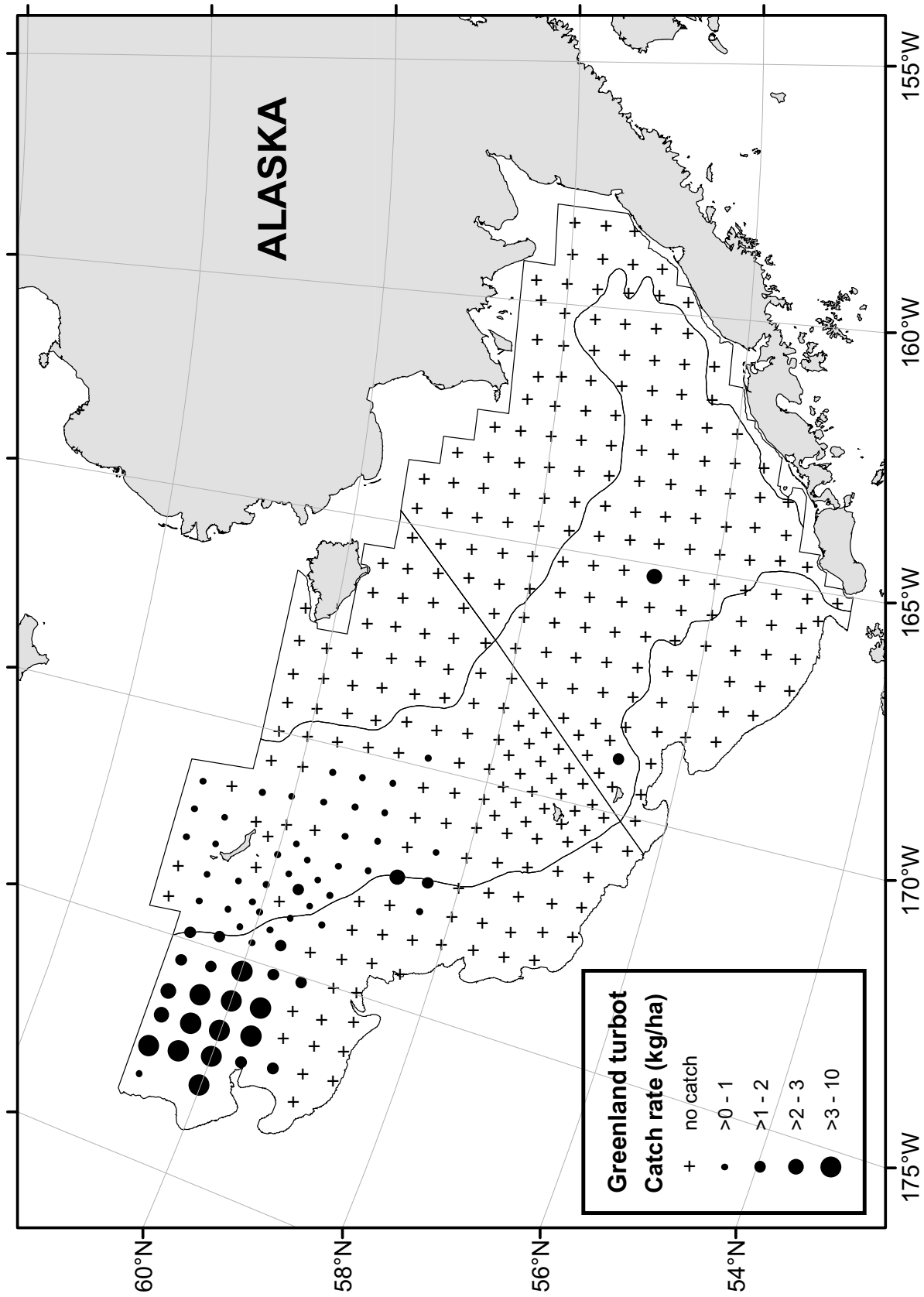


Figure 22. -- Distribution and relative abundance (kg/ha) of Greenland turbot (*Reinhardtius hippoglossoides*) for the 2007 eastern Bering Sea bottom trawl survey.

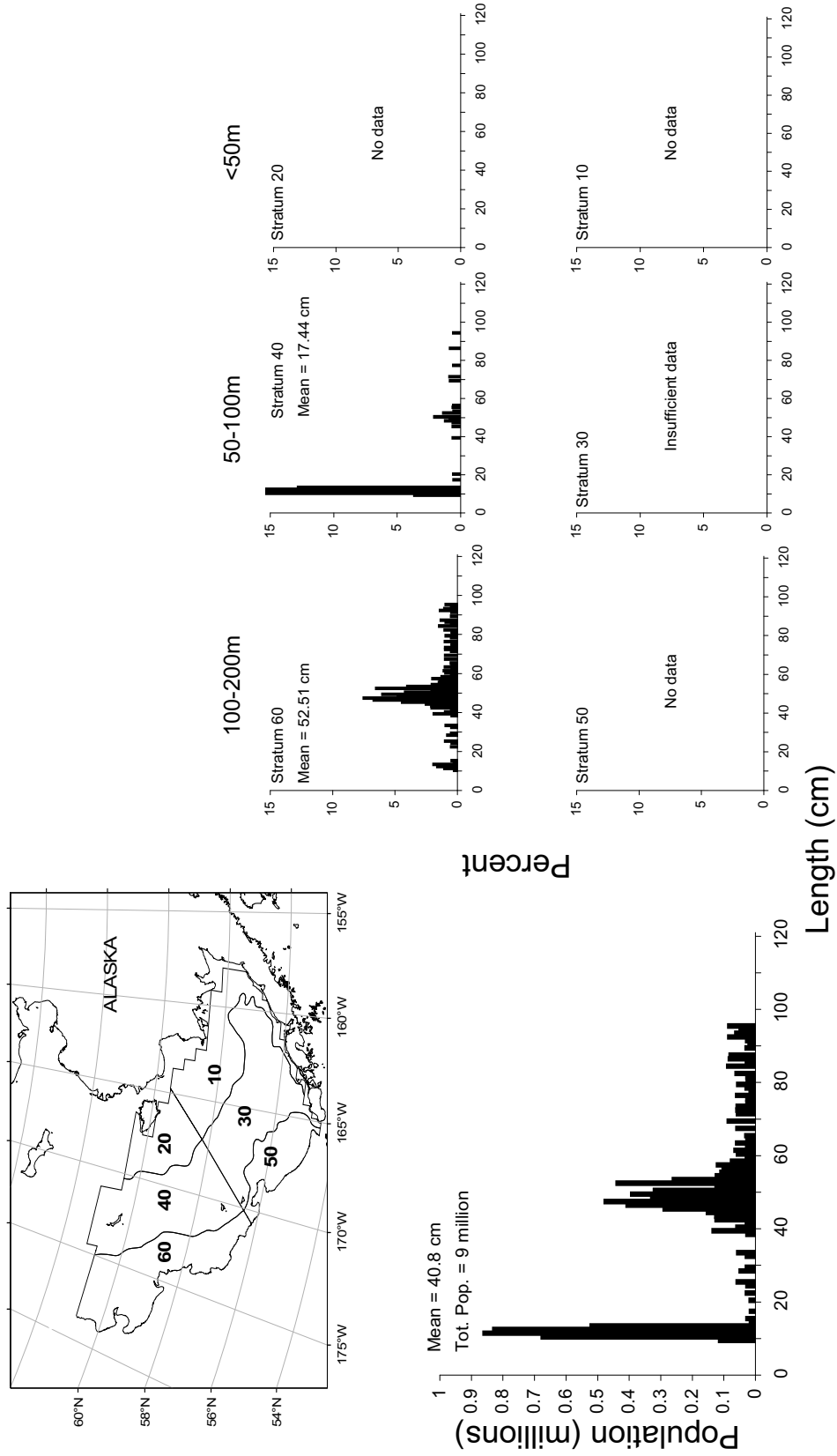


Figure 23. -- Estimated relative size distributions (sexes combined) of **Greenland turbot** (*Reinhardtius hippoglossoides*) in terms of population numbers and percent by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Table 16a. -- Abundance estimates and mean size of **Greenland turbot** (*Reinhardtius hippoglossoides*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	0.00	0	0.000	0.00	0	0.000	0.000	0.0
20	0.00	0	0.000	0.00	0	0.000	0.000	0.0
30	0.05	505	0.039	0.00	50,507	0.005	9.998	92.8
40	0.08	893	0.069	0.29	3,161,536	0.340	0.283	17.4
50	0.00	0	0.000	0.00	0	0.000	0.000	0.0
60	1.23	11,595	0.892	0.64	6,081,413	0.654	1.907	52.5
All Strata	0.28	12,993	1.000	0.20	9,293,457	1.000	1.398	40.8
95% confidence interval		± 4,978		±	3,038,930			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Table 16b. -- CPUE, population, and biomass estimates for **Greenland turbot** (*Reinhardtius hippoglossoides*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Total hauls	Hauls with catch	Hauls with numbers	Hauls with length measurements	Mean CPUE (kg/ha)	Variance CPUE (kg/ha)	Mean CPUE (no./ha)	Variance CPUE (no./ha)
10	58	0	0	0	0.00	0.00	0.00	0.00
20	31	0	0	0	0.00	0.00	0.00	0.00
Subtotal	89	0	0	0	0.00	0.00	0.00	0.00
31	69	1	1	1	0.03	0.00	0.00	0.00
32	8	1	1	1	0.23	0.05	0.03	0.00
41	44	20	20	20	0.07	0.00	0.34	0.01
42	31	0	0	0	0.00	0.00	0.00	0.00
43	22	16	16	16	0.22	0.01	0.50	0.01
Subtotal	174	38	38	38	0.07	0.00	0.15	0.00
50	26	0	0	0	0.00	0.00	0.00	0.00
61	60	23	23	22	1.26	0.08	0.62	0.02
62	7	6	6	6	0.70	0.04	0.98	0.18
Subtotal	93	29	29	28	0.87	0.03	0.46	0.01
Total	356	67	67	66	0.28	0.00	0.20	0.00

Table 16b. -- Continued.

Population						
Stratum	Population	Variance population	Eff. deg. freedom	95% Confidence limit		
				Lower	Upper	
10	0	0.00000E+00	57.00	0	0	
20	0	0.00000E+00	30.00	0	0	
Subtotal	0	0.00000E+00	87.00	0	0	
31	28,345	8.03460E+08	68.00	0	85,036	
32	22,162	4.91144E+08	7.00	0	74,574	
41	2,103,088	3.29950E+11	43.00	942,195	3,263,981	
42	0	0.00000E+00	30.00	0	0	
43	1,058,448	4.66450E+10	21.00	607,924	1,508,973	
Subtotal	3,212,043	3.77890E+11	84.65	1,982,584	4,441,503	
50	0	0.00000E+00	25.00	0	0	
61	5,450,375	1.90180E+12	59.00	2,663,298	8,237,452	
62	631,038	7.59410E+10	6.00	0	1,305,367	
Subtotal	6,081,413	1.97770E+12	86.37	3,268,769	8,894,058	
Total	9,293,457	2.35570E+12	210.73	6,254,527	12,332,386	

Biomass						
Stratum	Biomass (t)	Variance biomass	Eff. deg. freedom	95% Confidence limit		
				Lower	Upper	
10	0	0.00000E+00	57.00	0	0	
20	0	0.00000E+00	30.00	0	0	
Subtotal	0	0.00000E+00	87.00	0	0	
31	299	8.95967E+04	68.00	0	898	
32	206	4.22965E+04	7.00	0	692	
41	437	7.03311E+04	43.00	0	973	
42	0	0.00000E+00	30.00	0	0	
43	457	3.70925E+04	21.00	55	858	
Subtotal	1,398	2.39317E+05	102.90	420	2,377	
50	0	0.00000E+00	25.00	0	0	
61	11,147	6.06552E+06	59.00	6,169	16,124	
62	448	1.66944E+04	6.00	132	764	
Subtotal	11,595	6.08221E+06	69.79	6,662	16,527	
Total	12,993	6.32157E+06	120.28	8,015	17,971	

Arrowtooth flounder

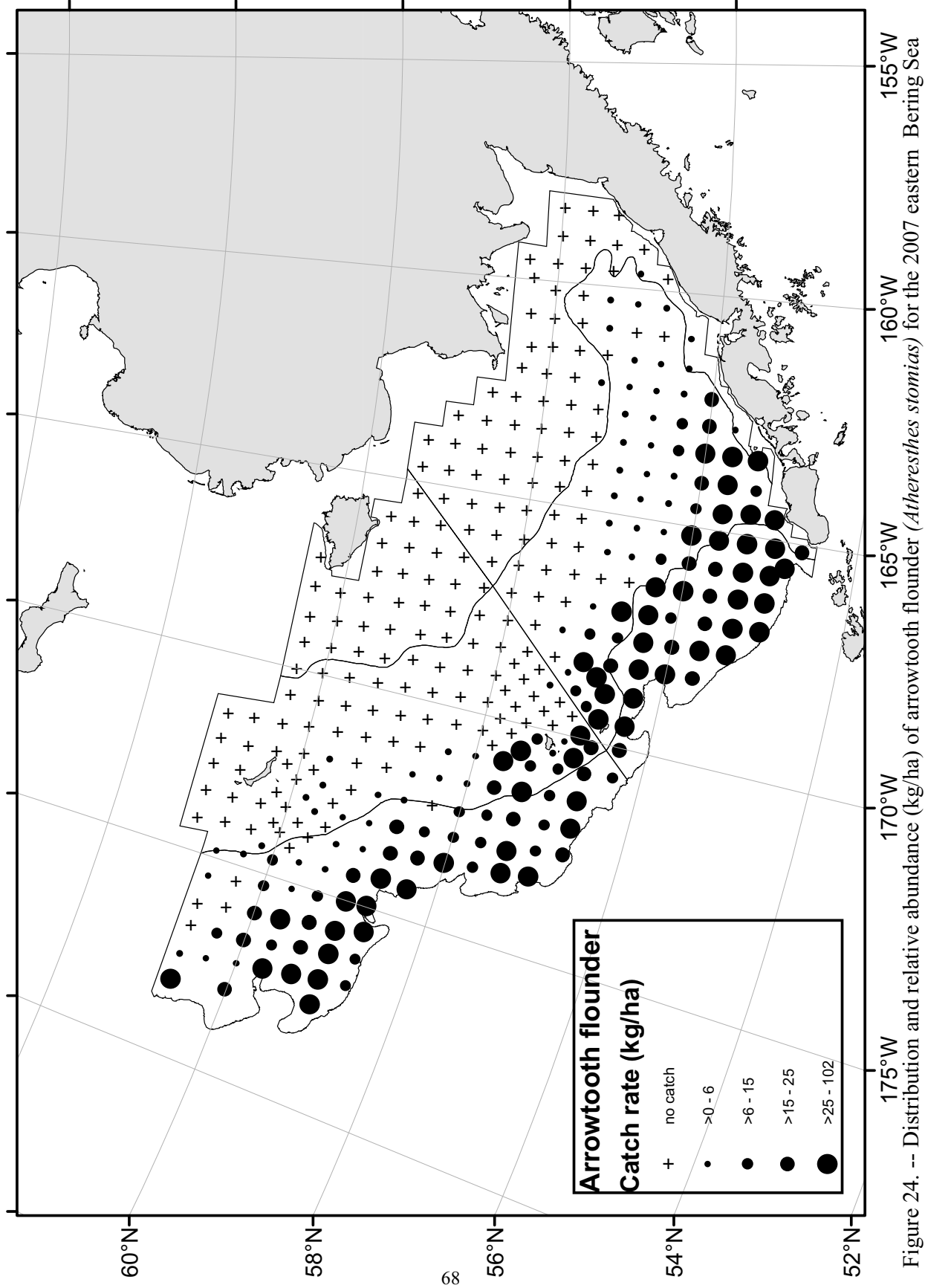


Figure 24. -- Distribution and relative abundance (kg/ha) of arrowtooth flounder (*Atheresthes stomias*) for the 2007 eastern Bering Sea bottom trawl survey.

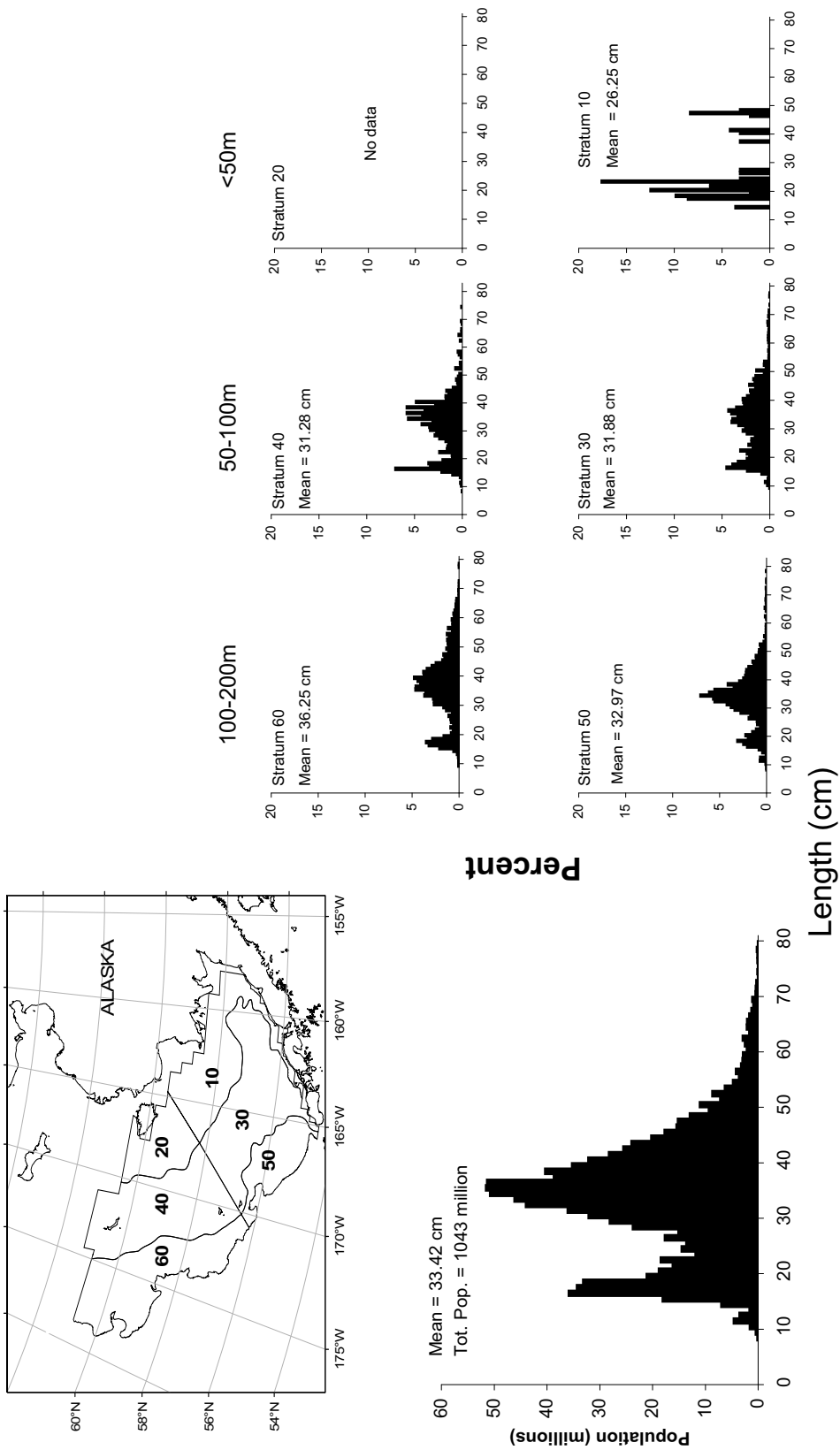


Figure 25. -- Estimated relative size distributions (sexes combined) of arrowtooth flounder (*Atheresthes stomias*) in terms of population numbers and percent by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Table 17a. -- Abundance estimates and mean size of **arrowtooth flounder** (*Atheresthes stomias*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	0.12	973	0.002	0.54	4,206,592	0.004	0.231	26.3
20	0.00	0	0.000	0.00	0	0.000	0.000	0.0
30	12.63	130,459	0.271	30.57	315,787,460	0.303	0.413	31.9
40	2.20	23,768	0.049	5.86	63,216,912	0.061	0.376	31.3
50	39.02	151,387	0.314	95.39	370,055,432	0.355	0.409	33.0
60	18.57	175,598	0.364	30.67	289,979,104	0.278	0.606	36.3
All Strata	10.41	482,184	1.000	22.51	1,043,245,499	1.000	0.462	33.4
95% confidence interval		± 74,498			± 160,108,803			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Table 17b. -- CPUE, population, and biomass estimates for **arrowtooth flounder** (*Atheresthes stomias*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Total hauls	Hauls with catch	Hauls with numbers	Hauls with length measurements	Mean CPUE (kg/ha)	Variance CPUE (kg/ha)	Mean CPUE (no./ha)	Variance CPUE (no./ha)
10	58	5	5	5	0.12	0.01	0.54	0.10
20	31	0	0	0	0.00	0.00	0.00	0.00
Subtotal	89	5	5	5	0.08	0.00	0.35	0.04
31	69	49	49	49	12.13	7.73	28.16	36.55
32	8	7	7	7	18.00	32.05	56.55	302.63
41	44	8	8	8	1.35	0.92	2.77	3.92
42	31	12	12	12	6.34	4.43	18.99	33.63
43	22	6	6	5	0.02	0.00	0.11	0.00
Subtotal	174	82	82	81	7.31	1.74	17.95	8.63
50	26	26	26	26	39.02	13.51	95.39	63.08
61	60	55	55	55	19.75	5.59	32.76	22.35
62	7	5	5	5	2.43	0.87	2.01	0.82
Subtotal	93	86	86	86	24.52	3.59	49.49	15.10
Total	356	173	173	172	10.41	0.66	22.51	3.05

Table 17b. -- Continued.

Population					
Stratum	Population	Variance population	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	4,206,592	6.15820E+12	57.00	0	9,221,833
20	0	0.00000E+00	30.00	0	0
Subtotal	4,206,592	6.15820E+12	66.63	0	9,169,721
31	266,171,082	3.26620E+15	68.00	151,870,309	380,471,854
32	49,616,378	2.32980E+14	7.00	12,265,931	86,966,825
41	17,376,246	1.54310E+14	43.00	0	42,481,100
42	45,608,884	1.93860E+14	30.00	17,177,193	74,040,575
43	231,782	9.11787E+09	21.00	32,595	430,969
Subtotal	379,004,371	3.84730E+15	89.36	254,950,722	503,058,021
50	370,055,432	9.49260E+14	25.00	306,463,381	433,647,483
61	288,686,202	1.73570E+15	59.00	204,487,766	372,884,639
62	1,292,902	3.36820E+11	6.00	0	2,785,013
Subtotal	660,034,536	2.68530E+15	82.61	556,394,731	763,674,340
Total	1,043,245,499	6.53880E+15	167.92	883,136,696	1,203,354,302

Biomass					
Stratum	Biomass (t)	Variance biomass	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	973	3.59221E+05	57.00	0	2,184
20	0	0.00000E+00	30.00	0	0
Subtotal	973	3.59221E+05	66.95	0	2,171
31	114,663	6.91122E+08	68.00	62,084	167,241
32	15,796	2.46724E+07	7.00	3,642	27,951
41	8,486	3.61756E+07	43.00	0	20,642
42	15,233	2.55321E+07	30.00	4,915	25,551
43	49	1.86875E+03	21.00	0	139
Subtotal	154,227	7.77505E+08	84.72	98,459	209,994
50	151,387	2.03338E+08	25.00	121,955	180,819
61	174,037	4.34102E+08	59.00	131,930	216,145
62	1,561	3.61511E+05	6.00	15	3,106
Subtotal	326,985	6.37801E+08	83.84	276,475	377,494
Total	482,184	1.41567E+09	166.52	407,686	556,682

Kamchatka flounder

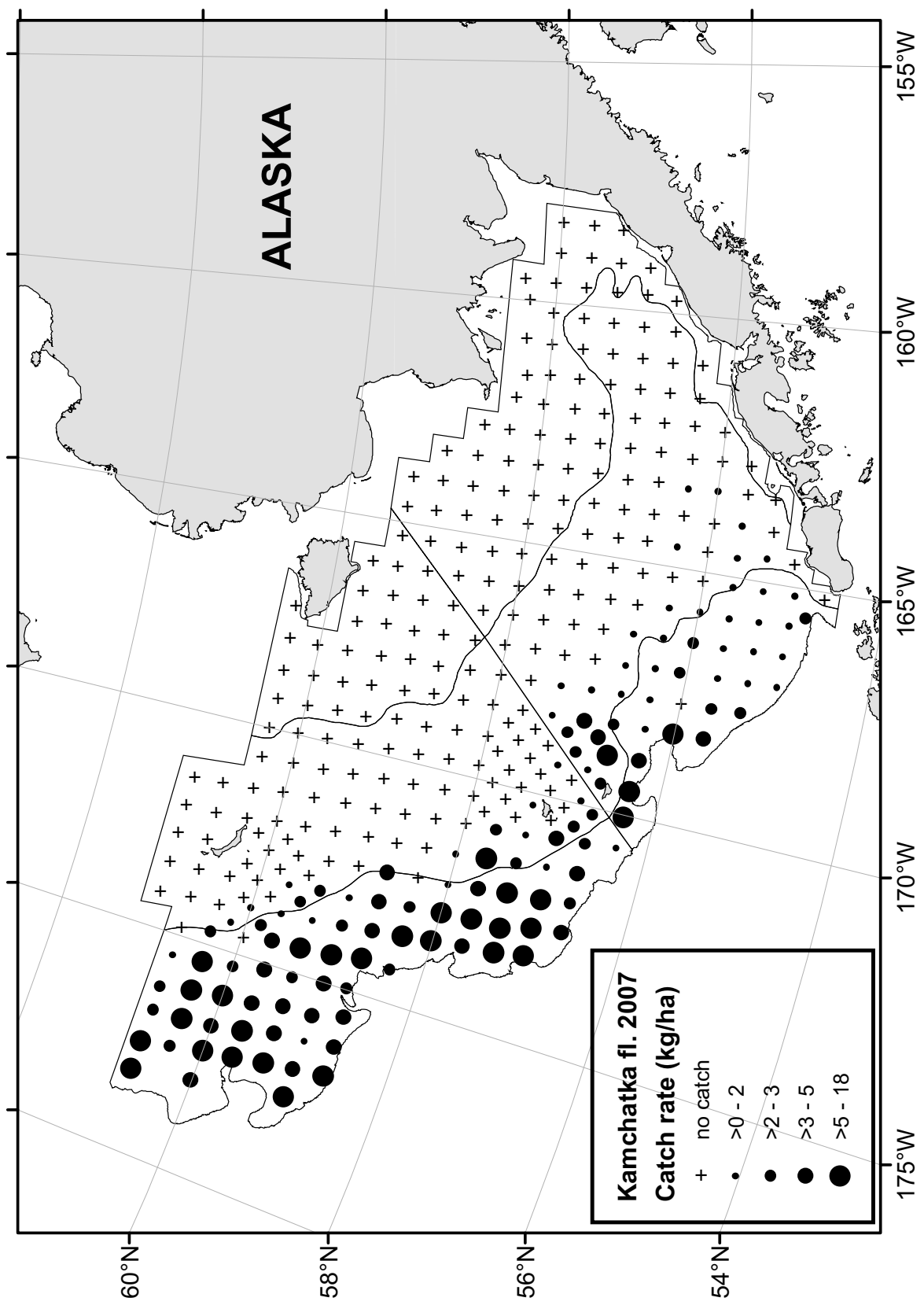


Figure 26. -- Distribution and relative abundance (kg/ha) of Kamchatka flounder (*Atheresthes evermanni*) for the 2007 eastern Bering Sea bottom trawl survey.

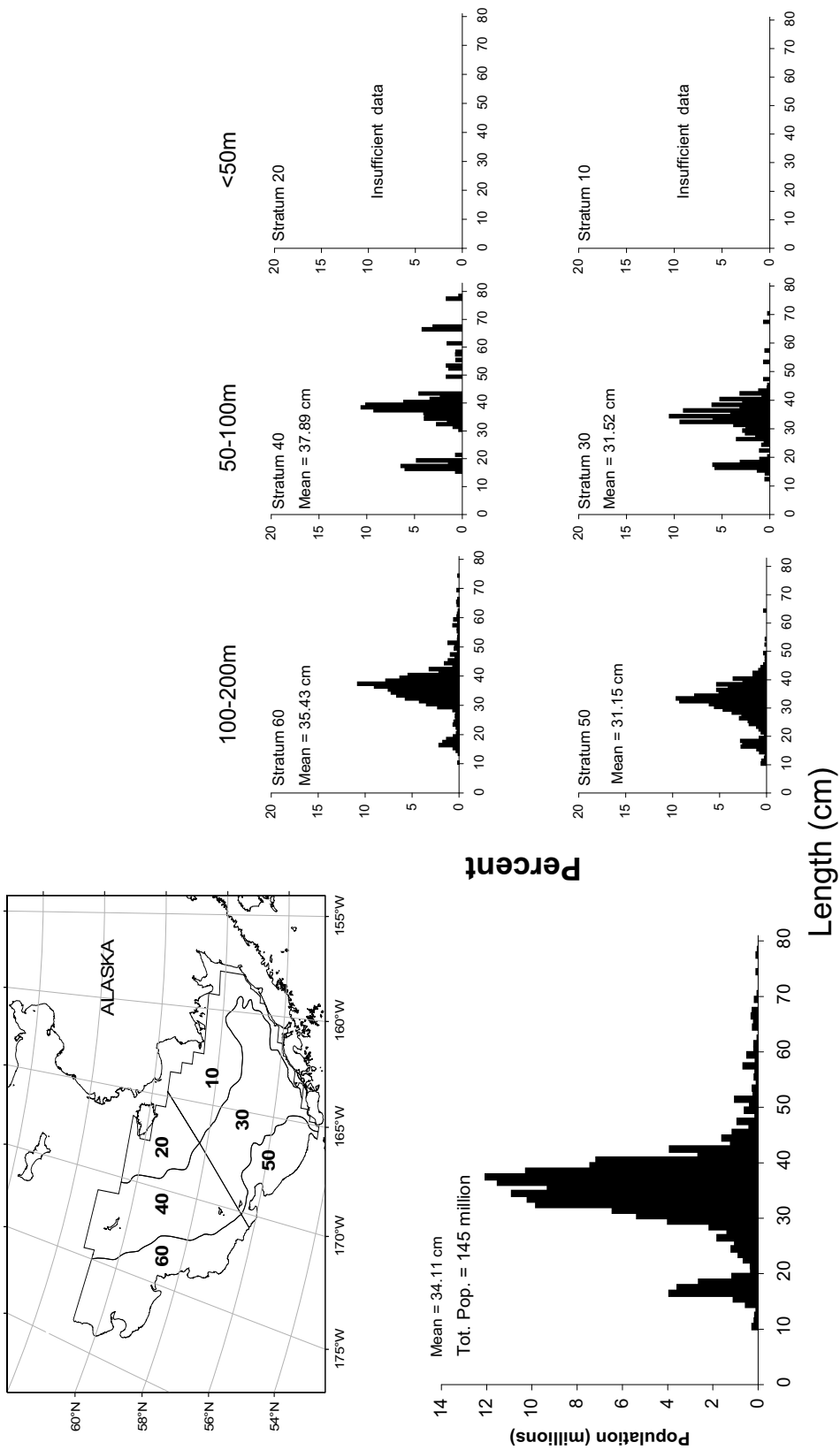


Figure 27. -- Estimated relative size distributions (sexes combined) of **Kamchatka flounder** (*Atheresthes evermanni*) in terms of population numbers and percent by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Table 18a. -- Abundance estimates and mean size of **Kamchatka flounder** (*Atheresthes evermanni*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	0.00	0	0.000	0.00	0	0.000	0.000	0.0
20	0.00	0	0.000	0.00	0	0.000	0.000	0.0
30	0.53	5,495	0.085	1.48	15,326,410	0.106	0.359	31.5
40	0.31	3,372	0.052	0.44	4,728,613	0.033	0.713	37.9
50	2.79	10,813	0.168	8.66	33,609,568	0.232	0.322	31.2
60	4.72	44,618	0.694	9.64	91,185,367	0.630	0.489	35.4
All Strata	1.39	64,299	1.000	3.13	144,849,957	1.000	0.444	34.1
95% confidence interval		± 10,187		±	26,436,234			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Table 18b. -- CPUE, population, and biomass estimates for **Kamchatka flounder** (*Atheresthes evermanni*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Total hauls	Hauls with catch	Hauls with numbers	Hauls with length measurements	Mean CPUE (kg/ha)	Variance CPUE (kg/ha)	Mean CPUE (no./ha)	Variance CPUE (no./ha)
10	58	0	0	0	0.00	0.00	0.00	0.00
20	31	0	0	0	0.00	0.00	0.00	0.00
Subtotal	89	0	0	0	0.00	0.00	0.00	0.00
31	69	15	15	15	0.17	0.00	0.50	0.02
32	8	8	8	8	4.41	3.40	12.04	23.99
41	44	3	3	3	0.26	0.03	0.26	0.03
42	31	8	8	8	0.40	0.03	1.11	0.19
43	22	5	5	4	0.37	0.03	0.21	0.01
Subtotal	174	39	39	38	0.42	0.01	0.95	0.05
50	26	25	25	24	2.79	0.62	8.66	4.01
61	60	59	59	59	4.87	0.15	10.17	1.18
62	7	6	6	6	2.64	0.52	2.44	0.88
Subtotal	93	90	90	89	4.16	0.12	9.36	0.86
Total	356	129	129	127	1.39	0.01	3.13	0.08

Table 18b. -- Continued.

Population					
Stratum	Population	Variance population	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	0	0.00000E+00	57.00	0	0
20	0	0.00000E+00	30.00	0	0
Subtotal	0	0.00000E+00	87.00	0	0
31	4,764,676	1.88860E+12	68.00	2,016,140	7,513,212
32	10,561,734	1.84670E+13	7.00	398,457	20,725,011
41	1,612,185	1.06250E+12	43.00	0	3,695,417
42	2,670,059	1.11350E+12	30.00	515,332	4,824,787
43	446,368	4.70020E+10	21.00	0	897,311
Subtotal	20,055,023	2.25790E+13	10.30	10,028,863	30,081,183
50	33,609,568	6.03620E+13	25.00	17,573,721	49,645,415
61	89,614,943	9.14120E+13	59.00	70,292,234	108,937,652
62	1,570,423	3.64350E+11	6.00	93,386	3,047,460
Subtotal	124,794,934	1.52140E+14	80.21	100,126,047	149,463,821
Total	144,849,957	1.74720E+14	91.88	118,413,723	171,286,191

Biomass					
Stratum	Biomass (t)	Variance biomass	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	0	0.00000E+00	57.00	0	0
20	0	0.00000E+00	30.00	0	0
Subtotal	0	0.00000E+00	87.00	0	0
31	1,626	2.10946E+05	68.00	708	2,545
32	3,868	2.62074E+06	7.00	40	7,697
41	1,617	1.19465E+06	43.00	0	3,826
42	968	1.62938E+05	30.00	144	1,792
43	787	1.42126E+05	21.00	3	1,571
Subtotal	8,867	4.33140E+06	17.81	4,476	13,258
50	10,813	9.38189E+06	25.00	4,491	17,136
61	42,919	1.20137E+07	59.00	35,914	49,924
62	1,699	2.15774E+05	6.00	562	2,836
Subtotal	55,432	2.16113E+07	77.69	46,134	64,729
Total	64,299	2.59429E+07	109.22	54,112	74,485

Pacific halibut

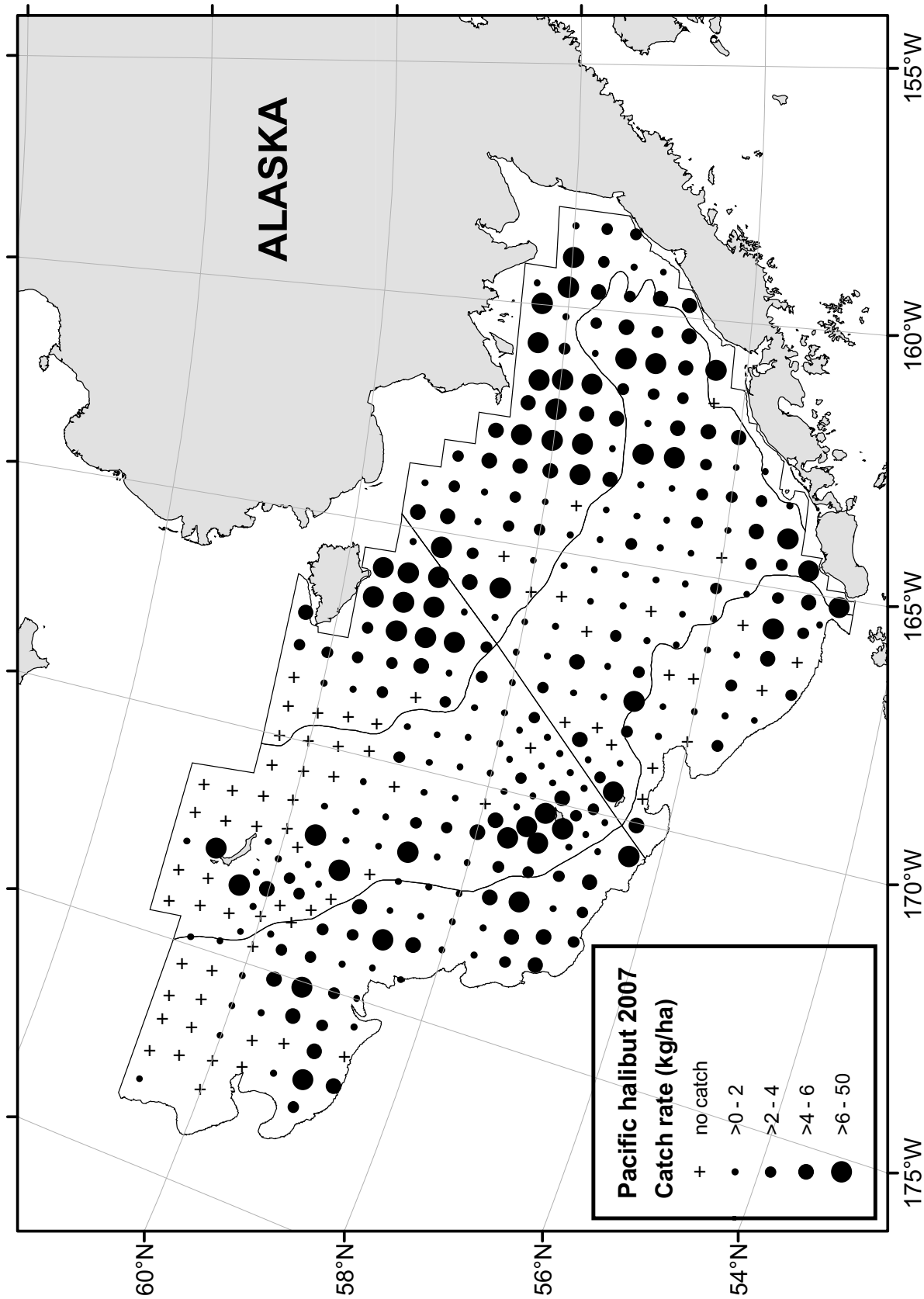


Figure 28. -- Distribution and relative abundance (kg/ha) of Pacific halibut (*Hippoglossus stenolepis*) for the 2007 eastern Bering Sea bottom trawl survey.

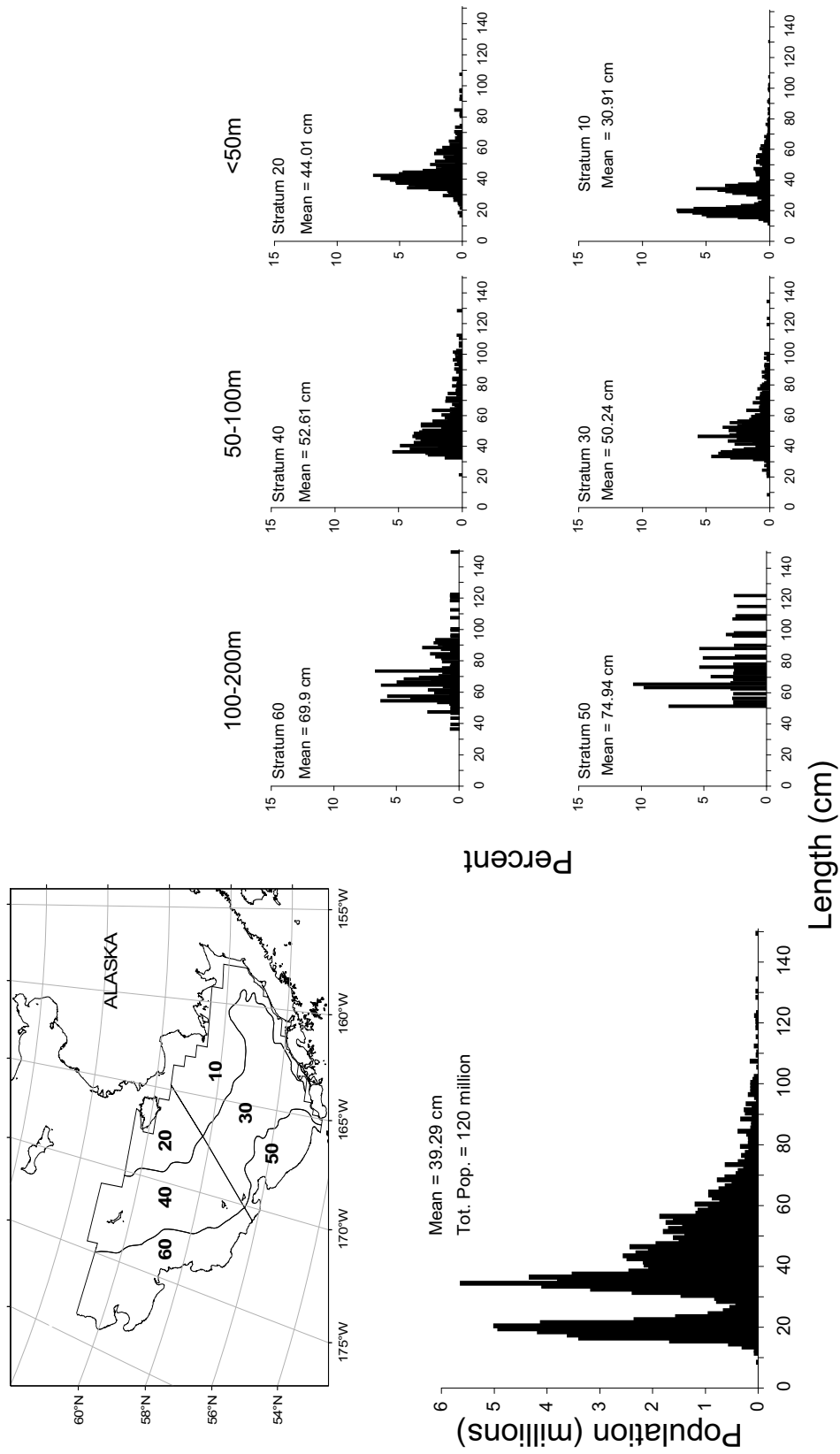


Figure 29. -- Estimated relative size distributions (sexes combined) of **Pacific halibut** (*Hippoglossus stenolepis*) in terms of population numbers and percent by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Table 19a. -- Abundance estimates and mean size of **Pacific halibut** (*Hippoglossus stenolepis*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	5.09	39,620	0.275	8.80	68,551,363	0.572	0.578	30.9
20	5.62	23,070	0.160	5.06	20,748,909	0.173	1.112	44.0
30	2.94	30,365	0.211	1.53	15,839,652	0.132	1.917	50.2
40	1.93	20,762	0.144	0.81	8,688,197	0.073	2.390	52.6
50	1.77	6,873	0.048	0.30	1,148,261	0.010	5.985	74.9
60	2.49	23,511	0.163	0.51	4,786,463	0.040	4.912	69.9
All Strata	3.11	144,201	1.000	2.58	119,762,846	1.000	1.204	39.3
95% confidence interval		± 21,101		±	28,314,029			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Table 19b. -- CPUE, population, and biomass estimates for **Pacific halibut** (*Hippoglossus stenolepis*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Total hauls	Hauls with catch	Hauls with numbers	Hauls with length measurements	Mean CPUE (kg/ha)	Variance CPUE (kg/ha)	Mean CPUE (no./ha)	Variance CPUE (no./ha)
10	58	54	54	54	5.09	0.45	8.80	2.62
20	31	24	24	24	5.62	1.75	5.06	1.90
Subtotal	89	78	78	78	5.27	0.40	7.51	1.35
31	69	65	65	65	2.92	0.19	1.59	0.08
32	8	5	5	5	3.15	3.45	0.93	0.30
41	44	26	26	26	1.04	0.06	0.39	0.01
42	31	29	29	29	4.20	2.66	2.32	0.90
43	22	14	14	14	1.98	0.50	0.31	0.01
Subtotal	174	139	139	139	2.42	0.09	1.16	0.03
50	26	18	18	18	1.77	0.13	0.30	0.01
61	60	46	46	46	2.56	0.19	0.52	0.01
62	7	5	5	5	1.52	0.26	0.32	0.01
Subtotal	93	69	69	69	2.28	0.10	0.45	0.01
Total	356	286	286	286	3.11	0.05	2.58	0.10

Table 19b. -- Continued.

Population					
Stratum	Population	Variance population	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	68,551,363	1.58730E+14	57.00	43,089,229	94,013,498
20	20,748,909	3.20020E+13	30.00	9,180,291	32,317,526
Subtotal	89,300,272	1.90730E+14	76.59	61,679,178	116,921,365
31	15,023,547	7.06530E+12	68.00	9,707,418	20,339,675
32	816,106	2.29060E+11	7.00	0	1,987,239
41	2,473,960	2.01740E+11	43.00	1,566,227	3,381,694
42	5,561,500	5.20700E+12	30.00	901,892	10,221,108
43	652,737	2.98680E+10	21.00	292,226	1,013,248
Subtotal	24,527,850	1.27330E+13	97.06	17,391,194	31,664,506
50	1,148,261	7.87160E+10	25.00	569,178	1,727,343
61	4,582,697	9.42070E+11	59.00	2,621,108	6,544,286
62	203,767	4.13096E+09	6.00	46,492	361,042
Subtotal	5,934,724	1.02490E+12	68.80	3,909,960	7,959,488
Total	119,762,846	2.04490E+14	86.44	91,448,817	148,076,874

Biomass					
Stratum	Biomass (t)	Variance biomass	Eff. deg. freedom	95% Confidence limit	
				Lower	Upper
10	39,620	2.74791E+07	57.00	29,026	50,215
20	23,070	2.94485E+07	30.00	11,973	34,168
Subtotal	62,690	5.69276E+07	76.54	47,600	77,781
31	27,597	1.69375E+07	68.00	19,366	35,828
32	2,768	2.65554E+06	7.00	0	6,755
41	6,496	2.52360E+06	43.00	3,286	9,707
42	10,076	1.53546E+07	30.00	2,075	18,078
43	4,190	2.23885E+06	21.00	1,068	7,311
Subtotal	51,127	3.97100E+07	114.66	38,524	63,730
50	6,873	1.93226E+06	25.00	4,004	9,742
61	22,536	1.48935E+07	59.00	14,737	30,335
62	975	1.08667E+05	6.00	168	1,782
Subtotal	30,384	1.69344E+07	73.47	22,153	38,614
Total	144,201	1.13573E+08	201.75	123,100	165,302

Bering skate

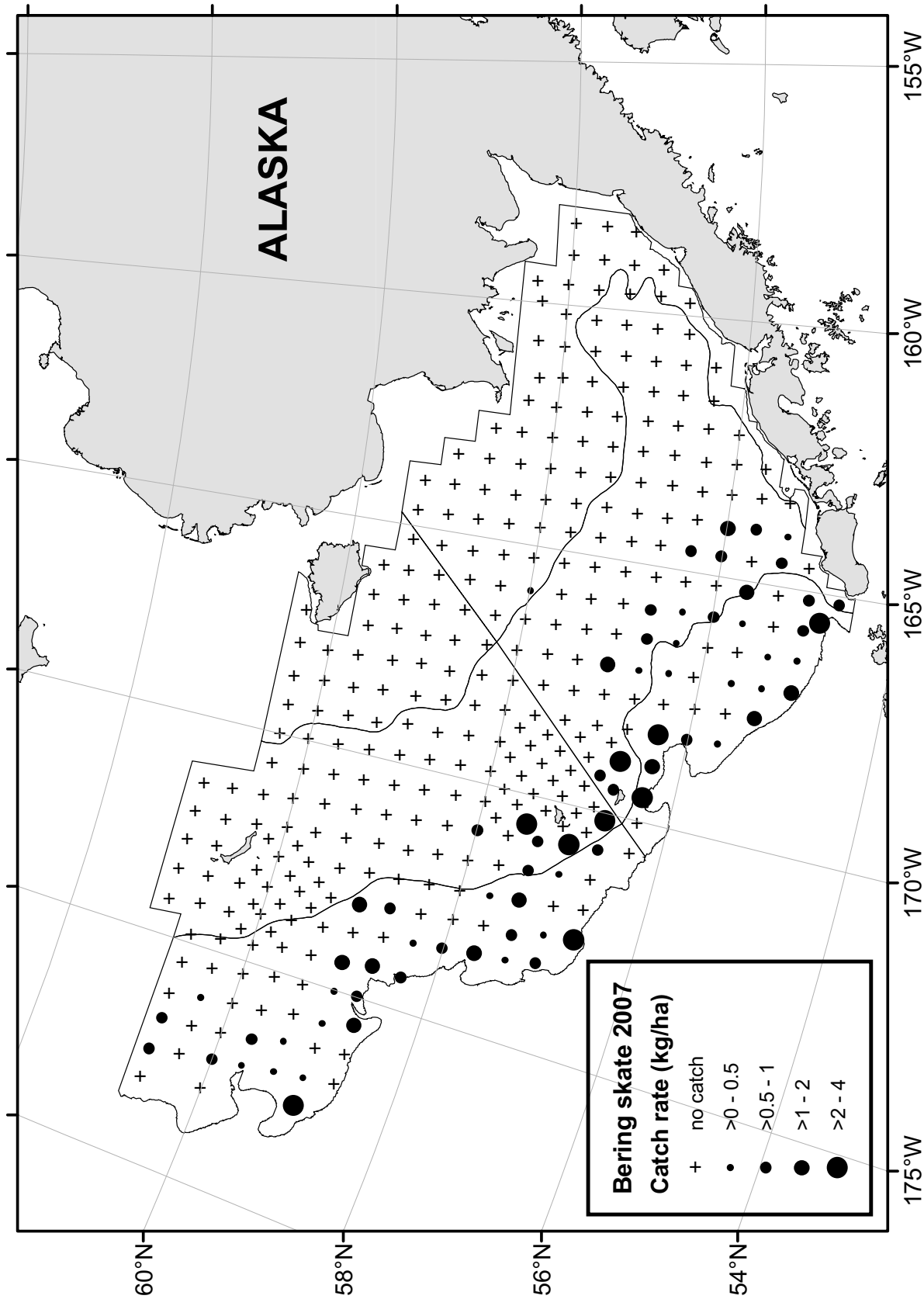


Figure 30. -- Distribution and relative abundance (kg/ha) of Bering skate (*Bathyraja interrupta*) for the 2007 eastern Bering Sea bottom trawl survey.

Table 20. -- Abundance estimates and mean size of **Bering skate** (*Bathyraja interrupta*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	0.0062576	48.7290631	0.005	0.006952944	54143.4034	0.008	0.900	0.0
20	0	0	0.000	0	0	0.000	0.000	0.0
30	0.1807222	1866.86449	0.200	0.119442933	1233848.21	0.193	1.513	54.0
40	0.0854636	921.487809	0.099	0.031229881	336727.6	0.053	2.737	71.0
50	0.6912704	2681.60621	0.288	0.721201804	2797717.5	0.438	0.958	62.2
60	0.4027379	3808.38316	0.408	0.207337202	1960628.85	0.307	1.942	66.6
All Strata	0.2012854	9327.07072	1.000	0.137751468	6383065.58	1.000	1.461	64.9
95% confidence interval		± 2,536		±	2,065,307			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Alaska skate

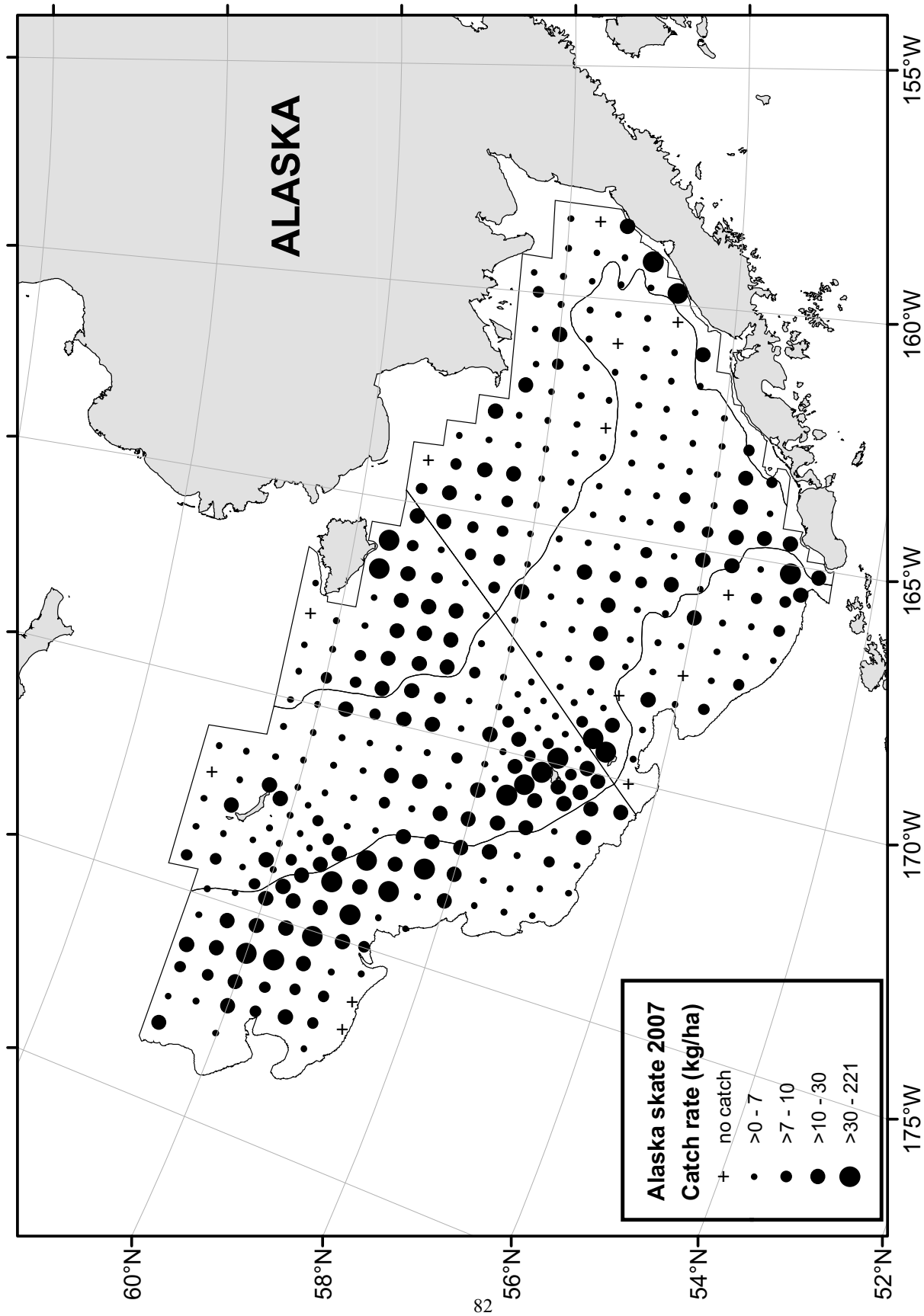


Figure 31. -- Distribution and relative abundance (kg/ha) of Alaska skate (*Bathyrja parmifera*) for the 2007 eastern Bering Sea bottom trawl survey.

Table 21. -- Abundance estimates and mean size of **Alaska skate** (*Bathyraja parmifera*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	7.35	57,221	0.125	2.07	16,112,496	0.119	3.551	73.5
20	12.71	52,137	0.114	4.05	16,622,492	0.122	3.137	70.0
30	8.81	91,001	0.199	3.31	34,210,649	0.252	2.660	67.4
40	9.26	99,821	0.218	3.35	36,143,913	0.266	2.762	61.7
50	7.25	28,135	0.061	1.05	4,055,864	0.030	6.937	84.3
60	13.71	129,627	0.283	3.03	28,698,484	0.211	4.517	79.2
All Strata	9.88	457,941	1.000	2.93	135,843,897	1.000	3.371	69.5
95% confidence interval		± 67,617		±	19,659,218			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Warty sculpin

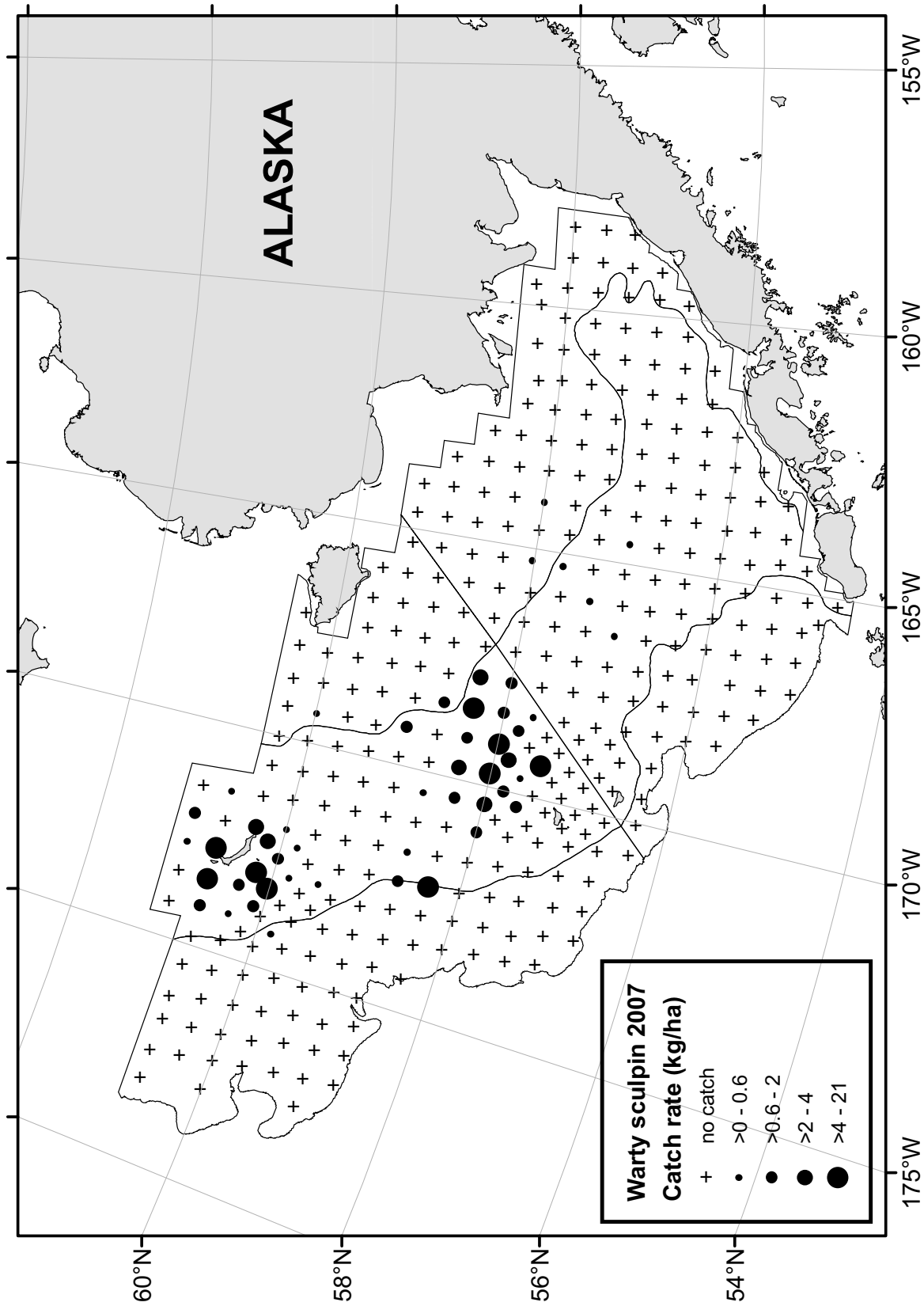


Figure 32. -- Distribution and relative abundance (kg/ha) of warty sculpin (*Myoxocephalus verrucosus*) for the 2007 eastern Bering Sea bottom trawl survey.

Table 22. -- Abundance estimates and mean size of **warty sculpin** (*Myoxocephalus verrucosus*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
1	0.01	72	0.005	0.01	86,850	0.009	0.831	41.0
2	0.05	216	0.016	0.04	146,375	0.015	1.473	37.7
3	0.01	110	0.008	0.02	198,475	0.020	0.552	42.4
4	1.11	11,944	0.893	0.84	9,063,779	0.900	1.318	42.4
5	0.00	0	0.000	0.00	0	0.000	0.000	0.0
6	0.11	1,029	0.077	0.06	571,046	0.057	1.802	53.3
All Strata	0.29	13,370	1.000	0.22	10,066,525	1.000	1.328	42.4
95% confidence interval		± 7,278		±	5,351,465			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Great sculpin

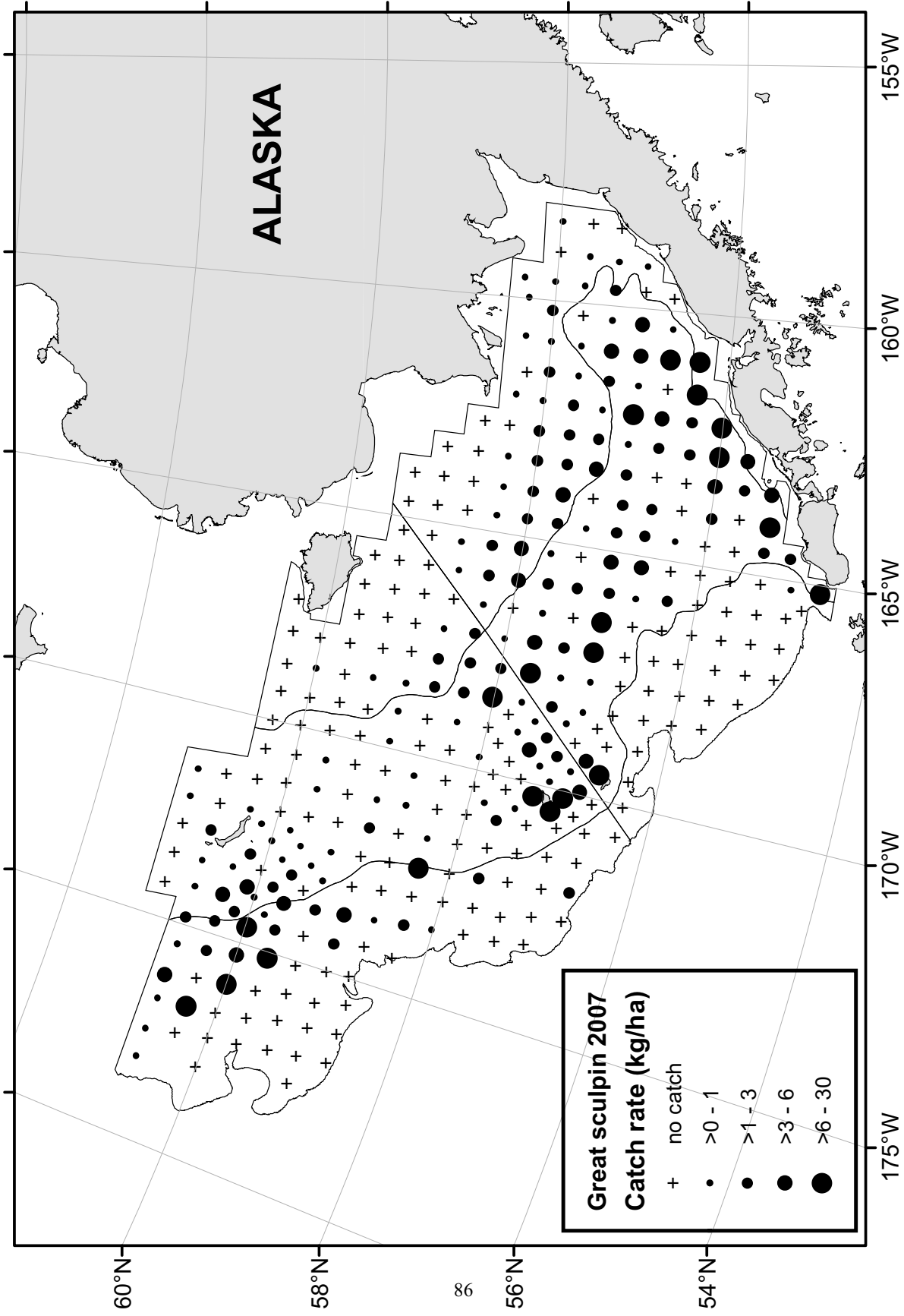


Figure 33. -- Distribution and relative abundance (kg/ha) of great sculpin (*Myoxocephalus polyacanthocephalus*) for the 2007 eastern Bering Sea bottom trawl survey.

Table 23. -- Abundance estimates and mean size of **great sculpin** (*Myoxocephalus polyacanthocephalus*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	1.28	9,953	0.158	0.60	4,710,014	0.203	2.113	39.0
20	0.27	1,108	0.018	0.18	727,606	0.031	1.523	39.0
30	2.71	28,003	0.444	0.77	7,961,004	0.343	3.518	51.4
40	0.95	10,205	0.162	0.41	4,451,722	0.192	2.292	46.8
50	0.04	147	0.002	0.03	118,012	0.005	1.246	46.1
60	1.45	13,715	0.217	0.56	5,272,273	0.227	2.601	54.5
All Strata	1.36	63,132	1.000	0.50	23,240,632	1.000	2.716	48.2
95% confidence interval		± 14,843		±	4,508,274			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Plain sculpin

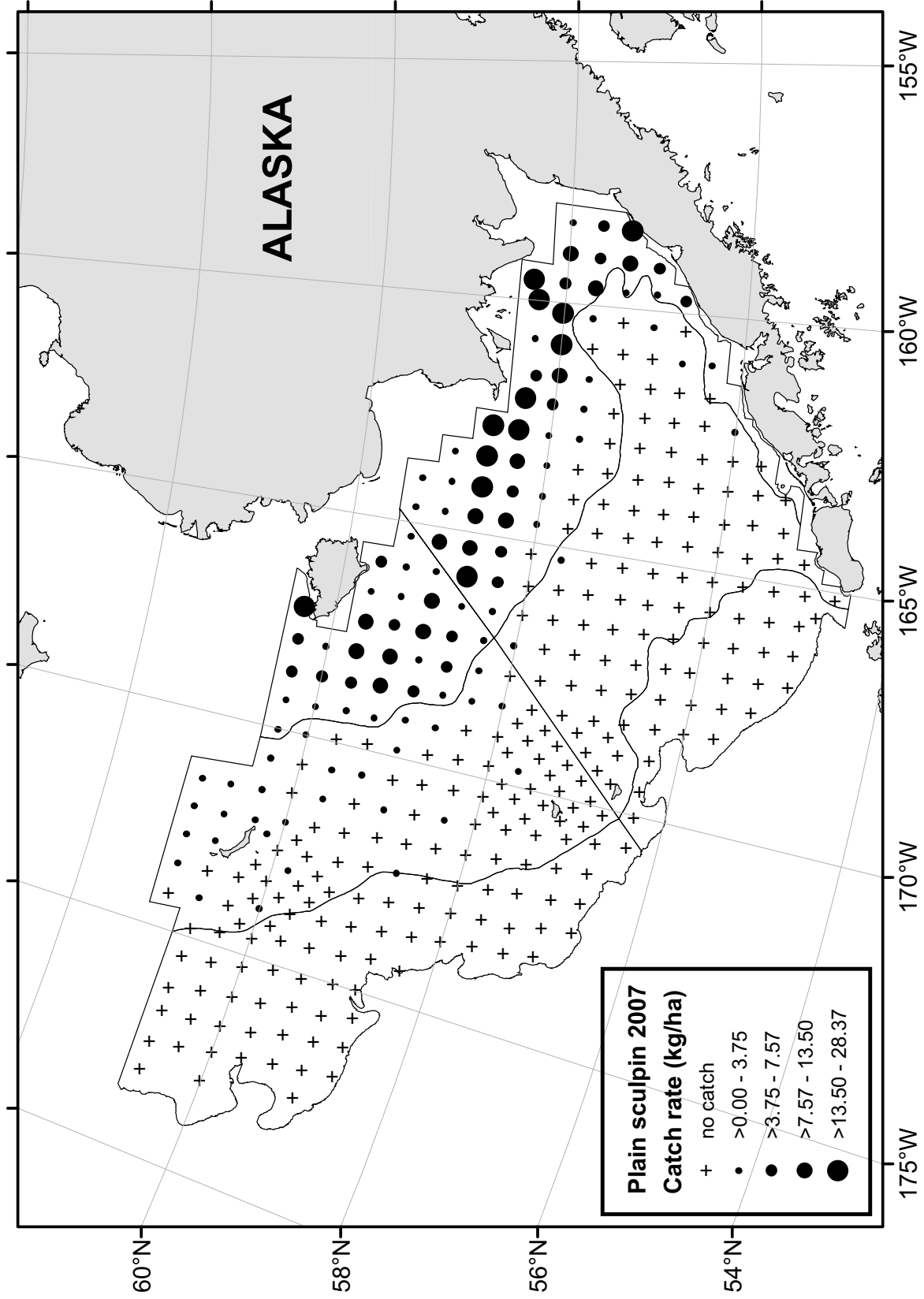


Figure 34. -- Distribution and relative abundance (kg/ha) of plain sculpin (*Myoxocephalus jaok*) for the 2007 eastern Bering Sea bottom trawl survey.

Table 24. -- Abundance estimates and mean size of **plain sculpin** (*Myoxocephalus jaok*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	6.82	53,146	0.683	11.44	89,077,680	0.707	0.597	34.3
20	5.43	22,281	0.286	8.43	34,573,369	0.274	0.644	33.1
30	0.04	373	0.005	0.03	260,832	0.002	1.431	40.7
40	0.18	1,983	0.025	0.19	2,079,551	0.016	0.954	45.2
50	0.00	0	0.000	0.00	0	0.000	0.000	0.0
60	0.01	53	0.001	0.01	60,833	0.000	0.870	0.0
All Strata	1.68	77,836	1.000	2.72	126,052,265	1.000	0.617	34.4
95% confidence interval		± 17,071		±	31,332,779			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Bigmouth sculpin

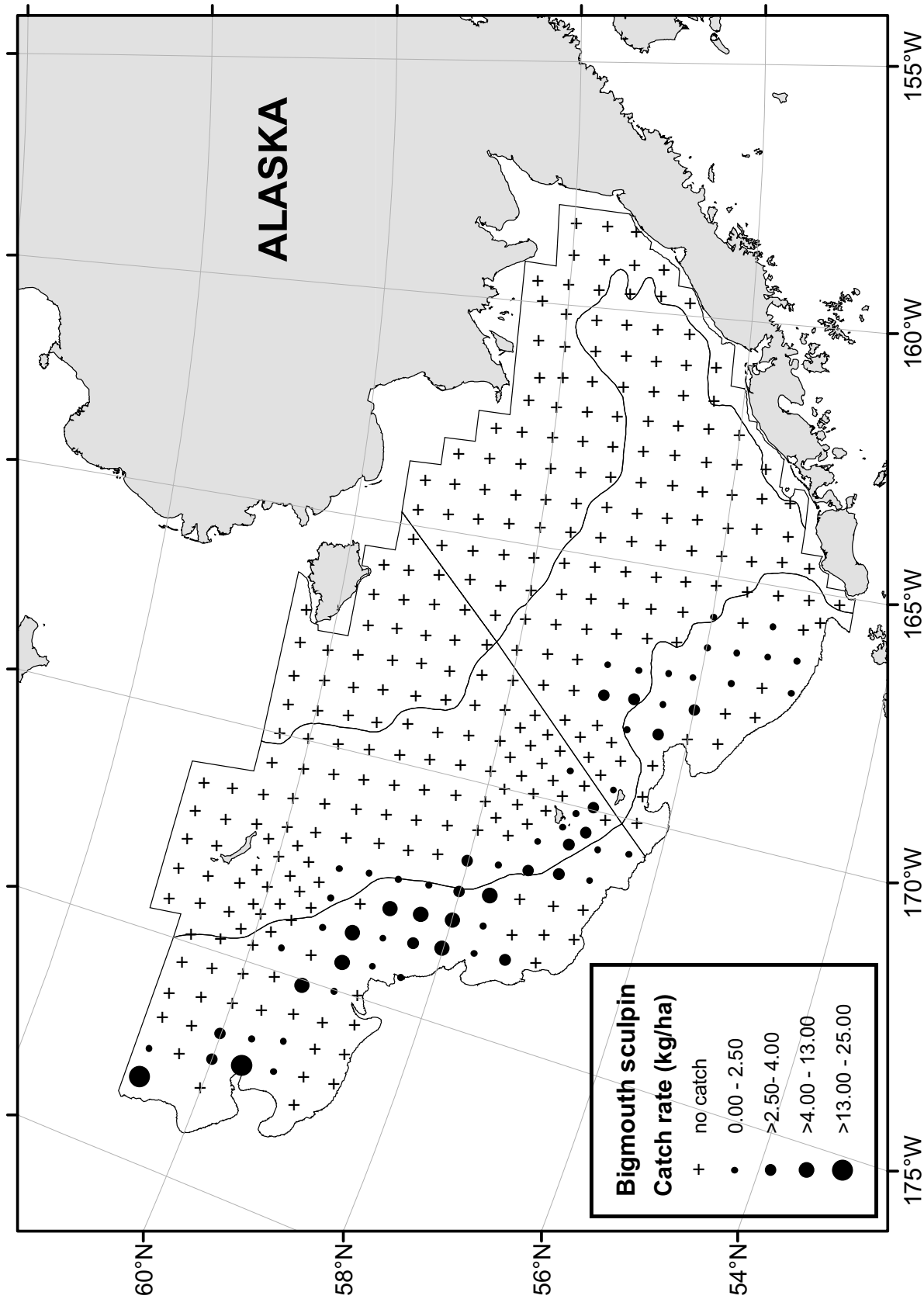


Figure 35. -- Distribution and relative abundance (kg/ha) of bigmouth sculpin (*Hemiripterus bolini*) for the 2007 eastern Bering Sea bottom trawl survey.

Table 25. -- Abundance estimates and mean size of **bigmouth sculpin** (*Hemitripterus bolini*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	0.00	0	0.000	0.00	0	0.000	0.000	0.0
20	0.00	0	0.000	0.00	0	0.000	0.000	0.0
30	0.16	1,658	0.060	0.03	329,002	0.047	5.040	62.1
40	0.22	2,378	0.085	0.05	580,848	0.083	4.093	58.8
50	0.57	2,217	0.080	0.16	617,697	0.089	3.589	62.1
60	2.28	21,606	0.776	0.58	5,450,573	0.781	3.964	53.9
All Strata	0.60	27,859	1.000	0.15	6,978,121	1.000	3.992	56.6
95% confidence interval		± 10,125		±	2,495,862			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Wattled eelpout

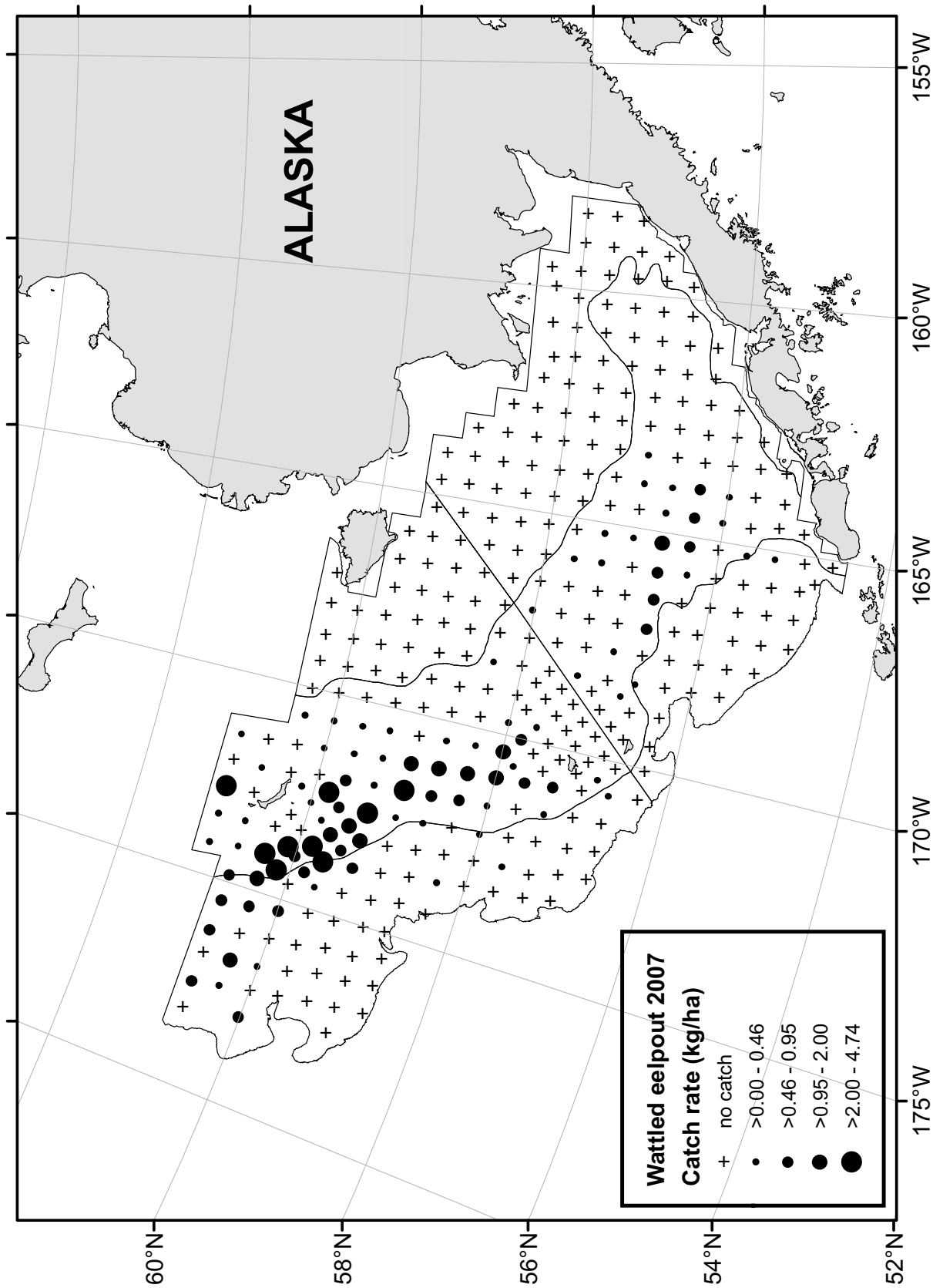


Figure 36. -- Distribution and relative abundance (kg/ha) of wattled eelpout (*Lycodes palearis*) for the 2007 eastern Bering Sea bottom trawl survey.

Table 26. -- Abundance estimates and mean size of **wattled eelpout** (*Lycodes palearis*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	0.00	0	0.000	0.00	0	0.000	0.000	0.0
20	0.00	0	0.000	0.00	0	0.000	0.000	41.0
30	0.10	1,063	0.133	0.47	4,853,980	0.137	0.219	39.2
40	0.51	5,466	0.683	2.25	24,282,296	0.685	0.225	36.2
50	0.01	56	0.007	0.05	208,199	0.006	0.267	46.6
60	0.15	1,422	0.178	0.64	6,085,387	0.172	0.234	37.6
All Strata	0.17	8,007	1.000	0.76	35,429,862	1.000	0.226	37.0
95% confidence interval		± 2,302		±	9,041,635			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Shortfin eelpout

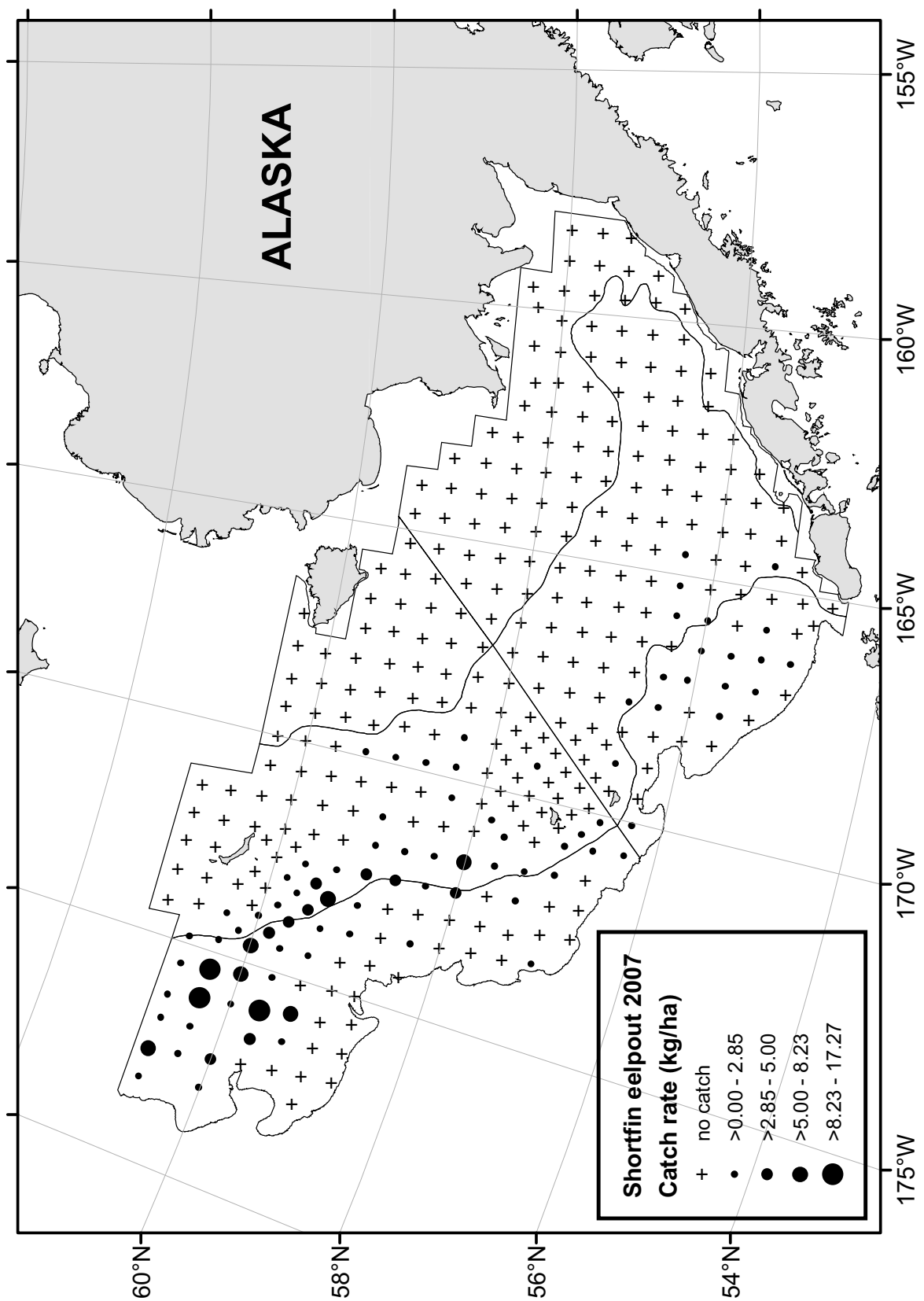


Figure 37. -- Distribution and relative abundance (kg/ha) of shortfin eelpout (*Lycodes brevipes*) for the 2007 eastern Bering Sea bottom trawl survey.

Table 27. -- Abundance estimates and mean size of **shortfin eelpout** (*Lycodes brevipes*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	0.00	0	0.000	0.00	0	0.000	0.000	0.0
20	0.00	0	0.000	0.00	0	0.000	0.000	0.0
30	0.01	71	0.003	0.19	1,939,054	0.007	0.037	21.5
40	0.38	4,063	0.182	6.02	64,887,271	0.238	0.063	23.0
50	0.10	372	0.017	1.91	7,410,171	0.027	0.050	23.0
60	1.88	17,813	0.798	21.02	198,799,941	0.728	0.090	25.8
All Strata	0.48	22,320	1.000	5.89	273,036,437	1.000	0.082	25.2
95% confidence interval		± 8,838		±	95,333,488			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Marbled eelpout

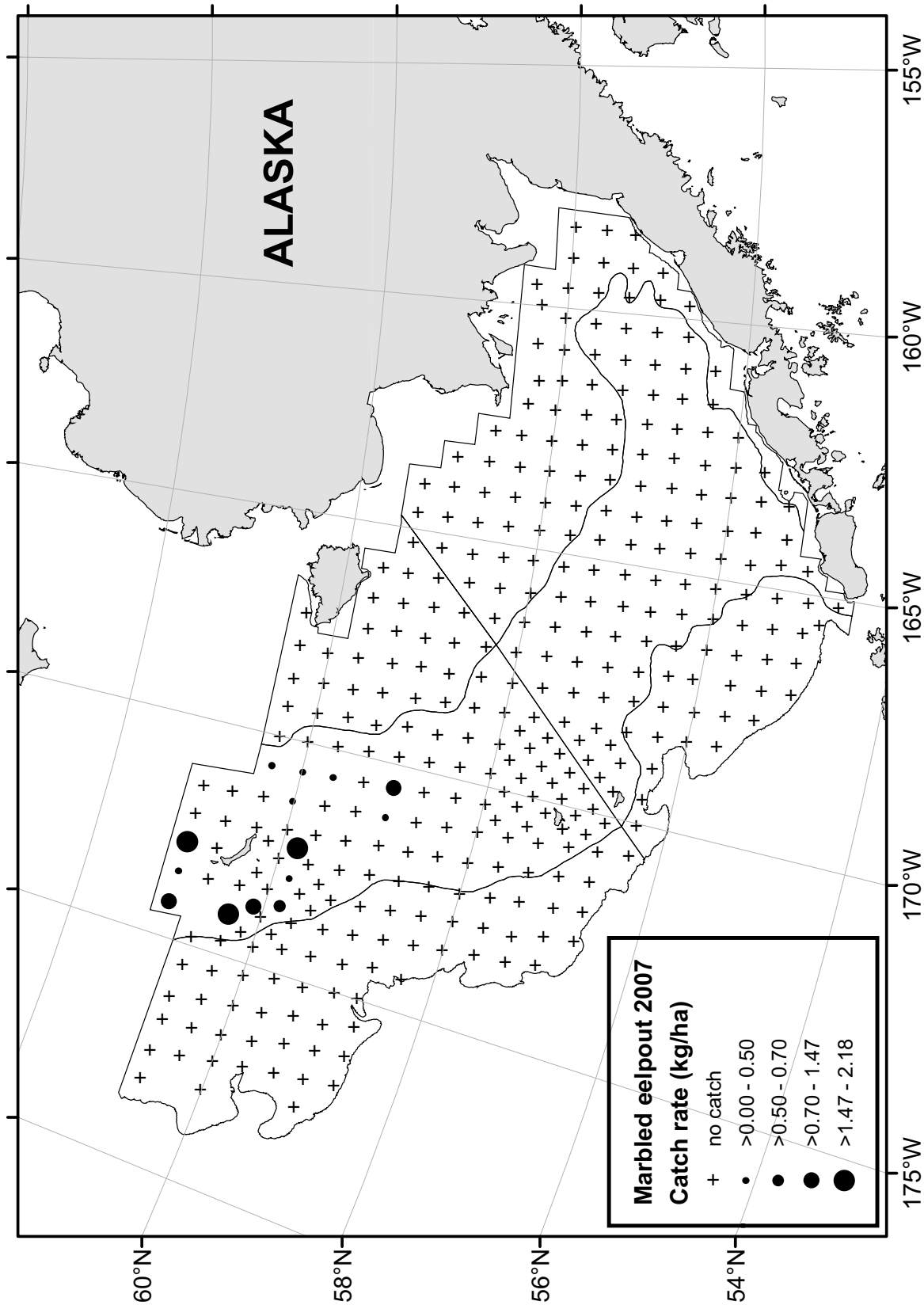


Figure 38. -- Distribution and relative abundance (kg/ha) of marbled eelpout (*Lycodes varidens*) for the 2007 eastern Bering Sea bottom trawl survey.

Table 28. -- Abundance estimates and mean size of **marbled eelpout**(*Lycodes varidens*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	0.00	0	0.000	0.00	0	0.000	0.000	0.0
20	0.00	0	0.000	0.00	0	0.000	0.000	0.0
30	0.00	0	0.000	0.00	0	0.000	0.000	0.0
40	0.15	1,611	1.000	0.10	1,080,303	1.000	1.492	59.0
50	0.00	0	0.000	0.00	0	0.000	0.000	0.0
60	0.00	0	0.000	0.00	0	0.000	0.000	0.0
All Strata	0.03	1,611	1.000	0.02	1,080,303	1.000	1.492	59.0
95% confidence interval		± 959		±	633,893			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Sturgeon poacher

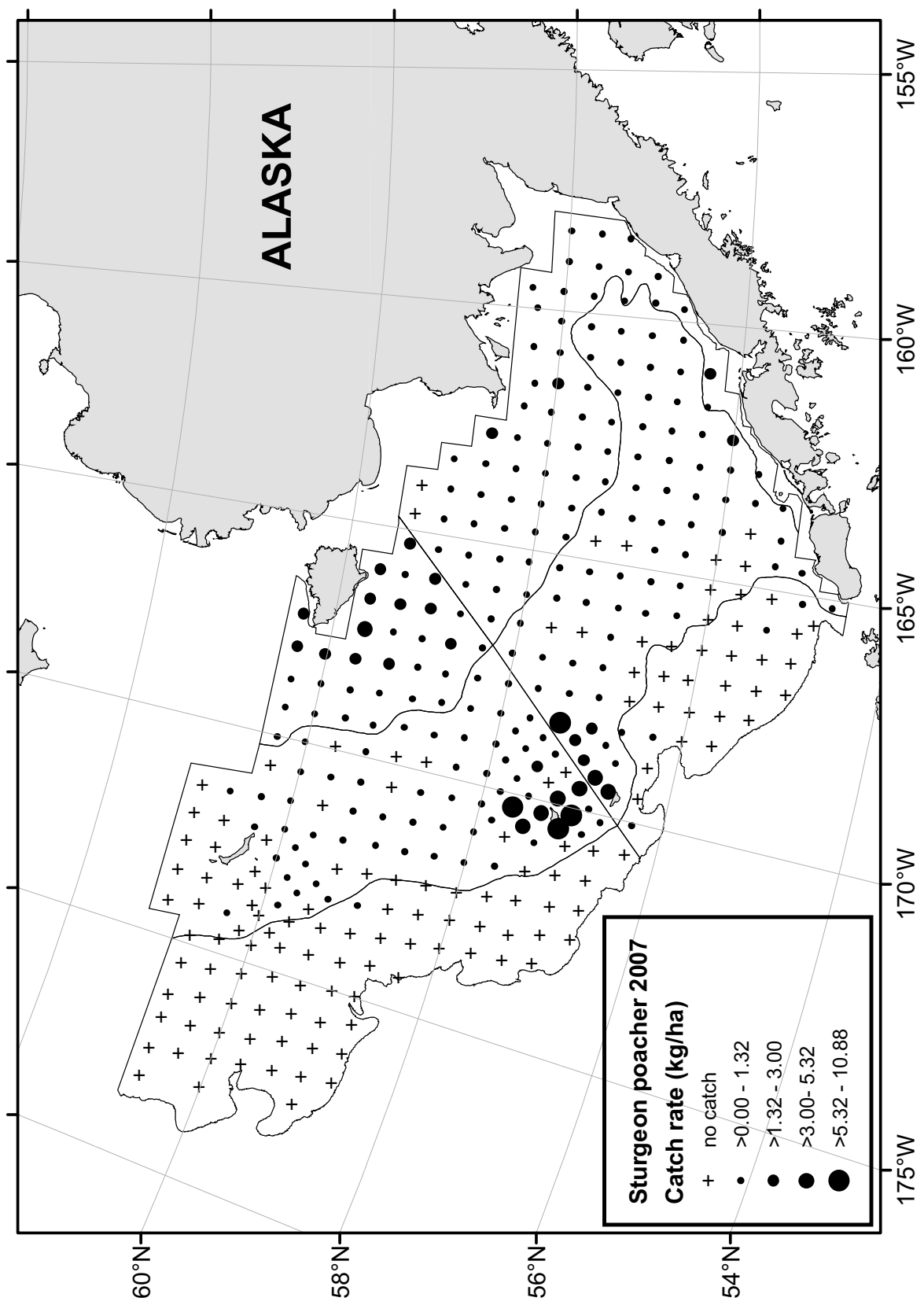


Figure 39. -- Distribution and relative abundance (kg/ha) of sturgeon poacher (*Podothecus accipenserinus*) for the 2007 eastern Bering Sea bottom trawl survey.

Table 29. -- Abundance estimates and mean size of **sturgeon poacher** (*Podothecus accipenserinus*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	0.41	3,165	0.179	5.79	45,100,753	0.188	0.070	
20	1.25	5,138	0.291	16.02	65,713,214	0.274	0.078	
30	0.45	4,621	0.262	6.55	67,693,489	0.282	0.068	
40	0.43	4,676	0.265	5.63	60,750,441	0.253	0.077	
50	0.01	47	0.003	0.19	746,582	0.003	0.063	
60	0.00	5	0.000	0.01	90,148	0.000	0.055	
All Strata	0.38	17,652	1.000	5.18	240,094,627	1.000	0.074	
95% confidence interval		± 3,300		±	40,753,187			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Bering poacher

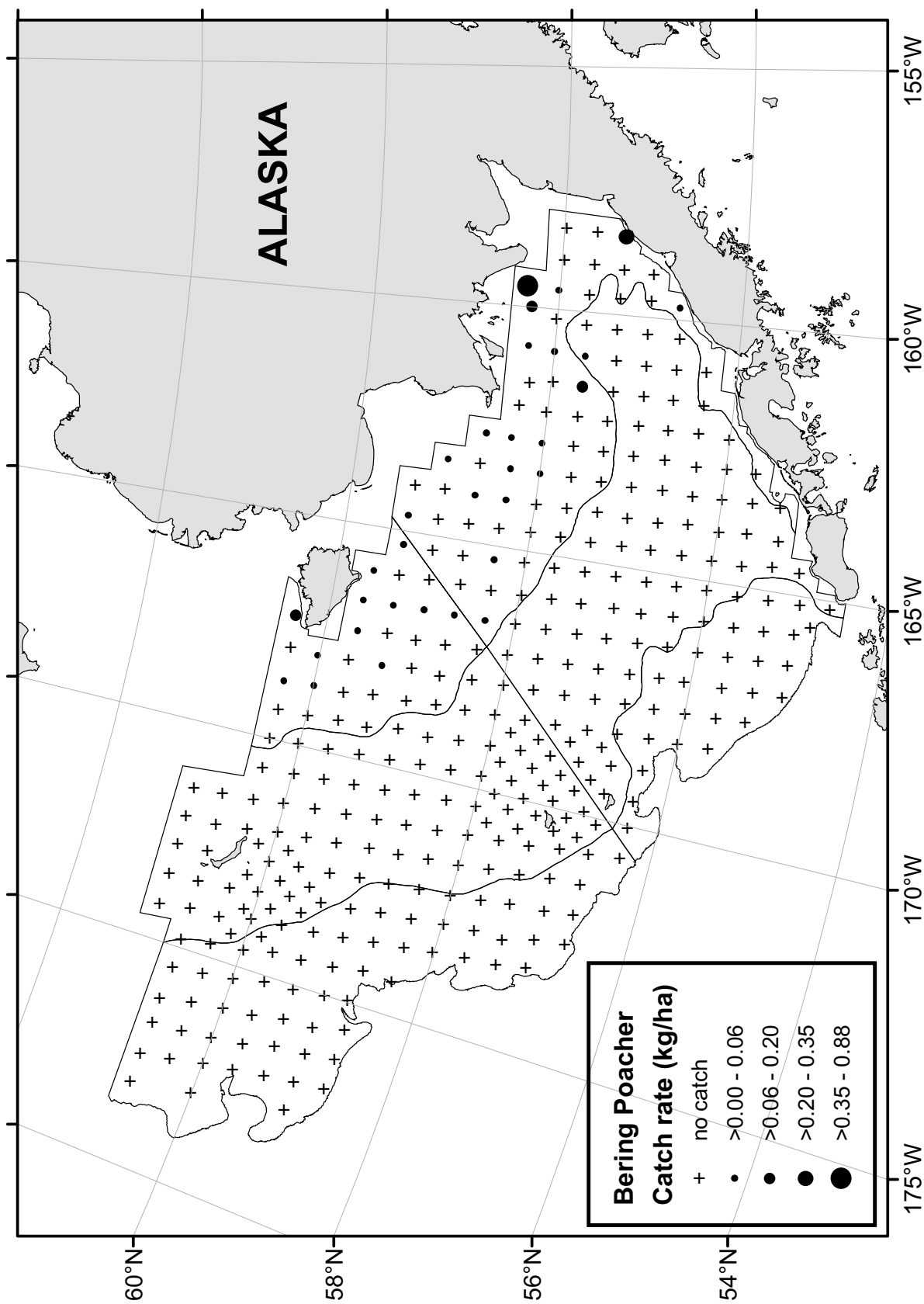


Figure 40. -- Distribution and relative abundance (kg/ha) of Bering poacher (*Ocella dodecaedron*) for the 2007 eastern Bering Sea bottom trawl survey.

Table 30. -- Abundance estimates and mean size of **Bering poacher** (*Ocella dodecaerdron*) by stratum for the 2007 eastern Bering Sea bottom trawl survey.

Stratum	Mean CPUE (kg/ha)	Estimated biomass (t) ^a	Proportion of estimated biomass	Mean CPUE (no./ha)	Estimated population numbers ^b	Proportion of estimated population	Mean weight (kg)	Mean length (cm)
10	0.03	268	0.858	0.46	3,578,448	0.677	0.075	
20	0.01	43	0.139	0.41	1,677,098	0.317	0.026	
30	0.00	1	0.003	0.00	29,329	0.006	0.030	
40	0.00	0	0.000	0.00	0	0.000	0.000	
50	0.00	0	0.000	0.00	0	0.000	0.000	
60	0.00	0	0.000	0.00	0	0.000	0.000	
All Strata	0.01	312	1.000	0.11	5,284,875	1.000	0.059	
95% confidence interval		± 254		±	2,330,112			

^aVariances and abundance estimates are given in Appendix D.

^bDifferences in sums of estimates and totals are due to rounding.

Butterfly sculpin

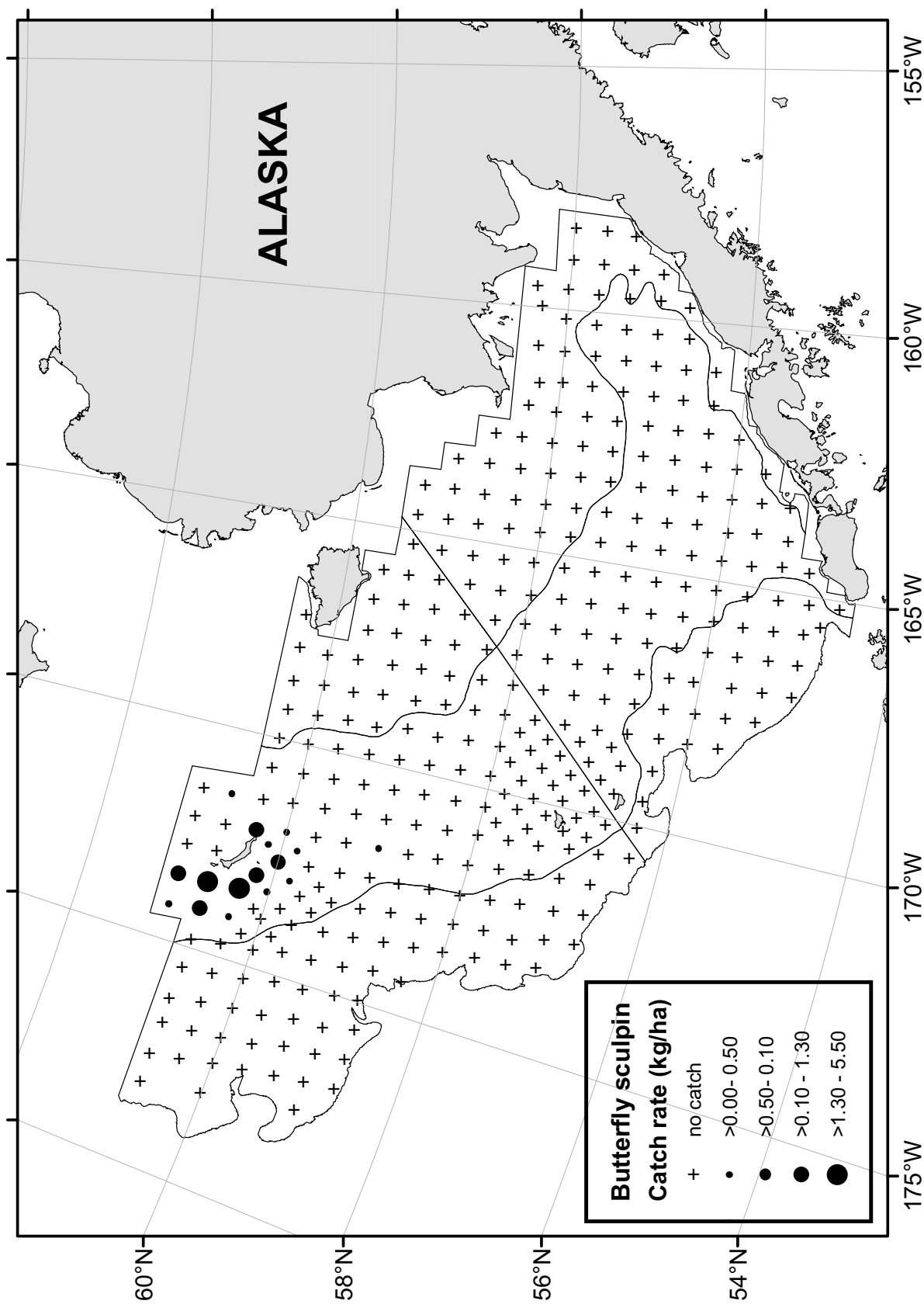


Figure 41. -- Distribution and relative abundance (kg/ha) of butterfly sculpin (*Hemilepidotus papilio*) for the 2007 eastern Bering Sea bottom trawl survey.

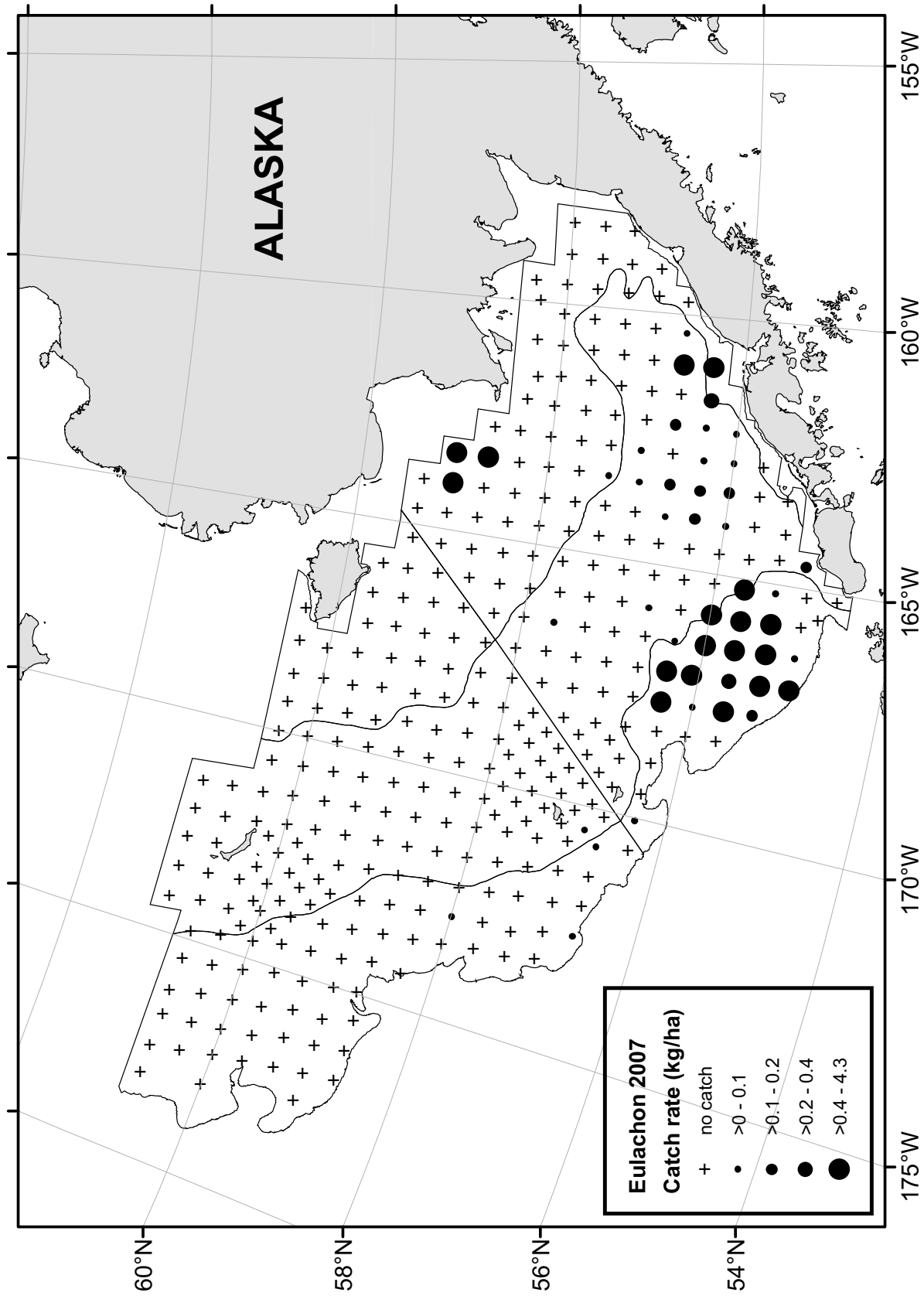


Figure 42. -- Distribution and relative abundance (kg/ha) of eulachon (*Thaleichthys pacificus*) for the 2007 eastern Bering Sea bottom trawl survey.

Capelin

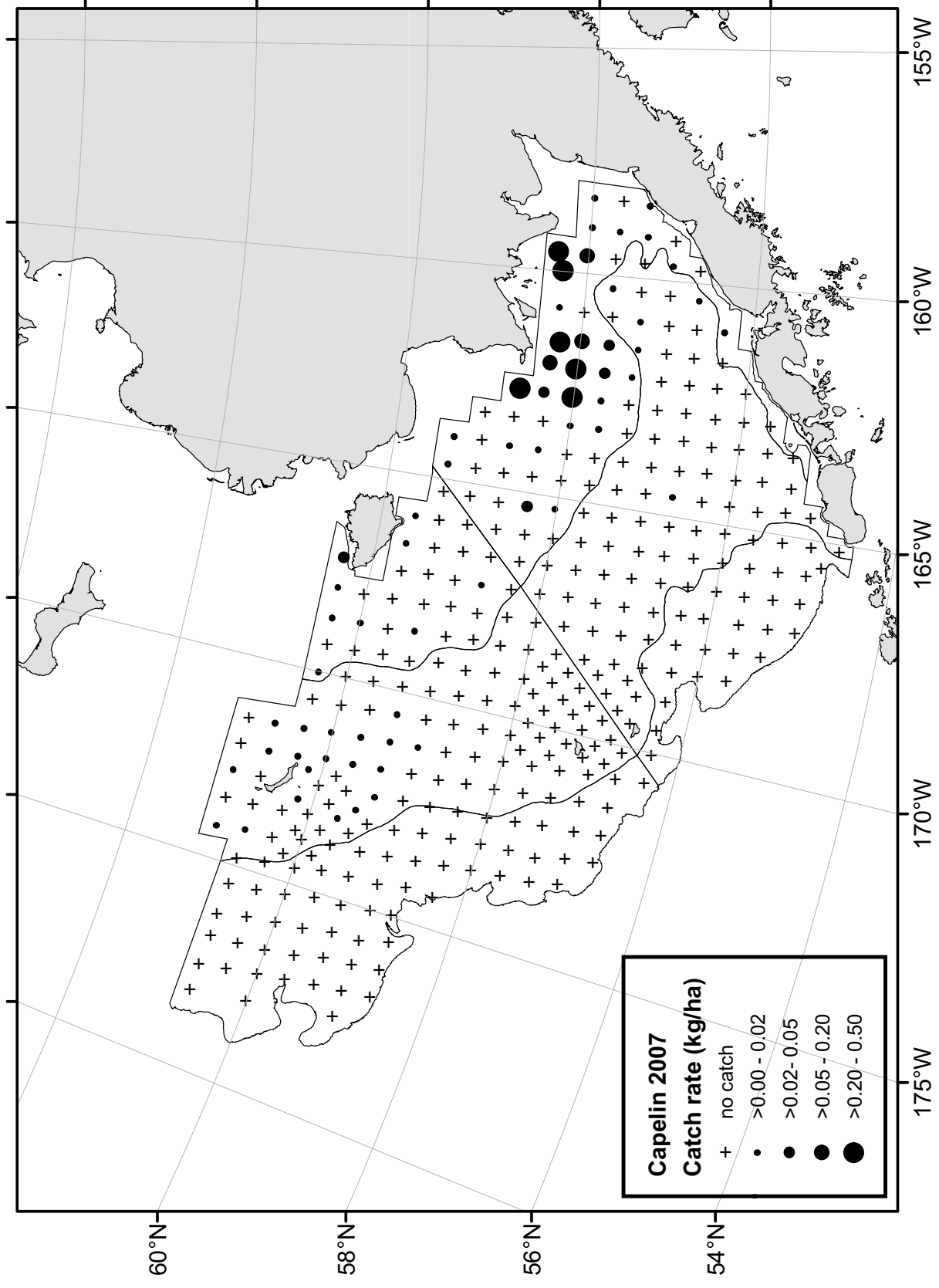


Figure 43. -- Distribution and relative abundance (kg/ha) of capelin (*Mallotus villosus*) for the 2007 eastern Bering Sea bottom trawl survey.

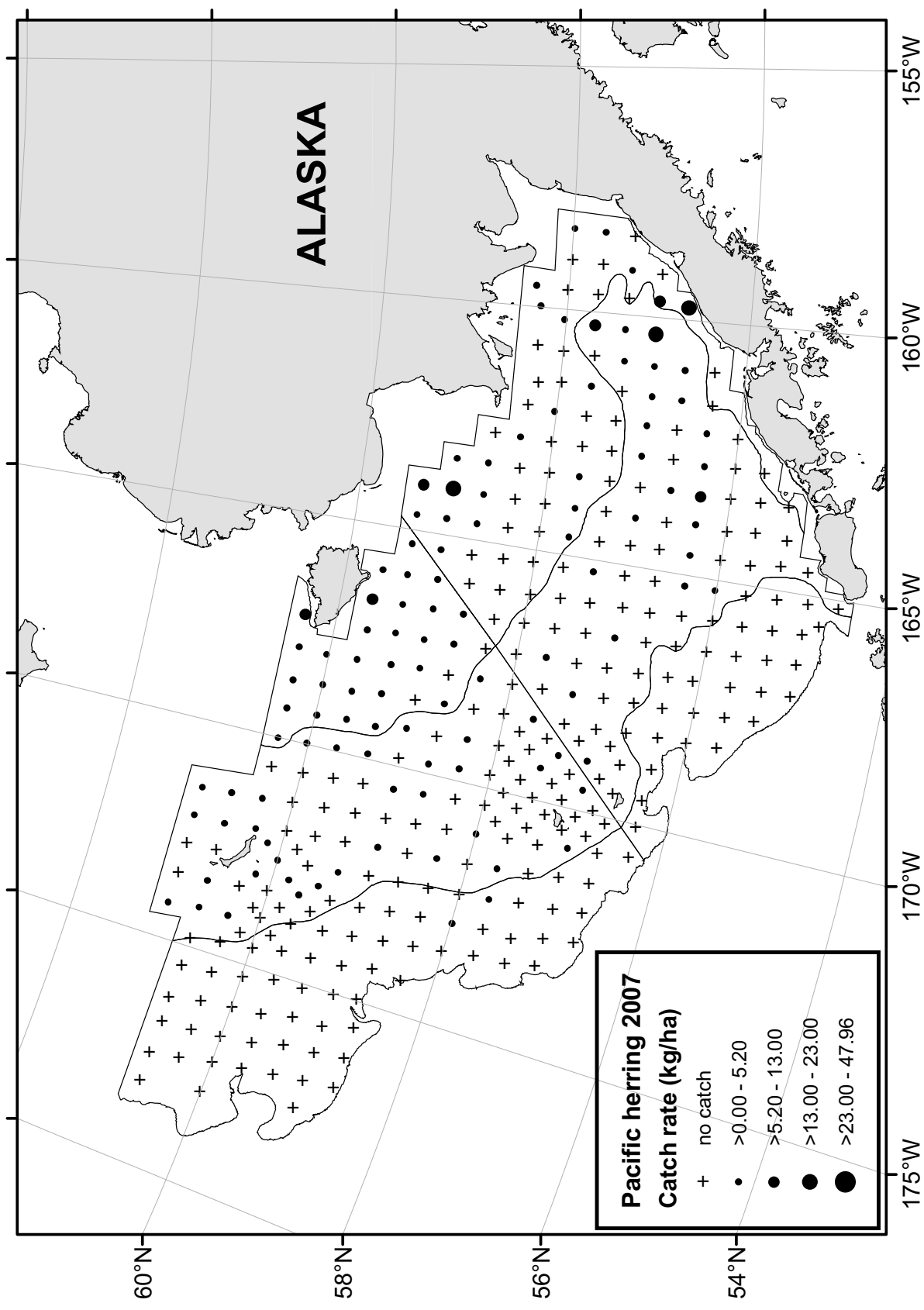


Figure 44. -- Distribution and relative abundance (kg/ha) of Pacific herring (*Clupea pallasii*) for the 2007 eastern Bering Sea bottom trawl survey.

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Appendix A: List of Species Encountered

Appendix A lists all fish and invertebrate species taken during the AFSC's 2007 eastern Bering Sea bottom trawl survey.

List of Tables

Appendix A Table 1 – Fish species encountered during the 2007 eastern Bering Sea bottom trawl survey.

Appendix A Table 2 - Invertebrate species encountered during the 2007 eastern Bering Sea bottom trawl survey.

Appendix A Table 1. -- Fish species encountered during the 2007 eastern Bering Sea bottom trawl survey.

Family / Subfamily	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range		
				Min. depth	Max. depth	Avg. depth	Southern	Northern	
Agonidae	Agonidae	poacher unident.	1	148	148	148	57.66872	57.66872	
	<i>Aspidophoroides bartoni</i>	Aleutian alligatorfish	28	45	136	72	56.34547	60.31706	
	<i>Aspidophoroides olriki</i>	Arctic alligatorfish	1	142	142	142	60.01427	60.01427	
	<i>Bathogonus alascanus</i>	gray starsnout	2	93	160	126	56.00022	56.32369	
	<i>Bathogonus pentacanthus</i>	bigeye poacher	1	110	110	110	59.3162	59.3162	
	<i>Leptogonus frenatus</i>	sawback poacher	44	61	163	106	54.83508	61.66207	
	<i>Leptogonus leptorhynchus</i>	longnose poacher	2	71	77	74	57.33033	57.34849	
	<i>Ocella dodecaedron</i>	Bering poacher	32	20	59	35	56.68611	60.33934	
	<i>Pallasina barbata</i>	tubenose poacher	1	26	26	26	58.63049	58.63049	
	<i>Podothecus accipenserinus</i>	sturgeon poacher	224	20	160	62	54.66053	60.67525	
	<i>Ammodytes hexapterus</i>	Pacific sand lance	10	26	63	43	55.67498	59.99001	
	Anarrhichadidae	<i>Anarrhichas orientalis</i>	Bering wolffish	4	20	71	46	55.0516	59.60424
	Ammodytidae	<i>Anarrhichthys ocellatus</i>	wolf-eel	1	32	32	32	60.33268	60.33268
		<i>Anoplopoma fimbria</i>	sablefish	2	51	104	77	55.35265	55.36137
	Bathymasteridae	Bathymasteridae	ronquill unident.	1	64	64	64	60.32141	60.32141
<i>Bathymaster signatus</i>		searcher	55	69	163	124	54.83508	60.66707	
<i>Clupea pallasi</i>		Pacific herring	116	20	109	57	56.01322	61.32231	
<i>Arctidellus pacificus</i>		hookhorn sculpin	5	69	117	83	56.67264	58.99046	
<i>Dasycottus setiger</i>		spinyhead sculpin	58	81	160	116	55.00087	60.67388	
<i>Eurymen gyrinus</i>		smoothcheek sculpin	3	60	71	65	60.31706	61.6552	
<i>Gymnocanthus galeatus</i>		armorhead sculpin	9	49	137	76	55.32661	58.66635	
<i>Gymnocanthus pistilliger</i>		threaded sculpin	46	20	80	38	56.66548	60.33934	
<i>Hemilepidotus hemilepidotus</i>		red Irish lord	1	71	71	71	56.00937	56.00937	
<i>Hemilepidotus jordani</i>		yellow Irish lord	59	48	154	88	54.66053	60.33686	
<i>Hemilepidotus papilio</i>		butterfly sculpin	21	59	93	73	58.98734	62.00076	
<i>Hemitripterus bolini</i>		bigmouth sculpin	65	48	174	116	55.00087	60.67388	
<i>Icelinus borealis</i>		northern sculpin	2	59	65	62	57.32484	57.65904	
<i>Icelus canaliculatus</i>		blacknose sculpin	1	150	150	150	56.01025	56.01025	
<i>Icelus spatula</i>		spatulate sculpin	45	55	159	80	54.83508	62.00043	
<i>Icelus spiniger</i>	thorny sculpin	63	58	155	118	55.00087	61.99196		
<i>Malacocottus zomurus</i>	darkfin sculpin	3	142	163	154	54.83508	58.34685		

Appendix A Table 1. -- Continued.

Family / Subfamily	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
	<i>Myoxocephalus jaok</i>	plain sculpin	138	20	101	49	56.00937	61.67003
	<i>Myoxocephalus polyacanthocephalus</i>	great sculpin	215	25	161	72	54.66053	62.00043
	<i>Myoxocephalus verrucosus</i>	warty sculpin	51	45	107	71	56.99219	60.99905
	<i>Nautichthys pribilovius</i>	eyeshade sculpin	1	77	77	77	57.34849	57.34849
	<i>Radulinus asprellus</i>	slim sculpin	1	148	148	148	57.66872	57.66872
	<i>Triglops forficata</i>	scissortail sculpin	3	49	154	94	56.66548	58.67874
	<i>Triglops macellus</i>	roughspine sculpin	6	76	136	107	54.99203	55.67895
	<i>Triglops pingeli</i>	ribbed sculpin	37	21	86	59	55.3307	60.33934
	<i>Triglops septicus</i>	spectacled sculpin	9	26	163	136	55.00087	59.33041
Cyclopterinae	<i>Aptocyclus ventricosus</i>	smooth lumpsucker	1	96	96	96	58.34083	58.34083
	<i>Cyclopteroopsis phrynooides</i>	toad lumpsucker	2	95	101	98	56.84203	56.99174
Gadidae	<i>Boreogadus saida</i>	Arctic cod	87	31	121	74	56.33333	62.00076
	<i>Eleginus gracilis</i>	saffron cod	7	20	32	24	58.99977	60.33934
	<i>Gadus macrocephalus</i>	Pacific cod	400	20	174	79	54.83508	62.00076
	<i>Theragra chalcogramma</i>	walleye pollock	390	20	174	80	54.66053	62.00076
Hexagrammidae	<i>Hexagrammos decagrammus</i>	kelp greenling	1	76	76	76	55.3307	55.3307
	<i>Hexagrammos stelleri</i>	whitespotted greenling	9	20	41	30	57.32781	60.33934
	<i>Pleurogrammus monopterygius</i>	Atka mackerel	5	67	159	107	54.83508	58.66635
Liparidinae	<i>Careproctus rastrinus</i>	salmon snailfish	36	68	149	98	59.32264	62.00043
	<i>Cryсталlichthys cyclospilus</i>	blotched snailfish	1	159	159	159	54.83508	54.83508
	Liparidinae	snailfish unident.	1	102	102	102	59.50238	59.50238
	<i>Liparis gibbus</i>	variegated snailfish	42	40	121	69	57.80475	62.00076
Osmeridae	<i>Mallotus villosus</i>	capelin	72	20	97	55	56.33765	62.00076
	<i>Oncorhynchus keta</i>	chum salmon	1	74	74	74	62.00026	62.00026
	<i>Oncorhynchus tshawytscha</i>	chinook salmon	2	47	76	61	57.99659	59.82705
	<i>Osmerus mordax</i>	rainbow smelt	4	20	29	22	59.31557	60.33934
	<i>Thaleichthys pacificus</i>	eulachon	48	21	155	96	55.00087	58.99977
Pleuronectidae	<i>Atheresthes evermanni</i>	Kamchatka flounder	134	57	174	117	54.83508	61.66207
	<i>Atheresthes stomias</i>	arrowtooth flounder	174	48	174	104	54.66053	60.67388
	<i>Glyptocephalus zachirus</i>	rex sole	75	33	163	113	54.66053	59.33041
	<i>Hippoglossoides elassodon</i>	flathead sole	304	33	174	88	54.66053	61.99196

Appendix A Table 1. -- Continued.

Family / Subfamily	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
	<i>Hippoglossoides robustus</i>	Bering flounder	92	40	146	85	57.6748	62.00076
	<i>Hippoglossoides</i> sp.		1	126	126	126	59.65709	59.65709
	<i>Hippoglossus stenolepis</i>	Pacific halibut	320	20	163	77	54.66053	61.67003
	<i>Isosetta isolepis</i>	butter sole	9	49	83	63	55.36137	57.18779
	<i>Lepidopsetta bilineata</i>	southern rock sole	2	67	76	71	55.0516	55.3307
	<i>Lepidopsetta polyxystra</i>	northern rock sole	367	20	174	74	54.66053	62.00043
	<i>Limanda aspera</i>	yellowfin sole	282	20	110	61	54.66053	62.00076
	<i>Limanda proboscidea</i>	longhead dab	56	20	55	36	56.33765	60.33934
	<i>Limanda sakhalinensis</i>	Sakhalin sole	10	45	80	63	58.0107	62.00076
	<i>Microstomus pacificus</i>	Dover sole	7	94	163	122	54.99203	58.34685
	<i>Platichthys stellatus</i>	starry flounder	69	20	71	42	55.36137	60.33934
	<i>Pleuronectes quadrituberculatus</i>	Alaska plaice	295	20	161	65	55.3307	62.00076
	<i>Reinhardtius hippoglossoides</i>	Greenland turbot	84	46	174	99	56.6627	62.00043
	<i>Bathyraja aleutica</i>	Aleutian skate	6	128	163	144	55.00087	59.00541
	<i>Bathyraja interrupta</i>	Bering skate	74	58	174	118	54.66053	61.33545
	<i>Bathyraja interrupta</i> egg case		8	116	155	132	55.00087	57.65531
	<i>Bathyraja maculata</i>	whiteblotched skate	2	130	142	136	56.31375	56.34053
	<i>Bathyraja parmifera</i>	Alaska skate	390	20	174	80	54.66053	62.00076
	<i>Bathyraja parmifera</i> egg case	Alaska skate egg case	9	59	139	90	55.32306	60.99895
	<i>Bathyraja</i> sp. egg case		1	60	60	60	56.98672	56.98672
	<i>Raja binoculata</i>	big skate	3	51	81	65	54.66053	55.82258
	<i>Sebastes aleutianus</i>	rougeye rockfish	2	137	148	142	55.00626	55.32661
	<i>Sebastes alutus</i>	Pacific ocean perch	10	107	150	129	56.01025	60.65598
	<i>Sebastes polyspinis</i>	northern rockfish	1	142	142	142	56.34053	56.34053
	<i>Acantholumpenus mackayi</i>	pighead prickleback	1	29	29	29	60.33934	60.33934
	<i>Lumpenus fabricii</i>	slender eelblenny	3	29	112	57	58.676	60.33934
	<i>Lumpenus maculatus</i>	daubed shanny	24	75	160	106	56.32369	62.00043
	<i>Lumpenus medius</i>	stout eelblenny	6	60	81	69	60.33475	62.00043
	<i>Lumpenus</i> sp.		1	128	128	128	56.66487	56.66487
	<i>Poroclinus rothrocki</i>	whitebarred prickleback	4	113	136	124	55.32735	56.67526
	<i>Trichodon trichodon</i>	Pacific sandfish	7	34	51	42	57.18779	57.98627

Appendix A Table 1. -- Continued.

Family / Subfamily	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
Zaproridae	<i>Zaproro silemus</i>	prowfish	2	142	159	150	54.83508	56.34053
Zoarcidae	<i>Lycodes brevipes</i>	shortfin eelpout	98	61	161	108	55.00626	61.66207
	<i>Lycodes palearis</i>	wattled eelpout	116	59	149	90	55.33625	62.00076
	<i>Lycodes raridens</i>	marbled eelpout	27	63	117	80	58.98563	62.00076
other		fish eggs unident.	1	53	53	53	57.67936	57.67936
other		fish larvae unident.	1	55	55	55	57.98182	57.98182
other		skate egg case unident.	10	67	147	111	54.99203	58.34083

Appendix A Table 2. -- Invertebrate species encountered during the 2007 eastern Bering Sea bottom trawl survey.

Grouping	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range		
				Min. depth	Max. depth	Avg. depth	Southern	Northern	
Annelida		worm unident.	3	60	74	65	57.99244	62.00026	
		tube worm unident.	5	60	135	78	56.67088	60.99105	
	<i>Aphrodita negligens</i>	sea mouse	19	109	174	139	56.33587	60.66707	
	<i>Aphrodita</i> sp.	sea mouse	2	102	112	107	56.32663	58.676	
	Aphroditidae	sea mouse unident.	1	88	88	88	59.32817	59.32817	
	<i>Eunice valens</i>	polychaete worm	1	69	69	69	57.34231	57.34231	
	<i>Eunoe depressa</i>	depressed scale worm	44	46	142	93	55.99089	61.33732	
	<i>Eunoe nodosa</i>	giant scale worm	60	46	160	95	56.32316	61.99196	
	<i>Eunoe</i> sp.	scale worm	1	117	117	117	58.01474	58.01474	
	Hirudinea unident.	leech unident.	1	93	93	93	58.66635	58.66635	
	<i>Carcinobdella cyclostomum</i>	striped sea leech	1	91	91	91	60.34048	60.34048	
	Polychaeta	polychaete worm unident.	2	33	136	84	57.32781	59.99658	
	Polynoidae	scale worm unident.	1	77	77	77	56.65521	56.65521	
	<i>Serpula columbiana</i>	polychaete worm	6	100	159	128	54.83508	56.99824	
	<i>Serpula</i> sp.	polychaete worm	1	121	121	121	56.33333	56.33333	
	Arthropoda		shrimp unident.	1	77	77	77	59.67567	59.67567
		Amphipoda	amphipod unident.	1	77	77	77	56.65521	56.65521
		<i>Argis alaskensis</i>	common argid	1	81	81	81	56.98812	56.98812
		<i>Argis dentata</i>	Arctic argid	35	63	159	103	54.83508	61.99196
		<i>Argis lar</i>	kuro argid	4	97	113	105	56.33587	56.84203
<i>Argis levior</i>		Nelson's argid	2	64	67	65	60.32141	60.66801	
<i>Argis</i> sp.		argid shrimp	48	36	135	74	55.99089	62.00043	
<i>Balanus evermanni</i>		giant barnacle	7	41	163	94	56.00022	58.67874	
<i>Balanus</i> sp.		barnacle	19	60	160	105	56.01025	61.33545	
<i>Cancer magister</i>		Dungeness crab	1	51	51	51	55.36137	55.36137	
<i>Cancer oregonensis</i>		Oregon rock crab	23	54	104	76	55.3307	57.49684	
<i>Caprella</i> sp.		caprellid amphipod unident.	1	107	107	107	60.65598	60.65598	
<i>Chionoecetes bairdi</i>		Tanner crab	320	38	174	87	54.66053	61.34008	
<i>Chionoecetes</i> hybrid		hybrid Tanner crab	70	46	160	86	54.83508	61.66908	

Appendix A Table 2. -- Continued.

Grouping	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
	<i>Chionoecetes opilio</i>	snow crab	273	43	161	88	54.99203	62.00076
	<i>Crangon communis</i>	twospine crangon	46	21	159	75	54.83508	59.65304
	<i>Crangon dalli</i>	ridged crangon	52	67	149	114	56.67526	61.99196
	<i>Crangon</i> sp.	crangon	66	20	155	74	55.00087	62.00043
	<i>Dermaturus mandti</i>	stone crab	1	32	32	32	58.2832	58.2832
	<i>Elassochirus cavimanus</i>	purple hermit crab	21	69	163	120	54.83508	59.00541
	<i>Elassochirus tenuimanus</i>	widehand hermit crab	4	51	83	66	55.3307	57.32827
	<i>Erimacrus isenbeckii</i>	horsehair crab	79	25	142	58	55.36137	60.31449
	<i>Eualus barbatus</i>	barbed eualid	3	121	155	132	55.00087	57.32111
	<i>Eualus gaimardii</i>	eualid shrimp	2	68	80	74	59.99354	61.3306
	<i>Eualus macilentus</i>	Greenland shrimp	7	92	107	99	60.98025	61.99196
	<i>Eualus</i> sp.	eualid shrimp	12	60	90	76	56.34448	62.00043
	Gammaridae	gammarid amphipod unident.	2	61	74	67	60.65932	62.00026
	Hippolytidae	hippolytid shrimp unident.	2	60	135	97	55.66254	60.17987
	<i>Hyas coarctatus</i>	circumboreal toad crab	157	27	115	66	55.36137	62.00076
	<i>Hyas lyratus</i>	Pacific lyre crab	157	32	163	89	54.83508	61.01371
	<i>Labidochirus splendescens</i>	splendid hermit	141	24	163	72	54.83508	62.00076
	<i>Lebbeus groenlandicus</i>	spiny lebbeid	1	75	75	75	60.02145	60.02145
	<i>Lebbeus polaris</i>	Polar lebbeid shrimp	1	101	101	101	56.84203	56.84203
	<i>Lebbeus</i> sp.	lebbeid shrimp	1	64	64	64	60.32141	60.32141
	<i>Oregonia gracilis</i>	graceful decorator crab	55	33	159	70	54.83508	58.01527
	Paguridae	hermit crab unident.	1	140	140	140	56.99805	56.99805
	<i>Pagurus aleuticus</i>	Aleutian hermit crab	138	51	160	102	54.83508	61.66207
	<i>Pagurus brandti</i>	sponge hermit crab	4	60	73	66	55.82258	57.68237
	<i>Pagurus capillatus</i>	hairy hermit crab	104	40	160	79	54.83508	59.98564
	<i>Pagurus confragosus</i>	knobbyhand hermit crab	95	69	163	107	54.83508	59.99217
	<i>Pagurus cornutus</i>	hornyhand hermit crab	2	84	103	93	58.32402	58.34487
	<i>Pagurus ochotensis</i>	Alaskan hermit crab	108	20	93	46	55.36137	60.33934
	<i>Pagurus rathbuni</i>	longfinger hermit crab	107	46	174	98	56.97317	62.00076
	<i>Pagurus</i> sp.	hermit crab	2	53	63	58	56.3253	57.65582

Appendix A Table 2. -- Continued.

Grouping	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
	<i>Pagurus trigonocheirus</i>	fuzzy hermit crab	208	36	174	84	54.83508	62.00076
	<i>Pandalus borealis</i>	northern shrimp	121	53	174	119	54.83508	61.66207
	<i>Pandalus goniurus</i>	humpy shrimp	99	29	135	78	55.33625	62.00076
	<i>Pandalus jordani</i>	ocean shrimp	1	59	59	59	57.65904	57.65904
	<i>Pandalus tridens</i>	yellowleg pandalid	8	72	160	104	55.98359	58.6622
	<i>Paralithodes camtschaticus</i>	red king crab	137	24	94	56	55.3307	60.32096
	<i>Paralithodes platypus</i>	blue king crab	36	46	110	81	56.98672	61.00002
	Polyplacophora unident.	chiton unident.	1	60	60	60	60.17987	60.17987
	<i>Spirontocaris arcuata</i>	Rathbun blade shrimp	3	64	91	76	60.02145	60.34048
	<i>Spirontocaris lamellicornis</i>	isopod	4	60	88	69	59.32817	60.31706
	<i>Telmessus cheiragonus</i>	helmet crab	27	20	51	33	58.01527	60.33934
	Thoracica	barnacle unident.	20	32	110	62	56.00937	60.67076
Ascididae	Ascidian unident.	tunicate unident.	12	33	138	70	57.32484	62.00043
	<i>Styela rustica</i>	sea potato	92	26	90	60	56.34448	60.99905
Brachiopoda	brachiopod unident.	lampshell unident.	2	65	163	114	57.65685	58.34685
Bryozoa	<i>Alcyonidium pedunculatum</i>	bryozoan	1	107	107	107	59.83813	59.83813
	Bryozoa unident.	bryozoan unident.	31	34	160	73	56.00937	61.3306
	<i>Bugula californica</i>	bryozoan	1	60	60	60	60.31706	60.31706
	<i>Dendrobeania</i> sp.	bryozoan	1	91	91	91	60.34048	60.34048
	<i>Flustra serrulata</i>	leafy bryozoan	9	36	160	72	56.32369	60.32096
	<i>Flustrellidra corniculata</i>	bryozoan	1	91	91	91	60.34048	60.34048
	<i>Leieschara orientalis</i>	bryozoan	1	60	60	60	60.31706	60.31706
	<i>Rhamphostomella costata</i>	ribbed bryozoan	16	41	150	81	54.66053	59.01813
Cnidaria	Actinaria	hydroid unident.	30	34	150	64	56.01025	61.32231
	Actinostolidae	sea anemone unident.	44	33	148	81	55.00626	62.00026
	<i>Aequorea</i> sp.	sea anemone	2	91	149	120	59.33041	60.34048
	Alcyonacea	jellyfish	12	121	149	134	57.32111	60.99626
	<i>Aurelia</i> sp.	soft coral unident.	1	93	93	93	56.00022	56.00022
	<i>Bathypeltia australis</i>	jellyfish	4	54	75	66	57.98595	58.66684
	<i>Chrysaora melanaster</i>	hot dog sea anemone	1	163	163	163	58.34685	58.34685
		lion's mane jelly fish	214	33	160	84	54.66053	62.00076

Appendix A Table 2. -- Continued.

Grouping	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
	<i>Chrysaora</i> sp.	chrysaora jellyfish	1	62	62	62	57.00459	57.00459
	<i>Cribrinopsis fernaldi</i>	chevron-tentacled anemone	3	106	155	126	55.00087	57.65531
	<i>Cyanea capillata</i>	lion's mane	24	49	142	90	56.34053	58.67876
	<i>Gersemia rubiformis</i>	sea raspberry	37	31	86	53	56.33765	60.33048
	<i>Gersemia</i> sp.	sea raspberry	42	28	161	63	56.65521	62.00076
	<i>Halpterus</i> sp.	sea whip	4	109	155	127	55.00087	57.35653
	<i>Halpterus willemoesi</i>	sea whip	5	100	136	120	54.99203	56.99824
	<i>Liponema brevicornis</i>	tentacle-shedding anemone	53	34	163	121	54.99711	59.33041
	<i>Metridium farcinum</i> (= <i>Metridium giganteum</i>)	gigantic anemone	54	32	159	74	54.83508	58.34514
	<i>Metridium</i> sp.	sea anemone	21	27	149	80	56.66487	60.33934
	<i>Phacellophora camtschatica</i>	egg yolk jellyfish	1	119	119	119	55.32735	55.32735
	<i>Phacellophora</i> sp.	jellyfish	1	108	108	108	57.67501	57.67501
	Scyphozoa	jellyfish unident.	40	34	155	83	55.00087	61.67003
	<i>Stomphia coccinea</i>	swimming anemone	21	67	120	88	54.99203	58.676
	<i>Stomphia</i> sp.	sea anemone	72	32	174	112	54.99711	61.99196
	<i>Stylasterina</i> unident.	hydrocoral unident.	2	81	83	82	61.00002	62.00043
	<i>Urticina columbiana</i>	sea anemone	1	96	96	96	56.01255	56.01255
	<i>Urticina crassicornis</i>	mottled anemone	12	33	109	69	55.3307	58.33844
	Virgularidae	sea whip unident.	7	95	148	121	56.33333	60.01427
	<i>Allocentrotus fragilis</i>	sand dollar unident.	1	154	154	154	58.67874	58.67874
	<i>Amphiophiura nodosa</i>	orange-pink sea urchin	1	136	136	136	55.67682	55.67682
	<i>Asterias amurensis</i>	brittlestar	1	58	58	58	57.98668	57.98668
	<i>Asteroidea</i> unident.	purple-orange sea star	248	20	160	65	55.0516	60.99105
	<i>Asteronyx loveni</i>	starfish unident.	1	60	60	60	60.17987	60.17987
	<i>Ceramaster japonicus</i>	serpent sea star	1	135	135	135	56.67088	56.67088
	<i>Ceramaster patagonicus</i>	red bat star	2	136	155	145	55.00087	55.67682
	<i>Ceramaster borealis</i>	orange bat sea star	1	159	159	159	54.83508	54.83508
		grooved sea star	4	41	85	67	55.3307	59.99354

Echinodermata

Appendix A Table 2. -- Continued.

Grouping	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
	<i>Crossaster papposus</i>	rose sea star	25	46	159	78	54.83508	60.67076
	<i>Ctenodiscus crispatus</i>	common mud star	80	80	161	121	54.99203	61.66207
	<i>Cucumaria fallax</i>	sea football	32	33	109	69	55.33625	57.98581
	<i>Cucumaria</i> sp.	sea football	1	69	69	69	57.4872	57.4872
	<i>Diplopteraster multipes</i>	pincushion sea star	7	135	163	145	56.01025	58.73946
	<i>Dipsacaster borealis</i>	northern sea star	4	121	163	146	54.83508	58.73946
	<i>Dipsacaster</i> sp.	northern sea star	1	140	140	140	56.99805	56.99805
	<i>Echinarachnius parma</i>	parma sand dollar	13	33	130	64	55.0516	60.17987
	<i>Evasterias echinosoma</i>	giant sea star	21	41	163	66	55.66912	60.99905
	<i>Evasterias</i> sp.	giant sea star	1	33	33	33	57.32781	57.32781
	<i>Evasterias troschelii</i>	mottled sea star	2	49	61	55	57.18779	57.33289
	<i>Gorgonocephalus eucnemis</i>	basketstar	229	38	163	84	54.83508	62.00076
	<i>Henricia beringiana</i>	Bering Henricia	2	67	140	103	56.99805	60.66801
	<i>Henricia leviuscula</i>	blood sea star	2	136	160	148	56.32369	58.67202
	<i>Henricia</i> sp.	sea star	38	45	163	101	54.83508	60.66801
	Holothuroidea unident.	sea cucumber unident.	3	60	107	78	55.67545	60.66801
	<i>Leptasterias arctica</i>	Arctic sea star	74	40	129	73	56.3487	61.99196
	<i>Leptasterias coei</i>	red banded sea star	1	67	67	67	57.6541	57.6541
	<i>Leptasterias groenlandica</i>	(no common name)	26	63	163	103	57.65531	62.00076
	<i>Leptasterias polaris</i>	Polar sea star	142	41	174	94	56.34711	62.00076
	<i>Leptasterias</i> sp.	sea star	11	46	117	72	58.01474	62.00043
	<i>Leptychaster anomalus</i>	pentagonal sand star	5	109	135	120	56.67088	57.99001
	<i>Lethasterias namimensis</i>	blackspined sea star	77	49	163	87	55.67682	60.34048
	<i>Molpadia</i> sp.	sea cucumber	2	69	137	103	56.07771	56.99976
	<i>Odontohenricia</i> sp.	sea star	3	136	160	148	55.67682	56.32369
	<i>Ophiacantha</i> sp.	brittlestar	1	64	64	64	60.32141	60.32141
	<i>Ophiopholis aculeata</i>	ubiquitous brittle star	4	136	143	138	58.66928	59.00634
	<i>Ophiopholis</i> sp.	brittlestar	1	160	160	160	56.32369	56.32369
	<i>Ophiura sarsi</i>	notched brittlestar	97	46	159	84	54.83508	62.00076
	<i>Pedicellaster magister</i>	majestic sea star	2	130	143	136	58.73946	58.99234
	<i>Pentamera lissoplaca</i>	crested sea cucumber	1	71	71	71	57.6593	57.6593

Appendix A Table 2. -- Continued.

Grouping	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
	<i>Pseudarchaster alascensis</i>	Alaskan scarlet star	1	80	80	80	56.66548	56.66548
	<i>Pseudarchaster parelii</i>	scarlet sea star	11	101	163	135	54.83508	58.99234
	<i>Psolus fabricii</i>	brownscaled sea cucumber	1	60	60	60	60.31706	60.31706
	<i>Psolus</i> sp.	scaled sea cucumber	2	64	75	69	60.02145	60.32141
	<i>Pteraster militaris</i>	wrinkled star	3	96	163	133	56.34053	58.34685
	<i>Pteraster obscurus</i>	obscure sea star	58	60	161	105	56.34053	61.01371
	<i>Pteraster tessellatus</i>	sea star	4	76	159	117	54.83508	58.67874
	<i>Solaster endeca</i>	northern sun sea star	1	80	80	80	56.66548	56.66548
	<i>Solaster</i> sp.	sea star	1	64	64	64	60.32141	60.32141
	<i>Strongylocentrotus droebachiensis</i>	green sea urchin	116	39	174	99	55.3307	62.00076
	<i>Strongylocentrotus polyacanthus</i>	(no common name)	1	159	159	159	54.83508	54.83508
	<i>Strongylocentrotus</i> sp.	sea urchin	6	34	160	94	55.0516	58.676
	<i>Synallactes challengeri</i>	sea cucumber	1	163	163	163	58.34685	58.34685
Echiura	Echiura	echiuroid worm unident.	3	32	58	41	59.68687	60.33268
Hemithyridae	Hemithyridae	hemithyrid brachiopods	1	60	60	60	60.31706	60.31706
Mollusca		dorid nudibranch unident.	4	64	142	87	56.34053	60.66801
		limpet unident.	1	90	90	90	56.34448	56.34448
	<i>Aforia circinata</i>	keeled aforia	28	78	160	119	55.32735	61.317
	<i>Aforia</i> sp.	aforia	6	101	147	116	55.33857	58.99046
	<i>Amicula vestita</i>	chiton	1	60	60	60	60.31706	60.31706
	<i>Arctomelon</i> sp.	gastropod	2	142	163	152	56.34053	58.34685
	<i>Arctomelon stearnsii</i>	Alaska volute	1	159	159	159	54.83508	54.83508
	<i>Benthocotopus leioderma</i>	smoothskin octopus	2	83	99	91	56.65368	56.67157
	<i>Beringius beringii</i>	Northern Bering whelk	24	38	149	97	55.00626	60.99796
	<i>Beringius frielei</i>	(no common name)	5	101	155	122	55.00087	58.67876
	<i>Beringius</i> sp.	gastropod	27	60	174	108	54.83508	61.33545
	<i>Beringius stimpsoni</i>	(no common name)	4	55	68	60	57.67015	60.31706
	Bivalvia unident.	bivalve unident.	10	20	58	46	57.32548	59.31557
	<i>Boreotrophon alaskanus</i>	Alaskan trophon	3	71	105	86	59.66666	61.6552
	<i>Boreotrophon beringi</i>	Bering trophon	1	103	103	103	60.98736	60.98736
	<i>Boreotrophon</i> sp.	trophon	4	75	112	92	56.97317	59.49618

Appendix A Table 2. -- Continued.

Grouping	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
	<i>Buccinum angulosum</i>	angular whelk	83	39	149	90	56.66548	61.99196
	<i>Buccinum ciliatum</i>	whelk	1	67	67	67	60.66801	60.66801
	<i>Buccinum oedematum</i>	swollen whelk	6	60	94	79	58.33501	60.31706
	<i>Buccinum plectrum</i>	sinuous whelk	30	39	154	106	56.00022	61.66207
	<i>Buccinum polare</i>	polar whelk	85	40	149	79	56.32316	62.00076
	<i>Buccinum scalariforme</i>	ladder whelk	105	46	163	95	55.3307	61.99196
	<i>Buccinum solenum</i>	whelk	1	97	97	97	56.67382	56.67382
	<i>Buccinum</i> sp.	whelk	26	41	160	79	56.31375	60.99796
	<i>Chlamys rubida</i>	reddish scallop	1	73	73	73	56.99219	56.99219
	<i>Chlamys</i> sp.	scallop	8	41	160	85	55.67895	60.02145
	<i>Climocardium californiense</i>	California cockle	1	58	58	58	59.68771	59.68771
	<i>Climocardium ciliatum</i>	hairy cockle	25	65	97	81	56.97317	61.99196
	<i>Climocardium nuttallii</i>	Nuttall cockle	9	60	142	91	59.00634	61.65335
	<i>Climocardium</i> sp.	cockle	4	89	121	104	56.33333	61.66207
	<i>Colus herendeenii</i>	thin-ribbed whelk	12	77	163	125	56.99824	59.33041
	<i>Colus</i> sp.	whelk	22	55	136	90	55.32735	61.3306
	<i>Colus spitzbergensis</i>	thick-ribbed whelk	1	67	67	67	57.84283	57.84283
	<i>Crepidula grandis</i>	great slippersnail	1	60	60	60	60.31706	60.31706
	<i>Crepidula</i> sp.	slipper shell	1	80	80	80	59.34651	59.34651
	<i>Cryptonatica (=Natica) aleutica</i>	Aleutian moonshell	2	92	112	102	60.32367	61.99196
	<i>Cryptonatica</i> sp.	moonshell	6	45	107	85	57.65219	60.65598
	<i>Cyclocardia crassidens</i>	thick carditid	1	60	60	60	60.31706	60.31706
	<i>Cyclocardia crebricostata</i>	many-rib cyclocardia	5	29	49	35	57.32781	59.65304
	<i>Cyclocardia</i> sp.	bivalve	1	38	38	38	58.68161	58.68161
	<i>Euspira (=Polinices) pallidus</i>	pale moonshell	20	61	96	75	58.98954	62.00076
	<i>Fusitriton oregonensis</i>	Oregon triton	91	51	174	114	54.66053	60.65598
	gastropod eggs	snail eggs	175	26	174	80	54.99203	62.00076
	Gastropod unident.	snail unident.	1	95	95	95	56.01322	56.01322
	<i>Hiatella arctica</i>	Arctic hiatella	5	33	74	62	57.32781	59.32264
	<i>Loligo opalescens</i>	California market squid	1	142	142	142	56.34053	56.34053
	<i>Macoma nasuta</i>	bent-nose macoma	2	47	47	47	57.99659	58.31951

Appendix A Table 2. -- Continued.

Grouping	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
	<i>Macoma</i> sp.	clam	5	33	84	52	57.18779	58.32402
	<i>Mactromeris polynyma</i>	Arctic surfclam	59	20	83	49	55.67498	60.99905
	<i>Margarites</i> sp.	clam	1	64	64	64	60.32141	60.32141
	<i>Modiolus modiolus</i>	northern horse mussel	1	93	93	93	58.66635	58.66635
	<i>Musculus discors</i>	discordant mussel	18	41	75	64	55.36137	60.99905
	<i>Musculus</i> sp.	mussel	1	74	74	74	61.32231	61.32231
	Mytilidae	mussel unident.	3	28	71	43	56.00937	59.60424
	<i>Mytilus edulis</i>	blue mussel	1	32	32	32	58.34965	58.34965
	<i>Natica russa</i>	rusty moon snail	22	34	122	80	57.68336	62.00043
	Naticidae eggs	moon snail eggs unid.	21	60	94	75	58.6622	62.00076
	<i>Neptunea amianta</i>	whelk	1	163	163	163	58.34685	58.34685
	<i>Neptunea borealis</i>	whelk	42	41	147	71	55.32735	61.66908
	<i>Neptunea heros</i>	whelk	125	31	107	64	56.3319	62.00076
	<i>Neptunea lyrata</i>	lyre whelk	100	45	160	96	55.32735	60.33686
	<i>Neptunea magna</i>	helmet whelk	60	60	146	95	56.32316	61.67003
	<i>Neptunea pribiloffensis</i>	Pribilof whelk	145	45	174	110	55.00087	61.66207
	<i>Neptunea</i> sp.	whelk	14	60	136	104	56.6656	61.66207
	<i>Neptunea</i> sp. D (Clark & McLean)	whelk	3	72	102	83	56.68484	59.50238
	<i>Neptunea ventricosa</i>	fat whelk	133	27	159	67	54.83508	61.66908
	<i>Nuculana pernula</i>	northern nut clam	1	96	96	96	61.65335	61.65335
	Nudibranchia unident.	nudibranch unident.	47	59	142	90	56.67088	62.00076
	Octopodidae	octopus unident.	3	73	106	91	56.32316	56.6595
	<i>Octopus dofleini</i>	giant octopus	22	72	154	118	55.3307	61.66207
	<i>Octopus</i> sp.	octopus	5	71	104	82	55.35265	62.00026
	<i>Panomya novegica</i>	awning clam	1	33	33	33	57.32781	57.32781
	<i>Patinopecten caurinus</i>	weather vane scallop	18	67	122	102	55.0516	57.33099
	<i>Plicifusus oceanodromae</i>	seahorse whelk	2	64	149	106	59.33041	60.32141
	<i>Plicifusus griseus</i>	gray whelk	1	76	76	76	56.67264	56.67264
	<i>Plicifusus kroyeri</i>	whelk	53	59	174	108	56.01025	61.34008
	<i>Plicifusus</i> sp.	whelk	7	75	160	122	56.32369	60.65818
	<i>Pododesmus macroschisma</i>	Alaska false jingle	2	64	75	69	60.02145	60.32141

Appendix A Table 2. -- Continued.

Grouping	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
	<i>Pododesmus</i> sp.	jingleshell	1	71	71	71	57.32703	57.32703
	<i>Pyrulofusus deformis</i>	warped whelk	37	58	163	91	55.67895	60.31706
	<i>Pyrulofusus melonis</i>	whelk	16	69	150	117	55.00626	59.33181
	<i>Pyrulofusus</i> sp.	whelk	2	113	117	115	60.99796	61.34008
	<i>Rossia pacifica</i>	eastern Pacific bobtail	3	121	142	132	56.33333	56.67088
	<i>Saxidomus giganteus</i>	butter clam	5	89	122	99	59.66666	61.99196
	<i>Serripes groenlandicus</i>	Greenland cockle	39	33	119	66	55.36137	61.67003
	<i>Serripes laperosusii</i>	broad cockle	5	29	73	48	57.50341	60.33934
	<i>Serripes notabilis</i>	oblique smoothcockle	11	93	161	111	56.99805	61.65335
	<i>Serripes</i> sp.	cickkle	5	55	136	97	55.65903	59.66747
	<i>Siliqua alta</i>	Alaska razor	11	20	47	31	57.99659	59.33778
	<i>Siliqua patula</i>	Pacific razor	1	47	47	47	58.31951	58.31951
	<i>Tellina lutea</i>	Alaska great-tellin	23	31	74	45	56.68611	62.00026
	<i>Tellina</i> sp.	clam	1	61	61	61	60.65932	60.65932
	<i>Tritonia dtomedea</i>	rosy tritonia	8	58	121	81	56.33333	60.01437
	<i>Tritonia</i> sp.	nudibranch	4	28	136	69	55.67682	59.60424
	<i>Volutopsius fragilis</i>	fragile whelk	6	58	160	81	56.32369	58.33501
	<i>Volutopsius</i> sp.	whelk	72	58	163	108	55.32735	61.34008
	<i>Volutopsius trophonius</i>	frilled whelk	1	102	102	102	59.50238	59.50238
	<i>Yoldia hyperborea</i>	northern yoldia	1	26	26	26	59.32823	59.32823
Nemertea	Nemertea	nemertean worm unident.	10	63	130	83	57.6541	62.00076
Other		empty bivalve shells	270	20	163	76	54.99203	62.00043
Other		empty gastropod shells	315	20	174	83	54.83508	62.00043
Other		unsorted catch and debris	43	37	91	58	55.77688	58.01527
Other	Polychaete tubes	polychete	6	86	155	116	55.00087	60.66558
Platyhelminthida	Platyhelminthes	flatworm unident.	1	97	97	97	56.67382	56.67382
Porifera		vase sponge unident.	2	71	80	75	57.6748	59.82041
	<i>Aphrocallistes vastus</i>	clay pipe sponge	2	32	160	96	56.32369	58.2832
	<i>Latrunculia</i> sp. A (Clark 2006)	green papillate sponge	1	130	130	130	56.31375	56.31375
	<i>Mycale loveni</i>	tree sponge	1	142	142	142	56.34053	56.34053
	<i>Polymastia fluegeli</i>	Fluegel's nipped sponge	1	163	163	163	58.34685	58.34685

Appendix A Table 2. -- Continued.

Grouping	Scientific name	Common name	Number stations present	Bottom depth (m)			Latitude range	
				Min. depth	Max. depth	Avg. depth	Southern	Northern
	Porifera	sponge unident.	80	33	163	82	54.83508	60.67076
	<i>Suberites</i> sp.	sponge	1	83	83	83	55.99331	55.99331
Sipuncula	Sipuncula	peanut worm unid.	2	96	121	108	57.32111	58.34083
Tunicata		compound ascidian unident.	25	33	91	58	56.3253	60.34048
	<i>Amaroucium soldatovi</i>	ascidian	12	68	77	71	57.34849	58.65915
	<i>Aplidium californicum</i>	tunicate unident.	1	46	46	46	58.32026	58.32026
	<i>Aplidium</i> sp.	sea glob	55	34	79	55	56.00937	60.33048
	<i>Boltenia ovifera</i>	tunicate unident.	109	26	110	56	55.0516	60.66801
	<i>Halocynthia aurantium</i>	sea peach	44	41	77	68	56.68611	60.66801
	<i>Molgula griffithsii</i>	sea grape	5	67	149	125	58.66736	60.66801
	Thaliacea unident.	salp unident.	36	53	174	115	56.99805	61.66207

Appendix B: Station Data, 2007 Eastern Bering Sea Trawl Survey

Appendix B contains station data by vessel for the 376 successfully completed standard survey stations. In using the tables, the following should be noted:

1. Time represents the nearest hour and minute at the start of the haul.
2. Haul numbers are not always sequential because unsatisfactory hauls were omitted.
3. All longitudes are in the Western Hemisphere and latitudes in the Northern Hemisphere. Starting and ending positions for each haul are displayed as degrees and decimal minutes.
4. Net measured codes are as follows:
 - Y = Net width was measured by net mensuration gear.
 - N = Net width was estimated from a function of wire out or wire out.
5. Catch weights are displayed in total kilograms

List of Tables

Appendix B Table 1 – Haul data for stations sampled by the FV *Arcturus*.

Appendix B Table 2 – Haul data for stations sampled by the FV *Aldebaran*.

Appendix B Table 1. -- Haul and catch data for successfully completed tows by FV *Arcturus* during the 2007 eastern Bering Sea bottom trawl survey.

Station	H-16	I-16	J-16	K-14	J-14	I-14	H-14	G-14	F-14	F-13	F-12
Start date and time	6/11/07 9:08	6/11/07 14:55	6/11/07 17:40	6/12/07 6:34	6/12/07 9:57	6/12/07 12:51	6/12/07 15:20	6/12/07 17:58	6/13/07 6:40	6/13/07 9:33	6/13/07 12:26
Haul number	14	16	17	18	19	20	21	22	23	24	25
Start latitude	5719.67	5738.56	5758.96	5821.28	5800.98	5740.97	5720.65	5700.40	5641.17	5639.94	5639.77
Start longitude	15935.25	15938.92	15940.61	16026.65	16024.21	16021.77	16019.67	16019.79	16015.30	16138.37	16100.66
End latitude	5720.77	5739.56	5800.51	5819.72	5759.40	5739.97	5719.23	5658.98	5640.74	5639.82	5641.27
End longitude	15937.19	15936.78	15940.94	16027.31	16024.40	16021.07	16018.57	16019.04	16012.74	16135.55	16100.60
Bottom depth (m)	33	34	34	25	44	51	56	56	41	63	69
Duration (h)	0.52	0.51	0.51	0.53	0.52	0.35	0.50	0.50	0.50	0.51	0.50
Distance fished (km)	2.83	2.82	2.89	2.96	2.94	1.97	2.87	2.74	2.89	2.89	2.78
Net width (m)	15.29	16.47	16.57	14.75	16.72	16.30	15.67	16.97	16.03	17.18	16.77
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	53.02	--	4.55	19.03	18.52	2.40	7.74	20.53	200.38	--	2.52
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	53.02	--	4.55	19.03	18.52	2.40	7.74	20.53	200.38	--	2.52
Alaska plaice	0.72	0.19	0.97	81.49	8.02	2.88	5.07	2.25	1.84	0.27	52.76
Arrowtooth flounder	--	--	--	--	--	--	--	0.07	--	0.19	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	17.26	11.09	6.84	2.68	34.13	14.14	15.94	21.67	20.50	21.17	21.64
Rock sole	1,453.55	203.58	212.29	2,781.29	497.54	415.06	831.40	512.66	717.80	465.10	701.92
Yellowfin sole	725.63	173.99	99.21	2,872.23	470.30	367.58	279.87	530.01	762.57	642.80	344.64
Other flatfish	112.92	63.40	20.76	139.45	277.59	63.14	9.94	28.17	123.91	127.49	22.74
Total flatfish	2,310.07	452.25	340.07	5,877.14	1,287.58	862.80	1,142.21	1,094.82	1,626.62	1,257.02	1,143.68
Walleye pollock	--	0.04	0.01	--	0.46	0.02	31.83	16.84	0.76	11.69	214.16
Pacific cod	39.21	0.24	4.22	17.32	13.84	17.61	43.57	15.38	44.21	26.70	43.46
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	--	--	--	--	--	--	--	--	--	--
Pacific herring	--	6.88	0.02	4.48	--	--	--	53.41	87.21	238.47	9.85
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	150.08	30.50	20.55	86.97	39.92	29.40	9.61	10.25	22.59	1.38	38.65
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	4.61	2.91	1.25	8.63	2.03	1.20	1.63	2.63	1.23	1.78	13.60
Blue king crab	193.90	40.57	26.05	117.39	56.26	48.22	86.63	98.50	155.99	280.02	319.72
Red king crab	--	--	--	8.02	17.01	26.45	32.83	25.05	15.94	85.62	121.55
Tanner crab, Bairdi	--	--	--	--	--	0.47	--	2.66	--	4.62	5.70
Tanner crab, opilio	--	--	--	--	--	--	--	--	--	--	--
Other crab	2.18	0.12	0.38	1.68	0.63	0.45	1.48	4.30	3.68	12.44	1.88
Shrimp	0.01	0.06	0.00	--	0.01	--	0.01	0.01	--	0.01	0.01
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	--	0.16	--	--	--	0.23	--	0.54	--	2.48	1.32
Starfish	400.33	76.48	161.88	232.74	263.10	174.52	170.22	313.62	168.70	239.35	72.74
Other invertebrates	17.40	2.78	1.27	--	9.45	20.64	37.73	30.81	18.57	107.22	124.95
Total invertebrates	419.93	79.60	163.53	242.44	290.20	222.75	242.26	376.99	206.89	451.74	328.14
Miscellaneous	1.08	1.38	3.35	--	0.18	0.51	1.58	0.26	2.42	2.01	0.93
Total catch	2,978.00	573.80	537.55	6,256.00	1,655.00	1,139.28	1,482.00	1,598.00	2,196.00	2,028.00	1,828.00

Appendix B Table 1. -- Continued.

Station	G-12	H-12	I-12	J-12	K-12	K-10	J-10	I-10	H-10	G-10	F-10
Start date and time	6/13/07 15:22	6/13/07 18:32	6/14/07 6:44	6/14/07 9:32	6/14/07 12:29	6/14/07 16:47	6/15/07 6:38	6/15/07 9:19	6/15/07 11:48	6/15/07 14:22	6/15/07 17:22
Haul number	26	27	28	29	30	31	32	33	34	35	36
Start latitude	5659.68	5719.49	5739.54	5759.80	5816.99	5819.17	5801.03	5740.48	5720.84	5700.28	5640.78
Start longitude	16101.99	16104.09	16106.59	16108.45	16112.60	16357.38	16353.30	16352.09	16350.92	16349.57	16348.67
End latitude	5700.83	5721.02	5741.08	5801.21	5817.12	5817.69	5759.45	5738.94	5719.34	5658.74	5639.28
End longitude	16100.14	16104.63	16106.20	16107.27	16111.06	16356.56	16353.45	16352.10	16351.23	16349.00	16348.68
Bottom depth (m)	64	65	59	47	32	47	40	50	53	62	71
Duration (h)	0.51	0.51	0.52	0.51	0.27	0.52	0.53	0.51	0.51	0.51	0.50
Distance fished (km)	2.84	2.89	2.87	2.87	1.53	2.86	2.94	2.85	2.80	2.90	2.77
Net width (m)	17.03	16.77	16.26	16.26	15.74	16.04	16.32	16.35	16.15	17.07	17.07
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Skates	6.64	--	9.27	52.93	12.02	78.27	23.62	18.96	7.62	15.15	4.51
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	6.64	--	9.27	52.93	12.02	78.27	23.62	18.96	7.62	15.15	4.51
Alaska plaice	168.36	39.93	15.53	66.82	2.00	3.96	10.08	68.94	111.34	268.66	148.95
Arrowtooth flounder	--	1.55	--	--	--	--	--	--	3.04	1.68	22.22
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	30.90	41.87	8.72	15.29	24.72	22.50	53.91	27.07	23.96	6.11	21.70
Rock sole	249.20	231.09	352.50	1,267.86	156.30	465.21	802.06	385.25	318.30	474.89	410.71
Yellowfin sole	169.18	124.83	222.89	1,239.90	146.28	240.96	408.87	607.48	386.90	223.14	326.08
Other flatfish	216.57	1.60	3.02	131.95	96.35	219.16	58.05	2.44	--	0.51	--
Total flatfish	834.21	440.87	602.66	2,721.82	425.65	951.79	1,332.97	1,091.18	843.53	974.99	929.66
Walleye pollock	130.82	95.26	42.98	0.03	0.02	--	--	18.46	8.10	18.47	69.78
Pacific cod	37.16	28.08	6.32	13.46	6.14	5.24	5.56	17.76	19.16	28.87	5.89
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	--	--	--	--	--	--	--	--	--	--
Pacific herring	20.60	1.38	--	--	--	--	1.75	--	--	0.62	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	25.80	23.98	0.67	87.72	9.09	63.56	29.12	10.74	2.59	41.60	16.00
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Other roundfish	0.84	1.66	1.29	5.18	1.96	2.82	2.82	1.61	1.27	1.01	3.52
Total roundfish	215.22	150.36	51.27	106.38	17.22	71.62	39.25	48.57	31.12	90.57	95.19
Blue king crab	--	--	--	--	--	--	--	--	--	--	--
Red king crab	41.53	27.51	30.87	32.78	2.34	--	49.52	111.28	94.66	103.87	58.24
Tanner crab, Bairdi	1.62	4.07	0.35	--	--	--	--	--	1.48	1.46	12.80
Tanner crab, opilio	--	--	--	--	--	--	--	--	--	--	0.69
Other crab	11.14	2.97	9.19	3.68	2.72	8.45	3.00	1.85	0.85	2.76	6.83
Shrimp	--	0.04	0.05	--	0.02	0.02	--	0.01	0.01	--	--
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	--	2.48	28.05	--	--	7.28	1.97	0.90	4.88	0.29	2.54
Starfish	3.69	43.85	151.97	330.33	188.30	372.14	114.81	203.35	409.11	13.36	--
Other invertebrates	129.60	165.80	52.07	1.77	3.66	5.71	0.22	9.29	3.34	17.09	36.06
Total invertebrates	187.58	246.72	272.55	368.56	197.04	393.59	169.51	326.67	514.32	138.84	117.16
Miscellaneous	0.36	0.17	5.02	1.49	0.16	0.73	0.72	0.22	1.20	0.34	1.33
Total catch	1,674.00	863.77	955.49	3,260.00	652.09	1,496.00	1,578.00	1,542.00	1,442.00	1,257.00	1,198.00

Appendix B Table 1. -- Continued.

Station	F-09	E-09	E-10	D-10	D-09	D-08	E-08	F-08	G-08	H-08	I-08
Start date and time	6/16/07 9:44	6/16/07 12:31	6/16/07 15:58	6/16/07 19:01	6/17/07 7:02	6/17/07 9:59	6/17/07 13:12	6/17/07 16:28	6/17/07 19:15	6/18/07 7:04	6/18/07 9:55
Haul number	38	39	40	41	42	43	44	45	46	47	48
Start latitude	5640.36	5619.54	5620.73	5600.56	5559.60	5600.01	5619.35	5639.31	5659.59	5719.76	5739.52
Start longitude	16313.24	16310.17	16349.10	16346.48	16311.53	16436.60	16434.79	16437.14	16435.35	16437.16	16437.70
End latitude	5638.79	5619.27	5619.31	5559.10	5558.67	5601.55	5620.81	5640.85	5700.75	5721.15	5740.70
End longitude	16313.56	16312.86	16348.05	16345.84	16309.45	16437.19	16435.29	16437.12	16433.56	16436.09	16435.88
Bottom depth (m)	76	82	79	71	83	93	89	77	68	55	49
Duration (h)	0.52	0.50	0.51	0.51	0.50	0.52	0.50	0.52	0.51	0.51	0.51
Distance fished (km)	2.92	2.82	2.84	2.79	2.77	2.84	2.75	2.84	2.83	2.78	2.84
Net width (m)	17.15	17.42	14.83	16.61	17.87	17.77	17.66	18.16	17.76	16.54	16.39
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	6.17	3.14	19.57	18.48	28.84	18.86	2.98	10.30	3.38	4.30	6.84
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	6.17	3.14	19.57	18.48	28.84	18.86	2.98	10.30	3.38	4.30	6.84
Alaska plaice	344.22	130.91	72.99	22.74	205.08	13.33	1.78	11.16	121.64	133.18	37.61
Arrowtooth flounder	19.13	32.86	16.55	71.55	90.00	198.45	56.58	1.42	0.18	--	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	32.50	11.06	19.22	20.09	9.45	15.32	10.44	2.30	8.53	19.26	38.39
Rock sole	207.18	348.77	749.85	773.06	244.37	138.79	54.88	24.57	215.13	369.96	230.71
Yellowfin sole	381.86	672.61	363.63	660.53	770.41	56.85	35.96	236.40	591.59	447.26	456.69
Other flatfish	0.18	14.58	1.71	14.58	5.16	3.33	--	--	--	--	--
Total flatfish	985.07	1,196.22	1,222.23	1,562.55	1,324.46	424.46	162.98	275.85	937.07	969.66	763.40
Walleye pollock	18.08	151.57	296.76	962.07	38.46	1,408.28	1,614.52	15.80	12.79	19.01	6.08
Pacific cod	24.88	86.46	23.50	553.79	16.31	16.91	22.80	16.68	3.40	1.19	30.62
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	0.49	--	--
Eelpouts	--	--	--	--	--	--	--	--	0.28	--	--
Pacific herring	--	1.98	1.49	--	--	--	34.66	2.14	--	--	1.13
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	6.49	8.53	6.36	79.84	50.95	16.80	--	0.01	11.16	15.89	12.54
Other rockfish	--	--	1.58	13.43	1.27	1.95	1.66	0.75	0.37	0.67	0.77
Total roundfish	49.82	249.12	329.69	1,609.13	106.98	1,443.94	1,673.64	35.38	28.49	36.77	51.14
Blue king crab	--	--	73.95	134.90	--	--	--	--	--	--	--
Red king crab	8.58	--	14.66	--	5.95	11.96	7.94	9.06	7.86	3.41	47.20
Tanner crab, Bairdi	8.85	11.47	2.05	--	4.03	2.27	0.19	0.97	1.80	0.16	0.50
Tanner crab, opilio	1.86	1.39	4.14	3.92	1.48	71.38	15.14	33.68	17.62	27.19	--
Other crab	92.23	8.36	0.02	--	--	--	0.01	--	0.02	--	44.53
Shrimp	0.01	--	--	--	--	--	--	--	--	--	0.01
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	57.87	20.00	--	1.51	5.74	105.25	4.12	43.30	12.17	36.68	17.93
Starfish	--	--	25.66	137.30	11.84	0.19	4.65	14.26	43.14	105.55	435.77
Other invertebrates	6.62	9.12	101.46	25.55	14.91	62.05	410.56	39.50	206.29	121.82	18.68
Total invertebrates	176.01	50.34	221.94	303.18	43.94	253.85	442.60	140.77	291.22	332.06	564.60
Miscellaneous	34.22	0.90	0.80	--	0.17	14.20	5.98	16.69	12.17	8.16	11.97
Total catch	1,314.00	1,614.00	1,938.00	3,566.00	1,660.00	2,273.35	2,325.33	560.15	1,299.65	1,368.93	1,410.00

Appendix B Table 1. -- Continued.

Station	J-08	K-08	L-08	M-08	M-07	M-06	L-06	K-06	J-06	I-06	H-06
Start date and time	6/18/07 12:57	6/18/07 15:40	6/18/07 18:30	6/19/07 6:42	6/19/07 9:37	6/19/07 12:23	6/19/07 15:00	6/19/07 17:27	6/20/07 6:59	6/20/07 9:56	6/20/07 12:35
Haul number	49	50	51	52	53	54	55	56	57	58	59
Start latitude	5759.44	5818.98	5839.41	5859.99	5859.47	5900.81	5840.89	5820.71	5800.21	5740.21	5720.54
Start longitude	16437.40	16437.67	16438.95	16439.27	16400.35	16521.28	16521.31	16521.71	16523.23	16523.25	16523.03
End latitude	5800.89	5820.37	5840.87	5859.69	5859.73	5859.28	5839.39	5819.16	5758.67	5738.75	5719.08
End longitude	16436.52	16436.73	16437.99	16436.19	16557.38	16521.61	16521.40	16521.61	16523.36	16523.08	16523.45
Bottom depth (m)	45	38	32	21	29	30	38	45	46	55	69
Duration (h)	0.52	0.50	0.51	0.53	0.52	0.52	0.50	0.51	0.52	0.49	0.50
Distance fished (km)	2.84	2.72	2.85	3.00	2.90	2.86	2.80	2.86	2.74	2.74	2.74
Net width (m)	16.65	16.06	15.76	15.02	15.51	15.85	15.85	16.29	15.90	16.01	16.93
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	20.32	25.88	20.77	24.62	36.70	95.60	23.88	36.82	28.06	3.37	9.03
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	20.32	25.88	20.77	24.62	36.70	95.60	23.88	36.82	28.06	3.37	9.03
Alaska plaice	35.54	21.88	53.61	40.46	25.92	74.28	27.30	41.21	90.27	76.78	60.78
Arrowtooth flounder	--	--	--	--	--	--	--	--	--	--	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	20.44	25.28	19.39	10.14	14.07	26.81	7.82	14.31	15.60	5.07	1.59
Rock sole	286.41	478.72	1,450.79	44.08	501.78	689.92	231.88	474.84	513.31	86.51	13.29
Yellowfin sole	222.14	215.11	694.56	595.43	693.48	538.40	334.47	422.95	481.37	276.45	570.77
Other flatfish	6.08	11.91	96.97	45.56	126.67	76.22	5.74	--	--	--	--
Total flatfish	570.61	752.90	2,315.32	735.67	1,361.92	1,405.64	607.20	953.31	1,100.55	444.80	646.42
Walleye pollock	4.45	3.22	6.13	0.64	0.02	--	0.60	22.19	5.99	11.22	4.91
Pacific cod	13.21	18.88	12.06	19.70	13.50	11.20	12.45	28.41	17.17	13.23	8.39
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	--	--	--	--	--	--	--	--	--	--
Pacific herring	--	--	0.15	9.41	58.71	0.39	0.03	--	--	3.12	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	13.58	50.01	75.00	13.43	20.42	17.08	39.28	48.18	18.84	10.52	1.88
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Other roundfish	2.42	0.76	5.93	26.60	7.80	2.02	1.64	0.87	0.80	0.31	--
Total roundfish	33.66	72.87	99.27	69.79	100.45	30.68	54.01	99.66	42.80	38.40	15.18
Blue king crab	--	--	--	--	--	--	--	--	--	--	--
Red king crab	33.16	15.15	1.27	--	--	--	2.68	--	5.90	--	2.64
Tanner crab, Bairdi	--	--	--	--	--	--	--	0.12	--	2.78	1.85
Tanner crab, opilio	--	--	--	--	--	--	--	--	--	--	0.14
Other crab	25.58	4.11	0.63	0.91	0.71	1.92	4.57	43.13	96.24	51.79	27.97
Shrimp	0.00	--	--	0.11	--	--	--	0.01	--	0.01	0.16
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	3.31	0.27	0.02	--	--	--	--	8.42	77.18	27.45	11.85
Starfish	303.41	205.90	294.68	152.21	51.56	45.92	156.98	249.26	175.77	135.55	504.13
Other invertebrates	27.01	0.23	0.03	0.10	0.46	0.18	0.09	42.51	45.68	144.36	73.11
Total invertebrates	392.48	225.66	296.64	153.34	52.73	48.02	164.32	343.46	400.76	361.94	621.85
Miscellaneous	9.00	0.49	--	0.34	0.01	0.07	0.59	9.06	54.47	25.49	21.68
Total catch	1,042.72	1,080.00	2,732.00	983.76	1,551.80	1,580.00	850.00	1,450.00	1,628.00	874.00	1,316.00

Appendix B Table 1. --- Continued.

Station	G-06	F-06	E-06	D-06	C-06	B-06	A-06	AZ0504	A-04	A-03	B-03
Start date and time	6/20/07 15:12	6/20/07 17:38	6/21/07 7:01	6/21/07 10:10	6/21/07 13:21	6/21/07 16:33	6/21/07 19:24	6/24/07 7:27	6/24/07 12:23	6/24/07 15:15	6/24/07 19:04
Haul number	60	61	62	63	64	65	66	67	69	70	71
Start latitude	5700.14	5641.09	5620.67	5600.75	5540.83	5521.16	5503.10	5450.10	5459.83	5500.38	5519.60
Start longitude	16523.80	16525.12	16524.74	16524.09	16522.90	16527.58	16525.57	16627.35	16615.40	16740.14	16738.95
End latitude	5658.67	5639.55	5619.22	5559.25	5539.36	5519.90	5501.73	5450.03	5500.12	5500.53	5521.11
End longitude	16523.77	16525.05	16524.65	16524.11	16523.07	16526.16	16524.46	16629.86	16612.90	16738.38	16739.17
Bottom depth (m)	72	77	90	96	100	104	67	159	134	148	137
Duration (h)	0.49	0.51	0.48	0.50	0.50	0.50	0.51	0.49	0.50	0.34	0.50
Distance fished (km)	2.74	2.86	2.68	2.78	2.74	2.77	2.79	2.70	2.73	1.90	2.81
Net width (m)	17.34	17.05	17.43	17.54	17.23	17.34	15.90	17.68	18.43	19.04	19.13
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	12.22	18.00	44.84	42.60	55.84	86.34	47.72	105.36	45.89	34.96	35.74
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	12.22	18.00	44.84	42.60	55.84	86.34	47.72	105.36	45.89	34.96	35.74
Alaska plaice	73.28	80.47	2.97	5.82	--	1.74	--	--	--	--	--
Arrowtooth flounder	0.06	11.27	28.37	41.06	419.40	495.52	157.53	191.19	168.70	229.36	170.50
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	11.18	6.74	4.29	--	11.34	12.94	86.48	6.16	10.10	--	22.98
Rock sole	29.91	102.36	44.28	10.80	3.30	0.59	663.04	17.22	--	--	--
Yellowfin sole	643.40	635.41	28.29	2.69	--	2.61	180.69	--	--	--	--
Other flatfish	--	--	1.57	--	10.57	45.74	9.69	26.72	7.68	5.79	9.48
Total flatfish	757.83	836.25	109.78	60.37	444.62	559.14	1,097.44	241.29	186.48	235.15	202.97
Walleye pollock	6.74	53.57	333.24	1,678.60	1,930.67	532.01	6,191.61	160.24	1,271.25	17.24	2.16
Pacific cod	7.74	24.46	18.90	39.20	60.41	13.37	14.74	50.03	8.72	13.50	1.60
Sablefish	--	--	--	--	--	1.06	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	1.63	--	--	--	--
Eelpouts	--	0.57	4.31	0.71	--	0.08	--	--	--	0.05	0.11
Pacific herring	--	--	2.03	--	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	9.37	9.81	4.12	2.28	--	9.81	4.88	0.02	--	0.84	1.33
Other rockfish	--	--	--	--	--	--	--	--	--	1.13	0.11
Other roundfish	--	0.11	0.23	0.08	--	0.38	10.52	19.05	--	0.21	7.67
Total roundfish	23.85	88.52	362.83	1,720.87	1,991.08	556.71	6,223.38	230.95	1,279.97	32.97	12.98
Blue king crab	--	--	--	--	--	--	--	--	--	--	--
Red king crab	33.14	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	2.07	7.86	14.76	14.76	15.09	71.60	--	50.55	64.42	34.91	50.22
Tanner crab, opilio	--	2.40	3.78	12.64	4.42	9.13	--	--	0.81	--	--
Other crab	9.08	78.64	86.97	138.18	123.93	40.25	--	9.55	--	1.16	2.52
Shrimp	0.01	--	0.00	--	0.03	0.04	--	0.02	--	0.08	0.02
Octopus	--	--	--	--	--	0.01	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	65.63	239.41	160.88	30.97	128.76	54.75	3.88	19.47	0.86	3.93	2.38
Starfish	87.82	6.19	235.69	0.05	--	0.50	26.70	0.65	--	--	--
Other invertebrates	91.30	132.96	28.57	31.02	389.27	57.72	1,006.64	36.88	12.61	9.76	14.07
Total invertebrates	289.04	467.46	530.65	227.62	661.51	234.00	1,037.22	117.11	78.70	49.84	69.22
Miscellaneous	16.30	60.80	69.98	32.12	32.73	18.93	0.02	0.75	--	0.14	0.62
Total catch	1,180.00	1,750.00	1,183.57	2,120.00	3,284.09	1,588.99	8,475.53	699.65	1,630.26	412.61	368.57

Appendix B Table 1. -- Continued.

Station	D-04	E-04	F-04	G-04	H-04	I-04	J-04	K-04	L-04	M-04	N-04
Start date and time	6/25/07 7:15	6/25/07 12:01	6/25/07 15:46	6/25/07 18:38	6/26/07 7:12	6/26/07 10:03	6/26/07 13:08	6/26/07 15:19	6/26/07 17:58	6/27/07 7:03	6/27/07 12:09
Haul number	72	74	76	77	78	79	80	81	82	83	84
Start latitude	5559.02	5619.39	5640.17	5658.39	5719.82	5739.25	5759.20	5819.23	5839.39	5859.92	5919.69
Start longitude	16613.01	16612.01	16608.35	16609.05	16608.05	16606.89	16605.30	16604.31	16604.31	16603.47	16602.17
End latitude	5600.51	5620.88	5641.65	5659.82	5721.30	5740.71	5800.01	5820.72	5840.89	5901.41	5920.60
End longitude	16613.12	16611.89	16608.77	16609.61	16607.72	16606.57	16605.40	16603.68	16604.45	16603.21	16600.91
Bottom depth (m)	112	95	82	75	71	67	58	46	39	32	26
Duration (h)	0.51	0.50	0.50	0.50	0.50	0.49	0.26	0.51	0.50	0.49	0.36
Distance fished (km)	2.78	2.76	2.77	2.72	2.76	2.79	1.49	2.83	2.79	2.77	2.07
Net width (m)	18.59	18.04	16.95	16.92	16.72	16.55	16.61	15.45	15.27	15.24	14.84
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	30.25	65.32	45.66	40.19	85.97	16.91	6.88	33.38	30.46	26.11	21.95
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	30.25	65.32	45.66	40.19	85.97	16.91	6.88	33.38	30.46	26.11	21.95
Alaska plaice	--	2.15	18.37	40.24	51.58	88.30	67.06	103.91	23.11	27.49	4.38
Arrowtooth flounder	116.61	65.63	3.47	2.19	--	--	--	--	--	--	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	4.49	9.83	--	2.93	0.69	--	--	49.66	21.76	43.72	65.81
Rock sole	--	4.24	78.41	81.34	20.61	13.18	52.92	688.33	329.40	7,348.43	134.57
Yellowfin sole	--	3.52	170.46	1,046.13	506.80	319.17	323.60	783.05	314.15	4,741.77	435.47
Other flatfish	4.92	4.37	--	--	--	--	--	5.76	5.92	42.94	25.28
Total flatfish	126.01	89.74	270.69	1,172.82	579.68	420.66	443.58	1,630.72	694.33	12,204.36	665.51
Walleye pollock	29.64	134.52	152.54	50.89	13.03	0.91	0.54	9.54	5.40	--	--
Pacific cod	5.25	4.02	1.514	22.93	21.38	24.53	14.38	30.72	16.94	13.51	0.46
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	1.02	0.51	--	--	--	--	--
Eelpouts	0.30	1.74	2.84	--	--	--	--	--	--	--	--
Pacific herring	--	--	--	--	--	--	--	--	--	7.07	0.05
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	3.65	5.42	2.56	6.29	7.03	6.44	7.58	28.84	104.08	12.97	2.64
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	12.48	0.08	1.82	0.26	0.25	0.43	1.67	1.76	4.29	6.13	1.78
Blue king crab	51.32	145.78	174.90	80.37	42.71	32.82	24.18	70.86	130.72	39.68	4.93
Red king crab	--	--	--	--	3.16	--	--	1.52	2.40	3.60	--
Tanner crab, Bairdi	18.19	8.32	4.65	4.49	10.64	6.05	0.52	0.46	--	--	--
Tanner crab, opilio	2.88	6.95	0.82	2.29	23.26	59.97	0.39	--	--	--	--
Other crab	25.85	105.01	143.20	26.02	25.38	75.85	49.87	9.27	9.68	2.87	0.38
Shrimp	0.03	0.01	--	--	0.03	--	0.01	--	--	--	--
Octopus	--	0.19	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	23.58	73.02	69.17	104.05	145.59	44.54	47.65	12.66	1.08	--	--
Starfish	--	0.17	12.75	73.13	121.01	160.03	106.40	113.66	252.92	149.04	64.19
Other invertebrates	68.63	28.61	169.43	164.53	116.52	328.91	105.24	50.54	12.99	--	0.09
Total invertebrates	139.16	222.28	400.01	374.50	445.59	675.35	310.08	188.11	279.07	155.51	64.66
Miscellaneous	3.45	65.12	89.08	17.08	14.19	53.14	43.24	3.17	1.42	1.34	0.61
Total catch	430.65	711.36	1,250.00	1,836.00	1,186.00	1,202.00	828.88	1,928.00	1,136.00	12,427.00	757.66

Appendix B Table 1. --- Continued.

Station	O-04	O-03	L-02	K-02	J-02	I-02	H-02	G-02	F-02	E-02	D-02
Start date and time	6/27/07 14:47	6/27/07 18:16	6/28/07 6:57	6/28/07 9:44	6/28/07 13:01	6/28/07 17:12	6/29/07 7:04	6/29/07 9:49	6/29/07 12:44	6/29/07 15:49	6/29/07 18:28
Haul number	85	86	87	88	89	90	91	92	93	94	95
Start latitude	5936.25	5939.18	5841.76	5820.93	5801.00	5741.00	5721.14	5700.96	5640.29	5620.92	5604.66
Start longitude	16603.40	16723.24	16846.75	16848.86	16849.82	16852.81	16852.72	16854.44	16855.16	16857.90	16859.30
End latitude	5937.42	5940.48	5840.23	5819.45	5759.65	5739.50	5719.69	5659.41	5639.23	5619.50	5603.39
End longitude	16601.15	16721.82	16846.78	16848.74	16849.40	16852.95	16853.09	16854.10	16857.08	16858.52	16700.64
Bottom depth (m)	28	29	46	54	66	71	74	77	99	117	137
Duration (h)	0.53	0.49	0.51	0.50	0.47	0.51	0.49	0.51	0.51	0.49	0.50
Distance fished (km)	3.02	2.75	2.85	2.75	2.55	2.79	2.72	2.88	2.73	2.71	2.73
Net width (m)	15.17	15.86	16.98	16.87	17.43	17.57	17.57	17.06	17.51	18.30	19.76
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	272.55	168.23	52.92	25.84	3.34	20.00	7.81	113.92	23.62	18.59	6.33
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	272.55	168.23	52.92	25.84	3.34	20.00	7.81	113.92	23.62	18.59	6.33
Alaska plaice	9.35	11.14	41.01	120.12	254.28	356.63	21.21	11.05	--	--	--
Arrowtooth flounder	--	--	--	--	--	--	--	0.81	193.28	168.86	89.15
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	84.18	54.03	39.45	13.10	4.13	2.43	19.78	0.94	12.44	--	--
Rock sole	150.80	154.91	475.43	419.95	15.24	50.84	73.86	41.62	1.93	--	0.82
Yellowfin sole	407.06	678.82	394.65	944.92	414.61	532.91	309.09	263.85	4.19	--	--
Other flatfish	1.65	13.02	1.38	--	--	--	--	--	0.96	13.15	18.02
Total flatfish	816.83	911.91	951.92	1,498.09	688.26	942.81	423.93	318.26	212.79	182.01	107.99
Walleye pollock	1.95	0.04	10.27	76.18	19.23	28.40	93.19	500.19	338.58	2.93	0.02
Pacific cod	13.96	26.40	41.64	37.60	90.90	23.25	5.47	87.94	7.24	16.96	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	0.31	--	--	--	2.34	0.03	1.15
Eelpouts	7.10	29.35	1.00	--	--	0.64	--	--	--	--	--
Pacific herring	--	--	--	--	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	29.92	6.30	30.98	19.95	3.23	21.62	14.29	96.10	5.49	6.16	6.41
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	23.02	12.93	6.78	2.32	0.12	0.45	4.30	1.54	--	6.73	6.64
Blue king crab	75.95	75.02	90.67	136.05	113.79	74.35	117.25	685.78	353.65	32.81	14.22
Red king crab	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	--	--	5.95	--	--	--	--	--	--	--	--
Tanner crab, opilio	--	--	0.55	13.20	25.60	2.66	6.90	4.34	8.87	31.60	23.40
Other crab	0.45	1.33	10.37	40.44	121.31	26.57	33.23	156.56	100.55	14.97	1.18
Shrimp	--	0.00	--	--	--	0.02	0.03	0.02	--	0.09	0.07
Octopus	--	--	--	--	--	--	--	--	1.60	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	0.09	--	4.99	21.52	79.68	27.71	98.43	203.99	46.92	27.76	2.84
Starfish	65.35	48.44	127.04	149.41	39.04	39.04	142.24	18.92	1.13	0.25	1.06
Other invertebrates	0.81	0.03	10.43	88.01	249.70	233.45	1,028.34	177.50	343.97	52.59	14.21
Total invertebrates	66.70	49.80	159.32	313.09	725.83	334.31	1,310.64	566.35	514.81	132.53	44.69
Miscellaneous	1.08	0.69	3.17	24.05	60.42	12.72	42.12	115.36	57.64	0.97	1.12
Total catch	1,233.11	1,205.65	1,258.00	2,000.00	1,604.00	1,452.00	1,942.00	1,926.00	1,262.95	446.68	356.23

Appendix B Table 1. -- Continued.

Station	E-18	D-18	C-18	E-20	F-20	GF2019	G-20	HG2019	H-20	HG2120	GF2120	G-21
Start date and time	7/2/07 12:13	7/2/07 15:22	7/2/07 18:07	7/4/07 7:17	7/4/07 10:19	7/4/07 12:38	7/4/07 14:58	7/4/07 17:30	7/5/07 7:12	7/5/07 9:14	7/5/07 12:05	7/5/07 14:21
Haul number	108	109	110	111	112	113	114	115	116	117	118	119
Start latitude	5619.42	5600.62	5540.61	5620.43	5639.93	5650.44	5659.20	5710.27	5719.97	5711.27	5649.97	5659.99
Start longitude	16945.23	16946.64	16948.98	17028.97	17029.92	17042.82	17025.78	17040.19	17023.78	17007.85	17004.04	17151.64
End latitude	5617.97	5559.11	5539.38	5620.56	5641.32	5649.23	5700.45	5709.30	5718.65	5710.00	5650.21	5659.58
End longitude	16945.10	16946.33	16948.98	17031.33	17028.84	17041.04	17027.32	17039.70	17022.67	17006.32	17006.69	17149.01
Bottom depth (m)	160	150	136	142	80	80	60	72	61	49	72	69
Duration (h)	0.49	0.51	0.41	0.47	0.51	0.52	0.51	0.33	0.49	0.50	0.49	0.50
Distance fished (km)	2.70	2.81	2.28	2.45	2.88	2.88	1.87	1.87	2.79	2.74	2.74	2.78
Net width (m)	17.21	17.85	17.97	17.55	17.00	17.05	17.42	16.72	16.60	16.57	16.55	16.28
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	122.73	21.43	32.92	121.99	303.32	1,087.80	33.87	0.65	42.10	225.90	95.26	42.66
Sharks	--	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	122.73	21.43	32.92	121.99	303.32	1,087.80	33.87	0.65	42.10	225.90	95.26	42.66
Alaska plaice	--	--	--	--	3.95	--	15.13	--	78.07	0.81	3.37	9.12
Arrowtooth flounder	251.55	354.21	82.92	165.56	138.49	40.37	--	1.67	--	--	148.81	16.13
Flathead sole	--	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	8.66	--	11.27	--	74.72	11.48	2.82	2.04	6.12	24.81	14.65	9.64
Rock sole	--	--	3.89	--	376.96	137.65	2,313.76	61.90	1,216.67	452.40	236.34	112.79
Yellowfin sole	--	--	--	--	19.07	48.30	78.07	8.86	86.26	5.78	13.13	125.52
Other flatfish	13.18	89.62	30.64	37.34	13.57	8.61	--	1.67	--	0.38	1.46	--
Total flatfish	273.40	443.83	128.73	202.90	626.75	246.42	2,409.78	76.14	1,387.12	484.18	417.76	273.22
Walleye pollock	0.02	2,350.57	862.45	422.85	513.39	5,441.43	1,295.17	1,424.86	679.32	1.59	653.69	873.09
Pacific cod	7.76	48.59	30.30	31.11	103.43	39.40	9.79	18.78	67.87	75.16	36.32	29.62
Sablefish	--	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	1.22	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	--	--	--	--	--	--	--	--	--	--	--
Pacific herring	--	--	--	--	--	--	1.72	--	--	--	--	--
Pacific ocean perch	--	0.02	--	55.18	--	--	--	--	--	--	--	--
Sculpins	13.34	0.21	0.22	6.84	357.22	19.72	71.49	5.69	11.64	7.88	81.37	245.47
Other rockfish	--	--	--	172.35	--	--	--	--	--	--	--	--
Other roundfish	0.78	1.06	0.02	79.49	16.07	26.42	23.41	9.36	14.42	20.26	3.54	38.22
Total roundfish	21.90	2,401.68	892.99	767.82	990.11	5,526.96	1,401.58	1,458.69	773.25	104.89	774.92	1,186.39
Blue king crab	--	--	--	--	--	--	2.32	--	--	--	--	--
Red king crab	--	--	--	--	--	3.76	11.87	3.89	40.89	20.29	12.54	65.60
Tanner crab, Bairdi	62.11	31.52	6.09	26.65	16.92	14.45	63.60	13.99	13.63	2.30	193.61	525.80
Tanner crab, opilio	1.96	0.58	--	1.16	--	1.16	8.42	10.58	35.95	0.44	3.93	3.32
Other crab	5.78	11.51	2.23	19.45	33.33	6.45	29.08	96.91	1.22	0.37	21.58	10.44
Shrimp	4.65	0.73	0.57	1.02	--	--	--	--	--	--	0.02	--
Octopus	--	--	--	--	9.84	--	--	0.05	--	--	--	--
Squids	--	--	--	0.05	--	--	--	--	--	--	--	--
Snails	2.64	4.76	4.01	18.74	17.04	--	43.06	--	--	--	14.52	2.78
Starfish	3.87	2.28	0.65	2.34	106.96	1.99	572.91	25.53	138.01	162.56	273.04	711.42
Other invertebrates	96.16	55.65	60.55	26.97	60.83	15.57	95.14	123.36	22.27	4.42	12.50	79.25
Total invertebrates	177.16	107.03	74.08	95.22	244.92	43.39	826.40	274.32	251.97	190.38	531.74	1,398.60
Miscellaneous	0.74	1.08	1.61	3.39	40.38	18.68	39.70	54.85	1.56	0.67	11.95	29.65
Total catch	614.40	3,094.44	1,163.90	1,193.43	2,537.57	7,052.62	4,718.00	1,869.67	2,456.00	1,006.02	2,719.46	3,642.00

Appendix B Table 1. -- Continued.

Station	HG2221	GF2221	F-21	E-21	E-22	F-22	G-22	H-22	IH2221	I-22	JI2221	J-22
Start date and time	7/5/07 17:47	7/6/07 14:12	7/6/07 16:25	7/7/07 7:14	7/7/07 9:42	7/7/07 12:37	7/7/07 15:01	7/7/07 17:34	7/8/07 7:10	7/8/07 9:27	7/8/07 11:38	7/8/07 14:11
Haul number	120	125	126	127	128	129	130	131	132	133	134	135
Start latitude	5706.28	5650.52	5640.43	5620.15	5620.00	5640.52	5659.50	5719.49	5729.12	5739.33	5749.96	5759.60
Start longitude	17132.43	17132.62	17151.75	17157.39	17120.38	17116.15	17113.52	17108.47	17124.93	17105.54	17122.71	17102.73
End latitude	5707.29	5649.78	5639.80	5620.28	5619.90	5642.08	5700.99	5720.96	5730.57	5740.78	5750.80	5800.23
End longitude	17130.38	17130.19	17154.19	17154.79	17117.61	17116.27	17112.95	17108.64	17124.62	17105.92	17125.13	17100.26
Bottom depth (m)	48	101	97	109	121	113	95	84	74	85	78	87
Duration (h)	0.51	0.50	0.50	0.48	0.51	0.52	0.52	0.50	0.49	0.49	0.51	0.49
Distance fished (km)	16.06	17.89	17.25	18.13	18.02	17.07	17.79	16.76	17.07	17.20	17.49	17.49
Net width (m)	Y	Y	Y	Y	N	Y	N	Y	N	Y	N	N
Net measured?												
Skates	48.21	59.64	80.42	--	77.87	81.15	125.94	128.55	165.18	141.50	10.49	105.16
Sharks	--	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	48.21	59.64	80.42	--	77.87	81.15	125.94	128.55	165.18	141.50	10.49	105.16
Alaska plaice	--	4.45	--	--	--	--	1.99	11.36	14.33	--	27.89	2.34
Arrowtooth flounder	13.40	164.89	122.25	188.18	49.93	118.69	85.01	50.44	142.60	195.07	--	3.87
Flathead sole	--	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	37.80	2.67	2.25	21.02	54.75	3.08	9.21	40.55	95.25	30.15	25.27	26.55
Rock sole	1,074.73	1.40	1.50	--	--	--	6.82	43.98	284.80	420.17	304.84	168.30
Yellowfin sole	46.59	--	--	--	--	--	--	7.34	18.88	2.89	67.40	76.23
Other flatfish	--	16.63	15.42	85.27	16.68	10.74	15.43	1.67	--	9.41	--	--
Total flatfish	1,172.52	190.04	141.41	294.47	121.36	132.51	118.46	155.34	555.87	657.69	425.40	277.29
Walleye pollock	1.07	387.30	719.45	105.64	3,177.41	107.17	59.34	1,682.40	2,272.93	959.40	908.95	266.58
Pacific cod	86.12	7.80	36.74	12.30	95.39	25.20	27.52	66.69	190.33	101.29	124.63	88.36
Sablefish	--	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	0.08	5.92	1.28	0.48	0.10	2.65	--	3.01	1.15	6.36
Eelpouts	--	4.49	--	--	--	--	1.63	--	--	--	--	0.26
Pacific herring	--	--	--	--	1.68	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	--	4.46	11.42	20.02	57.43	9.39	24.78	4.80	5.18
Sculpins	194.99	19.16	3.52	0.39	--	--	--	--	--	--	--	--
Other rockfish	--	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	48.81	17.18	1.52	0.38	0.05	0.92	6.12	0.63	22.53	2.43	6.24	1.66
Blue king crab	330.98	435.93	761.31	124.62	3,280.27	145.18	114.73	1,809.79	2,495.17	1,090.91	1,045.77	368.40
Red king crab	174.84	--	--	--	--	--	--	--	--	0.87	--	--
Tanner crab, Bairdi	129.35	20.91	31.64	54.67	34.04	31.38	33.49	5.74	19.75	16.28	3.67	2.25
Tanner crab, opilio	3.93	1.00	6.14	3.99	3.19	4.31	14.68	1.72	13.12	6.68	11.97	10.24
Other crab	138.10	168.69	88.85	15.48	1.33	37.45	80.00	141.88	97.05	129.73	151.46	47.76
Shrimp	--	0.06	0.01	0.10	0.33	0.13	0.10	0.05	--	0.04	--	0.05
Octopus	--	9.06	15.57	--	--	5.57	--	--	--	--	--	--
Squids	--	--	--	--	0.07	--	--	--	--	--	--	--
Snails	37.28	30.46	23.06	17.78	5.32	18.49	26.54	33.95	1.45	167.00	22.10	33.97
Starfish	207.33	46.32	5.74	1.04	0.64	27.62	170.91	173.39	25.46	9.85	110.30	21.32
Other invertebrates	8.40	4.82	50.66	43.87	219.04	426.80	1.55	66.70	323.57	379.48	23.23	8.59
Total invertebrates	699.23	281.30	221.67	136.92	263.95	551.75	327.26	423.43	480.40	709.92	322.73	124.17
Miscellaneous	23.05	17.63	12.24	1.20	0.42	5.38	12.71	36.53	90.06	0.38	56.00	2.90
Total catch	2,274.00	1,078.20	1,379.92	653.25	3,779.76	994.01	871.19	2,735.67	3,836.00	3,233.41	1,902.00	979.24

Appendix B Table 1. -- Continued.

Station	K-22	L-22	L-23	L-24	K-24	K-23	J-23	I-23	H-23	G-23	F-23	B-01
Start date and time	7/8/07 16:51	7/9/07 7:06	7/9/07 9:37	7/9/07 12:15	7/9/07 14:50	7/9/07 18:12	7/10/07 7:26	7/10/07 9:59	7/10/07 12:38	7/10/07 15:16	7/10/07 17:51	7/13/07 9:12
Haul number	136	137	138	139	140	141	142	143	144	145	146	147
Start latitude	5819.44	5839.73	5839.98	5840.73	5820.69	5820.45	5800.55	5740.54	5720.68	5700.88	5640.55	5520.31
Start longitude	17258.75	17254.88	17216.36	17338.04	17341.59	17220.59	17223.04	17227.97	17231.67	17236.64	17239.00	16826.93
End latitude	5820.94	5840.64	5840.53	5839.29	5819.28	5818.95	5759.71	5739.02	5719.22	5659.45	5639.09	5521.62
End longitude	17259.27	17254.18	17213.57	17337.47	17342.56	17221.29	17225.37	17227.61	17231.89	17236.94	17239.29	16826.01
Bottom depth (m)	84	83	93	101	103	96	98	99	101	109	120	147
Duration (h)	0.50	0.34	0.51	0.51	0.50	0.51	0.50	0.50	0.50	0.48	0.49	0.48
Distance fished (km)	2.82	1.82	2.89	2.71	2.85	2.78	2.79	2.84	2.73	2.67	2.73	2.61
Net width (m)	17.49	18.07	17.81	17.79	17.79	17.98	17.54	17.79	17.79	17.79	17.63	18.04
Net measured?	N	Y	Y	N	N	Y	Y	N	N	N	Y	Y
Skates	33.18	43.49	36.05	52.45	86.88	80.58	80.02	78.30	94.67	30.06	62.95	41.67
Sharks	--	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	33.18	43.49	36.05	52.45	86.88	80.58	80.02	78.30	94.67	30.06	62.95	41.67
Alaska plaice	3.07	17.62	42.69	21.84	--	12.10	9.09	--	--	--	--	--
Arrowtooth flounder	0.02	--	0.03	24.41	--	0.09	8.63	154.93	186.40	75.11	171.07	254.17
Flathead sole	--	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	10.04	9.50	1.06	--	--	--	--	--	--
Pacific halibut	18.53	9.49	32.89	7.92	5.07	8.50	1.15	12.44	17.70	11.97	27.61	5.11
Rock sole	22.26	5.42	65.80	23.46	61.97	127.55	42.62	17.38	3.39	--	--	--
Yellowfin sole	25.36	10.72	35.59	--	--	1.60	1.60	--	--	--	--	--
Other flatfish	--	--	--	17.55	--	--	6.91	35.90	14.78	8.45	28.43	20.96
Total flatfish	69.24	43.25	177.00	105.21	76.54	149.30	70.00	220.65	222.27	95.53	227.11	280.24
Walleye pollock	30.63	15.01	85.07	662.38	514.59	228.60	725.22	1,091.38	934.55	766.52	4,565.18	--
Pacific cod	43.78	42.16	105.30	79.30	49.86	50.82	58.34	113.18	31.98	79.98	11.37	42.59
Sablefish	--	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	0.57	--	--	--	--	--	--	--	--	--
Eelpouts	6.73	3.90	5.54	18.86	0.10	5.78	41.13	3.17	4.93	0.93	--	--
Pacific herring	--	--	--	--	--	0.46	--	3.66	--	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	0.23	0.32	--
Sculpins	1.02	0.81	2.12	14.68	99.42	2.92	15.20	7.77	16.96	19.63	6.42	0.05
Other rockfish	--	--	--	--	--	--	--	--	--	--	--	--
Other roundfish	0.31	0.28	0.56	--	--	1.71	0.14	0.53	6.60	30.35	--	0.62
Total roundfish	82.47	62.16	199.17	775.21	663.98	290.29	840.03	1,219.68	995.03	897.64	4,583.29	43.26
Blue king crab	--	--	--	--	--	--	--	--	--	--	--	--
Red king crab	--	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	3.38	2.69	3.51	4.52	6.14	3.20	6.41	7.28	4.57	16.53	36.19	26.99
Tanner crab, opilio	92.08	191.68	92.84	27.10	757.32	68.66	60.90	56.91	73.20	60.18	25.68	--
Other crab	28.79	4.94	4.76	47.04	24.10	17.23	22.92	14.81	55.26	88.27	44.15	1.14
Shrimp	0.04	0.07	0.06	0.17	0.22	0.27	0.19	0.30	0.30	0.24	0.13	0.19
Octopus	--	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--	--
Snails	54.71	9.03	47.27	24.93	136.77	66.80	101.07	12.92	60.36	23.89	42.00	8.04
Starfish	70.91	36.02	61.34	26.55	103.45	51.65	25.11	7.89	10.10	3.00	1.76	0.01
Other invertebrates	34.77	26.17	67.07	178.62	11.26	10.07	26.53	35.41	1.61	14.64	34.45	7.63
Total invertebrates	284.68	270.60	276.85	308.93	1,039.26	217.89	243.13	135.52	205.40	206.74	184.36	44.00
Miscellaneous	10.06	0.16	2.83	10.35	9.90	1.48	3.95	2.50	12.57	16.23	14.10	0.63
Total catch	479.64	421.87	775.42	1,459.55	1,894.00	794.98	1,348.91	2,125.90	1,603.72	1,316.44	5,186.50	489.17

Appendix B Table 1. -- Continued.

Station	C-01	D-01	E-01	G-26	H-26	I-26	J-26	K-26	L-26	M-26	N-26
Start date and time	7/13/07 11:40	7/13/07 14:14	7/13/07 16:49	7/14/07 12:32	7/14/07 15:59	7/14/07 18:36	7/15/07 7:32	7/15/07 10:29	7/15/07 13:01	7/15/07 15:56	7/15/07 18:24
Haul number	148	149	150	151	152	153	154	155	156	157	158
Start latitude	5539.54	5559.68	5620.37	5659.88	5719.27	5740.12	5800.88	5819.73	5839.48	5859.43	5918.97
Start longitude	16824.95	16822.57	16821.01	17446.20	17439.43	17436.50	17431.15	17426.45	17422.10	17416.75	17412.12
End latitude	5541.00	5601.19	5621.89	5659.91	5720.57	5741.55	5759.40	5821.19	5840.88	5900.95	5920.45
End longitude	16824.64	16822.55	16820.88	17443.44	17440.43	17436.17	17431.24	17426.24	17421.46	17416.28	17411.71
Bottom depth (m)	134	132	128	140	121	148	117	115	125	117	110
Duration (h)	0.49	0.50	0.49	0.49	0.48	0.47	0.49	0.49	0.47	0.49	0.50
Distance fished (km)	2.72	2.81	2.80	2.80	2.63	2.66	2.76	2.70	2.66	2.87	2.77
Net width (m)	18.22	18.33	17.80	16.85	16.65	16.80	16.96	18.02	18.02	17.51	16.47
Net measured?	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
Skates	7.38	--	7.20	23.87	28.47	53.30	56.78	27.14	226.34	90.91	142.09
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	7.38	--	7.20	23.87	28.47	53.30	56.78	27.14	226.34	90.91	142.09
Alaska plaice	--	--	--	--	--	--	--	--	--	--	--
Arrowtooth flounder	243.54	90.07	245.30	175.06	395.43	49.80	201.86	103.82	103.49	11.09	15.29
Flathead sole	--	--	--	--	--	--	--	--	--	18.71	21.56
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	7.80	5.11	4.72	26.56	11.36	4.14	8.85	27.70	97.90	10.42	2.27
Rock sole	--	--	--	2.20	2.59	0.54	4.79	43.60	6.88	24.70	7.98
Yellowfin sole	--	--	--	--	--	--	--	--	--	--	--
Other flatfish	21.05	--	4.63	44.81	68.64	27.14	46.54	26.88	20.28	12.66	6.42
Total flatfish	272.39	95.18	254.65	248.63	478.02	81.62	262.04	202.00	228.55	77.58	68.04
Walleye pollock	636.93	1,471.52	25.06	--	0.09	0.81	1,380.43	236.58	824.28	971.65	768.38
Pacific cod	2.51	17.38	1.79	39.08	12.10	45.12	124.27	13.68	94.58	20.33	68.12
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	0.09	--	0.49	0.03	--	--	--	0.18	--	0.90	14.85
Pacific herring	--	--	--	--	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	0.27	19.34	11.31	0.04	14.84	9.74	34.62	28.12	8.70	52.18	18.26
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	4.94	0.31	7.01	0.31	0.01	2.44	--	--	1.45	1.93	0.52
Total roundfish	644.74	1,508.55	45.66	39.46	27.04	58.11	1,539.32	278.56	929.00	1,047.00	870.14
Blue king crab	--	--	--	--	--	--	--	--	--	--	1.99
Red king crab	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	6.23	5.25	7.17	8.66	1.58	7.14	5.32	6.22	1.36	3.01	2.05
Tanner crab, opilio	0.14	0.68	33.32	2.28	0.59	--	20.84	11.72	7.60	17.15	116.68
Other crab	1.79	0.26	20.04	6.69	7.29	14.06	27.78	46.40	46.32	134.59	175.97
Shrimp	0.08	0.01	0.35	0.12	0.04	0.12	0.02	0.39	0.88	0.04	5.35
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	2.23	0.43	5.54	25.84	18.55	45.49	10.02	20.57	31.52	67.27	42.08
Starfish	0.05	--	0.02	7.83	1.22	2.08	3.31	3.73	1.73	2.15	4.78
Other invertebrates	3.51	3.49	28.89	384.13	253.01	11.80	8.30	6.75	4.67	5.37	19.89
Total invertebrates	14.04	10.12	95.33	435.54	282.29	80.68	75.59	95.77	94.08	229.57	368.80
Miscellaneous	0.08	--	1.42	4.84	5.03	3.77	8.94	5.59	14.33	60.09	32.42
Total catch	1,038.73	1,672.00	533.76	817.18	869.68	337.87	2,040.23	714.51	1,536.28	1,522.66	1,506.42

Appendix B Table 1. -- Continued.

Station	N-25	ON2625	O-25	PO2625	P-25	QP2625	Q-25	R-25	R-26	Q-26	P-27
Start date and time	7/16/07 7:21	7/16/07 9:48	7/16/07 12:18	7/16/07 14:56	7/16/07 17:36	7/17/07 7:18	7/17/07 10:09	7/17/07 12:55	7/17/07 15:28	7/17/07 18:04	7/18/07 7:31
Haul number	159	160	161	162	163	164	165	166	167	168	169
Start latitude	5919.71	5930.14	5940.33	5950.03	6001.29	6006.51	6019.28	6040.08	6039.93	6020.43	5958.97
Start longitude	17451.45	17430.83	17447.66	17424.93	17441.49	17414.43	17435.90	17432.15	17554.73	17555.42	17523.54
End latitude	5920.50	5931.22	5939.40	5951.08	6000.08	6007.28	6018.77	6041.55	6039.17	6019.03	6000.51
End longitude	17449.12	17428.94	17445.26	17426.95	17440.94	17411.88	17435.85	17431.64	17552.13	17556.22	17523.40
Bottom depth (m)	100	102	95	94	75	89	64	67	86	91	109
Duration (h)	0.48	0.50	0.50	0.49	0.42	0.48	0.18	0.50	0.49	0.51	0.52
Distance fished (km)	2.66	2.68	2.84	2.71	2.29	2.76	0.95	2.77	2.78	2.70	2.85
Net width (m)	17.79	17.79	17.79	17.79	17.07	17.49	17.56	17.07	17.56	17.79	18.06
Net measured?	N	N	N	N	N	N	Y	N	Y	N	Y
Skates	53.98	57.52	31.55	36.96	18.20	85.43	8.34	2.06	48.65	23.50	72.78
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	53.98	57.52	31.55	36.96	18.20	85.43	8.34	2.06	48.65	23.50	72.78
Alaska plaice	--	7.14	0.91	2.63	3.44	21.02	11.80	36.04	2.14	--	--
Arrowtooth flounder	13.25	11.47	1.89	--	--	--	--	--	--	--	35.17
Flathead sole	--	--	--	--	0.03	2.52	0.01	0.03	0.15	0.44	2.62
Greenland turbot	1.83	2.02	9.39	--	15.77	6.79	12.85	--	1.43	--	--
Pacific halibut	--	--	13.26	--	227.43	7.08	13.76	66.99	1.43	6.42	23.26
Rock sole	14.15	5.08	8.24	3.64	--	0.31	0.34	4.56	--	0.33	--
Yellowfin sole	--	--	1.85	--	--	--	--	--	--	--	--
Other flatfish	13.18	11.47	35.54	6.27	246.68	37.72	38.76	107.62	3.72	7.19	61.05
Total flatfish	42.41	37.17	53.98	24.18	246.68	77.44	80.91	215.26	5.15	14.38	114.82
Walleye pollock	394.02	1,300.27	263.79	115.15	6.05	15.08	2.89	10.63	3.37	81.67	5,287.83
Pacific cod	130.03	173.86	165.62	239.57	16.63	279.78	11.36	29.37	1.52	142.75	91.43
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	34.99	19.13	15.87	25.22	--	25.58	--	0.15	11.62	26.00	31.02
Pacific herring	--	--	0.03	--	--	--	--	0.03	0.21	0.02	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	7.12	0.80	6.87	9.76	19.52	23.02	8.83	122.43	15.07	31.64	151.61
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Other roundfish	0.32	0.03	2.45	6.55	3.77	1.70	5.21	2.31	2.49	2.05	--
Total roundfish	566.47	1,494.09	454.63	396.25	45.98	345.16	28.30	164.93	34.28	284.14	5,561.89
Blue king crab	13.48	36.72	20.17	16.25	4.38	9.52	4.25	5.97	3.58	7.40	--
Red king crab	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	15.76	5.53	0.89	0.41	--	0.46	0.02	1.21	0.85	2.15	0.88
Tanner crab, opilio	26.23	51.85	22.55	129.14	52.05	151.18	6.88	27.33	79.90	342.73	20.73
Other crab	59.19	29.39	11.30	5.71	86.00	3.89	5.36	13.72	0.57	2.10	16.03
Shrimp	1.45	2.68	2.54	2.21	0.63	0.07	0.09	0.41	0.01	0.26	0.59
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	38.90	19.02	35.45	21.65	28.04	3.74	2.45	11.14	0.04	0.10	41.35
Starfish	19.47	25.25	12.75	9.54	3.50	2.28	3.38	1.09	0.47	4.16	19.28
Other invertebrates	162.06	64.34	27.82	15.01	93.09	5.19	145.36	20.55	7.39	13.43	7.93
Total invertebrates	336.55	234.78	133.47	199.91	267.68	176.33	167.78	81.42	92.81	372.33	106.79
Miscellaneous	18.46	6.71	2.31	4.03	14.47	0.70	0.54	0.30	0.37	0.83	4.57
Total catch	1,061.18	1,865.47	657.67	644.48	593.00	683.90	243.71	358.22	202.19	695.09	5,848.00

Appendix B Table 1. -- Continued.

Station	QP2726	P-26	PO2726	O-26	O-27	N-27	M-27	L-27	K-27	L-28	M-28
Start date and time	7/18/07 10:05	7/18/07 12:54	7/18/07 15:12	7/18/07 17:55	7/19/07 7:33	7/19/07 10:43	7/19/07 13:40	7/19/07 16:17	7/19/07 18:57	7/20/07 9:36	7/20/07 11:54
Haul number	170	171	172	173	174	175	176	177	178	180	181
Start latitude	6009.60	6000.16	5950.29	5940.00	5940.42	5921.12	5900.32	5840.72	5820.81	5844.37	5859.54
Start longitude	17538.00	17404.29	17546.34	17408.48	17531.52	17533.87	17537.19	17544.44	17541.50	17501.99	17659.14
End latitude	6010.39	6001.45	5948.86	5941.01	5939.79	5919.67	5859.60	5839.35	5819.45	5844.79	5900.94
End longitude	17540.39	17402.67	17545.54	17406.29	17534.17	17534.31	17539.73	17545.56	17542.38	17504.63	17658.45
Bottom depth (m)	101	97	107	105	115	121	128	154	163	143	130
Duration (h)	0.50	0.51	0.49	0.50	0.50	0.49	0.49	0.50	0.48	0.50	0.52
Distance fished (km)	2.66	2.83	2.78	2.78	2.75	2.71	2.78	2.77	2.67	2.68	2.68
Net width (m)	18.93	18.90	18.65	18.34	18.78	18.64	18.35	19.29	19.14	18.89	18.63
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	39.05	7.79	96.68	102.00	86.94	140.78	228.47	20.60	33.93	48.65	67.30
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	39.05	7.79	96.68	102.00	86.94	140.78	228.47	20.60	33.93	48.65	67.30
Alaska plaice	--	--	--	--	1.13	13.44	--	--	--	--	--
Arrowtooth flounder	11.74	4.12	13.99	9.01	37.24	46.63	128.07	214.90	466.40	305.74	239.20
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	1.00	2.69	2.20	3.22	8.08	--	--	--	--	--	--
Pacific halibut	0.94	--	7.36	--	10.74	16.03	9.80	3.03	6.18	7.08	19.11
Rock sole	1.73	--	2.90	5.88	14.98	71.83	51.61	3.32	5.61	1.30	11.12
Yellowfin sole	--	--	--	--	--	--	--	--	--	--	--
Other flatfish	9.46	4.12	13.99	9.01	23.65	28.36	44.62	26.70	18.54	23.76	23.05
Total flatfish	24.86	10.93	40.45	27.12	95.82	176.28	234.10	247.95	496.73	337.88	292.48
Walleye pollock	221.23	199.74	648.94	1,189.63	608.66	2,620.92	170.93	0.04	--	--	1.30
Pacific cod	193.74	174.28	111.57	76.05	74.18	31.34	30.42	55.36	--	66.78	85.38
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	21.79	7.97	24.56	25.66	13.10	1.36	--	--	--	--	--
Pacific herring	--	--	--	--	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	0.25	--
Sculpins	11.45	5.88	7.15	24.70	25.18	--	50.32	11.11	7.14	0.00	11.92
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	1.33	1.01	0.06	0.16	0.30	0.15	3.73	5.91	2.77	0.63	11.38
Total roundfish	449.54	388.87	792.29	1,316.19	721.42	2,653.77	255.40	72.42	9.91	67.66	109.98
Blue king crab	9.58	14.52	1.68	12.29	--	--	--	--	--	--	--
Red king crab	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	0.55	0.81	1.70	1.88	0.79	0.73	27.73	3.90	1.87	10.25	3.84
Tanner crab, opilio	45.71	19.92	20.63	52.33	37.35	26.80	78.15	--	--	--	--
Other crab	18.54	4.58	56.60	53.00	52.96	131.77	97.34	21.90	7.80	10.26	23.98
Shrimp	1.00	0.49	0.53	4.83	3.68	--	0.35	0.03	0.01	0.06	0.09
Octopus	--	--	--	--	--	--	0.12	0.02	--	--	0.03
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	36.69	17.47	35.48	78.79	39.40	23.86	41.73	6.46	3.87	6.70	26.44
Starfish	21.58	6.82	69.83	25.98	16.06	5.48	6.55	1.07	5.13	2.66	7.84
Other invertebrates	14.21	18.56	43.33	60.83	43.01	54.07	125.67	13.64	20.95	24.14	19.85
Total invertebrates	147.87	83.18	229.78	289.92	193.25	242.72	377.63	47.03	39.63	54.08	82.05
Miscellaneous	1.28	4.53	--	12.86	11.32	32.14	24.09	3.89	0.64	1.89	9.65
Total catch	682.65	496.53	1,195.99	1,767.01	1,171.65	3,262.36	1,226.62	407.67	622.30	525.13	701.45

Appendix B Table 1. --- Continued.

Station	N-28	O-28	P-28	Q-28	Q-27	R-27	S-27	R-28	S-28	T-28	U-28
Start date and time	7/20/07 14:35	7/20/07 17:15	7/21/07 7:29	7/21/07 10:12	7/21/07 13:20	7/21/07 15:55	7/21/07 18:21	7/22/07 7:23	7/22/07 9:56	7/22/07 12:28	7/22/07 15:00
Haul number	182	183	184	185	186	187	188	189	190	191	192
Start latitude	5920.27	5939.43	5959.47	6019.42	6020.31	6039.49	6058.82	6039.36	6059.24	6119.02	6139.20
Start longitude	17653.93	17652.57	17643.71	17637.06	17518.25	17511.06	17507.26	17632.83	17627.24	17619.98	17614.14
End latitude	5921.75	5940.19	6000.97	6020.36	6020.67	6040.99	6100.30	6040.78	6100.69	6120.58	6139.99
End longitude	17654.16	17655.03	17643.53	17634.74	17515.30	17511.06	17507.01	17632.24	17626.26	17620.35	17613.48
Bottom depth (m)	133	126	117	112	103	98	93	107	103	97	96
Duration (h)	0.51	0.49	0.51	0.51	0.51	0.51	0.51	0.50	0.50	0.53	0.29
Distance fished (km)	2.75	2.72	2.79	2.72	2.80	2.75	2.77	2.82	2.75	2.90	1.58
Net width (m)	18.57	18.60	18.98	18.34	18.68	19.03	18.83	18.85	18.89	20.36	19.11
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	247.10	102.76	112.82	52.89	22.83	14.62	12.94	32.46	65.18	12.20	3.94
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	247.10	102.76	112.82	52.89	22.83	14.62	12.94	32.46	65.18	12.20	3.94
Alaska plaice	3.42	4.86	0.92	1.02	0.86	3.08	--	--	--	--	--
Arrowtooth flounder	72.58	32.40	45.98	30.99	15.75	0.17	--	3.13	--	--	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	8.86	6.62	19.64	7.28	6.53	9.18	0.24	5.91	1.79	2.48	0.03
Pacific halibut	47.33	21.81	4.49	--	3.92	2.78	--	--	2.97	6.32	--
Rock sole	11.07	34.93	2.96	--	1.13	24.68	1.33	0.48	1.30	8.46	3.13
Yellowfin sole	--	--	--	--	--	--	--	--	0.11	0.51	--
Other flatfish	13.89	17.75	10.88	30.99	12.63	--	--	2.47	--	--	--
Total flatfish	157.16	118.38	84.86	70.28	40.81	39.89	1.57	11.99	6.17	17.77	3.16
Walleye pollock	1,845.69	3,303.32	715.74	1,986.77	799.92	148.10	1.90	172.52	78.66	26.87	27.28
Pacific cod	280.97	69.48	76.44	100.25	45.23	114.15	4.35	91.06	67.13	176.89	47.96
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	2.03	41.15	55.68	19.07	7.34	5.04	8.84	18.82	1.57	16.62
Pacific herring	--	--	--	--	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	0.45	--	--	--
Sculpins	22.15	72.38	29.53	11.05	14.16	12.02	8.85	5.74	13.98	29.58	2.25
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Other roundfish	11.38	--	0.38	--	2.68	1.31	0.96	0.35	1.36	0.13	0.26
Total roundfish	2,160.18	3,447.21	863.23	2,153.75	881.05	282.92	21.09	278.96	179.95	235.03	94.36
Blue king crab	--	--	--	--	1.88	--	1.31	--	--	--	--
Red king crab	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	46.87	2.20	5.18	7.93	1.06	0.11	--	1.03	0.02	--	--
Tanner crab, opilio	2.63	23.34	15.52	22.00	12.26	41.70	40.00	6.06	31.81	37.44	17.25
Other crab	4.97	19.53	30.39	33.82	33.20	1.61	0.52	7.79	7.75	1.01	2.38
Shrimp	0.16	0.18	2.48	9.84	0.23	0.33	0.13	0.24	0.21	0.27	0.11
Octopus	--	--	--	--	--	--	--	6.35	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	7.60	48.22	91.62	80.44	75.98	6.93	0.73	37.29	19.69	0.36	2.30
Starfish	11.24	3.54	14.62	25.03	45.36	2.06	1.82	23.17	12.64	1.77	0.44
Other invertebrates	0.95	27.78	26.98	35.43	14.67	7.22	14.21	22.17	14.95	8.84	10.02
Total invertebrates	74.42	124.79	186.79	214.49	184.64	59.97	58.71	104.10	87.07	49.69	32.50
Miscellaneous	0.72	9.94	10.52	3.38	1.21	0.36	0.43	2.46	0.90	0.16	0.17
Total catch	2,657.89	3,865.76	1,306.87	2,508.99	1,434.63	475.10	128.47	431.96	378.46	452.89	223.90

Appendix B Table 1.--Continued.

Station	V-28	U-29	T-29	S-29	R-29	R-30	T-30	S-30	S-31	R-31	R-32
Start date and time	7/22/07 17:24	7/23/07 7:29	7/23/07 10:02	7/23/07 12:51	7/23/07 15:21	7/23/07 17:51	7/24/07 8:08	7/24/07 10:40	7/24/07 13:27	7/24/07 16:15	7/24/07 19:10
Haul number	193	194	195	196	197	198	199	200	201	202	203
Start latitude	6159.52	6139.72	6120.13	6059.88	6040.60	6039.68	6120.40	6100.82	6059.78	6040.43	6040.02
Start longitude	17610.27	17731.47	17740.84	17742.77	17747.20	17714.35	17701.49	17701.69	17821.95	17829.62	17950.39
End latitude	6200.82	6138.22	6118.90	6058.39	6039.25	6040.79	6118.99	6059.30	6059.30	6039.28	6039.93
End longitude	17610.04	17731.14	17742.65	17743.15	17748.19	17712.28	17702.66	17701.40	17824.93	17831.33	17947.96
Bottom depth (m)	92	106	107	113	119	129	117	122	135	146	161
Duration (h)	0.44	0.50	0.49	0.51	0.48	0.50	0.50	0.51	0.50	0.48	0.41
Distance fished (km)	2.42	2.81	2.79	2.78	2.67	2.80	2.82	2.84	2.84	2.23	2.23
Net width (m)	18.53	18.45	18.06	18.17	17.99	18.19	18.04	18.32	17.66	17.99	18.00
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	2.96	17.58	90.61	26.96	53.94	47.11	86.93	96.46	170.75	30.63	59.80
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	2.96	17.58	90.61	26.96	53.94	47.11	86.93	96.46	170.75	30.63	59.80
Alaska plaice	--	--	--	--	--	--	9.28	--	2.10	--	22.78
Arrowtooth flounder	--	3.30	6.15	--	11.19	13.30	10.29	12.70	3.37	49.41	263.50
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	0.09	11.94	19.51	11.86	12.94	13.80	37.62	22.81	22.84	40.71	2.40
Pacific halibut	--	1.23	2.82	3.54	--	--	36.15	--	5.60	--	4.49
Rock sole	7.63	1.95	2.02	--	4.38	3.62	--	2.84	--	1.18	88.26
Yellowfin sole	--	--	--	--	--	--	--	--	--	--	--
Other flatfish	7.72	3.30	6.15	--	11.19	13.30	10.29	12.70	3.37	30.98	55.87
Total flatfish	48.12	245.33	428.86	15.40	39.69	44.02	103.63	51.05	37.29	122.29	437.30
Walleye pollock	50.14	39.08	109.47	128.34	76.00	46.37	78.48	38.12	118.90	66.30	105.82
Pacific cod	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	1.92	1.94	6.69	7.18	17.28	13.15	14.58	54.54	54.63	28.82	5.51
Eelpouts	--	--	--	--	--	--	--	--	--	--	--
Pacific herring	--	--	--	--	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	8.25	22.39	0.39	7.15	15.57	2.84	0.55	8.38	0.40	14.12	69.09
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Other roundfish	0.61	0.24	0.24	1.02	--	--	2.83	0.48	0.05	0.12	2.06
Total roundfish	109.05	308.98	545.65	1,292.50	2,358.63	1,344.75	1,211.05	784.61	2,551.21	1,965.94	2,544.36
Blue king crab	--	--	--	--	--	--	--	--	--	--	--
Red king crab	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	--	--	0.26	0.08	0.26	0.82	0.01	0.22	--	--	0.15
Tanner crab, opilio	14.32	36.66	48.41	28.58	5.08	9.11	16.21	16.91	7.99	1.79	8.12
Other crab	1.67	2.41	4.51	1.04	4.46	0.26	1.69	11.86	5.95	0.13	7.49
Shrimp	0.18	0.41	0.54	0.04	1.83	0.70	0.68	1.45	1.30	2.10	3.28
Octopus	--	0.93	--	--	--	--	--	1.46	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	1.75	2.70	7.60	1.05	15.20	1.80	16.41	104.90	36.91	56.09	40.18
Starfish	6.46	0.37	0.65	6.50	10.01	25.81	12.66	16.34	25.25	107.36	8.44
Other invertebrates	11.84	8.19	8.18	13.31	23.77	12.78	39.22	17.57	8.49	8.96	38.16
Total invertebrates	36.23	51.67	70.14	50.59	60.61	51.29	86.87	170.71	85.89	176.44	105.81
Miscellaneous	1.11	0.11	--	0.17	0.72	0.30	0.66	0.14	0.25	--	15.67
Total catch	182.37	430.81	770.09	1,386.00	2,515.19	1,493.30	1,492.29	1,104.70	2,845.37	2,296.98	3,811.87

Appendix B Table 1. -- Continued.

Station	Q-31	Q-30	Q-29	P-29	P-30	P-32	P-31	O-31	O-30	O-29	N-29
Start date and time	7/25/07 7:43	7/25/07 10:20	7/25/07 12:58	7/25/07 15:59	7/25/07 18:38	7/26/07 8:24	7/26/07 11:13	7/26/07 14:03	7/26/07 16:34	7/26/07 19:00	7/27/07 7:41
Haul number	204	205	206	207	208	209	210	211	212	213	214
Start latitude	6021.34	6019.99	6020.21	5959.53	6000.48	6000.86	5959.79	5940.39	5940.05	5940.27	5920.04
Start longitude	17836.68	17716.52	17756.44	17602.36	17720.51	17804.13	17845.33	17850.99	17727.14	17605.93	17614.84
End latitude	6020.81	6020.16	6020.31	5959.30	6000.54	5959.49	5959.93	5938.89	5940.34	5940.40	5921.50
End longitude	17839.52	17719.33	17759.45	17759.30	17717.80	17805.01	17847.77	17851.81	17730.05	17608.89	17614.77
Bottom depth (m)	149	136	122	131	142	142	136	174	136	138	137
Duration (h)	0.50	0.48	0.50	0.51	0.46	0.48	0.41	0.52	0.50	0.50	0.50
Distance fished (km)	2.80	2.61	2.78	2.88	2.53	2.66	2.29	2.79	2.79	2.80	2.71
Net width (m)	18.36	18.29	18.04	17.74	18.00	17.59	18.52	18.33	18.23	18.15	18.17
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	11.40	45.29	92.05	206.94	51.70	18.17	60.62	46.84	52.48	184.95	122.30
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	11.40	45.29	92.05	206.94	51.70	18.17	60.62	46.84	52.48	184.95	122.30
Alaska plaice	--	--	--	--	--	--	--	--	--	--	--
Arrowtooth flounder	23.67	72.69	56.84	159.22	87.02	121.99	45.66	306.66	96.59	217.72	95.39
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	31.48	15.70	22.71	18.30	19.05	45.60	17.65	9.22	23.46	19.44	--
Pacific halibut	--	--	--	3.72	5.89	--	--	--	--	7.24	23.06
Rock sole	4.08	4.51	--	15.52	3.82	6.71	--	5.33	--	9.05	--
Yellowfin sole	--	--	--	--	--	--	--	--	--	--	--
Other flatfish	13.92	36.04	56.84	37.81	13.97	21.59	23.83	45.14	34.95	23.08	20.28
Total flatfish	73.15	128.93	136.39	234.57	129.75	195.90	87.14	366.34	155.00	277.15	138.73
Walleye pollock	1,487.74	607.09	3,997.99	1,974.65	2,544.31	1,595.08	1,907.88	4,623.06	1,358.27	2,529.57	1,132.55
Pacific cod	55.23	144.76	153.00	110.68	144.20	55.65	36.84	116.76	55.22	192.10	152.46
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	12.98	18.53	70.14	10.56	79.76	8.89	21.24	--	24.40	61.22	27.64
Pacific herring	--	--	--	--	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	1.83	33.94	3.49	39.69	16.16	0.11	11.35	123.98	6.70	8.09	2.70
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	0.28	0.72	--	--	--	8.47	--	--	0.52	5.83	5.27
Total roundfish	1,558.05	805.03	4,224.62	2,135.58	2,784.43	1,668.20	1,977.30	4,863.80	1,445.11	2,796.81	1,320.61
Blue king crab	--	--	--	--	--	--	--	--	--	--	--
Red king crab	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	0.70	0.40	2.34	3.37	11.06	0.15	--	2.48	4.64	6.30	4.76
Tanner crab, opilio	0.49	56.02	20.98	23.37	0.12	--	--	--	1.17	11.83	0.28
Other crab	0.58	30.00	7.82	16.30	2.32	13.18	0.73	1.96	0.35	21.72	17.36
Shrimp	1.70	3.20	1.17	1.04	3.76	10.66	2.93	0.21	5.68	7.05	0.43
Octopus	8.77	--	--	--	--	--	--	--	0.02	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	35.78	74.67	27.64	29.35	112.27	12.03	22.76	3.49	22.35	68.84	34.20
Starfish	118.03	90.32	48.87	83.43	421.76	18.56	32.35	3.47	97.48	112.49	39.37
Other invertebrates	116.07	3.32	28.39	31.07	34.78	301.99	1.67	132.02	19.69	132.02	54.34
Total invertebrates	282.13	257.92	137.21	187.93	554.44	356.57	93.54	13.28	151.37	360.26	150.73
Miscellaneous	6.92	9.25	2.30	6.32	13.25	4.03	--	1.91	2.98	12.24	3.16
Total catch	1,935.92	1,256.03	4,702.84	2,799.81	3,539.97	2,311.59	2,247.82	5,443.14	1,864.95	3,691.08	1,832.28

Appendix B Table 1. --- Continued.

Station	N-30	N-31	M-31	M-32	L-31	L-30	M-30	M-29	L-29
Start date and time	7/27/07 10:33	7/27/07 13:04	7/27/07 15:56	7/27/07 18:50	7/28/07 8:02	7/28/07 10:39	7/28/07 13:22	7/28/07 15:52	7/28/07 18:47
Haul number	215	216	217	218	219	220	221	222	223
Start latitude	5919.91	5919.82	5900.38	5900.01	5840.16	5840.04	5859.48	5900.17	5840.32
Start longitude	17737.84	17857.57	17702.85	17825.97	17707.83	17747.09	17741.54	17615.64	17626.45
End latitude	5920.31	5920.18	5859.12	5900.16	5839.91	5840.27	5900.96	5900.15	5840.29
End longitude	17734.97	17854.79	17704.37	17823.11	17710.64	17749.82	17741.11	17618.62	17629.42
Bottom depth (m)	136	149	137	136	137	140	135	134	136
Duration (h)	0.49	0.49	0.49	0.50	0.51	0.49	0.50	0.51	0.51
Distance fished (km)	2.83	2.74	2.76	2.75	2.77	2.68	2.78	2.87	2.88
Net width (m)	18.14	18.64	18.58	18.71	18.40	18.40	18.20	18.23	18.85
Net measured?	Y	Y	Y	Y	Y	Y	N	Y	Y
Skates	50.71	72.76	47.36	34.92	--	--	49.24	35.76	11.47
Sharks	--	--	--	--	--	--	--	--	--
Total elasmobranch	50.71	72.76	47.36	34.92	--	--	49.24	35.76	11.47
Alaska plaice	--	--	--	--	--	--	--	--	--
Arrowtooth flounder	103.70	184.42	193.16	234.65	76.65	79.12	162.68	151.88	167.66
Flathead sole	--	--	--	--	--	--	--	--	--
Greenland turbot	--	9.98	--	--	--	--	--	--	--
Pacific halibut	--	7.28	34.68	10.71	21.44	--	22.08	15.72	4.62
Rock sole	2.09	3.16	31.28	35.96	1.71	2.18	5.18	--	3.50
Yellowfin sole	--	--	--	--	--	--	--	--	--
Other flatfish	16.13	46.86	19.01	49.12	30.58	22.74	9.86	18.80	37.58
Total flatfish	121.92	251.70	278.13	330.44	130.38	104.04	199.80	186.41	213.36
Walleye pollock	2,081.84	0.16	1.83	3.40	2.85	0.49	0.50	1,588.39	656.29
Pacific cod	79.76	27.18	11.54	12.30	3.43	3.72	113.86	157.05	15.32
Sablefish	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--
Eelpouts	9.69	--	--	--	--	--	--	--	--
Pacific herring	--	--	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	0.00	--	--	--	--	--
Sculpins	11.60	10.79	--	--	0.00	0.01	0.03	0.11	0.02
Other rockfish	--	--	--	--	--	--	--	--	--
Other roundfish	2.18	5.30	--	0.23	0.16	--	0.31	0.01	0.05
Total roundfish	2,185.06	43.43	13.37	15.93	6.45	4.22	114.70	1,745.55	671.68
Blue king crab	--	--	--	--	--	--	--	--	--
Red king crab	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	16.94	2.94	0.74	2.12	1.02	0.87	1.76	6.50	43.52
Tanner crab, opilio	--	--	--	--	--	--	--	0.08	1.78
Other crab	1.31	4.34	6.92	12.00	16.53	24.08	5.99	16.57	30.53
Shrimp	0.39	0.11	0.01	0.01	0.02	0.03	0.11	0.04	0.15
Octopus	11.05	--	0.01	0.04	3.29	7.93	--	--	5.59
Squids	--	--	--	--	--	--	--	--	--
Snails	31.24	12.51	14.70	11.24	11.14	17.51	28.63	24.35	6.84
Starfish	44.18	2.00	0.85	0.24	0.05	0.45	7.05	7.35	2.66
Other invertebrates	13.92	12.32	17.00	27.43	4.08	6.92	7.51	14.00	6.35
Total invertebrates	119.03	34.21	40.24	53.09	36.14	57.78	51.05	68.88	97.42
Miscellaneous	1.76	1.53	1.44	2.17	6.12	6.49	0.64	1.09	5.90
Total catch	2,626.13	644.53	623.82	640.55	300.58	250.93	824.73	2,615.80	1,078.24

Appendix B Table 2. -- Haul and catch data for successfully completed tows by FV *Aldebaran* during the 2007 eastern Bering Sea bottom trawl survey.

Station	G-15	H-15	I-15	J-15	K-13	J-13	I-13	H-13	G-13	E-12	E-11
Start date and time	6/11/07 11:18	6/11/07 14:13	6/11/07 16:59	6/11/07 19:28	6/12/07 7:04	6/12/07 10:05	6/12/07 12:46	6/12/07 15:12	6/12/07 17:40	6/13/07 7:07	6/13/07 10:15
Haul number	11	12	13	14	15	16	17	18	19	20	21
Start latitude	5700.13	5719.53	5739.13	5759.18	5817.19	5800.92	5740.76	5720.95	5700.73	5620.26	5619.52
Start longitude	16052.18	16054.94	16058.92	15901.73	16001.60	16147.60	16143.78	16141.99	16140.15	16101.64	16222.25
End latitude	5701.55	5720.93	5815.70	5800.19	5815.70	5759.46	5739.21	5719.36	5659.20	5620.06	5621.04
End longitude	16051.68	16055.77	16059.41	15904.06	16002.64	16146.48	16143.57	16141.69	16139.72	16258.97	16222.65
Bottom depth (m)	33	46	45	39	41	51	53	58	62	54	63
Duration (h)	0.52	0.53	0.53	0.52	0.54	0.53	0.52	0.53	0.53	0.51	0.53
Distance fished (km)	2.67	2.73	2.92	2.98	2.94	2.92	2.88	2.95	2.88	2.77	2.85
Net width (m)	16.88	17.47	16.66	16.55	16.95	17.09	16.64	16.29	17.52	17.05	17.53
Net measured?	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Skates	160.34	7.32	3.18	34.08	44.10	13.14	16.76	12.33	4.90	121.13	10.60
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	160.34	7.32	3.18	34.08	44.10	13.14	16.76	12.33	4.90	121.13	10.60
Alaska plaice	1.06	2.20	--	--	16.66	21.90	2.59	8.05	2.83	137.39	42.59
Arrowtooth flounder	--	--	--	--	--	--	--	0.06	0.20	1.33	13.86
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	7.62	8.14	16.06	34.86	74.43	1.32	11.20	23.30	12.68	50.94	--
Pacific halibut	1,689.89	1,048.73	322.59	214.09	989.53	1,037.88	510.97	392.29	419.27	941.81	327.62
Rock sole	763.34	683.03	300.29	177.80	952.49	1,262.45	195.99	124.47	404.86	2,168.72	654.86
Yellowfin sole	204.73	58.60	13.86	53.32	101.58	51.17	1.79	10.15	34.16	55.11	68.23
Other flatfish	2,666.64	1,800.71	652.80	480.07	2,134.69	2,374.72	722.54	558.32	874.00	3,355.30	1,107.16
Total flatfish	--	--	2.62	0.57	0.02	0.05	0.02	6.73	239.32	22.41	398.95
Walleye pollock	88.80	0.75	24.40	4.88	0.20	18.19	31.08	0.98	22.23	8.05	20.66
Pacific cod	--	--	--	--	--	--	--	--	--	--	--
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Elfpouts	--	--	--	--	--	--	--	--	--	--	--
Pacific herring	--	1.08	--	--	21.96	11.96	38.33	7.26	114.86	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	55.74	58.71	32.99	40.65	101.87	106.96	2.79	3.63	27.68	35.69	48.35
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Other roundfish	0.18	1.20	1.64	0.89	4.88	3.33	1.17	2.89	1.61	11.28	2.99
Total roundfish	144.72	61.75	61.65	46.98	128.92	140.49	73.39	21.49	405.70	77.43	470.95
Blue king crab	--	--	3.30	3.50	--	22.09	8.96	54.34	88.69	18.03	250.95
Red king crab	--	4.26	--	--	--	--	0.47	2.18	4.06	3.52	6.04
Tanner crab, Bairdi	--	0.25	--	--	--	--	--	--	0.32	--	0.54
Tanner crab, opilio	--	--	0.35	0.09	1.87	1.79	1.39	7.15	6.27	15.79	13.41
Other crab	0.53	1.51	0.00	0.01	0.04	--	0.01	0.01	--	--	--
Shrimp	--	--	--	--	--	--	--	--	--	--	--
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	--	1.18	0.12	0.19	--	0.58	7.78	12.84	--	1.21	16.57
Starfish	295.16	165.00	114.32	76.26	188.19	460.03	684.81	338.16	320.94	378.42	159.19
Other invertebrates	9.50	39.23	11.59	18.46	2.69	8.93	22.53	70.87	113.88	49.32	48.76
Total invertebrates	305.18	211.42	129.68	98.52	192.79	493.42	725.95	485.56	534.16	466.29	495.46
Miscellaneous	0.89	2.21	0.35	0.49	0.15	77.33	2.71	11.00	0.60	3.91	4.24
Total catch	3,280.00	2,088.00	848.21	660.14	2,504.00	3,128.00	1,546.00	1,092.00	1,832.00	4,152.00	2,110.00

Appendix B Table 2. --- Continued.

Station	F-11	G-11	H-11	I-11	J-11	K-11	L-09	K-09	J-09	I-09	H-09
Start date and time	6/13/07 13:36	6/13/07 16:19	6/13/07 18:52	6/14/07 6:57	6/14/07 9:22	6/14/07 11:51	6/14/07 16:31	6/15/07 7:00	6/15/07 9:40	6/15/07 12:08	6/15/07 14:29
Haul number	22	23	24	25	26	27	28	29	30	31	32
Start latitude	5639.63	5659.00	5719.05	5739.35	5758.91	5813.95	5837.83	5820.98	5800.92	5740.69	5721.04
Start longitude	16224.42	16225.37	16227.24	16229.36	16230.11	16226.71	16318.19	16316.75	16314.90	16314.86	16314.21
End latitude	5640.39	5700.51	5720.55	5740.81	5800.44	5813.10	5838.41	5819.45	5759.38	5739.10	5719.47
End longitude	16224.50	16224.94	16227.94	16228.54	16229.99	16227.20	16315.28	16316.82	16315.01	16314.99	16314.01
Bottom depth (m)	86	67	54	53	55	41	26	32	41	43	47
Duration (h)	0.27	0.52	0.51	0.52	0.52	0.30	0.54	0.52	0.51	0.53	0.53
Distance fished (km)	1.42	2.84	2.87	2.83	2.84	1.65	3.02	2.84	2.84	2.95	2.91
Net width (m)	17.38	17.56	17.14	17.01	16.72	16.79	15.63	15.74	16.40	16.67	16.36
Net measured?	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Skates	0.67	12.69	12.20	4.74	43.90	8.48	94.20	27.70	15.26	13.09	--
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	0.67	12.69	12.20	4.74	43.90	8.48	94.20	27.70	15.26	13.09	--
Alaska plaice	37.91	130.93	89.80	147.03	53.29	1.51	11.02	39.61	24.74	39.62	191.50
Arrowtooth flounder	6.93	2.50	--	--	--	--	--	--	--	--	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	9.29	19.66	11.85	29.72	54.66	75.02	21.66	98.80	55.94	40.99	7.74
Rock sole	112.77	336.06	183.93	245.54	956.96	201.31	405.41	951.13	442.14	494.41	346.62
Yellowfin sole	164.92	307.29	246.79	909.71	1,183.56	220.62	532.38	1,024.38	428.28	265.17	369.65
Other flatfish	--	1.04	--	--	26.74	68.38	270.82	102.03	16.21	3.46	--
Total flatfish	331.82	797.48	532.37	1,332.00	2,275.21	566.84	1,241.28	2,215.95	967.32	843.64	915.51
Walleye pollock	148.36	97.44	123.63	9.64	27.67	2.18	0.02	0.01	11.42	14.86	16.48
Pacific cod	9.90	12.76	34.61	4.94	29.01	6.26	14.25	36.60	23.46	104.63	83.32
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	--	--	--	--	--	--	--	--	--	--
Pacific herring	0.31	2.27	--	11.21	--	--	--	3.29	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	0.03	3.90	6.59	7.58	49.91	13.49	104.03	104.33	22.92	8.03	8.56
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	1.89	1.73	3.13	3.65	10.05	2.80	9.16	3.86	4.79	0.65	1.07
Total roundfish	160.49	118.11	167.96	37.01	116.64	24.73	127.46	148.09	62.59	128.17	109.42
Blue king crab	--	--	--	--	--	--	--	--	--	--	--
Red king crab	7.18	81.38	73.96	87.16	59.16	--	--	--	35.34	148.50	117.40
Tanner crab, Bairdi	4.98	10.80	--	1.04	--	--	--	--	--	--	1.62
Tanner crab, opilio	--	--	--	--	--	--	--	--	--	--	--
Other crab	4.96	1.40	1.63	2.16	15.64	1.94	2.83	3.00	8.14	5.50	2.05
Shrimp	0.00	--	0.02	0.03	0.03	0.01	0.04	0.01	0.02	0.01	--
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	3.31	--	1.70	3.21	17.67	0.09	0.95	3.40	1.49	7.54	0.74
Starfish	--	165.27	327.27	443.44	331.40	155.04	269.02	275.11	125.41	181.45	1,199.05
Other invertebrates	400.43	58.55	54.10	68.40	34.11	4.27	--	2.35	1.54	7.74	34.64
Total invertebrates	420.87	317.21	458.68	605.44	458.02	161.34	272.85	283.86	171.94	350.74	1,355.50
Miscellaneous	4.42	1.34	3.22	2.33	13.63	0.26	0.21	0.40	1.31	1.18	16.27
Total catch	973.97	1,302.77	1,218.00	2,002.00	2,920.00	761.66	1,736.00	2,676.00	1,236.00	1,368.00	2,400.00

Appendix B Table 2. --- Continued.

Station	G-09	C-09	C-08	B-08	B-07	C-07	D-07	E-07	F-07	G-07	H-07
Start date and time	6/15/07 16:52	6/16/07 7:05	6/16/07 10:08	6/16/07 13:05	6/16/07 17:09	6/17/07 7:04	6/17/07 10:02	6/17/07 13:12	6/17/07 15:51	6/17/07 18:28	6/18/07 7:22
Haul number	33	34	35	36	37	38	39	40	41	42	43
Start latitude	5700.97	5540.50	5540.15	5521.68	5519.84	5540.74	5559.21	5619.91	5639.45	5659.25	5719.38
Start longitude	16312.76	16311.14	16437.03	16436.04	16558.08	16400.83	16557.74	16401.40	16558.70	16558.16	16400.19
End latitude	5659.46	5540.31	5540.19	5520.27	5521.00	5542.06	5600.74	5621.40	5640.95	5700.72	5720.52
End longitude	16311.89	16308.47	16434.29	16434.93	16559.93	16559.38	16557.79	16401.34	16558.68	16558.31	16558.31
Bottom depth (m)	58	50	81	94	76	94	90	84	73	66	61
Duration (h)	0.54	0.52	0.53	0.52	0.53	0.53	0.52	0.51	0.51	0.50	0.52
Distance fished (km)	2.95	2.83	2.88	2.86	2.91	2.89	2.83	2.75	2.78	2.75	2.83
Net width (m)	17.05	16.49	17.68	15.74	17.15	17.84	17.81	18.26	18.00	17.45	17.21
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Skates	9.90	38.22	72.71	74.50	35.84	119.38	31.67	37.33	6.40	9.10	19.77
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	9.90	38.22	72.71	74.50	35.84	119.38	31.67	37.33	6.40	9.10	19.77
Alaska plaice	355.52	6.07	214.57	169.45	2.42	--	1.78	2.50	24.75	68.93	111.20
Arrowtooth flounder	0.57	16.32	346.83	316.39	65.78	416.37	92.77	6.84	12.52	1.09	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	65.30	8.18	17.16	4.88	60.44	22.30	8.22	11.14	9.00	3.26	1.90
Rock sole	380.82	806.11	72.91	506.64	203.86	4.29	52.86	119.96	226.18	57.83	85.28
Yellowfin sole	437.72	259.46	226.70	741.70	78.70	5.45	9.63	49.43	623.08	475.57	360.02
Other flatfish	1.08	8.64	30.79	50.14	0.74	10.67	0.04	--	--	--	--
Total flatfish	1,241.00	1,104.78	908.96	1,789.20	411.94	459.08	165.30	189.87	895.52	606.68	558.40
Walleye pollock	13.67	110.97	746.30	182.30	89.71	717.04	210.52	229.52	69.80	4.18	9.12
Pacific cod	4.29	104.90	5.75	32.26	33.33	43.09	7.50	12.82	7.64	14.10	13.60
Sablefish	--	--	--	0.22	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	--	--	--	--	--	1.37	3.01	1.70	0.37	--
Pacific herring	0.26	--	--	--	--	--	--	5.02	--	0.39	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	1.78	18.12	13.94	20.52	32.27	0.56	6.21	--	11.24	14.28	--
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	1.16	1.46	1.84	4.45	1.37	--	0.69	2.56	0.95	0.90	0.24
Total roundfish	21.16	235.45	767.83	239.75	156.69	760.69	226.28	252.92	91.33	34.23	22.96
Blue king crab	--	--	--	--	--	--	--	--	--	--	--
Red king crab	46.86	88.49	41.93	256.11	9.15	2.69	--	2.49	33.77	0.38	9.51
Tanner crab, Bairdi	5.66	47.09	24.78	233.45	23.99	64.35	11.83	9.80	7.62	4.31	2.86
Tanner crab, opilio	0.40	--	1.16	8.11	3.10	2.94	0.87	2.16	3.01	0.24	0.58
Other crab	7.25	4.77	52.09	47.08	4.27	45.35	108.61	82.98	90.62	60.47	41.68
Shrimp	0.01	--	0.02	--	0.02	--	0.01	--	--	0.02	0.01
Octopus	--	--	--	--	--	--	--	--	0.36	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	10.17	4.97	67.23	32.60	64.67	70.79	134.22	175.42	254.20	66.08	40.88
Starfish	200.74	766.50	15.89	68.97	11.44	--	7.54	68.64	21.88	181.09	246.07
Other invertebrates	7.49	34.74	63.29	170.84	235.04	95.84	1,033.25	26.49	45.43	83.18	61.18
Total invertebrates	278.58	946.56	266.39	817.15	351.67	281.96	1,296.32	367.99	456.90	395.77	402.77
Miscellaneous	4.63	0.49	1.31	12.00	6.00	27.70	70.86	69.52	143.69	37.58	64.49
Total catch	1,594.00	2,396.00	2,072.00	3,480.00	983.13	1,701.98	1,902.00	990.00	1,654.00	1,100.00	1,086.00

Appendix B Table 2. --- Continued.

Station	I-07	J-07	K-07	L-07	N-07	N-06	N-05	M-05	L-05	K-05	J-05
Start date and time	6/18/07 10:10	6/18/07 12:55	6/18/07 15:36	6/18/07 18:22	6/19/07 7:06	6/19/07 9:43	6/19/07 12:16	6/19/07 14:55	6/19/07 17:21	6/20/07 6:59	6/20/07 9:23
Haul number	44	45	46	47	48	49	50	51	52	53	54
Start latitude	5739.41	5759.38	5819.13	5839.48	5918.93	5920.27	5920.18	5901.26	5840.90	5820.53	5801.01
Start longitude	16559.39	16558.91	16559.09	16559.05	16559.66	16520.96	16641.72	16641.72	16640.82	16642.62	16645.20
End latitude	5740.92	5800.88	5820.60	5840.97	5920.22	5920.41	5919.85	5859.71	5839.41	5819.01	5759.53
End longitude	16559.13	16558.85	16559.36	16559.53	16557.82	16517.87	16659.70	16642.28	16640.20	16642.77	16644.66
Bottom depth (m)	51	47	41	33	20	21	20	27	38	44	49
Duration (h)	0.51	0.51	0.50	0.51	0.54	0.53	0.53	0.52	0.51	0.53	0.51
Distance fished (km)	2.80	2.77	2.74	2.78	2.95	2.92	2.83	2.92	2.83	2.81	2.78
Net width (m)	16.55	16.76	16.08	15.74	15.32	15.36	15.74	15.99	15.74	16.25	16.66
Net measured?	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N
Skates	11.91	13.16	45.10	51.81	--	40.73	77.82	85.46	31.41	33.84	15.04
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	11.91	13.16	45.10	51.81	--	40.73	77.82	85.46	31.41	33.84	15.04
Alaska plaice	92.14	139.67	32.34	22.30	36.88	42.64	6.47	71.22	117.46	81.97	121.52
Arrowtooth flounder	--	--	--	--	--	--	--	--	--	--	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	--	0.94	12.74	2.07	6.41	20.13	4.48	33.88	9.70	--	8.34
Rock sole	241.28	114.96	320.44	449.23	9.57	24.48	46.17	467.32	348.95	283.05	152.62
Yellowfin sole	263.18	410.86	442.22	173.36	495.44	939.89	306.91	406.39	626.35	643.17	154.69
Other flatfish	--	3.29	807.74	20.71	19.44	28.58	17.60	34.07	6.03	--	--
Total flatfish	596.61	669.71	807.74	667.67	567.74	1,055.72	381.63	1,012.89	1,108.48	1,008.18	437.17
Walleye pollock	29.40	5.82	5.15	6.20	0.06	3.19	0.05	2.62	6.62	0.55	7.92
Pacific cod	37.08	70.54	224.66	19.74	--	24.40	15.55	0.03	32.32	4.57	13.84
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	--	--	--	--	--	--	--	--	--	--
Pacific herring	1.26	--	--	0.15	26.86	3.12	23.76	0.11	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	24.26	11.95	36.04	126.40	1.48	3.44	7.53	40.33	46.39	28.26	26.21
Other rockfish	2.24	1.38	2.17	1.51	39.09	22.34	17.00	3.97	0.76	4.00	0.34
Total roundfish	94.24	89.69	268.01	153.99	67.49	56.49	63.89	47.06	86.10	37.38	48.31
Blue king crab	--	--	--	--	--	--	--	--	--	--	--
Red king crab	14.61	13.17	12.66	6.96	--	--	--	--	10.51	4.66	7.20
Tanner crab, Bairdi	0.36	--	--	--	--	--	--	--	--	--	0.36
Tanner crab, opilio	--	--	--	--	--	--	--	--	--	--	--
Other crab	28.77	28.45	30.77	5.00	0.07	0.64	4.76	4.19	1.70	60.78	39.77
Shrimp	0.01	--	--	--	--	0.00	0.00	--	--	--	0.02
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	49.03	29.03	1.93	--	--	--	--	0.08	0.94	64.89	22.23
Starfish	673.42	352.44	155.24	273.60	118.26	106.25	15.80	72.15	729.52	366.06	108.41
Other invertebrates	65.04	71.20	4.14	0.47	0.17	0.02	0.16	0.02	2.66	13.34	946.82
Total invertebrates	831.23	494.28	204.74	286.04	118.50	106.91	20.73	76.45	745.33	509.72	1,124.79
Miscellaneous	74.02	25.48	6.41	0.49	0.25	0.29	0.99	0.14	0.68	58.87	59.50
Total catch	1,612.00	1,300.00	1,332.00	1,160.00	753.98	1,260.14	545.05	1,222.00	1,972.00	1,648.00	1,686.00

Appendix B Table 2. --- Continued.

Station	I-05	H-05	G-05	F-05	E-05	D-05	C-05	B-05	Z-05	A-05	B-04
Start date and time	6/20/07 11:58	6/20/07 14:27	6/20/07 16:54	6/21/07 6:55	6/21/07 9:22	6/21/07 11:55	6/21/07 14:54	6/21/07 17:28	6/24/07 6:58	6/24/07 10:17	6/24/07 14:14
Haul number	55	56	57	58	59	60	61	62	63	64	65
Start latitude	5740.94	5720.99	5700.58	5640.36	5620.83	5600.79	5540.53	5520.18	5439.63	5459.52	5519.64
Start longitude	16644.77	16646.09	16647.01	16646.59	16647.66	16648.90	16648.28	16649.80	16650.93	16650.30	16613.92
End latitude	5739.43	5719.50	5659.07	5638.86	5619.33	5559.27	5539.03	5518.63	5441.15	5501.07	5520.88
End longitude	16644.91	16646.51	16647.01	16646.13	16647.81	16648.98	16648.58	16650.11	16651.10	16650.21	16612.44
Bottom depth (m)	60	65	69	74	86	95	107	109	81	110	119
Duration (h)	0.52	0.51	0.51	0.52	0.51	0.52	0.51	0.52	0.51	0.52	0.52
Distance fished (km)	2.80	2.79	2.80	2.83	2.79	2.82	2.79	2.82	2.82	2.86	2.78
Net width (m)	17.08	17.34	17.48	17.10	17.57	17.83	18.01	18.03	17.01	17.67	18.45
Net measured?	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y
Skates	13.70	19.66	13.49	39.76	26.36	64.40	113.68	35.60	126.84	254.08	39.42
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	13.70	19.66	13.49	39.76	26.36	64.40	113.68	35.60	126.84	254.08	39.42
Alaska plaice	180.00	82.35	32.88	40.04	4.97	--	--	--	--	--	--
Arrowtooth flounder	--	--	0.52	3.23	5.17	138.12	156.16	397.46	80.58	417.38	319.31
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	10.56	--	--	--	--	--	--	--
Pacific halibut	2.94	0.42	4.86	5.25	7.18	12.30	1.22	13.46	72.51	23.96	35.34
Rock sole	77.11	44.00	70.98	104.32	15.29	5.02	--	0.26	260.04	29.74	0.97
Yellowfin sole	354.19	697.15	808.94	811.96	16.13	--	--	--	22.51	2.12	--
Other flatfish	--	--	--	--	--	2.69	8.30	5.00	18.82	130.54	8.92
Total flatfish	614.24	823.92	918.18	975.35	48.74	158.13	165.68	416.18	454.46	603.74	364.55
Walleye pollock	3.18	3.18	9.51	29.34	98.52	227.52	1.95	0.88	5,778.97	550.92	--
Pacific cod	18.42	28.36	27.38	36.62	17.49	16.30	3.66	11.54	--	18.02	3.02
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	0.46	0.53	8.02	3.48	--	0.16	0.68	--	--	0.22
Pacific herring	--	0.20	--	--	3.59	5.57	--	--	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	5.14	0.02	15.70	19.78	0.19	0.10	1.04	1.29	136.28	8.74	0.94
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	1.26	0.05	0.15	0.95	0.12	--	2.97	0.25	4.10	1.04	5.31
Total roundfish	28.00	32.27	53.27	94.71	123.39	249.49	9.79	14.64	5,919.35	578.72	9.49
Blue king crab	--	--	5.78	--	--	--	--	--	--	--	--
Red king crab	--	--	2.73	5.38	2.95	26.98	11.58	211.89	0.24	9.80	79.06
Tanner crab, Bairdi	0.75	1.80	0.78	0.36	4.22	6.46	2.78	1.05	--	2.33	1.77
Tanner crab, opilio	2.05	0.42	0.42	0.36	60.68	199.01	42.34	14.54	--	0.56	2.30
Other crab	125.75	19.37	19.64	54.53	--	--	0.08	0.01	--	--	0.02
Shrimp	0.01	0.03	--	--	0.78	--	--	--	--	--	--
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	116.78	42.40	96.44	194.42	58.70	93.05	28.92	7.58	0.59	1.54	2.23
Starfish	39.37	71.99	107.02	81.26	12.68	--	0.02	--	--	0.06	--
Other invertebrates	162.28	108.86	333.19	312.73	129.03	84.30	89.41	13.97	1.17	13.16	35.18
Total invertebrates	447.01	244.87	565.58	648.68	269.05	409.79	175.11	249.04	2.00	27.45	120.56
Miscellaneous	181.06	6.41	5.59	177.88	83.34	79.32	4.19	2.29	--	0.88	1.00
Total catch	1,284.00	1,138.01	1,660.00	2,264.00	613.33	1,020.00	529.06	857.85	6,686.00	1,563.74	598.58

Appendix B Table 2. --- Continued.

Station	C-04	C-03	D-03	E-03	F-03	G-03	H-03	I-03	J-03	K-03	L-03
Start date and time	6/24/07 16:48	6/25/07 6:53	6/25/07 9:29	6/25/07 12:04	6/25/07 14:52	6/25/07 17:48	6/26/07 6:57	6/26/07 9:28	6/26/07 11:59	6/26/07 14:20	6/26/07 16:40
Haul number	66	67	68	69	70	71	72	73	74	75	76
Start latitude	5539.51	5539.71	5559.45	5619.60	5639.22	5659.53	5719.03	5739.41	5759.55	5819.22	5839.30
Start longitude	16611.72	16736.75	16736.32	16734.97	16733.58	16732.12	16730.81	16729.63	16728.52	16726.98	16726.18
End latitude	5540.95	5541.19	5600.94	5621.10	5640.73	5701.04	5720.51	5740.89	5801.08	5820.72	5840.80
End longitude	16612.71	16736.28	16736.41	16734.91	16733.71	16732.72	16731.17	16729.12	16728.12	16726.38	16725.99
Bottom depth (m)	117	125	123	102	83	73	69	65	60	46	41
Duration (h)	0.52	0.51	0.51	0.52	0.52	0.53	0.51	0.51	0.53	0.52	0.51
Distance fished (km)	2.86	2.78	2.76	2.79	2.81	2.86	2.78	2.78	2.86	2.85	2.78
Net width (m)	19.07	19.07	18.43	17.88	17.48	17.39	16.80	16.89	16.82	16.07	15.42
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	1.15	7.18	55.02	11.89	22.58	51.50	25.45	2.48	48.74	40.80	25.88
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	1.15	7.18	55.02	11.89	22.58	51.50	25.45	2.48	48.74	40.80	25.88
Alaska plaice	--	--	--	1.18	--	306.79	117.14	23.93	45.09	59.22	87.29
Arrowtooth flounder	114.77	115.65	173.57	320.22	3.51	--	--	--	--	--	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	--	6.80	3.08	2.78	2.01	15.27	--	0.75	4.99	8.78	5.52
Rock sole	--	--	--	0.12	0.26	50.02	51.76	6.06	11.24	165.51	333.14
Yellowfin sole	--	--	--	0.34	14.60	136.54	786.26	274.40	289.10	322.10	354.23
Other flatfish	4.91	12.33	15.32	11.77	3.51	--	--	--	--	--	0.32
Total flatfish	119.67	134.78	191.97	336.42	23.88	508.63	955.16	305.14	350.42	555.60	780.51
Walleye pollock	0.85	1.60	1.50	337.02	253.52	15.05	9.52	3.13	1.11	16.28	73.95
Pacific cod	2.52	--	7.57	16.46	7.12	11.19	9.64	1.46	12.18	6.47	69.63
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	1.28	1.91	--	2.51	--	--	--	--	--	--
Eelpouts	--	--	--	--	--	--	--	--	--	--	--
Pacific herring	--	--	--	--	--	1.21	--	--	--	--	4.88
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	0.62	0.93	2.71	1.84	--	83.01	0.04	2.14	--	3.79	15.78
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	2.24	14.52	5.03	0.50	0.07	1.07	0.02	0.06	0.12	3.21	1.85
Blue king crab	--	--	--	--	263.22	111.53	19.21	6.78	13.41	29.75	166.09
Red king crab	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	30.59	48.85	45.98	18.68	5.92	3.72	33.25	23.98	30.89	2.94	2.22
Tanner crab, opilio	2.40	1.60	0.49	4.13	7.36	1.44	9.41	84.31	239.99	0.26	--
Other crab	4.42	0.06	5.92	43.85	138.29	81.32	38.22	14.70	127.85	9.99	4.84
Shrimp	0.02	0.07	0.07	0.00	--	0.03	--	0.01	0.01	--	--
Octopus	--	--	--	--	0.75	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	1.88	0.44	4.29	84.45	86.99	61.74	255.65	38.28	39.19	4.77	5.57
Starfish	--	0.04	0.73	--	58.69	9.16	66.49	31.74	127.59	55.82	191.48
Other invertebrates	20.61	4.59	12.54	50.95	23.67	174.45	555.45	46.21	128.83	23.34	14.41
Total invertebrates	59.92	55.65	70.02	202.06	321.66	331.87	958.48	239.23	694.34	97.12	218.53
Miscellaneous	0.64	0.08	0.84	4.05	155.17	34.89	83.06	3.63	49.05	2.34	3.00
Total catch	218.10	329.83	559.38	1,095.45	811.51	1,184.00	2,110.00	562.00	1,158.00	726.00	1,194.00

Appendix B Table 2. --- Continued.

Station	M-03	N-03	N-02	O-02	O-01	Q-02	Q-01	P-01	P-18	Q-18	P-19
Start date and time	6/27/07 6:51	6/27/07 9:22	6/27/07 11:56	6/27/07 14:23	6/27/07 16:58	6/28/07 6:45	6/28/07 9:24	6/28/07 11:55	6/28/07 14:31	6/28/07 16:52	6/29/07 6:50
Haul number	77	78	79	80	81	82	83	84	85	86	87
Start latitude	5859.30	5919.31	5920.20	5938.90	5941.21	6020.36	6019.96	6001.33	5959.40	6019.26	5959.14
Start longitude	16723.30	16723.83	16846.63	16842.65	16802.69	16846.63	16803.13	16800.82	16920.81	16918.65	17040.53
End latitude	5900.75	5920.83	5920.53	5940.27	5939.78	6020.03	6019.82	5959.79	6000.67	6020.78	6000.53
End longitude	16724.35	16723.26	16843.60	16841.03	16803.57	16843.59	16800.08	16800.29	16919.15	16918.37	17041.76
Bottom depth (m)	33	27	31	31	34	29	32	24	38	36	45
Duration (h)	0.52	0.52	0.52	0.52	0.51	0.52	0.52	0.53	0.51	0.51	0.52
Distance fished (km)	2.85	2.86	2.94	2.96	2.79	2.87	2.83	2.89	2.83	2.84	2.83
Net width (m)	15.41	15.72	15.06	15.53	16.62	15.77	16.00	15.44	15.73	15.81	16.69
Net measured?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Skates	34.30	77.62	100.99	18.44	31.86	5.26	--	10.32	21.30	2.26	33.74
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	34.30	77.62	100.99	18.44	31.86	5.26	--	10.32	21.30	2.26	33.74
Alaska plaice	21.04	8.47	19.13	32.33	28.25	82.41	8.72	23.62	22.54	28.59	37.03
Arrowtooth flounder	--	--	--	--	--	--	--	--	--	--	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	86.18	32.46	127.61	11.44	17.37	22.47	12.40	9.61	5.57	--	--
Rock sole	234.67	219.11	157.49	216.12	141.78	28.46	29.96	245.09	91.22	75.68	9.64
Yellowfin sole	422.00	347.75	181.54	221.59	342.37	233.76	230.97	1,192.28	387.30	203.98	63.28
Other flatfish	9.33	93.30	2.23	20.31	0.48	5.53	1.69	21.76	1.55	0.15	0.07
Total flatfish	773.20	701.09	487.99	501.78	530.24	372.63	283.73	1,492.36	508.18	308.40	110.01
Walleye pollock	--	3.30	--	25.01	19.19	11.25	10.63	8.84	11.36	17.44	2.91
Pacific cod	8.34	15.22	1.25	64.73	8.26	25.14	8.88	17.20	4.11	4.78	0.01
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	--	--	--	--	--	--	--	--	--	--
Pacific herring	1.33	0.27	0.05	0.23	4.95	44.94	6.72	0.07	0.25	0.50	0.06
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	58.67	5.95	19.70	51.78	51.67	96.67	26.57	16.67	30.43	31.49	2.56
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Other roundfish	11.09	8.23	4.76	17.36	8.90	13.02	13.09	6.46	2.77	5.27	1.23
Total roundfish	79.43	32.96	25.76	159.12	92.98	191.01	65.88	49.23	48.92	59.48	6.78
Blue king crab	--	--	--	1.94	--	--	--	--	--	6.94	--
Red king crab	--	--	--	--	--	--	--	7.68	0.02	--	0.14
Tanner crab, Bairdi	--	--	--	--	--	--	--	--	--	--	0.14
Tanner crab, opilio	--	4.67	9.08	0.84	2.46	9.05	0.30	1.22	5.88	4.92	41.41
Other crab	5.21	--	--	--	0.01	0.52	0.03	--	0.01	0.00	0.01
Shrimp	--	--	--	--	--	--	--	--	--	--	--
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	0.16	--	0.22	--	0.63	--	--	--	3.58	4.35	4.52
Starfish	300.60	91.02	43.01	17.79	18.07	59.58	21.39	8.85	73.76	39.39	24.60
Other invertebrates	0.86	0.58	0.13	0.10	5.67	0.99	0.02	--	41.62	21.70	247.03
Total invertebrates	306.83	96.26	52.43	20.67	26.83	70.15	21.75	17.75	124.86	77.30	317.86
Miscellaneous	0.24	0.06	0.83	--	0.09	0.38	0.07	0.33	13.07	2.94	61.61
Total catch	1,194.00	908.00	668.00	700.00	682.00	639.42	371.42	1,570.00	716.33	450.38	530.00

Appendix B Table 2. --- Continued.

Station	Q-19	Q-20	P-20	O-20	N-20	N-19	O-19	O-18	N-18	N-01	M-02
Start date and time	6/29/07 9:19	6/29/07 12:06	6/29/07 14:41	6/29/07 17:17	6/30/07 6:49	6/30/07 9:07	6/30/07 11:42	6/30/07 14:15	6/30/07 16:54	7/1/07 6:48	7/1/07 10:14
Haul number	88	89	90	91	92	93	94	95	96	97	98
Start latitude	6018.87	6019.83	6001.01	5941.26	5920.81	5920.15	5939.26	5940.02	5920.92	5918.84	5901.09
Start longitude	17040.24	17159.74	17001.81	17004.60	17007.46	17043.50	17044.01	16921.08	16925.85	16804.93	16845.17
End latitude	6020.40	6019.66	5959.43	5939.85	5919.88	5920.37	5940.76	5939.95	5919.46	5920.37	5859.73
End longitude	17040.48	17156.76	17001.90	17005.42	17008.46	17046.45	17044.18	16924.02	16925.81	16804.87	16846.42
Bottom depth (m)	43	51	55	58	58	51	49	40	43	40	41
Duration (h)	0.53	0.51	0.54	0.50	0.37	0.51	0.51	0.50	0.50	0.51	0.51
Distance fished (km)	2.85	2.76	2.92	2.73	1.97	2.84	2.79	2.77	2.71	2.83	2.78
Net width (m)	16.70	17.37	17.20	16.75	17.23	16.32	16.42	15.74	15.74	15.11	15.50
Net measured?	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
Skates	2.12	16.06	27.06	58.58	31.31	69.75	40.84	35.04	84.72	97.69	115.23
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	2.12	16.06	27.06	58.58	31.31	69.75	40.84	35.04	84.72	97.69	115.23
Alaska plaice	53.28	249.78	247.13	134.08	200.37	124.87	218.94	77.77	16.33	26.79	34.60
Arrowtooth flounder	--	--	--	--	--	--	--	--	--	--	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	--	--	--	--	--	--	--	2.01	13.03	16.70	39.94
Rock sole	47.16	0.59	0.15	0.16	--	29.53	6.56	212.67	318.84	232.40	286.20
Yellowfin sole	113.55	44.49	16.67	9.73	9.35	60.59	71.89	180.18	91.63	357.47	229.40
Other flatfish	--	--	--	--	--	--	--	2.70	0.18	14.25	7.91
Total flatfish	213.99	294.85	263.94	143.97	209.72	214.98	297.39	475.33	440.00	647.62	598.05
Walleye pollock	4.26	0.01	0.02	0.57	0.52	12.13	0.50	56.46	75.68	35.16	16.71
Pacific cod	0.00	0.07	0.14	0.08	0.06	0.15	10.73	59.98	35.14	47.67	78.02
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	0.08	--	--	--	--	--	--
Eelpouts	--	--	--	--	0.38	0.13	0.06	16.75	0.14	0.41	0.03
Pacific herring	0.09	0.21	0.10	0.73	--	--	--	--	--	--	--
Pacific ocean perch	7.83	12.54	2.53	--	--	11.41	5.56	18.86	50.59	53.64	35.70
Sculpins	--	--	--	--	--	--	--	--	--	--	--
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	2.60	3.78	1.85	4.22	1.08	0.27	0.48	5.75	4.53	7.75	4.22
Total roundfish	14.78	16.62	4.63	5.60	2.13	24.09	17.33	157.79	166.07	144.63	134.68
Blue king crab	--	--	--	--	--	--	--	--	--	--	--
Red king crab	--	--	--	--	--	--	5.52	5.96	0.93	2.35	--
Tanner crab, Bairdi	--	--	0.30	4.80	25.94	4.00	0.09	--	--	--	--
Tanner crab, opilio	0.01	15.37	50.91	74.08	119.22	12.71	0.95	--	--	--	--
Other crab	74.86	21.77	23.44	66.87	10.93	40.75	67.16	65.92	15.88	15.24	15.26
Shrimp	0.01	--	--	--	--	0.00	0.00	0.01	--	--	--
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	20.22	8.71	21.24	99.69	4.02	10.52	6.20	18.61	13.18	8.93	7.35
Starfish	72.96	64.98	25.68	41.98	122.31	79.54	167.11	86.07	30.75	159.73	150.51
Other invertebrates	200.74	88.24	77.77	143.73	38.14	318.23	208.89	20.35	11.35	16.69	4.70
Total invertebrates	368.79	199.05	199.34	431.15	320.56	465.75	455.92	196.90	72.09	202.94	177.81
Miscellaneous	124.32	19.31	12.21	16.71	1.99	42.90	60.52	7.43	1.12	2.61	3.06
Total catch	724.00	546.00	508.00	656.00	566.00	818.00	872.00	874.00	764.00	1,095.96	1,028.82

Appendix B Table 2. -- Continued.

Station	M-01	L-18	M-18	M-19	M-20	L-20	L-19	E-19	F-19	GF1918	G-19
Start date and time	7/1/07 12:48	7/1/07 15:18	7/2/07 6:45	7/2/07 9:20	7/2/07 12:09	7/2/07 14:37	7/2/07 17:20	7/4/07 7:16	7/4/07 10:05	7/4/07 12:43	7/4/07 15:37
Haul number	99	100	102	103	104	105	106	107	108	109	110
Start latitude	5900.03	5841.16	5859.07	5900.06	5900.87	5840.81	5840.01	5618.83	5639.76	5648.30	5700.67
Start longitude	16808.68	16931.19	16927.67	17050.10	17010.21	17012.62	17048.77	16907.19	16905.01	16923.62	16900.52
End latitude	5859.90	5839.62	5900.56	5859.95	5859.34	5839.30	5840.03	5620.33	5640.72	5649.70	5700.38
End longitude	16805.83	16807.01	16927.01	17047.20	17010.42	17012.20	17051.70	16907.68	16907.09	16922.78	16903.29
Bottom depth (m)	43	47	47	55	63	67	63	130	101	98	80
Duration (h)	0.50	0.52	0.52	0.50	0.52	0.51	0.52	0.51	0.49	0.49	0.51
Distance fished (km)	2.75	2.88	2.75	2.79	2.85	2.83	2.84	2.78	2.78	2.72	2.87
Net width (m)	15.25	16.25	16.00	16.31	17.04	17.03	17.58	18.18	17.83	17.83	16.97
Net measured?	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y
Skates	69.18	63.19	99.72	118.28	131.36	48.76	43.17	48.27	61.72	32.77	48.01
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	69.18	63.19	99.72	118.28	131.36	48.76	43.17	48.27	61.72	32.77	48.01
Alaska plaice	20.07	65.99	581.95	183.31	256.11	270.18	53.07	183.84	303.50	168.22	53.81
Arrowtooth flounder	--	--	--	--	--	--	--	--	--	--	--
Flathead sole	--	--	--	--	--	0.01	--	--	9.28	--	--
Greenland turbot	--	--	--	--	--	1.09	4.90	--	5.41	--	9.68
Pacific halibut	18.94	5.19	--	8.73	9.88	16.31	23.39	22.35	54.52	--	273.18
Rock sole	113.98	489.69	487.58	76.13	10.75	145.03	313.86	--	--	--	58.24
Yellowfin sole	63.60	215.08	134.88	92.19	143.50	145.03	313.86	--	--	--	17.28
Other flatfish	0.17	0.16	--	--	--	432.62	395.22	229.43	459.55	186.19	438.85
Total flatfish	216.77	776.11	1,204.42	360.36	420.24	432.62	395.22	229.43	459.55	186.19	438.85
Walleye pollock	6.22	6.58	1.25	54.81	1.12	27.05	52.67	400.28	1,707.65	381.31	1,588.29
Pacific cod	8.96	36.90	8.96	19.95	3.31	25.97	43.04	32.42	84.13	17.75	55.02
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	--	--	0.03	0.03	0.08	--	--	0.39	0.11	--
Pacific herring	2.33	0.40	--	0.10	--	0.53	--	--	--	--	1.13
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	3.15	24.60	30.73	19.61	6.00	--	8.96	--	--	1.86	8.09
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	2.15	2.44	1.62	0.55	6.72	6.34	1.38	3.08	4.98	1.77	13.80
Total roundfish	22.81	70.51	42.56	95.02	17.19	59.98	106.05	435.78	1,797.16	402.79	1,666.33
Blue king crab	--	--	--	--	--	--	--	--	--	--	--
Red king crab	3.57	--	4.00	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	--	3.46	1.63	32.15	120.51	76.12	5.22	35.96	40.29	7.95	3.74
Tanner crab, opilio	--	--	0.20	161.98	337.90	202.46	2.87	--	3.33	40.06	5.30
Other crab	7.05	30.32	35.42	20.84	56.93	89.78	103.20	5.13	66.97	72.57	13.47
Shrimp	--	0.01	--	--	--	--	0.02	0.00	--	--	--
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	0.95	4.76	1.86	3.06	25.18	177.03	28.95	25.59	43.19	13.81	0.09
Starfish	909.49	87.98	293.87	186.81	21.62	103.53	110.50	4.78	3.21	67.05	21.22
Other invertebrates	3.48	11.92	17.00	107.56	101.98	313.82	312.96	20.92	83.34	4.96	0.54
Total invertebrates	924.54	138.45	353.98	512.40	664.12	962.74	563.72	92.39	240.33	206.39	44.36
Miscellaneous	2.71	3.73	1.33	3.94	22.18	3.89	60.30	0.67	22.28	64.88	11.72
Total catch	1,236.00	1,052.00	1,702.00	1,090.00	1,262.00	1,508.00	1,170.00	869.69	2,700.70	902.39	2,219.03

Appendix B Table 2. --- Continued.

Station	HG1918	H-19	IH1918	I-19	J11918	J-19	K-19	K-20	J-20	J12019	I-20	IH2019
Start date and time	7/4/07 18:13	7/5/07 7:02	7/5/07 9:35	7/5/07 12:05	7/5/07 14:35	7/5/07 16:51	7/6/07 6:59	7/6/07 9:30	7/6/07 12:09	7/6/07 14:30	7/6/07 16:33	7/7/07 7:02
Haul number	111	112	113	114	115	116	117	118	119	120	121	122
Start latitude	5708.99	5719.62	5729.81	5739.22	5748.29	5759.15	5819.95	5820.80	5800.64	5750.57	5740.49	5729.23
Start longitude	16921.72	17059.66	16915.89	17058.57	16916.74	17055.07	17053.96	17015.92	17017.21	17038.93	17020.21	17040.07
End latitude	5710.54	5720.36	5731.17	5740.21	5749.41	5800.63	5819.72	5819.29	5759.57	5749.61	5739.16	5729.68
End longitude	16921.69	16902.03	16914.89	17058.87	16915.01	17054.79	17051.05	17015.92	17019.30	17036.68	17021.59	17037.40
Bottom depth (m)	77	71	72	69	71	69	68	70	70	67	71	69
Duration (h)	0.51	0.49	0.49	0.33	0.49	0.50	0.51	0.51	0.51	0.51	0.51	0.51
Distance fished (km)	2.88	2.74	16.82	1.86	2.71	2.76	2.87	2.85	2.80	2.82	2.81	2.80
Net width (m)	17.31	16.47	16.82	16.85	16.95	17.38	17.48	17.21	18.02	17.38	17.21	17.34
Net measured?	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y
Skates	24.32	22.25	27.89	15.91	25.52	28.83	25.14	7.62	91.26	34.90	52.82	24.92
Sharks	--	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	24.32	22.25	27.89	15.91	25.52	28.83	25.14	7.62	91.26	34.90	52.82	24.92
Alaska plaice	55.39	33.39	49.47	31.84	90.69	199.36	32.13	116.44	124.29	102.17	98.06	43.62
Arrowtooth flounder	20.53	6.80	--	--	--	--	--	--	--	--	--	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	--	--	--	--	--	--	--	--	--	--	--	--
Pacific halibut	20.79	2.32	0.75	--	0.45	3.37	3.26	0.95	4.37	2.13	13.26	3.84
Rock sole	138.11	485.31	113.43	58.34	94.33	113.21	13.25	13.01	3.54	122.12	73.61	274.29
Yellowfin sole	66.92	29.69	77.46	69.25	227.57	113.13	98.64	395.01	126.48	157.30	148.56	80.78
Other flatfish	10.80	--	--	--	--	--	--	--	0.06	--	--	--
Total flatfish	312.53	557.52	241.11	159.44	413.04	429.08	147.27	525.40	258.74	383.72	333.49	402.53
Walleye pollock	481.82	185.00	180.26	55.43	35.66	13.66	7.07	36.50	34.68	56.26	143.18	134.50
Pacific cod	9.41	99.32	45.54	4.14	10.63	7.75	14.56	11.90	36.54	13.88	7.68	40.43
Sablefish	--	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	--	--	--	--	--	0.12	0.12	1.88	--	1.90	0.11
Pacific herring	--	2.23	--	--	--	--	0.04	0.40	--	--	--	0.37
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--	--
Sculpins	9.82	116.76	3.83	3.18	6.01	25.24	7.77	11.79	26.75	13.03	4.78	127.27
Other rockfish	--	--	--	--	--	--	--	--	--	--	--	--
Total roundfish	12.82	4.06	2.68	0.34	2.94	2.95	2.24	2.09	0.77	5.24	1.57	7.60
Total roundfish	513.86	407.37	232.31	63.09	55.25	49.60	31.81	62.79	100.62	88.41	159.11	310.27
Blue king crab	--	25.62	--	--	--	--	--	--	--	--	--	15.47
Red king crab	--	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	16.54	7.80	4.52	0.80	4.13	4.63	11.78	3.70	11.21	3.33	3.60	13.09
Tanner crab, opilio	18.20	11.25	5.58	9.06	5.71	10.37	102.22	54.83	275.81	19.42	19.04	28.76
Other crab	36.01	15.22	57.04	38.00	107.98	68.16	53.03	58.73	102.42	131.96	74.74	106.55
Shrimp	--	0.49	--	0.00	--	0.03	0.01	0.03	0.02	0.01	0.01	0.59
Octopus	--	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--	--
Snails	--	6.28	--	2.38	7.33	81.61	50.35	25.96	14.22	14.07	5.98	3.36
Starfish	35.45	86.44	181.88	105.80	125.89	53.87	162.85	76.31	93.47	137.51	114.61	116.07
Other invertebrates	12.75	1,399.37	408.36	329.79	682.52	933.35	320.63	292.29	91.69	70.31	60.56	829.12
Total invertebrates	118.96	1,552.46	657.38	485.83	933.56	1,152.02	700.86	511.84	588.83	376.60	278.54	1,112.99
Miscellaneous	18.31	30.41	55.50	23.89	55.92	74.31	4.01	19.55	13.29	53.11	48.39	76.94
Total catch	1,000.79	2,570.00	1,228.00	750.00	1,490.00	1,734.00	912.00	1,130.00	1,056.11	938.00	876.16	1,956.00

Appendix B Table 2. --- Continued.

Station	IH2120	H-21	J12120	I-21	J-21	K-21	L-21	M-21	M-23	M-24	M-25	L-25
Start date and time	7/7/07 9:35	7/7/07 11:53	7/7/07 18:19	7/8/07 7:18	7/8/07 9:55	7/8/07 12:25	7/8/07 14:57	7/8/07 17:29	7/9/07 7:00	7/9/07 9:39	7/9/07 12:32	7/9/07 15:32
Haul number	123	124	126	127	128	129	130	131	132	133	134	135
Start latitude	5730.20	5719.70	5749.21	5738.59	5759.16	5818.82	5839.55	5859.14	5859.24	5900.09	5900.15	5840.56
Start longitude	17002.35	17145.73	17159.52	17144.65	17138.44	17137.27	17134.25	17131.05	17214.41	17335.56	17453.90	17459.95
End latitude	5730.69	5720.87	5750.43	5740.18	5800.46	5820.41	5841.13	5900.74	5859.77	5900.81	5858.68	5839.02
End longitude	17159.63	17147.53	17001.36	17144.67	17140.12	17137.15	17134.22	17131.00	17211.57	17332.86	17453.55	17300.38
Bottom depth (m)	68	57	73	73	74	75	74	72	88	99	108	112
Duration (h)	0.51	0.51	0.53	0.53	0.52	0.53	0.53	0.53	0.52	0.52	0.50	0.51
Distance fished (km)	2.86	2.83	2.91	2.93	2.93	2.96	2.92	2.97	2.90	2.91	2.74	2.88
Net width (m)	16.90	16.71	17.57	17.57	17.57	17.43	17.71	17.57	17.57	18.84	17.83	18.28
Net measured?	Y	Y	N	N	N	Y	Y	N	N	Y	N	Y
Skates	45.57	301.40	26.54	79.06	21.74	49.35	8.68	23.70	40.09	18.37	215.54	110.73
Sharks												
Total elasmobranch	45.57	301.40	26.54	79.06	21.74	49.35	8.68	23.70	40.09	18.37	215.54	110.73
Alaska plaice	7.38		100.30	24.81	44.18	29.92	262.58	72.06	21.78	1.28	19.37	21.91
Arrowtooth flounder										0.02	24.32	109.21
Flathead sole												
Greenland turbot												
Pacific halibut	5.24	226.39	1.31	5.62		5.48		0.01	3.02	2.28		
Rock sole	295.28	6,443.92	6.30	694.92	5.53	7.04	6.93	0.75	182.93	8.83	20.33	2.51
Yellowfin sole	184.42	25.73	59.17	68.03	46.20	47.52	55.23	30.06	11.62		23.30	112.80
Other flatfish		1.54									8.41	24.12
Total flatfish	492.31	6,736.86	167.08	793.38	95.91	89.96	327.88	102.87	225.84	12.41	95.73	270.54
Walleye pollock	91.17	0.24	158.09	213.53	168.39	21.42	5.30	1.83	112.73	248.47	558.90	1,146.61
Pacific cod	47.33	1,462.99	7.12	60.71	23.05	55.00	19.14	8.58	167.27	131.61	110.18	158.45
Sablefish												
Atka mackerel												
Eelpouts			2.78		6.58	2.09	0.90	3.65	16.41	22.18	0.33	
Pacific herring							0.03	0.25	0.01			
Pacific ocean perch												
Sculpins	34.07	224.46	5.70	4.92	13.98	7.83	3.74	0.05	8.43	8.26	3.14	48.82
Other rockfish												
Total roundfish	3.95	17.65	3.05	41.37	1.32	0.65	3.80	2.31	1.93	0.31	0.51	0.03
Blue king crab	176.51	1,705.33	176.75	320.53	213.32	86.99	32.92	16.67	306.78	410.82	673.05	1,353.91
Red king crab												
Tanner crab, Bairdi		12.05		0.49								
Tanner crab, opilio	22.10	5.56	1.45	17.01	15.00	3.07	0.84	1.78		4.17	7.79	4.60
Other crab	47.70	17.96	60.36	196.89	211.19	62.01	10.47	6.32	153.32	27.54	51.24	62.60
Shrimp	0.02		0.01		0.02	0.05	0.08	0.14	9.67	13.08	50.37	65.55
Octopus									0.06	1.21	0.09	0.13
Squids												
Snails	12.36		0.29	33.10	33.86	8.49	4.00	15.59				
Starfish	1,197.36	337.10	62.13	104.23	166.27	115.45	111.36	39.71	15.69	24.10	44.57	50.98
Other invertebrates	56.38	68.12	39.29	34.43	55.15	87.23	133.20	84.67	14.60	20.44	5.04	14.60
Total invertebrates	1,356.23	441.13	356.51	397.40	517.74	396.59	352.95	318.39	212.89	383.54	206.24	319.93
Miscellaneous	78.94	25.82	13.63	211.92	42.34	11.59	2.19	4.62	1.97	2.86	18.11	15.08
Total catch	2,152.00	9,210.54	744.00	1,834.00	896.00	634.48	732.13	466.72	878.70	828.00	1,240.41	2,242.12

Appendix B Table 2. --- Continued.

Station	K-25	J-24	I-24	H-24	G-24	F-24	A-02	B-02	C-02	F-25	G-25
Start date and time	7/9/07 18:09	7/10/07 7:20	7/10/07 9:55	7/10/07 12:33	7/10/07 15:25	7/10/07 17:55	7/13/07 8:10	7/13/07 10:56	7/13/07 13:33	7/14/07 8:38	7/14/07 11:15
Haul number	136	137	138	139	140	141	142	143	144	145	146
Start latitude	5820.48	5800.35	5740.50	5721.39	5658.90	5639.89	5500.05	5519.38	5539.75	5640.25	5659.89
Start longitude	17304.10	17344.08	17349.48	17354.16	17357.40	17202.42	16703.70	16701.71	16700.95	17325.90	17321.04
End latitude	5818.92	5758.90	5739.07	5719.91	5657.46	5638.42	5501.49	5520.87	5541.25	5641.73	5701.13
End longitude	17304.35	17344.88	17348.86	17354.36	17357.78	17202.61	16703.40	16701.64	16700.82	17326.30	17320.77
Bottom depth (m)	110	105	108	109	119	128	155	139	135	135	122
Duration (h)	0.53	0.50	0.50	0.50	0.49	0.49	0.49	0.50	0.51	0.50	0.42
Distance fished (km)	2.90	2.80	2.72	2.75	2.69	2.72	2.75	2.75	2.77	2.31	2.31
Net width (m)	18.01	17.34	18.17	18.03	17.80	17.56	18.26	19.11	20.52	18.18	18.03
Net measured?	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N
Skates	158.28	126.81	62.86	31.81	34.44	28.63	45.66	20.10	11.58	49.31	9.26
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	158.28	126.81	62.86	31.81	34.44	28.63	45.66	20.10	11.58	49.31	9.26
Alaska plaice	6.02	10.46	65.21	108.73	97.80	131.09	275.99	194.83	146.55	131.33	63.23
Arrowtooth flounder	71.91	49.59	--	--	--	--	--	--	--	--	--
Flathead sole	--	--	--	--	--	--	--	--	--	--	--
Greenland turbot	1.18	--	--	--	--	--	--	--	--	--	--
Pacific halibut	8.22	5.98	22.83	41.40	8.68	10.82	13.82	--	21.62	10.75	18.25
Rock sole	51.25	47.77	3.87	0.98	--	--	--	--	--	0.81	--
Yellowfin sole	--	--	--	--	--	--	--	--	--	--	--
Other flatfish	12.42	7.56	15.27	26.41	34.35	14.39	19.03	19.70	12.81	40.02	26.54
Total flatfish	151.00	121.36	107.18	177.51	140.83	156.30	308.83	214.53	180.98	182.92	108.02
Walleye pollock	1,976.37	819.57	358.95	450.71	1,900.37	68.83	0.57	1.44	4.44	1.27	12.30
Pacific cod	49.31	75.35	64.49	26.07	40.79	--	17.25	--	--	62.54	10.79
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--	--	--	--
Eelpouts	--	21.10	--	0.09	--	--	--	0.98	0.38	--	--
Pacific herring	--	--	0.88	--	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	--	--	0.49	--	--	--	1.65	--
Sculpins	72.15	18.42	60.90	0.12	--	5.83	6.02	0.51	7.43	2.43	0.02
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Other roundfish	0.54	--	10.59	2.51	--	2.06	3.05	4.70	2.13	0.86	0.00
Total roundfish	2,098.36	934.45	495.81	479.50	1,941.17	77.21	26.89	7.63	14.37	68.75	23.11
Blue king crab	--	--	--	--	--	--	--	--	--	--	--
Red king crab	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	1.38	1.16	10.96	35.15	6.57	3.72	32.53	19.28	7.78	1.87	3.14
Tanner crab, opilio	71.58	61.72	79.82	26.98	40.17	1.35	1.35	0.76	--	--	3.35
Other crab	85.12	33.72	43.98	42.68	3.47	5.10	1.70	1.62	1.11	7.14	7.62
Shrimp	0.10	0.02	0.57	0.37	0.24	0.05	3.72	1.13	0.25	0.13	0.23
Octopus	--	--	--	--	--	--	--	--	--	0.01	--
Squids	--	--	--	--	--	--	--	--	--	0.24	--
Snails	82.93	78.03	86.26	51.56	6.11	14.49	12.33	0.97	1.59	17.51	9.15
Starfish	6.85	48.99	11.23	1.84	--	--	0.19	--	0.45	6.39	20.27
Other invertebrates	51.23	229.49	54.64	17.15	410.49	638.80	4.07	7.49	11.01	110.13	151.84
Total invertebrates	299.17	453.14	287.46	175.73	467.04	662.30	55.89	31.25	22.19	143.42	195.61
Miscellaneous	11.23	6.47	16.51	5.00	7.50	12.85	5.21	0.12	0.14	8.19	2.07
Total catch	2,824.42	2,103.56	1,025.27	896.41	2,656.35	984.85	531.48	342.11	365.61	486.82	378.81

Appendix B Table 2. --- Continued.

Station	H-25	I-25	J-25	M-22	N-22	N-21	O-21	P-21	P-22	O-22	O-23
Start date and time	7/14/07 13:56	7/14/07 16:48	7/14/07 19:13	7/15/07 7:17	7/15/07 9:48	7/15/07 12:35	7/15/07 18:38	7/16/07 7:18	7/16/07 10:08	7/16/07 12:48	7/16/07 15:23
Haul number	147	148	149	150	151	152	153	154	155	156	157
Start latitude	5719.86	5739.32	5759.40	5859.37	5919.36	5919.36	5939.04	5959.07	6000.86	5939.93	5940.54
Start longitude	17310.43	17311.42	17308.29	17252.08	17249.06	17128.15	17125.12	17122.19	17241.94	17245.54	17205.96
End latitude	5721.35	5740.84	5800.95	5900.88	5920.88	5920.92	5940.56	6000.60	5959.34	5939.93	5939.02
End longitude	17310.21	17311.57	17308.68	17252.27	17249.09	17128.02	17125.06	17122.21	17242.11	17242.47	17205.70
Bottom depth (m)	116	119	109	78	76	68	67	65	70	73	77
Duration (h)	0.50	0.51	0.52	0.51	0.51	0.52	0.51	0.51	0.50	0.52	0.51
Distance fished (km)	2.78	2.83	2.90	2.80	2.82	2.90	2.82	2.83	2.82	2.82	2.90
Net width (m)	17.21	17.16	16.86	17.57	17.57	18.83	16.71	17.21	17.21	17.55	17.57
Net measured?	Y	Y	Y	N	N	Y	Y	N	N	Y	N
Skates	11.31	18.80	75.58	53.28	23.50	24.02	32.64	21.30	24.29	26.23	25.11
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	11.31	18.80	75.58	53.28	23.50	24.02	32.64	21.30	24.29	26.23	25.11
Alaska plaice	--	--	6.20	58.90	9.38	6.65	6.23	5.29	2.86	6.07	23.42
Arrowtooth flounder	216.46	92.52	86.49	--	--	--	--	--	--	--	0.04
Flathead sole	--	--	--	0.02	0.08	0.02	0.03	--	0.01	0.03	--
Greenland turbot	--	--	--	9.30	2.93	1.61	0.03	--	--	1.33	36.64
Pacific halibut	20.50	2.43	4.35	4.27	1.92	0.53	0.18	1.06	0.78	2.87	25.76
Rock sole	--	--	22.20	15.82	10.15	28.14	7.05	21.72	8.34	9.70	10.17
Yellowfin sole	--	--	25.46	--	--	--	--	--	--	--	--
Other flatfish	40.00	29.21	144.70	88.31	24.46	36.95	13.48	28.07	11.99	20.00	96.03
Total flatfish	276.96	124.16	144.70	88.31	24.46	36.95	13.48	28.07	11.99	20.00	96.03
Walleye pollock	6,026.32	465.04	383.88	2.07	4.69	0.69	1.92	0.19	0.09	5.17	73.70
Pacific cod	28.98	56.24	56.88	68.69	26.64	1.89	0.27	0.05	0.14	0.81	247.52
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	7.83	1.65	0.21	1.66	2.89	1.95	0.54	2.68
Eelpouts	--	0.39	--	--	--	--	--	--	--	--	--
Pacific herring	--	--	0.70	--	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	--	11.36	42.22	2.19	0.04	0.68	3.50	--	--	1.39	0.01
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Other roundfish	--	10.01	0.80	0.57	2.01	0.76	0.87	0.93	3.90	3.38	3.06
Total roundfish	6,055.30	543.04	464.48	81.34	35.03	4.22	8.22	4.05	6.08	11.29	326.97
Blue king crab	--	--	--	--	--	--	--	--	--	--	0.46
Red king crab	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	2.68	2.65	4.75	3.38	3.93	0.89	0.82	0.24	0.06	0.52	--
Tanner crab, opilio	2.45	34.36	76.96	351.86	267.73	56.80	69.32	27.15	29.18	60.39	60.64
Other crab	27.96	41.00	82.64	1.80	30.39	20.10	26.07	17.45	34.41	56.15	58.24
Shrimp	--	0.17	0.21	0.01	0.01	0.05	0.03	0.01	0.01	0.02	0.01
Octopus	--	--	--	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	23.66	34.51	61.23	1.53	17.01	21.02	32.88	13.10	16.02	27.80	8.33
Starfish	27.28	5.83	7.18	13.93	11.80	16.76	13.60	11.66	8.37	18.38	31.20
Other invertebrates	13.20	6.47	14.80	23.78	14.42	45.49	76.03	20.40	10.23	8.43	48.45
Total invertebrates	97.24	125.00	247.79	396.30	345.29	161.10	218.75	90.01	98.28	171.69	207.33
Miscellaneous	2.88	3.53	8.80	0.79	11.13	8.85	8.95	1.52	2.77	2.78	30.47
Total catch	6,587.50	921.46	1,044.97	622.31	439.46	235.66	283.00	145.47	144.40	233.69	693.28

Appendix B Table 2. --- Continued.

Station	N-23	N-24	ON2524	O-24	PO2524	QP2524	P-24	PO2423	7/18/07 12:10	P-23	7/18/07 14:53	QP2423	7/18/07 17:16	Q-23
Start date and time	7/16/07 17:53	7/17/07 7:15	7/17/07 9:54	7/17/07 12:35	7/17/07 15:14	7/17/07 17:59	7/18/07 7:16	7/18/07 9:36	7/18/07 12:10	7/18/07 14:53	7/18/07 17:16			
Haul number	158	159	160	161	162	163	164	165	166	167	168			
Start latitude	5920.79	5919.69	5929.77	5940.10	5949.22	6010.79	5959.61	5949.62	5959.47	6009.15	6019.02			
Start longitude	17209.97	17330.65	17306.28	17327.09	17303.25	17458.36	17323.45	17343.81	17203.49	17341.98	17356.02			
End latitude	5919.28	5920.57	5930.66	5940.59	5950.19	6012.23	5959.06	5950.64	5957.97	6010.16	6020.55			
End longitude	17210.30	17328.30	17308.72	17324.25	17305.60	17457.55	17326.26	17346.13	17203.63	17339.68	17356.20			
Bottom depth (m)	80	88	94	85	80	60	68	76	68	59	60			
Duration (h)	0.51	0.50	0.51	0.50	0.51	0.50	0.51	0.52	0.50	0.51	0.52			
Distance fished (km)	2.82	2.78	2.83	2.82	2.84	2.77	2.81	2.88	2.80	2.84	2.84			
Net width (m)	17.57	17.57	17.36	17.82	17.57	16.45	17.21	17.18	17.48	16.68	17.21			
Net measured?	N	N	Y	Y	N	Y	N	Y	Y	Y	N			
Skates	4.23	30.11	46.34	42.11	20.85	16.41	25.42	16.21	23.50	65.70	88.32			
Sharks														
Total elasmobranch	4.23	30.11	46.34	42.11	20.85	16.41	25.42	16.21	23.50	65.70	88.32			
Alaska plaice	10.46	2.01	3.50	4.63	27.52	26.68	12.84	206.09	153.22	37.00	14.40			
Arrowtooth flounder				0.09	0.04									
Flathead sole														
Greenland turbot	0.01	0.01	0.03	3.66	0.07		0.01	0.05						
Pacific halibut	1.66	63.05	8.51	9.80	13.03	0.74	1.58			1.70				
Rock sole	10.78	7.56	4.42	10.89	22.79	213.56	69.26	203.17	7.61	46.61	15.03			
Yellowfin sole	2.36	0.85	0.28	1.51	1.41	7.18	9.80	2.07	25.82	20.44	4.08			
Other flatfish									0.20					
Total flatfish	25.27	73.48	16.74	30.58	64.85	248.16	93.49	411.38	186.85	105.75	33.51			
Walleye pollock	23.82	68.84	62.05	51.23	51.25	5.31	27.32	13.87	1.75	0.29	4.59			
Pacific cod	51.69	86.68	97.83	34.21	30.48	59.72	40.88	37.21	4.31	16.08	8.12			
Sablefish														
Atka mackerel														
Eelpouts	2.27	17.80	22.96	4.86	4.35	0.24	0.10	24.55		0.11				
Pacific herring		0.69	0.26		0.15		0.27			0.02				
Pacific ocean perch														
Sculpins		8.49	1.79	0.66	4.64	90.65	13.81	3.36	4.05	22.76	20.82			
Other rockfish														
Other roundfish	0.68	2.33	4.84	1.46	2.17	1.97	5.14	7.26	5.13	1.37	22.57			
Total roundfish	78.46	184.84	189.73	92.42	93.04	157.90	87.51	86.26	15.24	40.63	56.40			
Blue king crab				9.31	8.01	27.47	4.60	1.78	0.41	3.50	2.90			
Red king crab														
Tanner crab, Bairdi	0.59	2.45	4.62	1.54	0.37	0.20	0.26	0.04	0.08					
Tanner crab, opilio	87.09	206.77	44.24	53.07	61.45	101.06	38.09	90.29	39.99	134.63	20.69			
Other crab	12.55	8.74	15.59	42.45	81.53	17.98	21.14	152.21	101.89	17.21	390.90			
Shrimp	0.04	0.37	5.06	0.08	0.01	0.88	0.07		0.01	0.01	0.56			
Octopus		2.47												
Squids														
Snails	35.19	19.98	25.20	7.39	9.06	22.48	6.35	31.81	27.96	9.43	99.74			
Starfish	18.35	31.84	16.75	15.48	12.77	104.50	5.22	19.51	9.43	18.04	16.35			
Other invertebrates	46.93	73.51	31.36	34.78	29.50	28.64	8.53	11.58	9.31	2.54	298.41			
Total invertebrates	200.73	346.14	151.94	164.10	202.71	303.21	84.27	307.22	189.07	185.34	829.56			
Miscellaneous	8.69	3.84	1.12	5.90	11.56	3.13	1.61	35.10	--	0.69	42.46			
Total catch	318.98	639.55	406.95	342.92	415.06	728.81	293.14	893.78	418.26	399.88	1,050.25			

Appendix B Table 2. --- Continued.

Station	R-24	R-23	S-23	S-24	S-25	T-25	U-25	V-25	V-26	V-27	U-26
Start date and time	7/19/07 7:23	7/19/07 10:02	7/19/07 12:52	7/19/07 15:41	7/19/07 18:35	7/20/07 7:17	7/20/07 10:12	7/20/07 12:58	7/20/07 15:47	7/20/07 18:19	7/21/07 7:11
Haul number	169	170	171	172	173	174	175	176	177	178	179
Start latitude	6040.25	6039.56	6059.94	6059.94	6059.77	6119.34	6139.31	6200.05	6200.02	6200.03	6140.14
Start longitude	17314.41	17352.00	17351.89	17312.64	17431.16	17424.93	17419.82	17417.48	17531.41	17651.01	17534.92
End latitude	6039.10	6041.07	6100.20	6100.08	6059.71	6120.78	6140.65	6200.34	6200.09	6200.07	6140.06
End longitude	17316.45	17352.37	17348.95	17309.53	17427.98	17425.93	17418.52	17414.36	17528.17	17647.86	17531.70
Bottom depth (m)	46	61	64	67	75	74	71	63	74	81	77
Duration (h)	0.51	0.52	0.50	0.50	0.52	0.51	0.50	0.50	0.51	0.50	0.51
Distance fished (km)	2.83	2.82	2.71	2.83	2.88	2.81	2.73	2.78	2.84	2.77	2.86
Net width (m)	16.66	19.17	17.21	17.77	17.42	17.57	17.21	17.21	17.57	17.57	17.57
Net measured?	N	Y	N	Y	Y	N	N	N	N	N	N
Skates	61.94	17.60	--	32.45	20.40	14.61	3.52	15.60	23.62	22.55	33.94
Sharks	--	--	--	--	--	--	--	--	--	--	--
Total elasmobranch	61.94	17.60	--	32.45	20.40	14.61	3.52	15.60	23.62	22.55	33.94
Alaska plaice	325.37	10.46	9.76	40.73	3.25	1.23	4.53	13.68	1.32	3.97	3.74
Arrowtooth flounder	--	--	--	--	--	--	--	--	--	--	--
Flathead sole	--	--	0.02	0.01	--	0.01	0.00	--	--	0.17	0.06
Greenland turbot	0.11	0.01	--	0.01	--	--	--	--	--	--	--
Pacific halibut	36.58	--	--	2.22	--	--	--	--	--	--	--
Rock sole	48.58	1.14	1.22	54.04	2.20	0.44	0.89	--	1.03	4.19	0.94
Yellowfin sole	27.32	3.60	6.96	8.45	1.33	0.38	--	0.75	0.23	0.92	0.25
Other flatfish	0.08	--	--	--	--	--	--	0.18	0.09	--	--
Total flatfish	438.04	15.21	17.96	105.45	6.78	2.07	5.42	14.61	2.68	9.25	4.99
Walleye pollock	15.01	0.12	0.18	13.39	0.20	0.19	0.64	0.09	1.59	46.87	6.90
Pacific cod	52.33	0.04	0.01	39.26	0.05	0.50	0.36	1.45	1.45	3.72	26.02
Sablefish	--	--	--	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	32.34	2.14	5.48	0.15	15.16	8.33	4.02	2.48
Eelpouts	--	0.01	--	--	--	0.01	--	--	--	--	--
Pacific herring	--	0.06	0.07	--	--	--	--	--	--	--	--
Pacific ocean perch	--	--	--	--	--	--	--	--	--	--	--
Sculpins	35.37	1.08	8.58	5.98	4.82	1.24	2.32	3.63	--	0.64	--
Other rockfish	--	--	--	--	--	--	--	--	--	--	--
Other roundfish	0.01	2.59	1.88	1.01	2.77	2.04	2.53	10.72	9.47	6.02	0.75
Total roundfish	102.72	3.89	10.72	91.98	9.98	9.45	6.00	31.05	20.84	61.27	36.15
Blue king crab	86.10	1.87	--	--	--	--	--	--	--	--	--
Red king crab	--	--	--	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	0.18	--	--	--	--	--	--	--	--	--	--
Tanner crab, opilio	0.58	13.54	14.29	16.47	70.79	22.73	368.23	76.99	55.63	60.21	26.78
Other crab	39.56	2.73	3.44	1.66	3.60	1.57	1.24	5.67	0.78	1.86	0.49
Shrimp	0.00	0.00	0.01	0.00	0.00	0.05	0.06	0.08	0.12	0.43	0.04
Octopus	--	--	--	--	--	--	0.06	--	0.14	--	0.43
Squids	--	--	--	--	--	--	--	--	--	--	--
Snails	44.49	2.30	5.24	4.02	3.76	6.55	22.00	90.34	39.30	33.99	13.13
Starfish	40.20	101.29	240.94	4.65	19.70	18.22	22.94	10.45	23.74	15.62	12.14
Other invertebrates	44.90	10.03	42.80	16.66	30.88	17.58	55.46	174.25	14.51	18.49	21.40
Total invertebrates	256.00	131.77	306.72	43.46	128.72	66.70	469.93	357.77	134.22	130.60	74.41
Miscellaneous	0.88	0.33	0.61	0.20	--	0.03	0.56	--	0.02	0.96	1.11
Total catch	859.87	170.12	337.08	311.87	172.07	94.68	500.73	432.75	196.89	273.45	176.46

Appendix B Table 2. --- Continued.

Station	U-27	T-27	T-26	S-26	S-22	R-22	Q-22	Q-21
Start date and time	7/21/07 9:42	7/21/07 12:24	7/21/07 14:57	7/21/07 17:44	7/22/07 7:14	7/22/07 9:35	7/22/07 12:09	7/22/07 14:50
Haul number	180	181	182	183	184	185	186	187
Start latitude	6140.20	6120.24	6119.84	6100.00	6059.46	6040.52	6020.09	6019.86
Start longitude	17655.93	17659.12	17538.76	17548.26	17230.82	17233.46	17236.89	17120.14
End latitude	6139.51	6118.79	6120.10	6059.84	6057.97	6039.01	6019.88	6019.58
End longitude	17653.13	17658.98	17541.87	17551.23	17230.38	17233.71	17239.88	17123.11
Bottom depth (m)	85	89	80	83	60	63	66	63
Duration (h)	0.50	0.49	0.50	0.49	0.51	0.50	0.50	0.50
Distance fished (km)	2.79	2.69	2.83	2.70	2.79	2.79	2.79	2.79
Net width (m)	17.09	16.78	17.57	16.87	19.46	17.21	17.21	17.12
Net measured?	Y	Y	N	Y	Y	N	N	Y
Skates	8.26	5.19	16.73	41.57	29.55	8.36	29.94	11.40
Sharks	--	--	--	--	--	--	--	--
Total elasmobranch	8.26	5.19	16.73	41.57	29.55	8.36	29.94	11.40
Alaska plaice	--	--	--	--	11.40	14.03	11.96	97.58
Arrowtooth flounder	--	--	--	--	--	--	--	--
Flathead sole	--	--	--	--	--	--	--	--
Greenland turbot	0.04	0.08	--	--	0.01	--	0.01	--
Pacific halibut	0.50	--	--	--	--	--	--	--
Rock sole	3.14	1.59	0.10	0.11	1.99	0.47	1.67	0.35
Yellowfin sole	0.16	--	0.05	--	3.71	3.88	5.41	10.98
Other flatfish	--	--	0.05	--	0.10	0.16	--	0.07
Total flatfish	3.84	1.67	0.15	0.11	17.21	18.54	19.05	108.98
Walleye pollock	25.85	4.06	3.17	5.48	0.06	0.17	0.14	2.23
Pacific cod	8.50	10.39	1.99	0.80	0.02	--	0.27	0.11
Sablefish	--	--	--	--	--	--	--	--
Atka mackerel	--	--	--	--	--	--	--	--
Eelpouts	2.58	--	0.37	5.99	0.06	--	--	1.94
Pacific herring	--	--	--	0.01	0.05	0.03	0.02	--
Pacific ocean perch	--	--	--	--	--	--	--	--
Sculpins	1.66	1.18	2.01	0.46	3.46	2.63	1.56	1.11
Other rockfish	--	--	--	--	--	--	--	--
Other roundfish	2.83	2.03	3.22	1.56	0.62	0.43	1.21	1.89
Total roundfish	41.43	17.66	10.76	14.30	4.26	3.26	3.20	7.28
Blue king crab	--	--	--	1.43	--	--	--	--
Red king crab	--	--	--	--	--	--	--	--
Tanner crab, Bairdi	--	--	0.01	--	--	--	--	--
Tanner crab, opilio	29.74	43.28	48.70	12.20	235.88	20.82	53.47	29.09
Other crab	1.80	2.30	1.90	2.15	2.57	0.85	14.63	10.48
Shrimp	0.68	0.05	0.14	0.08	--	0.01	0.00	0.02
Octopus	--	--	--	--	--	--	--	--
Squids	--	--	--	--	--	--	--	--
Snails	7.84	5.45	11.78	2.55	6.03	3.87	29.60	15.40
Starfish	7.52	2.73	16.15	9.13	8.88	5.64	10.66	8.91
Other invertebrates	11.77	32.04	130.91	229.78	45.38	14.30	14.83	11.66
Total invertebrates	59.36	85.85	209.59	257.32	298.73	45.49	123.19	75.55
Miscellaneous	0.20	0.26	0.27	0.17	0.10	0.06	1.38	1.28
Total catch	128.85	114.55	238.51	314.44	350.25	76.13	181.67	206.09

Appendix C: Rank Order of Relative Abundance of Fishes and Invertebrates

Appendix C ranks all fishes and invertebrates identified during the 2007 eastern Bering Sea bottom trawl survey by descending unweighted CPUE (kg/ha).

Appendix C Table 1. -- Rank of fish and invertebrate taxa by unweighted total CPUE (kg/ha) from the 2007 eastern Bering Sea bottom trawl survey.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
1	21740	89.6547	108.2737	69.2600	0.2817	0.2817	<i>Theragra chalcogramma</i>
2	10260	46.5929	49.7641	32.7664	0.1464	0.4280	<i>Lepidopsetta</i> sp.
3	10210	45.6513	22.7577	36.3011	0.1434	0.5715	<i>Limanda aspera</i>
4	81742	19.3138	3.3878	15.7062	0.0607	0.6321	<i>Asterias amurensis</i>
5	10130	10.8807	1.3409	8.6111	0.0342	0.6663	<i>Hippoglossoides elassodon</i>
6	471	10.1799	0.6488	8.6012	0.0320	0.6983	<i>Bathyraja parmifera</i>
7	21720	9.7775	1.0819	7.7389	0.0307	0.7290	<i>Gadus macrocephalus</i>
8	10110	9.7231	0.9180	7.8452	0.0305	0.7596	<i>Atheresthes stomias</i>
9	10285	9.0739	0.7037	7.4297	0.0285	0.7881	<i>Pleuronectes quadrituberculatus</i>
10	68580	5.6808	0.5281	4.2564	0.0178	0.8059	<i>Chionoectes opilio</i>
11	83020	4.5001	0.4911	3.1265	0.0141	0.8200	<i>Gorgonocephalus eucnemis</i>
12	98082	4.2875	0.7344	2.6078	0.0135	0.8335	<i>Styela rustica</i>
13	98205	3.9972	1.2094	1.8417	0.0126	0.8461	<i>Halocynthia aurantium</i>
14	99994	3.3306	0.1089	2.6839	0.0105	0.8565	empty gastropod shells
15	10120	3.1617	0.0678	2.6512	0.0099	0.8665	<i>Hippoglossus stenolepis</i>
16	68560	2.7276	0.2010	1.8488	0.0086	0.8750	<i>Chionoectes bairdi</i>
17	69086	2.6841	0.0919	2.0900	0.0084	0.8835	<i>Pagurus trigonocheirus</i>
18	10220	2.0618	0.1508	1.3007	0.0065	0.8899	<i>Platichthys stellatus</i>
19	69060	2.0068	0.0602	1.5258	0.0063	0.8963	<i>Pagurus aleuticus</i>
20	69322	1.9891	0.1136	1.3284	0.0062	0.9025	<i>Paralithodes camtschaticus</i>
21	71820	1.7226	0.0613	1.2374	0.0054	0.9079	<i>Neptunea pribiloffensis</i>
22	21371	1.6346	0.0526	1.1851	0.0051	0.9130	<i>Myoxocephalus jaok</i>
23	91000	1.5019	0.5614	0.0334	0.0047	0.9178	Porifera
24	21370	1.4451	0.0341	1.0834	0.0045	0.9223	<i>Myoxocephalus polyacanthocephalus</i>
25	10112	1.2987	0.0199	1.0222	0.0041	0.9264	<i>Atheresthes evermanni</i>
26	98105	1.0413	0.0956	0.4353	0.0033	0.9297	<i>Boltenia ovifera</i>
27	40504	1.0340	0.0272	0.7106	0.0032	0.9329	<i>Chrysaora melanaster</i>
28	80590	0.9984	0.0440	0.5873	0.0031	0.9360	<i>Leptasterias polaris</i>
29	71884	0.9382	0.0173	0.6802	0.0029	0.9390	<i>Neptunea heros</i>
30	83320	0.8870	0.0412	0.4890	0.0028	0.9418	<i>Ophiura sarsi</i>
31	81780	0.7943	0.0846	0.2244	0.0025	0.9443	<i>Tenodiscus crispatus</i>

Appendix C Table 1. -- Continued.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
32	43021	0.7856	0.1022	0.1591	0.0025	0.9467	<i>Metridium farcimen</i>
33	21347	0.7387	0.0644	0.2413	0.0023	0.9491	<i>Hemilepidotus jordani</i>
34	71882	0.7104	0.0095	0.5190	0.0022	0.9513	<i>Neptunea ventricosa</i>
35	43090	0.6866	0.0540	0.2311	0.0022	0.9534	<i>Liponema brevicornis</i>
36	71870	0.6849	0.0125	0.4655	0.0022	0.9556	<i>Neptunea lyrata</i>
37	82511	0.6836	0.3645	0.0000	0.0021	0.9577	<i>Strongylocentrotus</i> sp.
38	82510	0.6181	0.1433	0.0000	0.0019	0.9597	<i>Strongylocentrotus droebachiensis</i>
39	68577	0.5968	0.0415	0.1976	0.0019	0.9616	<i>Hyas coarctatus</i>
40	21110	0.5812	0.0302	0.2408	0.0018	0.9634	<i>Clupea pallasi</i>
41	69120	0.5752	0.0113	0.3668	0.0018	0.9652	<i>Pagurus capillatus</i>
42	21420	0.5581	0.0115	0.3478	0.0018	0.9670	<i>Hemiripterus bolini</i>
43	24191	0.4694	0.0090	0.2839	0.0015	0.9684	<i>Lycodes brevipes</i>
44	80200	0.4666	0.0328	0.0161	0.0015	0.9699	<i>Lethasterias nanimensis</i>
45	20040	0.4459	0.0037	0.3272	0.0014	0.9713	<i>Podothecus accipenserinus</i>
46	72500	0.4441	0.0070	0.2797	0.0014	0.9727	<i>Fusitriton oregonensis</i>
47	71753	0.3987	0.0202	0.1203	0.0013	0.9739	<i>Pyrulofusus deformis</i>
48	69070	0.3751	0.0033	0.2626	0.0012	0.9751	<i>Pagurus confragosus</i>
49	43010	0.3680	0.1217	0.0000	0.0012	0.9763	<i>Metridium</i> sp.
50	69090	0.3551	0.0094	0.1649	0.0011	0.9774	<i>Pagurus ochotensis</i>
51	10211	0.3505	0.0082	0.1735	0.0011	0.9785	<i>Limanda proboscidea</i>
52	69095	0.3426	0.0032	0.2316	0.0011	0.9796	<i>Pagurus rathbuni</i>
53	21368	0.3337	0.0076	0.1631	0.0010	0.9806	<i>Myoxocephalus verrucosus</i>
54	10200	0.3308	0.0068	0.1694	0.0010	0.9817	<i>Glyptocephalus zachirus</i>
55	71750	0.2673	0.0035	0.1522	0.0008	0.9825	<i>Volutopsis</i> sp.
56	10115	0.2602	0.0029	0.1542	0.0008	0.9833	<i>Reinhardtius hippoglossoides</i>
57	74120	0.2513	0.0358	0.0000	0.0008	0.9841	<i>Patinopecten caurinus</i>
58	98310	0.2368	0.0017	0.1551	0.0007	0.9848	<i>Aplidium</i> sp.
59	99993	0.2250	0.0007	0.1721	0.0007	0.9856	empty bivalve shells
60	69323	0.2193	0.0042	0.0918	0.0007	0.9862	<i>Paralithodes platypus</i>
61	435	0.1966	0.0009	0.1381	0.0006	0.9869	<i>Bathyrcaja interrupta</i>
62	24185	0.1962	0.0010	0.1339	0.0006	0.9875	<i>Lycodes palearis</i>
63	80020	0.1664	0.0045	0.0345	0.0005	0.9880	<i>Evasterias echinosoma</i>

Appendix C Table 1. -- Continued.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
64	68578	0.1600	0.0014	0.0868	0.0005	0.9885	<i>Hyas lyratus</i>
65	71001	0.1543	0.0016	0.0758	0.0005	0.9890	gastropod eggs
66	20720	0.1446	0.0022	0.0525	0.0005	0.9894	<i>Bathymaster signatus</i>
67	98300	0.1174	0.0023	0.0226	0.0004	0.9898	compound ascidian unident.
68	30420	0.1124	0.0126	0.0000	0.0004	0.9902	<i>Sebastes polyspinis</i>
69	80594	0.1115	0.0011	0.0455	0.0004	0.9905	<i>Leptasterias arctica</i>
70	72755	0.1074	0.0008	0.0533	0.0003	0.9908	<i>Buccinum polare</i>
71	85201	0.1071	0.0010	0.0463	0.0003	0.9912	<i>Cucumaria fallax</i>
72	43000	0.1016	0.0029	0.0000	0.0003	0.9915	Actiniaria
73	68590	0.0941	0.0015	0.0171	0.0003	0.9918	<i>Chionoecetes</i> hybrid
74	21314	0.0886	0.0014	0.0158	0.0003	0.9921	<i>Gymnocanthus pistilliger</i>
75	69061	0.0864	0.0003	0.0515	0.0003	0.9924	<i>Labidochirus splendescens</i>
76	40561	0.0795	0.0005	0.0339	0.0002	0.9926	<i>Cyanea capillata</i>
77	23010	0.0765	0.0004	0.0376	0.0002	0.9928	<i>Thaleichthys pacificus</i>
78	66031	0.0621	0.0002	0.0378	0.0002	0.9930	<i>Pandalus borealis</i>
79	480	0.0609	0.0032	0.0000	0.0002	0.9932	<i>Bathyraja maculata</i>
80	72752	0.0603	0.0001	0.0395	0.0002	0.9934	<i>Buccinum scalariforme</i>
81	72743	0.0597	0.0005	0.0137	0.0002	0.9936	<i>Buccinum angulosum</i>
82	98303	0.0552	0.0006	0.0055	0.0002	0.9938	<i>Amaroucium soldatovi</i>
83	69121	0.0537	0.0003	0.0224	0.0002	0.9939	<i>Elassochirus cavimanus</i>
84	71886	0.0518	0.0001	0.0308	0.0002	0.9941	<i>Neptunea magna</i>
85	472	0.0518	0.0005	0.0075	0.0002	0.9943	<i>Bathyraja aleutica</i>
86	71761	0.0482	0.0004	0.0091	0.0002	0.9944	<i>Pyrulofusus melonis</i>
87	78403	0.0474	0.0003	0.0163	0.0001	0.9946	<i>Octopus dofleini</i>
88	69400	0.0467	<0.0001	0.0310	0.0001	0.9947	<i>Erimacrus isenbeckii</i>
89	42012	0.0458	0.0016	0.0000	0.0001	0.9949	<i>Halopteris willemoesi</i>
90	71800	0.0458	0.0005	0.0024	0.0001	0.9951	<i>Neptunea</i> sp.
91	21725	0.0454	<0.0001	0.0288	0.0001	0.9953	<i>Boreogadus saida</i>
92	99997	0.0432	0.0018	0.0000	0.0001	0.9954	unsorted catch and debris
93	21735	0.0422	0.0007	0.0000	0.0001	0.9956	<i>Eleginus gracilis</i>
94	85210	0.0421	0.0017	0.0000	0.0001	0.9958	<i>Psolus</i> sp.
95	75111	0.0421	0.0003	0.0080	0.0001	0.9959	<i>Mactromeris polynyma</i>

Appendix C Table 1. -- Continued.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
96	21390	0.0419	<0.0001	0.0266	0.0573	0.0001	<i>Dasycoctus setiger</i>
97	22205	0.0407	0.0002	0.0120	0.0694	0.0001	<i>Liparis gibbus</i>
98	71891	0.0396	<0.0001	0.0219	0.0574	0.0001	<i>Plicifusus kroyeri</i>
99	81315	0.0395	0.0015	0.0000	0.1164	0.0001	<i>Pteraster tessellatus</i>
100	21348	0.0392	0.0003	0.0038	0.0745	0.0001	<i>Hemilepidotus papilio</i>
101	30060	0.0388	0.0013	0.0000	0.1094	0.0001	<i>Sebastes alutus</i>
102	420	0.0370	0.0008	0.0000	0.0923	0.0001	<i>Raja binoculata</i>
103	24184	0.0364	0.0001	0.0143	0.0586	0.0001	<i>Lycodes varidens</i>
104	21316	0.0355	0.0008	0.0000	0.0907	0.0001	<i>Gymnocanthus galeatus</i>
105	71769	0.0351	0.0002	0.0098	0.0603	0.0001	<i>Beringius sp.</i>
106	85219	0.0336	0.0011	0.0000	0.0994	0.0001	<i>Psolus fabricii</i>
107	71772	0.0326	0.0003	0.0000	0.0654	0.0001	<i>Beringius beringii</i>
108	43030	0.0324	<0.0001	0.0176	0.0472	0.0001	<i>Stomphia sp.</i>
109	42003	0.0323	0.0006	0.0000	0.0786	0.0001	Virularidae
110	20006	0.0313	0.0002	0.0055	0.0570	<0.0001	<i>Leptagonus frenatus</i>
111	41221	0.0306	0.0003	0.0000	0.0638	<0.0001	<i>Gersemia rubiformis</i>
112	81355	0.0292	<0.0001	0.0158	0.0426	<0.0001	<i>Pteraster obscurus</i>
113	50192	0.0291	0.0001	0.0070	0.0511	<0.0001	<i>Aphrodita negligens</i>
114	80015	0.0290	0.0007	0.0000	0.0816	<0.0001	<i>Evasterias troschelii</i>
115	43042	0.0270	0.0002	0.0015	0.0525	<0.0001	<i>Urticina crassicornis</i>
116	75285	0.0259	0.0001	0.0025	0.0494	<0.0001	<i>Serripes groenlandicus</i>
117	65201	0.0253	0.0003	0.0000	0.0575	<0.0001	<i>Balanus sp.</i>
118	68781	0.0251	<0.0001	0.0111	0.0390	<0.0001	<i>Telmessus cheiragonus</i>
119	72740	0.0244	0.0002	0.0000	0.0523	<0.0001	<i>Buccinum sp.</i>
120	71756	0.0227	0.0002	0.0000	0.0535	<0.0001	<i>Volutopsis fragilis</i>
121	42008	0.0219	0.0002	0.0000	0.0521	<0.0001	<i>Halipteris sp.</i>
122	10270	0.0211	<0.0001	0.0030	0.0392	<0.0001	<i>Isopsetta isolepis</i>
123	82522	0.0201	0.0004	0.0000	0.0594	<0.0001	<i>Strongylocentrotus polyacanthus</i>
124	40500	0.0172	<0.0001	0.0049	0.0294	<0.0001	Scyphozoa
125	71835	0.0162	<0.0001	0.0080	0.0245	<0.0001	<i>Neptunea borealis</i>
126	81095	0.0156	<0.0001	0.0013	0.0299	<0.0001	<i>Crossaster papposus</i>
127	69042	0.0155	0.0001	0.0000	0.0390	<0.0001	<i>Pagurus brandti</i>

Appendix C Table 1. -- Continued.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
128	20322	0.0144	<0.0001	0.0000	<0.0001	0.9988	<i>Anarhichas orientalis</i>
129	65100	0.0139	<0.0001	0.0038	<0.0001	0.9988	Thoracica
130	82740	0.0138	<0.0001	0.0000	<0.0001	0.9989	<i>Echinarachnius parma</i>
131	95000	0.0133	<0.0001	0.0023	<0.0001	0.9989	Bryozoa unident.
132	74562	0.0126	<0.0001	0.0000	<0.0001	0.9989	<i>Musculus discors</i>
133	68510	0.0126	<0.0001	0.0068	<0.0001	0.9990	<i>Oregonia gracilis</i>
134	57411	0.0115	<0.0001	0.0000	<0.0001	0.9990	<i>Serpula columbiana</i>
135	24001	0.0112	<0.0001	0.0000	<0.0001	0.9990	<i>Zaprora silenus</i>
136	72751	0.0108	<0.0001	0.0050	<0.0001	0.9991	<i>Buccinum plectrum</i>
137	43032	0.0100	<0.0001	0.0019	<0.0001	0.9991	<i>Stomphia coccinea</i>
138	21355	0.0098	<0.0001	0.0000	<0.0001	0.9991	<i>Triglops pingeli</i>
139	21438	0.0096	<0.0001	0.0050	<0.0001	0.9992	<i>Icelus spiniger</i>
140	41201	0.0095	<0.0001	0.0034	<0.0001	0.9992	<i>Gersemia</i> sp.
141	23041	0.0094	<0.0001	0.0041	<0.0001	0.9992	<i>Mallotus villosus</i>
142	71915	0.0086	<0.0001	0.0000	<0.0001	0.9992	<i>Neptunea</i> sp.
143	95017	0.0078	<0.0001	0.0000	<0.0001	0.9993	<i>Bugula californica</i>
144	56311	0.0076	<0.0001	0.0025	<0.0001	0.9993	<i>Eunoe nodosa</i>
145	98219	0.0074	<0.0001	0.0000	<0.0001	0.9993	<i>Aplidium californicum</i>
146	91040	0.0072	<0.0001	0.0000	<0.0001	0.9993	<i>Mycale loveni</i>
147	22236	0.0071	<0.0001	0.0023	<0.0001	0.9993	<i>Careproctus rastrinus</i>
148	81360	0.0069	<0.0001	0.0000	<0.0001	0.9994	<i>Diploptaster multipes</i>
149	20061	0.0065	<0.0001	0.0012	<0.0001	0.9994	<i>Ocella dodecaedron</i>
150	40011	0.0063	<0.0001	0.0011	<0.0001	0.9994	hydroid unident.
151	65203	0.0060	<0.0001	0.0000	<0.0001	0.9994	<i>Balanus evermanni</i>
152	72063	0.0057	<0.0001	0.0027	<0.0001	0.9994	<i>Aforia circinata</i>
153	74983	0.0052	<0.0001	0.0003	<0.0001	0.9994	<i>Clinocardium ciliatum</i>
154	71774	0.0051	<0.0001	0.0000	<0.0001	0.9995	<i>Beringius stimpsoni</i>
155	75286	0.0049	<0.0001	0.0000	<0.0001	0.9995	<i>Serripes laperosus</i>
156	66045	0.0046	<0.0001	0.0025	<0.0001	0.9995	<i>Pandalus goniurus</i>
157	81850	0.0045	<0.0001	0.0000	<0.0001	0.9995	<i>Dipsacaster</i> sp.
158	21932	0.0043	<0.0001	0.0005	<0.0001	0.9995	<i>Hexagrammos stelleri</i>
159	71890	0.0042	<0.0001	0.0000	<0.0001	0.9995	<i>Plicifusus</i> sp.

Appendix C Table 1. -- Continued.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
160	71710	0.0042	<0.0001	0.0007	<0.0001	0.9995	<i>Colus</i> sp.
161	21354	0.0041	<0.0001	0.0105	<0.0001	0.9995	<i>Triglops scepticus</i>
162	23220	0.0041	<0.0001	0.0098	<0.0001	0.9996	<i>Oncorhynchus tshawytscha</i>
163	81060	0.0040	<0.0001	0.0120	<0.0001	0.9996	<i>Solaster</i> sp.
164	69110	0.0040	<0.0001	0.0092	<0.0001	0.9996	<i>Elassochirus tenuimanus</i>
165	71771	0.0039	<0.0001	0.0083	<0.0001	0.9996	<i>Beringius frielei</i>
166	23055	0.0039	<0.0001	0.0089	<0.0001	0.9996	<i>Osmerus mordax</i>
167	74104	0.0038	<0.0001	0.0091	<0.0001	0.9996	<i>Chlamys</i> sp.
168	75605	0.0038	<0.0001	0.0111	<0.0001	0.9996	<i>Pododesmus</i> sp.
169	40501	0.0037	<0.0001	0.0111	<0.0001	0.9996	<i>Chrysaora</i> sp.
170	71721	0.0037	<0.0001	0.0071	<0.0001	0.9997	<i>Colus herendeenii</i>
171	75287	0.0033	<0.0001	0.0070	<0.0001	0.9997	<i>Serripes notabilis</i>
172	71010	0.0033	<0.0001	0.0053	<0.0001	0.9997	Nudibranchia unident.
173	21592	0.0033	<0.0001	0.0068	<0.0001	0.9997	<i>Trichodon trichodon</i>
174	21921	0.0033	<0.0001	0.0064	<0.0001	0.9997	<i>Pleurogrammus monopterygius</i>
175	436	0.0032	<0.0001	0.0078	<0.0001	0.9997	<i>Bathyraja interrupta</i>
176	75205	0.0031	<0.0001	0.0051	<0.0001	0.9997	<i>Tellina lutea</i>
177	99998	0.0030	<0.0001	0.0086	<0.0001	0.9997	Polychaete tubes
178	71025	0.0028	<0.0001	0.0072	<0.0001	0.9997	<i>Tritonia</i> sp.
179	74982	0.0027	<0.0001	0.0062	<0.0001	0.9997	<i>Clinocardium nuttallii</i>
180	75021	0.0027	<0.0001	0.0063	<0.0001	0.9997	<i>Saxidomus giganteus</i>
181	71500	0.0026	<0.0001	0.0076	<0.0001	0.9998	Gastropod unident.
182	81870	0.0025	<0.0001	0.0066	<0.0001	0.9998	<i>Dipsacaster borealis</i>
183	80595	0.0025	<0.0001	0.0052	<0.0001	0.9998	<i>Leptasterias</i> sp.
184	95070	0.0024	<0.0001	0.0042	<0.0001	0.9998	<i>Rhamphostomella costata</i>
185	81061	0.0023	<0.0001	0.0069	<0.0001	0.9998	<i>Solaster endeca</i>
186	80660	0.0023	<0.0001	0.0042	<0.0001	0.9998	<i>Pseudarchaster parelii</i>
187	80540	0.0023	<0.0001	0.0036	<0.0001	0.9998	<i>Henricia</i> sp.
188	95030	0.0023	<0.0001	0.0045	<0.0001	0.9998	<i>Flustra serrulata</i>
189	71511	0.0022	<0.0001	0.0047	<0.0001	0.9998	Naticidae eggs
190	71765	0.0022	<0.0001	0.0064	<0.0001	0.9998	<i>Volutopsius trophonius</i>
191	72747	0.0021	<0.0001	0.0041	<0.0001	0.9998	<i>Buccinum oedematum</i>

Appendix C Table 1. -- Continued.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
192	20320	0.0021	<0.0001	0.0000	<0.0001	0.9998	<i>Anarrhichthys ocellatus</i>
193	91030	0.0021	<0.0001	0.0000	<0.0001	0.9998	<i>Aphrocallistes vastus</i>
194	56312	0.0018	<0.0001	0.0010	<0.0001	0.9998	<i>Eumoeo depressa</i>
195	72757	0.0017	<0.0001	0.0000	<0.0001	0.9998	<i>Buccinum ciliatum</i>
196	75600	0.0017	<0.0001	0.0000	<0.0001	0.9999	<i>Pododesmus macroschisma</i>
197	98070	0.0017	<0.0001	0.0005	<0.0001	0.9999	Thaliacea unident.
198	68040	0.0016	<0.0001	0.0004	<0.0001	0.9999	<i>Cancer oregonensis</i>
199	71580	0.0015	<0.0001	0.0000	<0.0001	0.9999	<i>Euspira (=Polinices)</i>
200	40506	0.0015	<0.0001	0.0004	<0.0001	0.9999	<i>Aequorea</i> sp.
201	68020	0.0015	<0.0001	0.0000	<0.0001	0.9999	<i>Cancer magister</i>
202	10180	0.0014	<0.0001	0.0000	<0.0001	0.9999	<i>Microstomus pacificus</i>
203	78020	0.0014	<0.0001	0.0000	<0.0001	0.9999	<i>Octopus</i> sp.
204	78012	0.0014	<0.0001	0.0000	<0.0001	0.9999	<i>Benthoctopus leioderma</i>
205	74080	0.0013	<0.0001	0.0000	<0.0001	0.9999	<i>Mytilus edulis</i>
206	98000	0.0013	<0.0001	0.0000	<0.0001	0.9999	Ascidian unident.
207	21441	0.0012	<0.0001	0.0007	<0.0001	0.9999	<i>Iceland spatula</i>
208	71030	0.0012	<0.0001	0.0001	<0.0001	0.9999	<i>Tritonia diomedea</i>
209	21356	0.0011	<0.0001	0.0000	<0.0001	0.9999	<i>Triglops macellus</i>
210	69080	0.0010	<0.0001	0.0000	<0.0001	0.9999	<i>Pagurus cornutus</i>
211	66502	0.0010	<0.0001	0.0003	<0.0001	0.9999	<i>Crangon</i> sp.
212	30051	0.0009	<0.0001	0.0000	<0.0001	0.9999	<i>Sebastes aleutianus</i>
213	69035	0.0009	<0.0001	0.0000	<0.0001	0.9999	<i>Pagurus</i> sp.
214	22175	0.0009	<0.0001	0.0000	<0.0001	0.9999	<i>Aptocyclus ventricosus</i>
215	66530	0.0009	<0.0001	0.0005	<0.0001	0.9999	<i>Crangon dalli</i>
216	21341	0.0009	<0.0001	0.0000	<0.0001	0.9999	<i>Malacocottus zonurus</i>
217	75284	0.0009	<0.0001	0.0000	<0.0001	0.9999	<i>Serripes</i> sp.
218	72059	0.0008	<0.0001	0.0000	<0.0001	0.9999	<i>Aforia</i> sp.
219	74000	0.0008	<0.0001	0.0000	<0.0001	0.9999	Bivalvia unident.
220	20510	0.0008	<0.0001	0.0000	<0.0001	0.9999	<i>Anoplopoma fimbria</i>
221	80115	0.0007	<0.0001	0.0000	<0.0001	0.9999	<i>Leptasterias coei</i>
222	74311	0.0007	<0.0001	0.0000	<0.0001	0.9999	<i>Hiattella arctica</i>
223	91005	0.0006	<0.0001	0.0000	<0.0001	0.9999	vase sponge unident.

Appendix C Table 1. -- Continued.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
224	10129	0.0006	<0.0001	0.0000	<0.0001	0.9999	<i>Hippoglossoides</i> sp.
225	78010	0.0006	<0.0001	0.0000	<0.0001	0.9999	Octopodidae
226	71537	0.0006	<0.0001	0.0000	<0.0001	0.9999	<i>Natica russa</i>
227	80110	0.0005	<0.0001	0.0002	<0.0001	0.9999	<i>Leptasterias groenlandica</i>
228	402	0.0005	<0.0001	0.0000	<0.0001	0.9999	<i>Bathyrhaja</i> sp.
229	21352	0.0005	<0.0001	0.0000	<0.0001	0.9999	<i>Triglops forficata</i>
230	50010	0.0005	<0.0001	0.0000	<0.0001	0.9999	tube worm unident.
231	72789	0.0005	<0.0001	0.0000	<0.0001	1.0000	<i>Arctomelon</i> sp.
232	71524	0.0005	<0.0001	0.0000	<0.0001	1.0000	<i>Cryptonatica</i> sp.
233	74106	0.0005	<0.0001	0.0000	<0.0001	1.0000	<i>Chlamys rubida</i>
234	72420	0.0005	<0.0001	0.0000	<0.0001	1.0000	<i>Boreotrophon</i> sp.
235	401	0.0004	<0.0001	0.0000	<0.0001	1.0000	skate egg case unident.
236	71250	0.0004	<0.0001	0.0000	<0.0001	1.0000	dorid nudibranch unident.
237	10212	0.0004	<0.0001	0.0000	<0.0001	1.0000	<i>Limanda sakhalinensis</i>
238	81092	0.0004	<0.0001	0.0000	<0.0001	1.0000	<i>Crossaster borealis</i>
239	66515	0.0004	<0.0001	0.0002	<0.0001	1.0000	<i>Crangon communis</i>
240	80729	0.0004	<0.0001	0.0000	<0.0001	1.0000	<i>Ceramaster japonicus</i>
241	71726	0.0004	<0.0001	0.0000	<0.0001	1.0000	<i>Colus spitzbergensis</i>
242	75240	0.0004	<0.0001	0.0000	<0.0001	1.0000	<i>Macoma</i> sp.
243	66580	0.0004	<0.0001	0.0002	<0.0001	1.0000	<i>Argis dentata</i>
244	1	0.0003	<0.0001	0.0000	<0.0001	1.0000	fish eggs unident.
245	80620	0.0003	<0.0001	0.0000	<0.0001	1.0000	<i>Pseudarchaster atascensis</i>
246	71535	0.0003	<0.0001	0.0000	<0.0001	1.0000	<i>Cryptonatica (=Natica)</i>
247	20051	0.0003	<0.0001	0.0000	<0.0001	1.0000	<i>Aspidophorooides olriki</i>
248	74980	0.0003	<0.0001	0.0000	<0.0001	1.0000	<i>Clinocardium</i> sp.
249	66570	0.0003	<0.0001	0.0002	<0.0001	1.0000	<i>Argis</i> sp.
250	75267	0.0003	<0.0001	0.0001	<0.0001	1.0000	<i>Siliqua alta</i>
251	20050	0.0003	<0.0001	0.0002	<0.0001	1.0000	<i>Aspidophorooides bartoni</i>
252	80010	0.0003	<0.0001	0.0000	<0.0001	1.0000	<i>Evasterias</i> sp.
253	74050	0.0003	<0.0001	0.0000	<0.0001	1.0000	Mytilidae
254	71810	0.0003	<0.0001	0.0000	<0.0001	1.0000	<i>Neptunea amianta</i>
255	43082	0.0003	<0.0001	0.0000	<0.0001	1.0000	<i>Cribrinopsis fernaldi</i>

Appendix C Table 1. -- Continued.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
256	75241	0.0003	<0.0001	0.0000	<0.0001	1.0000	<i>Macoma nasuta</i>
257	91226	0.0003	<0.0001	0.0000	<0.0001	1.0000	<i>Latrunculia</i> sp.
258	74985	0.0003	<0.0001	0.0000	<0.0001	1.0000	<i>Clinocardium californiense</i>
259	50000	0.0002	<0.0001	0.0000	<0.0001	1.0000	Polychaeta
260	85115	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Molpadia</i> sp.
261	91015	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Suberites</i> sp.
262	50161	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Aphrodita</i> sp.
263	74060	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Modiolus modiolus</i>
264	43100	0.0002	<0.0001	0.0000	<0.0001	1.0000	Actinostolidae
265	79020	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Rossia pacifica</i>
266	474	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Bathyraja parnifera</i>
267	70115	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Amicula vestita</i>
268	21935	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Hexagrammos decagrammus</i>
269	71896	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Plicifus oceanodromae</i>
270	57412	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Serpula</i> sp.
271	23805	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Lumpenus maculatus</i>
272	72756	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Buccinum solemum</i>
273	99902	0.0002	<0.0001	0.0000	<0.0001	1.0000	<i>Molgula griffithii</i>
274	80551	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Odontohenricia</i> sp.
275	71900	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Plicifusus griseus</i>
276	72402	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Boreotrophon alaskanus</i>
277	22206	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Crystallichthys cyclospilus</i>
278	20202	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Ammodytes hexapterus</i>
279	80730	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Ceramaster patagonicus</i>
280	81829	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Leptychaster anomalus</i>
281	40511	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Aurelia</i> sp.
282	82530	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Alloctrotus fragilis</i>
283	80000	0.0001	<0.0001	0.0000	<0.0001	1.0000	Asteroidea unident.
284	21423	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Eurymen gyrimus</i>
285	83336	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Amphiphiura nodosa</i>
286	81320	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Pteraster militaris</i>
287	71681	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Crepidula grandis</i>

Appendix C Table 1. -- Continued.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
288	97010	0.0001	<0.0001	0.0000	<0.0001	1.0000	Hemithyridae
289	80597	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Henricia beringiana</i>
290	21346	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Hemilepidotus hemilepidotus</i>
291	66163	0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Spirotoctaris lamellicornis</i>
292	74654	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Cyclocardia crassidens</i>
293	21333	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Artediellus pacificus</i>
294	40505	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Phacelophora camtschatica</i>
295	74322	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Panomya novegica</i>
296	23807	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Lumpenus fabricii</i>
297	85000	<0.0001	<0.0001	0.0000	<0.0001	1.0000	Holothuroidea unident.
298	74655	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Cyclocardia crebricostata</i>
299	72790	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Arctomelon stearnsii</i>
300	43044	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Utricina columbiana</i>
301	92500	<0.0001	<0.0001	0.0000	<0.0001	1.0000	Nemertea
302	83070	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Asteronyx loveni</i>
303	20700	<0.0001	<0.0001	0.0000	<0.0001	1.0000	Bathymasteridae
304	74656	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Cyclocardia</i> sp.
305	23809	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Acantholumpenus mackayi</i>
306	66611	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Argis lar</i>
307	66033	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Pandalus tridens</i>
308	23806	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Lumpenus medius</i>
309	74420	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Yoldia hyperborea</i>
310	23850	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Poroclinus rothroeki</i>
311	80230	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Pedicellaster magister</i>
312	85290	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Synallactes challengeri</i>
313	94500	<0.0001	<0.0001	0.0000	<0.0001	1.0000	Echiura
314	95006	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Leteschara orientalis</i>
315	23801	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Lumpenus</i> sp.
316	20000	<0.0001	<0.0001	0.0000	<0.0001	1.0000	Agonidae
317	95036	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Aleyonidium pedunculatum</i>
318	66150	<0.0001	<0.0001	0.0000	<0.0001	1.0000	Hippolytidae
319	56310	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Eunoe</i> sp.

Appendix C Table 1. -- Continued.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
320	20005	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Leptogomus leptorhynchus</i>
321	94000	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Sipuncula</i>
322	21405	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Nautichthys pribilovius</i>
323	20035	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Bathygomus alascamus</i>
324	82730	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	sand dollar unident.
325	40509	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Phacelophora</i> sp.
326	66030	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Pandalus jordani</i>
327	66161	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Spirotozaris arcuata</i>
328	69010	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	Paguridae
329	75266	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Siliqua patula</i>
330	97000	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	brachiopod unident.
331	21439	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Icelus canaliculatus</i>
332	22200	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	Liparidinae
333	85200	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Cucumaria</i> sp.
334	50160	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	Aphroditidae
335	80544	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Henricia leviuscula</i>
336	83400	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Ophiopholis aculeata</i>
337	95035	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Flustrellidra corniculata</i>
338	41100	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	Aleyonacea
339	71405	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	limpet unident.
340	66170	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Eualus</i> sp.
341	43045	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Bathyphebia australis</i>
342	92000	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	Platyhelminthes
343	69312	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Dermaturus mandii</i>
344	70100	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	Polyplacophora unident.
345	66200	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Lebbeus</i> sp.
346	66203	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Lebbeus groenlandicus</i>
347	56300	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	Polynoidae
348	44029	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Sylasterina</i> unident.
349	60110	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	Gammaridae
350	66613	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Argis levior</i>
351	72531	<0.0001	<0.0001	<0.0001	<0.0001	1.0000	<i>Margarites</i> sp.

Appendix C Table 1. -- Continued.

Rank	Species code	Mean CPUE (kg/ha)	Variance	95% Confidence limits	Proportion	Cumulative proportion	Scientific name
352	85169	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Pentamera lissoplaca</i>
353	20037	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Bathygonus pentacanthus</i>
354	21311	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Icelinus borealis</i>
355	50001	<0.0001	<0.0001	0.0000	<0.0001	1.0000	worm unident.
356	66575	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Argis ataskensis</i>
357	22190	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Cyclopteroipsis phrynooides</i>
358	75201	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Tellina</i> sp.
359	66171	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Eualus barbatus</i>
360	60100	<0.0001	<0.0001	0.0000	<0.0001	1.0000	Amphipoda
361	2	<0.0001	<0.0001	0.0000	<0.0001	1.0000	fish larvae unident.
362	59111	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Notostombdella</i> (= <i>Carcinobdella</i>)
363	66204	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Lebbeus polaris</i>
364	21320	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Radulimus asprellus</i>
365	83342	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Ophiacantha</i> sp.
366	20001	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Pallasina barbata</i>
367	79120	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Loligo opalescens</i>
368	50005	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Eunice valens</i>
369	91110	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Polymastia fluegeli</i>
370	71640	<0.0001	<0.0001	0.0000	<0.0001	1.0000	<i>Crepidula</i> sp.
371	83360	<0.0001	<0.0001	0.0000	<0.0001	0.0000	<i>Ophiopholis</i> sp.
372	95105	<0.0001	<0.0001	0.0000	<0.0001	0.0000	<i>Dendrobeania</i> sp.
373	66175	<0.0001	<0.0001	0.0000	<0.0001	0.0000	<i>Eualus gaimardii</i>
374	60145	<0.0001	<0.0001	0.0000	<0.0001	0.0000	<i>Caprella</i> sp.
375	59100	<0.0001	<0.0001	0.0000	<0.0001	0.0000	Hirudinea unident.
376	66000	<0.0001	<0.0001	0.0000	<0.0001	0.0000	shrimp unident.

Appendix D: Population Estimates by Sex and Size Groups for Principal Fish Species

Appendix D presents estimates of the numbers of individuals within the overall survey area by sex and size group for principal fish species.

List of Tables

Population estimates by sex and size group from the 2007 eastern Bering Sea bottom trawl survey.

Appendix D Table 1 – walleye pollock

Appendix D Table 2 – Pacific cod

Appendix D Table 3 – yellowfin sole

Appendix D Table 4 – northern and southern rock sole grouped

Appendix D Table 5 – flathead sole and Bering flounder grouped

Appendix D Table 6 – Alaska plaice

Appendix D Table 7 – Greenland turbot

Appendix D Table 8 – arrowtooth flounder

Appendix D Table 9 – Kamchatka flounder

Appendix D Table 10 – Pacific halibut

Appendix D Table 1. -- Population estimates by sex and size for **walleye pollock** (*Theragra chalcogramma*) from the 2007 eastern Bering Sea bottom trawl survey.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
50	0	0	66,928	66,928	0.0000	0.0000
60	0	0	66,928	66,928	0.0000	0.0000
70	0	0	235,470	235,470	0.0000	0.0001
80	0	0	4,122,101	4,122,101	0.0006	0.0007
90	0	0	38,943,676	38,943,676	0.0059	0.0066
100	0	0	205,636,617	205,636,617	0.0311	0.0377
110	0	0	267,514,143	267,514,143	0.0405	0.0781
120	0	0	436,689,467	436,689,467	0.0661	0.1442
130	0	0	252,605,360	252,605,360	0.0382	0.1824
140	0	0	211,632,491	211,632,491	0.0320	0.2144
150	16,387,266	11,580,966	82,601,985	110,570,217	0.0167	0.2311
160	22,104,809	14,555,127	27,606,418	64,266,354	0.0097	0.2409
170	8,016,019	10,440,240	8,902,496	27,358,755	0.0041	0.2450
180	4,944,277	4,070,540	4,225,483	13,240,301	0.0020	0.2470
190	3,150,371	3,566,685	715,591	7,432,648	0.0011	0.2481
200	1,349,177	1,419,205	61,971	2,830,353	0.0004	0.2485
210	1,396,520	508,677	123,273	2,028,470	0.0003	0.2489
220	3,096,408	1,110,206	0	4,206,614	0.0006	0.2495
230	2,274,320	1,240,813	0	3,515,133	0.0005	0.2500
240	4,234,727	1,551,521	517,189	6,303,436	0.0010	0.2510
250	4,181,682	2,015,218	0	6,196,900	0.0009	0.2519
260	2,288,031	4,091,390	0	6,379,421	0.0010	0.2529
270	4,418,448	1,418,600	0	5,837,048	0.0009	0.2538
280	4,434,380	4,132,201	0	8,566,582	0.0013	0.2551
290	4,011,488	2,104,313	0	6,115,801	0.0009	0.2560
300	3,304,452	3,291,714	0	6,596,166	0.0010	0.2570
310	4,436,670	4,016,385	0	8,453,055	0.0013	0.2583
320	4,272,787	1,757,692	0	6,030,479	0.0009	0.2592
330	5,705,930	4,111,666	0	9,817,595	0.0015	0.2607
340	3,005,587	5,878,962	66,937	8,951,485	0.0014	0.2620
350	4,320,228	7,773,758	0	12,093,986	0.0018	0.2638
360	12,557,629	9,534,543	0	22,092,172	0.0033	0.2672
370	14,795,831	14,978,917	0	29,774,749	0.0045	0.2717
380	23,670,597	16,433,262	0	40,103,859	0.0061	0.2777
390	27,255,455	16,675,099	0	43,930,554	0.0066	0.2844
400	46,981,382	25,096,444	192,847	72,270,673	0.0109	0.2953
410	80,877,161	53,644,177	0	134,521,338	0.0203	0.3157
420	114,915,348	58,874,195	0	173,789,543	0.0263	0.3420
430	149,324,195	65,135,555	0	214,459,751	0.0324	0.3744
440	173,448,596	108,329,846	0	281,778,442	0.0426	0.4170
450	254,647,674	125,865,674	0	380,513,348	0.0576	0.4746
460	223,253,894	142,384,632	0	365,638,525	0.0553	0.5299
470	233,276,706	175,814,422	0	409,091,128	0.0619	0.5918
480	196,211,665	168,671,527	0	364,883,192	0.0552	0.6469
490	190,626,207	162,965,228	0	353,591,435	0.0535	0.7004
500	170,918,217	141,030,968	0	311,949,186	0.0472	0.7476

Appendix D Table 1. -- Continued.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
510	154,714,245	126,676,288	28,798	281,419,331	0.0426	0.7902
520	136,623,189	144,505,570	0	281,128,759	0.0425	0.8327
530	109,916,897	112,691,329	0	222,608,226	0.0337	0.8664
540	89,381,116	90,916,540	0	180,297,656	0.0273	0.8936
550	60,499,059	86,617,946	0	147,117,005	0.0223	0.9159
560	55,375,507	52,296,296	0	107,671,803	0.0163	0.9322
570	43,236,214	53,860,957	0	97,097,171	0.0147	0.9469
580	37,100,616	39,088,236	0	76,188,852	0.0115	0.9584
590	19,797,439	33,413,649	0	53,211,088	0.0080	0.9664
600	15,845,902	32,926,175	0	48,772,077	0.0074	0.9738
610	11,683,840	21,302,318	0	32,986,157	0.0050	0.9788
620	8,817,967	17,709,003	0	26,526,970	0.0040	0.9828
630	5,196,417	15,493,271	0	20,689,689	0.0031	0.9859
640	7,031,080	17,724,461	0	24,755,541	0.0037	0.9897
650	3,607,441	9,199,634	0	12,807,075	0.0019	0.9916
660	3,259,777	7,715,055	0	10,974,832	0.0017	0.9933
670	1,980,738	5,942,285	0	7,923,023	0.0012	0.9945
680	2,214,415	4,853,887	0	7,068,302	0.0011	0.9956
690	1,291,494	4,595,512	0	5,887,006	0.0009	0.9964
700	912,431	3,828,053	0	4,740,484	0.0007	0.9972
710	424,975	3,625,784	0	4,050,759	0.0006	0.9978
720	533,006	2,599,661	0	3,132,666	0.0005	0.9983
730	287,333	2,112,888	0	2,400,222	0.0004	0.9986
740	711,705	2,061,208	0	2,772,913	0.0004	0.9990
750	170,539	1,068,219	0	1,238,757	0.0002	0.9992
760	1,267,695	863,342	0	2,131,037	0.0003	0.9995
770	27,633	623,339	0	650,971	0.0001	0.9996
780	29,277	424,089	0	453,366	0.0001	0.9997
790	0	995,191	0	995,191	0.0002	0.9999
800	0	219,723	0	219,723	0.0000	0.9999
810	0	229,538	0	229,538	0.0000	0.9999
820	0	298,270	30,769	329,040	0.0000	1.0000
830	0	58,142	0	58,142	0.0000	1.0000
840	0	28,872	0	28,872	0.0000	1.0000
850	0	59,880	0	59,880	0.0000	1.0000
Total	2,796,032,085	2,272,694,975	1,542,586,939	6,611,313,999	1.0000	1.0000

Appendix D Table 2. -- Population estimates by sex and size for **Pacific cod** (*Gadus macrocephalus*) from the 2007 eastern Bering Sea bottom trawl survey.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
80	0	0	423,086	423,086	0.0006	0.0006
90	0	17,822	405,587	423,409	0.0006	0.0012
100	168,595	172,140	7,050,923	7,391,658	0.0101	0.0112
110	797,708	203,075	26,517,578	27,518,361	0.0375	0.0488
120	795,781	918,437	64,853,879	66,568,097	0.0908	0.1395
130	1,634,747	1,017,939	78,893,294	81,545,980	0.1112	0.2507
140	2,915,243	2,463,904	74,621,063	80,000,209	0.1091	0.3598
150	3,170,553	2,232,539	59,891,618	65,294,710	0.0890	0.4488
160	13,884,283	11,080,596	16,844,851	41,809,730	0.0570	0.5058
170	23,538,630	7,905,118	9,481,054	40,924,801	0.0558	0.5617
180	12,166,342	14,384,450	2,715,390	29,266,182	0.0399	0.6016
190	11,524,449	6,117,890	1,013,882	18,656,221	0.0254	0.6270
200	6,977,015	15,267,499	669,853	22,914,368	0.0312	0.6582
210	5,628,348	6,829,151	693,900	13,151,399	0.0179	0.6762
220	4,050,496	2,427,517	456,291	6,934,303	0.0095	0.6856
230	5,018,557	1,907,864	57,394	6,983,815	0.0095	0.6952
240	1,208,175	1,100,822	90,971	2,399,967	0.0033	0.6984
250	1,429,292	1,046,082	33,577	2,508,951	0.0034	0.7018
260	1,769,670	1,917,719	33,577	3,720,966	0.0051	0.7069
270	2,736,049	2,132,424	67,154	4,935,628	0.0067	0.7136
280	3,855,072	3,221,397	0	7,076,470	0.0096	0.7233
290	3,645,335	3,006,519	33,577	6,685,431	0.0091	0.7324
300	4,826,178	3,973,447	33,577	8,833,202	0.0120	0.7445
310	3,824,816	3,148,177	33,577	7,006,570	0.0096	0.7540
320	4,610,140	3,366,421	33,577	8,010,138	0.0109	0.7649
330	4,190,253	4,046,386	201,463	8,438,102	0.0115	0.7764
340	3,483,336	3,569,734	33,577	7,086,647	0.0097	0.7861
350	3,707,957	2,810,124	0	6,518,081	0.0089	0.7950
360	2,716,590	2,477,463	100,731	5,294,784	0.0072	0.8022
370	2,811,206	2,495,503	33,577	5,340,286	0.0073	0.8095
380	2,414,237	1,950,973	0	4,365,210	0.0060	0.8154
390	1,827,033	1,635,345	0	3,462,379	0.0047	0.8202
400	2,361,697	1,768,444	67,154	4,197,295	0.0057	0.8259
410	2,252,134	2,132,366	33,577	4,418,076	0.0060	0.8319
420	2,568,005	1,693,585	0	4,261,590	0.0058	0.8377
430	1,996,590	1,853,481	67,154	3,917,226	0.0053	0.8431
440	2,034,118	2,671,284	0	4,705,403	0.0064	0.8495
450	2,254,673	2,076,271	0	4,330,944	0.0059	0.8554
460	2,580,175	2,285,744	0	4,865,919	0.0066	0.8620
470	2,558,900	1,971,789	0	4,530,689	0.0062	0.8682
480	2,079,241	2,424,355	67,154	4,570,750	0.0062	0.8744
490	1,979,458	1,482,119	0	3,461,577	0.0047	0.8792
500	2,289,856	2,008,937	0	4,298,793	0.0059	0.8850
510	2,191,271	2,034,597	0	4,225,868	0.0058	0.8908
520	2,448,737	2,218,629	0	4,667,366	0.0064	0.8971
530	2,213,031	1,664,221	0	3,877,253	0.0053	0.9024
540	2,062,103	2,044,337	0	4,106,440	0.0056	0.9080

Appendix D Table 2. -- Continued.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
550	2,116,472	1,266,313	0	3,382,785	0.0046	0.9126
560	1,724,866	1,381,334	0	3,106,200	0.0042	0.9169
570	1,673,856	1,084,519	0	2,758,375	0.0038	0.9206
580	1,473,439	1,489,095	0	2,962,535	0.0040	0.9247
590	1,421,217	1,249,225	0	2,670,442	0.0036	0.9283
600	1,963,756	1,514,675	0	3,478,431	0.0047	0.9331
610	1,467,602	1,383,539	0	2,851,141	0.0039	0.9369
620	1,796,740	1,656,542	0	3,453,282	0.0047	0.9417
630	1,595,877	1,205,882	0	2,801,759	0.0038	0.9455
640	1,454,878	1,370,114	0	2,824,992	0.0039	0.9493
650	1,310,318	1,273,105	0	2,583,423	0.0035	0.9529
660	1,005,333	1,619,416	0	2,624,749	0.0036	0.9564
670	744,128	1,107,084	0	1,851,212	0.0025	0.9590
680	1,208,518	1,254,447	0	2,462,965	0.0034	0.9623
690	1,137,864	1,143,040	0	2,280,904	0.0031	0.9654
700	867,092	924,334	0	1,791,426	0.0024	0.9679
710	768,090	581,190	0	1,349,280	0.0018	0.9697
720	895,947	905,822	28,852	1,830,621	0.0025	0.9722
730	709,010	623,929	0	1,332,939	0.0018	0.9740
740	650,106	1,480,588	33,577	2,164,271	0.0030	0.9770
750	355,758	861,372	0	1,217,130	0.0017	0.9786
760	559,895	511,939	0	1,071,834	0.0015	0.9801
770	535,130	245,889	0	781,019	0.0011	0.9812
780	259,128	437,992	0	697,120	0.0010	0.9821
790	352,727	646,363	0	999,090	0.0014	0.9835
800	351,629	606,299	0	957,928	0.0013	0.9848
810	793,613	246,232	0	1,039,845	0.0014	0.9862
820	297,158	273,330	0	570,488	0.0008	0.9870
830	197,937	400,549	0	598,487	0.0008	0.9878
840	397,650	108,076	0	505,725	0.0007	0.9885
850	841,580	590,002	0	1,431,582	0.0020	0.9904
860	209,315	401,636	0	610,951	0.0008	0.9913
870	199,272	255,505	0	454,777	0.0006	0.9919
880	124,495	381,816	0	506,311	0.0007	0.9926
890	412,647	434,331	0	846,978	0.0012	0.9937
900	196,904	385,928	0	582,832	0.0008	0.9945
910	225,732	492,265	33,577	751,573	0.0010	0.9955
920	107,792	372,059	0	479,851	0.0007	0.9962
930	59,754	129,482	0	189,237	0.0003	0.9965
940	63,894	386,798	0	450,692	0.0006	0.9971
950	95,468	114,079	0	209,547	0.0003	0.9974
960	124,608	191,064	0	315,672	0.0004	0.9978
970	29,556	102,299	0	131,856	0.0002	0.9980
980	58,970	99,896	0	158,866	0.0002	0.9982
990	0	142,978	0	142,978	0.0002	0.9984
1000	104,385	58,106	0	162,491	0.0002	0.9986
1010	29,556	72,294	0	101,851	0.0001	0.9987
1020	0	452,264	0	452,264	0.0006	0.9994
1030	29,556	44,570	0	74,126	0.0001	0.9995
1040	0	136,527	0	136,527	0.0002	0.9996
1060	28,313	84,048	0	112,361	0.0002	0.9998
1090	0	27,871	0	27,871	0.0000	0.9998
Total	208,223,605	179,500,914	345,649,625	733,374,144	1.0000	1.0000

Appendix D Table 3. -- Population estimates by sex and size for **yellowfin sole** (*Limanda aspera*) from the 2007 eastern Bering Sea bottom trawl survey.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
50	0	227,246	0	227,246	0.0000	0.0000
60	0	0	0	0	0.0000	0.0000
80	648,438	510,952	952,392	2,111,782	0.0002	0.0003
90	1,728,952	2,441,053	582,210	4,752,215	0.0006	0.0008
100	10,753,768	9,578,551	0	20,332,319	0.0024	0.0032
110	38,964,494	25,757,936	0	64,722,430	0.0076	0.0108
120	64,432,535	71,294,180	0	135,726,715	0.0159	0.0268
130	80,565,701	81,241,494	0	161,807,195	0.0190	0.0458
140	87,227,199	79,598,520	0	166,825,719	0.0196	0.0654
150	107,079,867	85,824,475	0	192,904,342	0.0227	0.0880
160	139,069,368	117,282,913	0	256,352,281	0.0301	0.1181
170	121,753,700	113,424,195	0	235,177,895	0.0276	0.1457
180	116,910,752	119,712,646	0	236,623,398	0.0278	0.1735
190	138,114,313	110,851,684	0	248,965,997	0.0292	0.2028
200	126,550,526	119,782,188	0	246,332,714	0.0289	0.2317
210	133,361,717	116,701,243	0	250,062,960	0.0294	0.2610
220	141,318,119	130,724,254	0	272,042,372	0.0319	0.2930
230	156,596,720	151,441,498	0	308,038,219	0.0362	0.3292
240	193,576,419	189,929,334	63,224	383,568,978	0.0450	0.3742
250	195,455,714	196,715,604	42,150	392,213,468	0.0461	0.4203
260	211,303,319	211,983,592	105,374	423,392,285	0.0497	0.4700
270	233,223,338	198,894,909	0	432,118,246	0.0507	0.5207
280	276,747,436	215,284,458	126,449	492,158,343	0.0578	0.5785
290	243,714,867	187,066,389	0	430,781,256	0.0506	0.6291
300	267,435,160	228,307,359	0	495,742,520	0.0582	0.6873
310	265,493,831	226,027,738	0	491,521,568	0.0577	0.7451
320	252,664,745	240,277,828	63,224	493,005,797	0.0579	0.8029
330	212,537,301	266,482,780	0	479,020,081	0.0563	0.8592
340	147,579,197	251,783,911	21,075	399,384,183	0.0469	0.9061
350	66,035,897	231,240,786	0	297,276,683	0.0349	0.9410
360	28,805,787	175,825,760	0	204,631,546	0.0240	0.9650
370	15,547,063	118,490,674	21,075	134,058,812	0.0157	0.9808
380	3,710,831	76,405,041	21,075	80,136,948	0.0094	0.9902
390	1,450,476	45,372,554	0	46,823,030	0.0055	0.9957
400	732,939	20,046,713	0	20,779,652	0.0024	0.9981
410	453,798	7,262,544	0	7,716,342	0.0009	0.9990
420	0	4,881,528	0	4,881,528	0.0006	0.9996
430	0	1,058,667	0	1,058,667	0.0001	0.9997
440	0	780,150	0	780,150	0.0001	0.9998
450	0	53,399	0	53,399	0.0000	0.9998
460	0	831,152	0	831,152	0.0001	0.9999
560	0	276,206	0	276,206	0.0000	1.0000
Total	4,081,544,286	4,431,850,897	2,104,262	8,515,499,446	1.0000	1.0000

Appendix D Table 4. -- Population estimates by sex and size for **northern** and **southern rock sole** (*Lepidopsetta* spp.) from the 2006 eastern Bering Sea bottom trawl survey.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
70	639,686	0	794,038	1,433,724	0.0001	0.0001
80	7,977,827	4,924,190	4,519,350	17,421,367	0.0016	0.0017
90	37,277,182	15,093,256	18,326,564	70,697,002	0.0064	0.0082
100	67,879,135	36,083,190	27,240,181	131,202,506	0.0120	0.0201
110	123,655,637	88,161,810	32,780,115	244,597,562	0.0223	0.0424
120	204,379,553	137,998,007	59,345,084	401,722,644	0.0366	0.0790
130	268,454,708	201,801,122	99,098,628	569,354,457	0.0519	0.1309
140	268,731,042	233,592,435	66,173,626	568,497,103	0.0518	0.1827
150	300,963,720	195,684,637	76,130,537	572,778,894	0.0522	0.2349
160	287,348,429	231,640,926	30,838,578	549,827,933	0.0501	0.2850
170	274,392,577	208,126,032	19,032,968	501,551,576	0.0457	0.3307
180	236,545,163	222,695,039	3,377,669	462,617,872	0.0422	0.3729
190	257,752,545	176,723,674	1,823,658	436,299,877	0.0398	0.4127
200	216,103,369	182,830,622	0	398,933,991	0.0364	0.4490
210	250,620,871	182,260,750	0	432,881,620	0.0395	0.4885
220	210,793,665	157,789,908	0	368,583,573	0.0336	0.5221
230	218,950,100	166,047,573	797,374	385,795,048	0.0352	0.5572
240	220,565,155	173,606,260	0	394,171,415	0.0359	0.5931
250	186,570,354	192,786,770	0	379,357,125	0.0346	0.6277
260	193,685,805	139,774,735	0	333,460,540	0.0304	0.6581
270	244,996,257	154,190,061	0	399,186,318	0.0364	0.6945
280	287,875,733	135,688,777	0	423,564,510	0.0386	0.7331
290	312,892,906	120,010,630	0	432,903,536	0.0395	0.7725
300	248,352,720	116,811,406	0	365,164,127	0.0333	0.8058
310	159,392,941	127,838,740	0	287,231,680	0.0262	0.8320
320	92,736,228	139,080,662	0	231,816,891	0.0211	0.8531
330	51,759,506	174,765,985	0	226,525,491	0.0206	0.8738
340	24,984,746	229,797,615	149,111	254,931,472	0.0232	0.8970
350	10,850,074	258,831,721	0	269,681,795	0.0246	0.9216
360	4,402,661	301,760,308	0	306,162,969	0.0279	0.9495
370	2,312,556	204,666,841	745,556	207,724,953	0.0189	0.9684
380	876,284	162,942,160	0	163,818,444	0.0149	0.9833
390	836,500	88,135,615	0	88,972,115	0.0081	0.9915
400	261,259	43,261,598	0	43,522,857	0.0040	0.9954
410	0	19,353,719	0	19,353,719	0.0018	0.9972
420	0	12,014,712	0	12,014,712	0.0011	0.9983
430	420,422	11,515,004	0	11,935,426	0.0011	0.9994
440	0	4,173,666	0	4,173,666	0.0004	0.9997
450	0	1,876,066	0	1,876,066	0.0002	0.9999
460	0	690,698	0	690,698	0.0001	1.0000
470	191,104	0	0	191,104	0.0000	1.0000
Total	5,276,428,422	5,255,026,919	441,173,037	10,972,628,378	1.0000	1.0000

Appendix D Table 5. -- Population estimates by sex and size for **flathead sole** and **Bering flounder** (*Hippoglossoides* spp.) from the 2007 eastern Bering Sea bottom trawl survey.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
50	0	0	180,892	180,892	0.0001	0.0001
60	0	106,053	801,975	908,028	0.0005	0.0006
70	0	0	536,379	536,379	0.0003	0.0009
80	29,020	668,422	3,189,662	3,887,103	0.0021	0.0030
90	2,460,551	990,355	2,897,604	6,348,509	0.0034	0.0064
100	1,821,225	2,019,534	2,464,698	6,305,456	0.0034	0.0097
110	1,719,395	2,030,014	1,602,689	5,352,098	0.0029	0.0126
120	3,073,732	3,552,643	1,805,697	8,432,073	0.0045	0.0171
130	2,507,847	3,261,845	1,993,872	7,763,564	0.0042	0.0213
140	2,993,834	3,201,523	544,328	6,739,685	0.0036	0.0249
150	5,763,746	4,561,386	253,706	10,578,838	0.0057	0.0305
160	7,708,215	7,028,404	554,233	15,290,852	0.0082	0.0387
170	13,491,230	11,991,959	350,308	25,833,496	0.0138	0.0526
180	24,745,087	15,599,234	1,226,077	41,570,398	0.0223	0.0748
190	23,048,179	23,621,607	875,769	47,545,556	0.0255	0.1003
200	33,474,047	35,458,393	1,226,077	70,158,517	0.0376	0.1379
210	39,134,516	33,422,508	875,769	73,432,793	0.0393	0.1772
220	41,605,275	37,149,663	1,050,923	79,805,861	0.0427	0.2199
230	30,047,292	28,445,430	875,769	59,368,491	0.0318	0.2517
240	36,163,289	30,917,456	1,401,231	68,481,977	0.0367	0.2884
250	35,976,872	26,829,063	175,154	62,981,089	0.0337	0.3221
260	39,530,003	35,819,641	525,462	75,875,105	0.0406	0.3628
270	39,304,150	29,092,643	175,154	68,571,947	0.0367	0.3995
280	41,620,672	33,712,887	350,308	75,683,867	0.0405	0.4400
290	45,197,280	32,556,506	700,615	78,454,402	0.0420	0.4821
300	51,229,112	37,504,392	1,401,231	90,134,735	0.0483	0.5303
310	60,088,444	38,832,354	525,462	99,446,260	0.0533	0.5836
320	62,248,871	40,213,440	1,050,923	103,513,234	0.0554	0.6390
330	50,190,921	41,680,970	525,462	92,397,353	0.0495	0.6885
340	51,809,420	47,842,839	700,615	100,352,874	0.0537	0.7423
350	42,331,438	41,553,051	0	83,884,489	0.0449	0.7872
360	32,809,646	43,564,540	700,615	77,074,802	0.0413	0.8285
370	27,200,056	33,367,915	175,154	60,743,124	0.0325	0.8610
380	21,741,867	29,587,886	175,154	51,504,907	0.0276	0.8886
390	11,416,699	26,437,356	0	37,854,055	0.0203	0.9088
400	8,854,807	25,729,534	0	34,584,340	0.0185	0.9274
410	4,398,913	18,808,736	175,154	23,382,803	0.0125	0.9399
420	2,683,963	23,470,271	0	26,154,235	0.0140	0.9539
430	1,228,303	21,704,421	0	22,932,724	0.0123	0.9662
440	38,426	16,637,768	0	16,676,194	0.0089	0.9751
450	155,494	13,569,859	0	13,725,353	0.0074	0.9825
460	0	12,203,943	0	12,203,943	0.0065	0.9890
470	19,213	5,787,302	0	5,806,515	0.0031	0.9921
480	73,016	8,411,067	0	8,484,083	0.0045	0.9967
490	0	3,232,330	0	3,232,330	0.0017	0.9984
500	0	1,734,649	0	1,734,649	0.0009	0.9993
510	0	627,799	0	627,799	0.0003	0.9996
520	0	657,406	0	657,406	0.0004	1.0000
Total	899,934,069	935,196,993	32,064,120	1,867,195,183	1.0000	1.0000

Appendix D Table 6. -- Population estimates by sex and size for **Alaska plaice** (*Pleuronectes quadrituberculatus*) from the 2007 eastern Bering Sea bottom trawl survey.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
90	0	101,155	0	101,155	0.0001	0.0001
100	127,301	252,888	0	380,188	0.0005	0.0006
110	0	1,446,512	0	1,446,512	0.0018	0.0024
120	1,510,730	2,059,543	0	3,570,273	0.0044	0.0068
130	610,074	1,334,617	0	1,944,691	0.0024	0.0092
140	2,574,560	1,380,579	0	3,955,138	0.0049	0.0141
150	3,279,862	2,287,776	0	5,567,638	0.0069	0.0210
160	5,385,970	3,429,769	0	8,815,739	0.0109	0.0319
170	8,308,990	4,293,957	0	12,602,948	0.0156	0.0475
180	7,281,996	4,195,938	0	11,477,935	0.0142	0.0617
190	9,011,105	6,343,025	0	15,354,130	0.0190	0.0807
200	9,857,517	6,972,240	0	16,829,758	0.0208	0.1015
210	9,967,563	6,996,104	0	16,963,667	0.0210	0.1224
220	12,179,236	10,946,115	0	23,125,351	0.0286	0.1510
230	10,379,208	8,304,214	0	18,683,422	0.0231	0.1742
240	11,785,464	7,492,998	52,567	19,331,029	0.0239	0.1981
250	14,316,878	9,628,570	0	23,945,448	0.0296	0.2277
260	14,619,454	9,965,218	0	24,584,671	0.0304	0.2581
270	12,850,551	9,075,133	106,641	22,032,325	0.0272	0.2853
280	16,090,725	14,090,715	158,455	30,339,894	0.0375	0.3228
290	17,462,294	10,482,479	265,096	28,209,869	0.0349	0.3577
300	22,455,184	13,301,762	211,775	35,968,721	0.0445	0.4022
310	21,811,759	12,475,962	264,342	34,552,063	0.0427	0.4449
320	28,877,204	14,343,272	476,871	43,697,347	0.0540	0.4990
330	25,853,163	9,408,756	211,775	35,473,695	0.0439	0.5429
340	36,390,756	14,045,449	424,304	50,860,509	0.0629	0.6058
350	26,833,409	10,283,964	581,252	37,698,625	0.0466	0.6524
360	31,870,410	13,854,160	159,962	45,884,532	0.0567	0.7091
370	16,721,261	11,100,421	317,663	28,139,346	0.0348	0.7439
380	13,780,211	14,098,390	159,962	28,038,563	0.0347	0.7786
390	6,986,510	10,361,877	317,663	17,666,050	0.0218	0.8004
400	4,038,985	16,823,343	105,134	20,967,462	0.0259	0.8264
410	2,412,266	14,066,800	425,058	16,904,124	0.0209	0.8473
420	842,634	18,096,453	53,321	18,992,407	0.0235	0.8708
430	294,617	14,792,845	318,417	15,405,878	0.0191	0.8898
440	283,720	16,765,371	52,567	17,101,658	0.0211	0.9110
450	107,482	13,605,909	106,641	13,820,032	0.0171	0.9281
460	207,111	13,490,866	159,962	13,857,939	0.0171	0.9452
470	0	10,666,939	53,321	10,720,259	0.0133	0.9585
480	0	9,240,872	213,283	9,454,154	0.0117	0.9702
490	0	7,275,339	53,321	7,328,659	0.0091	0.9792
500	0	5,930,305	0	5,930,305	0.0073	0.9866
510	27,335	4,078,611	0	4,105,947	0.0051	0.9916
520	65,606	2,473,681	0	2,539,287	0.0031	0.9948
530	0	1,761,115	0	1,761,115	0.0022	0.9969

Appendix D Table 6. -- Continued.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
540	0	1,128,183	0	1,128,183	0.0014	0.9983
550	0	328,065	0	328,065	0.0004	0.9988
560	0	567,524	0	567,524	0.0007	0.9995
570	0	240,960	0	240,960	0.0003	0.9998
580	0	72,827	0	72,827	0.0001	0.9998
600	0	128,861	0	128,861	0.0002	1.0000
Total	407,459,099	395,888,426	5,249,355	808,596,880	1.0000	1.0000

Appendix D Table 7. -- Population estimates by sex and size for **Greenland turbot** (*Reinhardtius hippoglossoides*) from the 2007 eastern Bering Sea bottom trawl survey.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
90	30,179	0	85,555	115,734	0.0125	0.0125
100	138,673	27,019	512,477	678,169	0.0730	0.0854
110	112,825	110,968	637,818	861,611	0.0927	0.1781
120	217,841	198,600	414,423	830,863	0.0894	0.2675
130	278,890	148,600	95,022	522,511	0.0562	0.3238
140	18,022	0	0	18,022	0.0019	0.3257
150	29,230	0	0	29,230	0.0031	0.3288
170	17,959	0	0	17,959	0.0000	0.3288
200	19,045	0	0	19,045	0.0019	0.3308
210	0	0	0	0	0.0000	0.3308
220	0	31,074	0	31,074	0.0000	0.3308
240	0	29,230	0	29,230	0.0020	0.3328
250	60,023	0	0	60,023	0.0000	0.3328
280	50,353	0	0	50,353	0.0033	0.3362
290	0	31,074	0	31,074	0.0000	0.3362
320	30,920	0	0	30,920	0.0031	0.3393
330	58,008	0	0	58,008	0.0065	0.3458
380	0	29,151	0	29,151	0.0000	0.3458
390	106,786	29,151	0	135,937	0.0000	0.3458
400	31,270	29,230	0	60,501	0.0054	0.3512
410	0	31,074	0	31,074	0.0033	0.3545
420	31,270	95,605	0	126,875	0.0000	0.3545
430	96,592	31,074	0	127,665	0.0000	0.3545
440	154,331	0	0	154,331	0.0033	0.3579
450	91,644	199,325	0	290,969	0.0062	0.3641
460	183,137	225,513	0	408,650	0.0000	0.3641
470	221,692	256,522	0	478,214	0.0000	0.3641
480	222,552	107,816	0	330,367	0.0000	0.3641
490	244,293	150,010	0	394,302	0.0000	0.3641
500	118,689	203,458	0	322,147	0.0031	0.3672
510	17,830	109,135	0	126,965	0.0146	0.3819
520	157,342	283,383	0	440,725	0.0065	0.3884
530	123,756	138,811	0	262,567	0.0033	0.3917
540	63,869	61,715	0	125,584	0.0137	0.4054
550	51,183	60,175	0	111,358	0.0137	0.4191
560	28,023	76,229	0	104,252	0.0166	0.4357
570	93,109	29,103	0	122,213	0.0313	0.4670
580	29,275	48,808	0	78,083	0.0440	0.5110
590	31,270	0	0	31,270	0.0515	0.5625
600	0	59,286	0	59,286	0.0355	0.5980
610	0	66,696	0	66,696	0.0424	0.6404
620	29,643	0	0	29,643	0.0347	0.6751
630	0	61,773	0	61,773	0.0137	0.6888
640	0	29,103	0	29,103	0.0474	0.7362
650	0	32,612	0	32,612	0.0283	0.7644
670	0	60,913	0	60,913	0.0120	0.7764

Appendix D Table 7. -- Continued.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
680	0	0	0	0	0.0112	0.7876
690	27,019	60,834	0	87,853	0.0132	0.8008
710	59,031	0	0	59,031	0.0034	0.8042
720	29,275	31,270	0	60,546	0.0064	0.8105
730	60,195	0	0	60,195	0.0072	0.8177
740	29,151	0	0	29,151	0.0032	0.8209
750	29,275	0	0	29,275	0.0066	0.8275
760	32,612	28,905	0	61,516	0.0031	0.8307
770	19,090	0	0	19,090	0.0035	0.8342
780	31,731	0	0	31,731	0.0000	0.8342
790	58,066	0	0	58,066	0.0066	0.8407
800	0	28,023	0	28,023	0.0000	0.8407
810	29,275	0	0	29,275	0.0095	0.8502
820	31,731	31,731	0	63,462	0.0000	0.8502
840	60,635	29,103	0	89,739	0.0065	0.8567
850	0	31,270	0	31,270	0.0065	0.8632
860	0	84,407	0	84,407	0.0031	0.8663
870	0	81,931	0	81,931	0.0032	0.8695
890	0	31,731	0	31,731	0.0021	0.8715
900	0	22,162	0	22,162	0.0034	0.8749
910	0	29,943	0	29,943	0.0062	0.8812
920	0	86,323	0	86,323	0.0030	0.8842
930	0	64,103	0	64,103	0.0032	0.8874
940	0	50,690	0	50,690	0.0068	0.8942
950	0	86,893	0	86,893	0.0000	0.8942
Total	3,686,610	3,861,553	1,745,294	9,293,457	1.0000	1.0000

Appendix D Table 8. -- Population estimates by sex and size for **arrowtooth flounder** (*Atheresthes stomias*) from the 2007 eastern Bering Sea bottom trawl survey.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
80	74,757	0	57,165	131,922	0.0001	0.0001
90	108,751	234,171	120,865	463,787	0.0004	0.0006
100	784,604	153,781	661,484	1,599,870	0.0015	0.0021
110	1,469,078	1,245,513	1,929,329	4,643,920	0.0045	0.0066
120	1,062,989	1,690,156	807,852	3,560,997	0.0034	0.0100
130	229,708	1,086,811	312,951	1,629,470	0.0016	0.0115
140	2,443,397	4,063,791	469,065	6,976,252	0.0067	0.0182
150	5,549,059	11,240,554	1,291,991	18,081,603	0.0173	0.0356
160	11,954,815	20,592,999	3,347,358	35,895,172	0.0344	0.0700
170	7,921,024	25,422,361	979,276	34,322,661	0.0329	0.1029
180	11,476,485	20,683,206	982,583	33,142,275	0.0318	0.1346
190	4,696,340	15,901,661	535,473	21,133,474	0.0203	0.1549
200	4,842,850	13,506,990	446,228	18,796,068	0.0180	0.1729
210	4,148,551	11,419,875	624,719	16,193,145	0.0155	0.1884
220	5,854,614	12,626,453	0	18,481,068	0.0177	0.2061
230	3,988,137	7,912,853	0	11,900,990	0.0114	0.2175
240	5,875,504	8,593,065	27,509	14,496,078	0.0139	0.2314
250	5,562,381	7,973,098	77,901	13,613,380	0.0130	0.2445
260	7,729,224	9,807,572	155,803	17,692,599	0.0170	0.2614
270	5,392,429	9,557,723	155,803	15,105,955	0.0145	0.2759
280	7,637,841	16,131,036	0	23,768,877	0.0228	0.2987
290	11,443,244	16,542,039	155,803	28,141,086	0.0270	0.3257
300	13,950,184	18,124,762	77,901	32,152,847	0.0308	0.3565
310	13,709,242	22,012,308	389,507	36,111,057	0.0346	0.3911
320	21,160,544	22,625,607	233,704	44,019,855	0.0422	0.4333
330	18,228,301	27,481,852	467,408	46,177,560	0.0443	0.4776
340	19,511,725	31,065,765	233,704	50,811,194	0.0487	0.5263
350	18,527,259	32,430,809	623,211	51,581,278	0.0494	0.5757
360	19,162,678	32,096,427	77,901	51,337,007	0.0492	0.6249
370	12,359,803	25,946,028	389,507	38,695,337	0.0371	0.6620
380	15,895,253	24,457,093	0	40,352,346	0.0387	0.7007
390	11,719,419	23,373,791	155,803	35,249,012	0.0338	0.7345
400	8,855,384	23,195,205	155,803	32,206,392	0.0309	0.7654
410	8,291,704	19,910,777	77,901	28,280,382	0.0271	0.7925
420	6,516,647	18,964,199	77,901	25,558,747	0.0245	0.8170
430	6,636,314	17,359,052	0	23,995,366	0.0230	0.8400
440	3,566,601	16,617,910	77,901	20,262,412	0.0194	0.8594
450	1,604,678	16,141,870	0	17,746,549	0.0170	0.8764
460	1,389,073	14,106,799	0	15,495,872	0.0149	0.8913
470	1,351,998	13,854,831	0	15,206,830	0.0146	0.9058
480	1,427,108	11,442,268	77,901	12,947,278	0.0124	0.9182
490	1,008,782	8,372,377	0	9,381,159	0.0090	0.9272
500	718,088	10,337,505	0	11,055,593	0.0106	0.9378
510	269,417	6,932,666	0	7,202,083	0.0069	0.9447
520	1,039,645	7,658,377	0	8,698,022	0.0083	0.9531
530	176,801	6,160,811	0	6,337,612	0.0061	0.9592

Appendix D Table 8. -- Continued.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
540	204,379	4,589,116	0	4,793,496	0.0046	0.9637
550	487,997	3,155,770	0	3,643,767	0.0035	0.9672
560	0	4,202,579	0	4,202,579	0.0040	0.9713
570	92,693	3,151,587	0	3,244,279	0.0031	0.9744
580	0	2,987,952	0	2,987,952	0.0029	0.9772
590	0	2,797,547	77,901	2,875,448	0.0028	0.9800
600	0	2,161,243	0	2,161,243	0.0021	0.9821
610	0	2,506,056	0	2,506,056	0.0024	0.9845
620	92,693	2,831,536	0	2,924,229	0.0028	0.9873
630	0	1,676,915	0	1,676,915	0.0016	0.9889
640	0	2,156,987	0	2,156,987	0.0021	0.9910
650	0	2,088,556	0	2,088,556	0.0020	0.9930
660	0	1,709,979	0	1,709,979	0.0016	0.9946
670	0	1,260,258	0	1,260,258	0.0012	0.9958
680	0	911,221	0	911,221	0.0009	0.9967
690	0	1,153,629	0	1,153,629	0.0011	0.9978
700	0	514,241	0	514,241	0.0005	0.9983
710	0	483,717	0	483,717	0.0005	0.9987
720	0	382,770	0	382,770	0.0004	0.9991
730	0	59,071	0	59,071	0.0001	0.9992
740	0	157,266	0	157,266	0.0002	0.9993
750	0	54,840	0	54,840	0.0001	0.9994
760	0	135,389	0	135,389	0.0001	0.9995
770	0	169,766	0	169,766	0.0002	0.9997
780	0	234,074	0	234,074	0.0002	0.9999
790	0	27,566	0	27,566	0.0000	0.9999
840	0	97,769	0	97,769	0.0001	1.0000
Total	318,200,188	708,712,199	16,333,113	1,043,245,499	1.0000	1.0000

Appendix D Table 9. -- Population estimates by sex and size for **Kamchatka flounder** (*Atheresthes evermanni*) from the 2006 eastern Bering Sea bottom trawl survey.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
100	222,714	27,120	0	249,835	0.0017	0.0017
110	94,488	31,585	30,219	156,292	0.0011	0.0028
120	98,872	27,120	0	125,992	0.0009	0.0037
130	68,736	0	0	68,736	0.0005	0.0041
140	341,141	140,668	58,415	540,224	0.0037	0.0079
150	671,498	351,280	59,427	1,082,205	0.0075	0.0153
160	2,555,832	1,232,585	140,254	3,928,671	0.0271	0.0425
170	2,003,365	1,528,392	30,219	3,561,976	0.0246	0.0671
180	1,155,114	1,456,097	0	2,611,211	0.0180	0.0851
190	570,166	566,137	0	1,136,303	0.0078	0.0929
200	95,179	212,695	0	307,874	0.0021	0.0951
210	187,115	134,330	0	321,445	0.0022	0.0973
220	367,893	265,018	0	632,911	0.0044	0.1016
230	335,171	529,407	0	864,578	0.0060	0.1076
240	536,603	639,628	0	1,176,231	0.0081	0.1157
250	656,418	362,654	0	1,019,071	0.0070	0.1228
260	1,033,397	767,708	0	1,801,105	0.0124	0.1352
270	624,539	732,873	0	1,357,411	0.0094	0.1446
280	990,986	1,158,082	0	2,149,068	0.0148	0.1594
290	2,012,501	1,975,930	0	3,988,431	0.0275	0.1869
300	2,505,798	2,840,350	0	5,346,148	0.0369	0.2239
310	3,538,786	2,891,331	0	6,430,117	0.0444	0.2682
320	4,825,783	4,987,774	0	9,813,556	0.0677	0.3360
330	5,278,782	4,905,448	0	10,184,230	0.0703	0.4063
340	5,668,277	5,214,372	0	10,882,648	0.0751	0.4814
350	4,679,592	4,621,633	0	9,301,225	0.0642	0.5457
360	6,340,846	5,165,300	0	11,506,146	0.0794	0.6251
370	5,591,529	6,455,787	0	12,047,316	0.0832	0.7083
380	4,836,403	5,419,067	0	10,255,470	0.0708	0.7791
390	3,291,595	4,120,381	0	7,411,976	0.0512	0.8302
400	3,396,430	3,754,622	0	7,151,052	0.0494	0.8796
410	496,297	2,137,180	0	2,633,477	0.0182	0.8978
420	1,549,834	2,344,228	0	3,894,063	0.0269	0.9247
430	351,478	851,316	0	1,202,794	0.0083	0.9330
440	516,761	1,061,680	0	1,578,440	0.0109	0.9439
450	604,813	518,368	0	1,123,181	0.0078	0.9516
460	103,071	282,354	0	385,425	0.0027	0.9543
470	232,664	679,001	0	911,665	0.0063	0.9606
480	64,258	59,309	0	123,567	0.0009	0.9614
490	239,972	343,780	0	583,752	0.0040	0.9655
500	133,148	226,076	0	359,225	0.0025	0.9679
510	491,478	523,952	0	1,015,431	0.0070	0.9749
520	35,966	166,015	0	201,980	0.0014	0.9763
530	176,037	60,834	0	236,872	0.0016	0.9780
540	0	61,718	0	61,718	0.0004	0.9784
550	29,154	122,705	0	151,858	0.0010	0.9794

Appendix D Table 9. -- Continued.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
560	89,894	30,210	0	120,104	0.0008	0.9803
570	84,843	562,865	0	647,708	0.0045	0.9847
590	0	479,444	0	479,444	0.0033	0.9881
600	50,353	120,004	0	170,356	0.0012	0.9892
610	35,661	130,711	0	166,372	0.0011	0.9904
620	0	29,070	0	29,070	0.0002	0.9906
650	0	178,188	0	178,188	0.0012	0.9918
670	0	233,940	0	233,940	0.0016	0.9934
690	0	145,056	0	145,056	0.0010	0.9944
700	0	27,566	0	27,566	0.0002	0.9946
Total	69,861,230	74,670,193	318,533	144,849,957	1.0000	1.0000

Appendix D Table 10. -- Population estimates by sex and size for **Pacific halibut** (*Hippoglossus stenolepis*) from the 2007 eastern Bering Sea bottom trawl survey.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
80	0	0	22,964	22,964	0.0002	0.0002
110	0	0	61,268	61,268	0.0005	0.0007
120	0	0	62,003	62,003	0.0005	0.0012
130	28,118	0	266,195	294,313	0.0025	0.0037
140	39,349	0	510,054	549,403	0.0046	0.0083
150	120,511	317,255	1,226,147	1,663,913	0.0139	0.0222
160	136,367	562,615	2,686,795	3,385,777	0.0283	0.0504
170	291,131	773,296	2,538,468	3,602,895	0.0301	0.0805
180	312,038	756,477	3,099,315	4,167,830	0.0348	0.1153
190	519,288	817,544	3,584,996	4,921,828	0.0411	0.1564
200	645,932	603,229	3,748,145	4,997,306	0.0417	0.1981
210	497,472	556,490	3,061,348	4,115,310	0.0344	0.2325
220	425,689	205,882	1,707,201	2,338,773	0.0195	0.2520
230	177,054	263,989	1,113,349	1,554,392	0.0130	0.2650
240	143,727	136,875	654,761	935,364	0.0078	0.2728
250	146,412	131,569	372,339	650,320	0.0054	0.2782
260	135,746	86,597	299,607	521,951	0.0044	0.2826
270	117,358	57,149	236,207	410,714	0.0034	0.2860
280	145,713	264,101	368,507	778,321	0.0065	0.2925
290	213,223	88,010	509,120	810,354	0.0068	0.2993
300	396,319	294,441	756,577	1,447,337	0.0121	0.3114
310	542,705	662,394	1,170,764	2,375,864	0.0198	0.3312
320	796,918	757,932	1,607,378	3,162,227	0.0264	0.3576
330	804,084	1,169,370	2,112,508	4,085,963	0.0341	0.3917
340	1,756,482	1,320,496	2,551,112	5,628,090	0.0470	0.4387
350	775,938	1,040,286	1,975,181	3,791,406	0.0317	0.4704
360	920,511	1,672,269	1,728,911	4,321,691	0.0361	0.5065
370	882,727	1,128,685	1,502,080	3,513,492	0.0293	0.5358
380	669,478	1,063,878	701,357	2,434,713	0.0203	0.5561
390	700,066	581,907	780,744	2,062,717	0.0172	0.5734
400	591,532	589,613	967,293	2,148,437	0.0179	0.5913
410	677,440	629,531	857,357	2,164,328	0.0181	0.6094
420	747,325	431,270	1,296,881	2,475,476	0.0207	0.6301
430	722,307	503,829	1,319,955	2,546,090	0.0213	0.6513
440	859,534	609,920	833,699	2,303,153	0.0192	0.6705
450	610,021	454,508	1,003,583	2,068,112	0.0173	0.6878
460	609,421	675,859	1,130,738	2,416,018	0.0202	0.7080
470	660,083	673,296	591,817	1,925,196	0.0161	0.7241
480	546,499	557,438	382,839	1,486,776	0.0124	0.7365
490	482,866	153,746	956,281	1,592,894	0.0133	0.7498
500	365,913	258,009	756,004	1,379,926	0.0115	0.7613
510	461,522	541,563	783,291	1,786,376	0.0149	0.7762
520	406,284	417,367	863,627	1,687,278	0.0141	0.7903
530	397,333	359,114	662,522	1,418,970	0.0118	0.8021
540	664,528	531,001	534,832	1,730,361	0.0144	0.8166
550	279,112	308,651	1,005,378	1,593,140	0.0133	0.8299

Appendix D Table 10. -- Continued.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
560	347,279	629,170	875,306	1,851,756	0.0155	0.8454
570	373,048	374,295	421,776	1,169,119	0.0098	0.8551
580	206,703	475,221	442,913	1,124,837	0.0094	0.8645
590	370,074	227,052	335,108	932,234	0.0078	0.8723
600	264,096	546,773	370,714	1,181,582	0.0099	0.8822
610	171,235	299,487	241,898	712,619	0.0060	0.8881
620	104,817	341,918	413,000	859,735	0.0072	0.8953
630	210,598	293,345	419,460	923,403	0.0077	0.9030
640	134,092	148,691	641,458	924,242	0.0077	0.9107
650	106,705	139,372	486,317	732,394	0.0061	0.9168
660	54,436	222,934	336,931	614,301	0.0051	0.9220
670	219,689	103,086	161,709	484,484	0.0040	0.9260
680	141,900	279,557	341,383	762,840	0.0064	0.9324
690	193,127	147,048	278,893	619,068	0.0052	0.9375
700	49,568	190,317	164,209	404,095	0.0034	0.9409
710	109,209	67,902	188,094	365,206	0.0030	0.9440
720	145,313	29,279	87,599	262,191	0.0022	0.9462
730	57,796	103,784	452,410	613,991	0.0051	0.9513
740	55,662	108,796	200,444	364,902	0.0030	0.9543
750	58,876	57,310	119,657	235,843	0.0020	0.9563
760	99,074	88,074	117,986	305,135	0.0025	0.9589
770	101,456	84,052	45,342	230,851	0.0019	0.9608
780	47,682	28,759	85,655	162,095	0.0014	0.9621
790	83,468	121,083	117,871	322,422	0.0027	0.9648
800	0	59,986	114,893	174,879	0.0015	0.9663
810	0	29,237	139,190	168,427	0.0014	0.9677
820	28,948	30,143	114,812	173,903	0.0015	0.9691
830	0	146,213	58,245	204,458	0.0017	0.9709
840	90,020	101,601	177,619	369,240	0.0031	0.9739
850	28,543	46,096	56,451	131,090	0.0011	0.9750
860	0	28,759	83,711	112,469	0.0009	0.9760
870	35,251	0	78,140	113,391	0.0009	0.9769
880	57,565	111,177	151,917	320,659	0.0027	0.9796
890	57,323	45,052	0	102,375	0.0009	0.9804
900	56,911	104,843	70,308	232,062	0.0019	0.9824
910	51,609	115,407	84,959	251,975	0.0021	0.9845
920	0	28,404	73,585	101,989	0.0009	0.9853
930	85,004	19,295	111,880	216,178	0.0018	0.9871
940	0	19,090	0	19,090	0.0002	0.9873
950	29,018	0	28,813	57,831	0.0005	0.9878
960	28,695	88,297	58,164	175,155	0.0015	0.9893
970	0	0	128,479	128,479	0.0011	0.9903
980	0	80,915	46,318	127,233	0.0011	0.9914
990	0	19,642	108,165	127,806	0.0011	0.9925
1000	29,070	16,358	85,129	130,556	0.0011	0.9935
1010	0	28,835	57,272	86,107	0.0007	0.9943
1020	0	44,324	18,959	63,283	0.0005	0.9948
1050	0	0	16,348	16,348	0.0001	0.9949

Appendix D Table 10. -- Continued.

Length (mm)	Males	Females	Unsexed	Total	Proportion	Cumulative proportion
1070	0	90,334	47,256	137,590	0.0011	0.9961
1090	0	0	27,735	27,735	0.0002	0.9963
1100	0	16,358	0	16,358	0.0001	0.9964
1120	30,049	15,431	16,698	62,179	0.0005	0.9970
1150	0	26,117	0	26,117	0.0002	0.9972
1180	30,724	0	0	30,724	0.0003	0.9974
1190	0	0	27,746	27,746	0.0002	0.9977
1200	0	29,875	0	29,875	0.0002	0.9979
1210	31,115	0	0	31,115	0.0003	0.9982
1220	0	58,779	0	58,779	0.0005	0.9987
1230	0	0	22,964	22,964	0.0002	0.9989
1280	0	30,236	0	30,236	0.0003	0.9991
1300	0	0	30,688	30,688	0.0003	0.9994
1340	0	27,271	0	27,271	0.0002	0.9996
1490	0	0	28,469	28,469	0.0002	0.9998
Total	25,797,827	29,592,478	64,372,541	119,762,846	1.0000	1.0000

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