



**Northwest and
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**Report to Industry:
Results of the 1987 U.S.-Japan
Coperative Bottom Trawl Survey
of the Central and Western Gulf of Alaska**

June 1988

This report does not constitute a publication and is for information only.
All data herein are to be considered provisional.

Report to Industry: Results of the 1987 U.S.-Japan
Cooperative Bottom Trawl Survey
of the Central and Western Gulf of Alaska

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INTRODUCTION

During the summer of 1987, the National Marine Fisheries Service's (NMFS), Northwest and Alaska Fisheries Center (NWAFC), Seattle, WA., in cooperation with the Fisheries Agency of Japan's (JFA), Far Seas Fisheries Research Laboratory (FSFRL), Shimizu, Japan, completed the second triennial groundfish resource assessment survey of the Gulf of Alaska (GOA). Survey operations in the central and western GOA were conducted by the NWAFC's Seattle based Resource Assessment and Conservation Engineering Division (RACE) and FSFRL's groundfish section. The eastern GOA was surveyed by the NWAFC's Auke Bay Alaska Laboratory (ABL) groundfish program¹.

From 22 May- 6 September, 828 bottom trawl hauls were attempted between the Islands of Four Mountains (170° W. long.) in the eastern Aleutian Islands and Cape St. Elias ($144^{\circ} 30'$ W. long.) in the central GOA at depths ranging from 11-411 fathoms, (20- 750 meters (m)) (Figure 1). The purpose of this report is to provide pertinent information collected by the research vessels operating in the central and western GOA to the U.S. fishing industry.

METHODS

Vessels and Gear Characteristics

The two U.S. charter vessels, the 24 m Nore-Dick and 26 m Lets Go are both house-forward style commercial stern trawlers powered with 500 and 565 horsepower (hp) main engines while the 50 m Taisei Maru No. 35, chartered by the Fisheries Agency of Japan, is a commercial stern trawler powered with a 3,400 hp main engine (Table 1). The Taisei Maru No. 35 had the highest average towing speed, 4.4 nautical miles per hour (nm/h), with the Lets Go and Nore-Dick being considerably slower with average towing speeds of 3.2 and 2.3 nm/h respectively.

1 Reports describing the fishing results of the 1984 or 1987 triennial surveys in the eastern Gulf of Alaska are available by contacting: Dr. George Snyder, NOAA, NMFS, Auke Bay Laboratory, P.O. Box 210155, Auke Bay, Alaska, 99821

All bottom trawling by the U.S. vessels was conducted with four seam, high-opening polyethylene Noreastern trawls equipped with rubber bobbin roller gear (Table 2, Appendix). This standard survey trawl has a 27.2 m headrope and 36.7 m footrope consisting of a 24.9 m center section with adjacent 5.9 m "flying wing" extensions. Accessory gear for the Noreastern trawl included 54.9 m triple dandylines and 1.8 X 2.7 m steel V-doors weighing approximately 700 kg each.

The Japanese trawl was also constructed of polyethylene webbing but had headrope-footrope dimensions of 55.6 and 65.0 m respectively and roller gear consisting of steel bobbins and automobile tires (Table 2, Appendix). This trawl was connected to 2.6 X 3.9 m curved steel doors, weighing approximately 3,200 kg each with a single and double dandyline arrangement totaling 156 m.

An acoustic net mensuration system consisting of a headrope unit and two wing units was used to measure the horizontal and vertical dimensions of the Noreastern trawl on the U.S. vessels while on the Japanese vessel, a headrope mounted transducer was used to measure the vertical opening of the trawl while a second transducer mounted sideways on the trawl wing was used to measure the horizontal trawl opening. Trawl width generally increased with increasing depth. The wingspread of the U.S. Noreastern trawl varied between 14.1- 15.5 m with the Lets Go exhibiting a larger spread by depth than the Nore-Dick. The wingspread of the Japanese trawl varied from 26.6 m at depths shallower than 100 m to 30.0 m at depths greater than 200 m.

Survey design and operations

The central and western Gulf of Alaska survey area was divided into 38 subareas based on bottom depth and geographical area (e.g. banks, gullies, flats, etc.). The sampling density assigned to each subarea was based on abundance estimates from the results of the 1984 U.S.-Japan cooperative bottom trawl survey of the central and western GOA. The uneven sampling distribution seen in Figure 1 is a result of assigning the highest sampling densities to subareas of highest estimated abundance.

During survey operations, the first trawlable location encountered near the selected station was sampled. In choosing the exact location, only the bottom conditions indicated by the echo sounder were considered and not the presence or absence of fish sign. Each survey station was scheduled to be towed for

one-half hour, however in cases where there was not enough trawlable bottom for a full one-half hour tow, shorter tows were completed. Net sonde units, mounted on the trawl headrope, were used to determine the on-bottom time of the trawl gear.

Catches weighing less than approximatley 1,000 kg were completely sorted to species and weighed. Larger catches were sampled to obtain a representative portion of approximately 1,000 kg. The numbers of individuals for each species and length distributions for selected species were determined from the total catch or from random samples. Additional biological data, age structures and other special collections were also made.

Fishing Power Experiment

To estimate the differences in the relative efficiencies between the vessels and trawls used during the survey, a side-by-side trawling experiment was conducted at five locations east of Kodiak Island which were selected on the basis of depth, trawlability and the presence of important groundfish species. The experimental design called for each vessel to fish simultaneously in the same direction for 15 minutes in one of three side-by-side positions then return to the starting point, change positions relative to the other vessels and complete another tow, repeating this process until each vessel had completed each relative position twice at each site. The Taisei Maru No. 35 completed 45 comparison tows followed by the Nore-Dick and Lets Go with 44 and 43 tows respectively.

The results of the experiment indicate that, with only the exception of shortraker rockfish, the U.S. vessels equipped with Noreastern trawls had a higher fishing efficiency than the Japanese vessel/trawl combination (Table 3). Also, the catch rates obtained during the experiment by the U.S. vessels were very similar for most species except Pacific halibut, rock sole and sablefish which may be partially due to differences in towing speeds.

The relative differences in fishing efficiencies between vessels were only used in the distribution and abundance plots (Section 1) which adjusted the catches for each species to the catch predicted for the most efficient trawl. For example, in the case of arrowtooth flounder, the Japanese survey catches were multiplied by 1.50 which is the mean CPUE for arrowtooth flounder obtained by the U.S. vessels during the fishing power experiment divided by the CPUE obtained by the Japanese vessel. The smallest multiplier used to expand the Japanese survey catches

was for sablefish (1.21) while the largest multiplier was for Dover sole (7.06).

ORGANIZATION OF REPORT AND DATA STANDARDIZATIONS

This report focuses on the catch data collected at individual stations and includes information for the principal species encountered during the survey. Section 1 contains distribution and relative abundance charts based on the adjusted catches of selected species at successfully completed survey stations. The fishing results for the Taisei Maru No. 35 are presented in Section 2 which consists of three parts: (1) station charts with haul numbers plotted adjacent to their respective geographical locations, (2) summary listings of species catches by haul, and (3) summary listings of catch rates in descending order of magnitude for selected species of commercial interest. Sections 3 and 4 containing the fishing results for the Lets Go and Nore-Dick respectively are similarly organized.

Explanations of the various adjustments and standardizations to the data are given in the title page of each section.

Explanations of the symbols and codes appearing in the fishing logs are summarized in Table 4.

The Appendix contains specifications and diagrams of the fishing gear used during the survey.

For further information regarding this survey contact:

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Resource Assessment and Conservation Engineering Division
Northwest and Alaska Fisheries Center
7600 Sand Point Way N.E.
BIN C15700, Bld. 4
Seattle, Washington 98115
(206) 526-4170

Table 1.-- Specifications of the research vessels participating in the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

Vessel Characteristics	<u>Nore-dick</u>	<u>Lets Go</u>	<u>Taisei Maru</u>
Overall length (m)	23.8	25.9	49.6
Gross tonnage	--	--	349.7
Shaft horsepower	500	565	3,400
Propeller	std	w/nozzle	var. pitch
Mean towing speed (nm/h)	2.31	3.20	4.38
Crew	4	4	24
Scientists	4	4	3

Table 2.-- Specifications of the fishing gear used during the 1987 triennial U.S.-Japan bottom trawl survey of the central and western Gulf of Alaska.

Gear Component	U.S. trawl	Japanese trawl
Material	poly	poly
Headrope length (m)	27.2	55.6
Footrope length (m)		
Center section	24.9	65.0
Wing sections (ea)	5.9	
Overall net length (m)	45.9	89.8
Codend:	single-layer	triple-layer
Mesh size of codend (mm)	89.0	100.0
Codend liner (mm)	38.0	
Diameter of bobbins (mm)	356-457	530
Diameter of tires (mm)	--	600
Dandyline length (m)	55	156
Otter doors (m x m)	1.83 x 2.74	2.55 x 3.85
Approximate weight of otter doors (kg)	727	3,200
wingspread (m)	14.1- 15.5	26.6- 30.0

Table 3.--Relative differences in fishing efficiencies observed during the 1987 fishing power comparison experiment (value of 1.00 is most efficient) and the resulting multipliers used to adjust survey catch rates shown in species distribution and abundance plots.

Species	<u>Relative differences between vessels</u>			<u>Catch multiplier</u>		
	U.S. 1	U.S. 2	Japan 3	U.S. 1	U.S. 2	Japan 3
Skates	1.00	.89	.52	--	--	1.82
Arrowtooth flounder	1.00	.96	.65	--	--	1.50
Pacific halibut	.41	1.00	.67	2.43	--	1.47
Flathead sole	1.00	.92	.46	--	--	2.08
Dover sole	1.00	.88	.13	--	--	7.06
Rex sole	1.00	.95	.38	--	--	2.58
Rock sole	.46	1.00	.15	--	--	4.96
Walleye pollock	.87	1.00	.43	--	--	2.20
Pacific cod	1.00	.77	.59	--	--	1.52
Sablefish	.53	1.00	.82	1.87	--	1.21
Shortspine thornyhead	.83	1.00	.36	--	--	2.54
Pacific ocean perch	1.00	.94	.38	--	--	2.55
Rougheye rockfish	.83	1.00	.62	--	--	1.48
Northern rockfish	1.00	.36	.72	--	--	1.38
Shorthraker rockfish	.55	.87	1.00	1.82	1.14	--

Table 4.-- Definitions of codes and symbols used in the fishing logs of the 1987 triennial U.S.- Japan cooperative bottom trawl survey.

Gear depth-	fathoms
Duration of tow-	tenths of an hour (standard tow is one-half hour)
Distance fished-	nautical miles
Gear performance-	0 = satisfactory 1 = satisfactory tow, net snagged bottom but damage and fish loss were minimal 5 = unsatisfactory tow 6 = unsatisfactory, net snagged bottom 7 = unsatisfactory tow, torn net
Gear type-	717 = Japanese polyethylene bottom trawl with roller gear 170/= U.S. polyethylene Noreastern 171 bottom trawl with roller gear
Catch units-	<u>Section 1:</u> Distribution and abundance plots use catch per unit effort of kilograms of catch per nautical mile trawled <u>Sections 2-4:</u> Summary listings of species catches by haul are the catches in kilograms. Summary listings of catch rates for selected species use kilograms of catch per nautical mile trawled

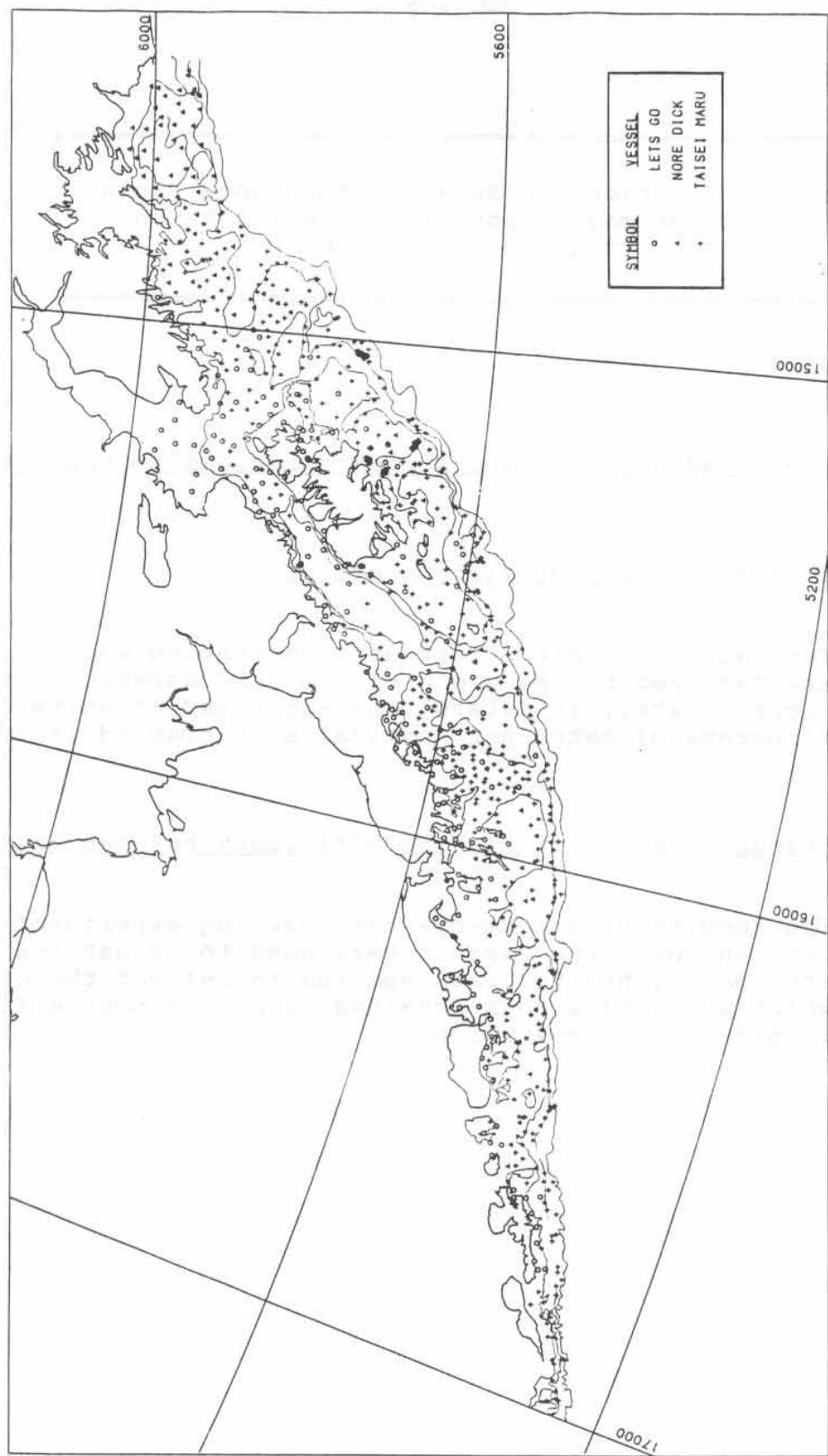


Figure 1.--Total survey stations attempted during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska by vessel, May 31-September 6, 1987.

SECTION 1

Distribution and Relative Abundance Plots
for the major groundfish species taken
during the 1987 survey.

Summary of adjustments and standardizations to the data

■ Standardization of fishing effort:

The catch per unit effort at each station was standardized to the width of the U.S. Noreastern trawl (approximately 15 meters) and expressed in units of kilograms of catch per nautical mile trawled (kg/nm).

■ Standardization of fishing efficiency between vessels:

The results of a side-by-side trawling experiment between the three vessels were used to adjust the station catches for each species to reflect the catch which would have been obtained using the most efficient vessel/trawl combination.

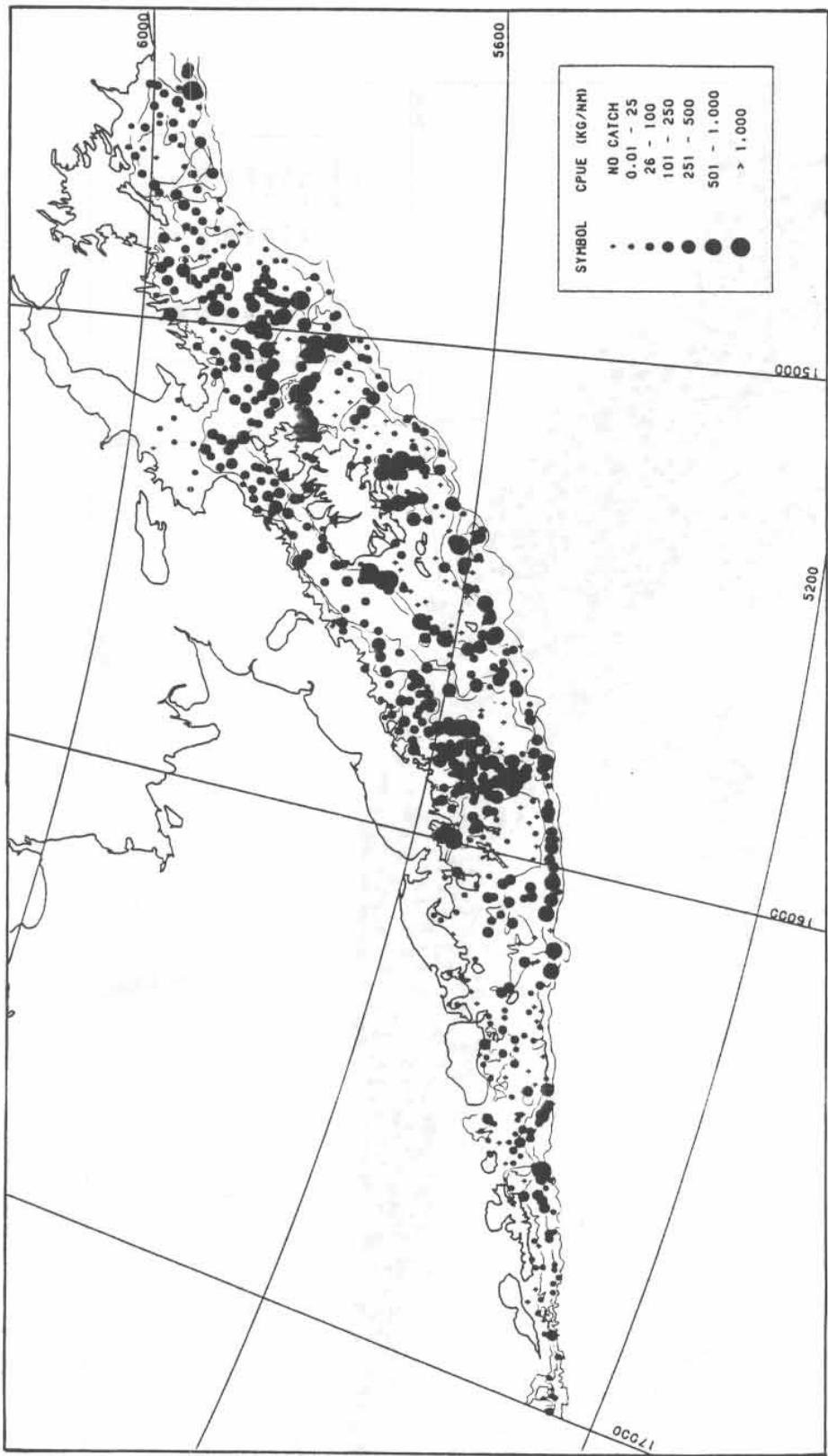


Figure 2.--Catch per unit effort (kilograms/nautical mile) of arrowtooth flounder, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

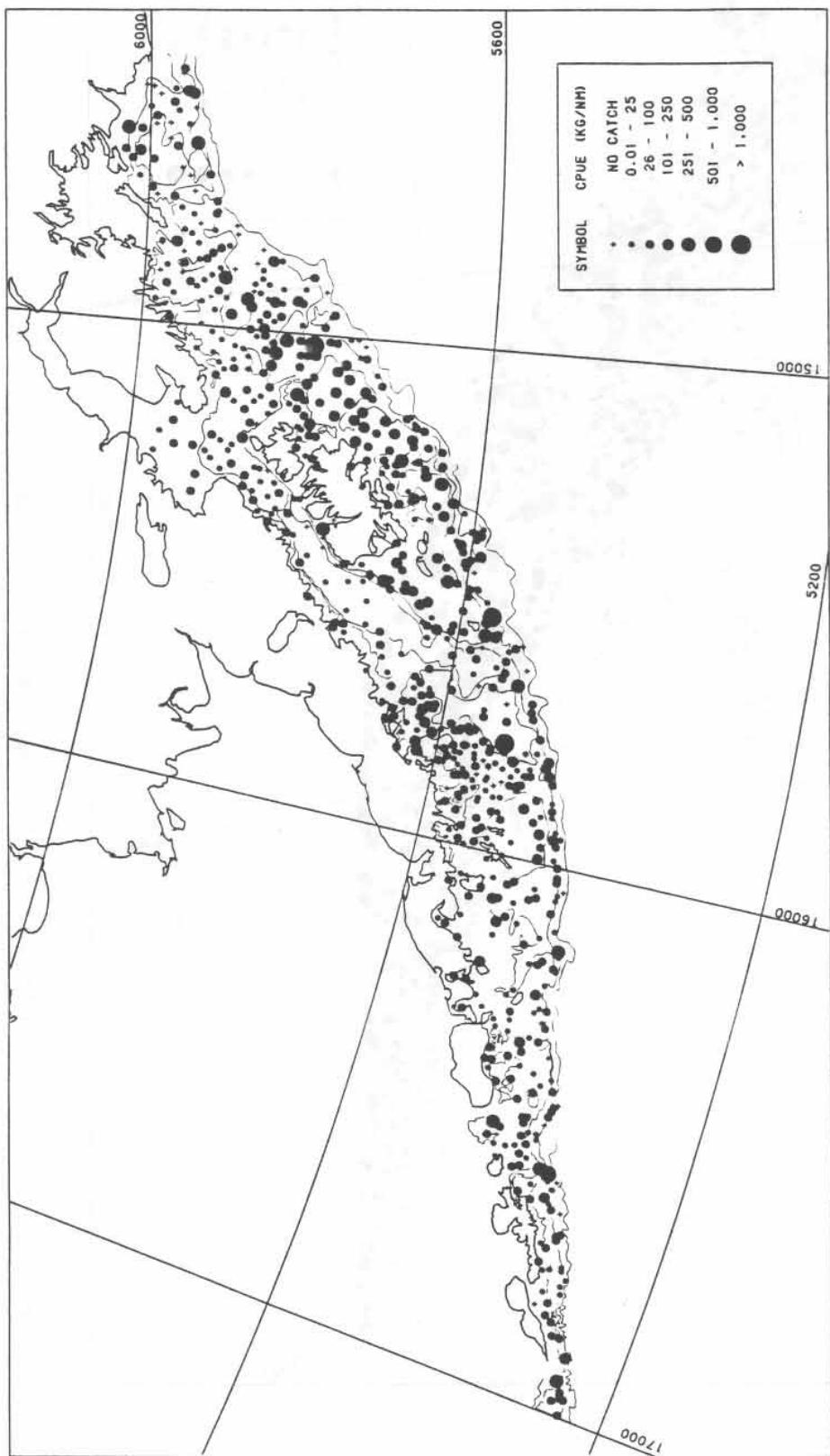


Figure 3.--Catch per unit effort (kilograms/nautical mile) of Pacific halibut, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

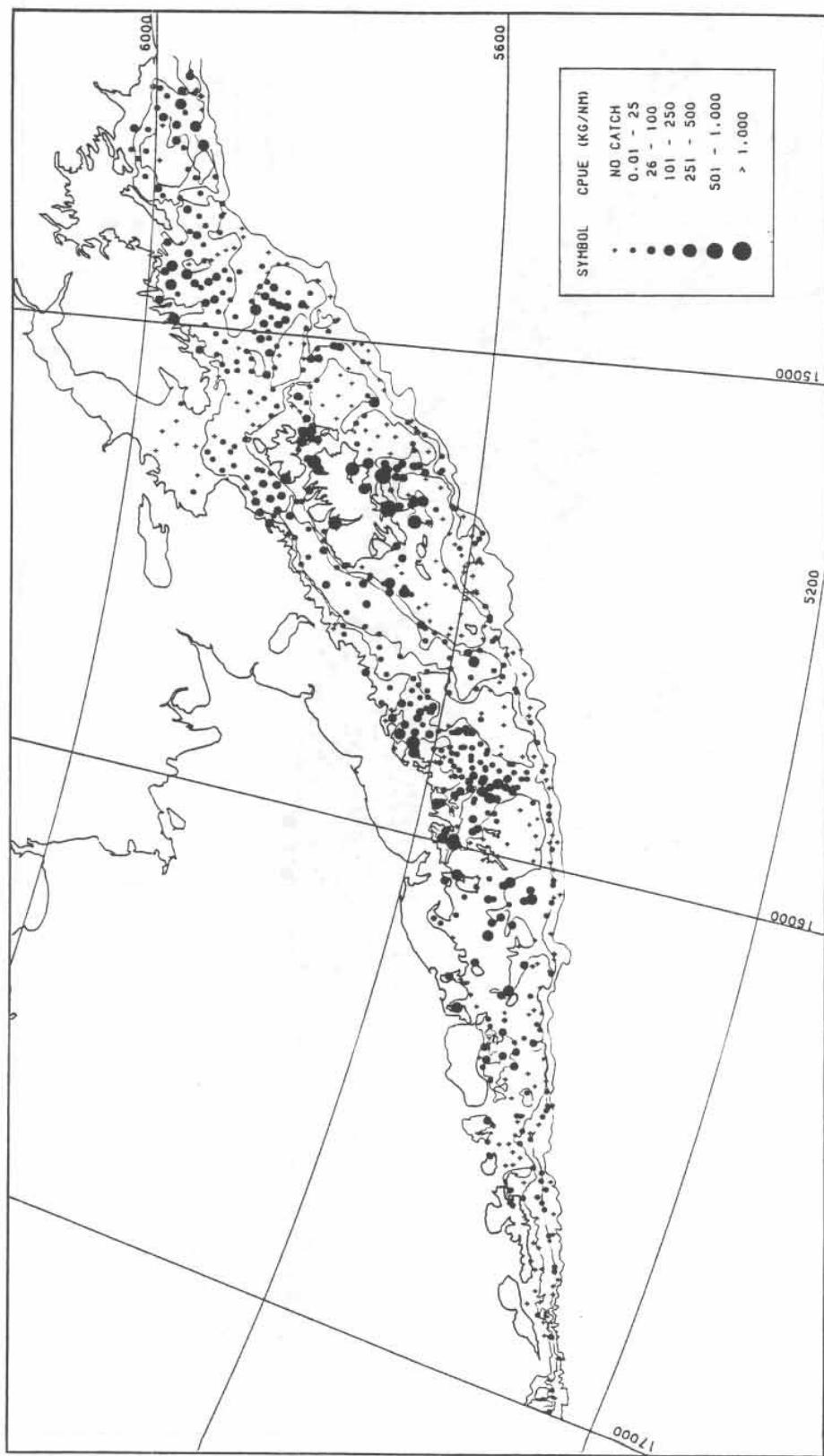


Figure 4.--Catch per unit effort (kilograms/nautical mile) of flathead sole, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

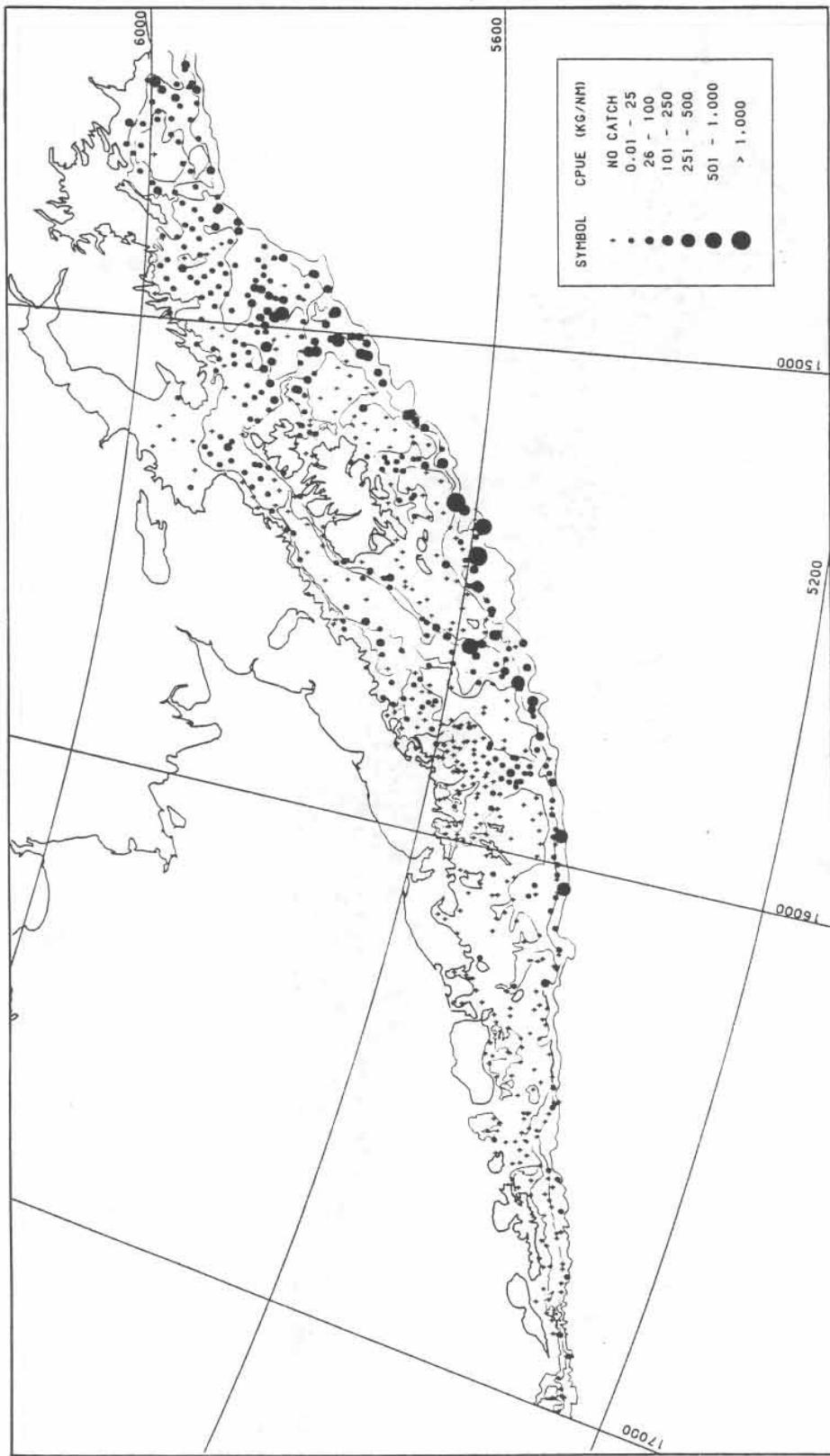


Figure 5.--Catch per unit effort (kilograms/nautical mile) of Dover sole, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

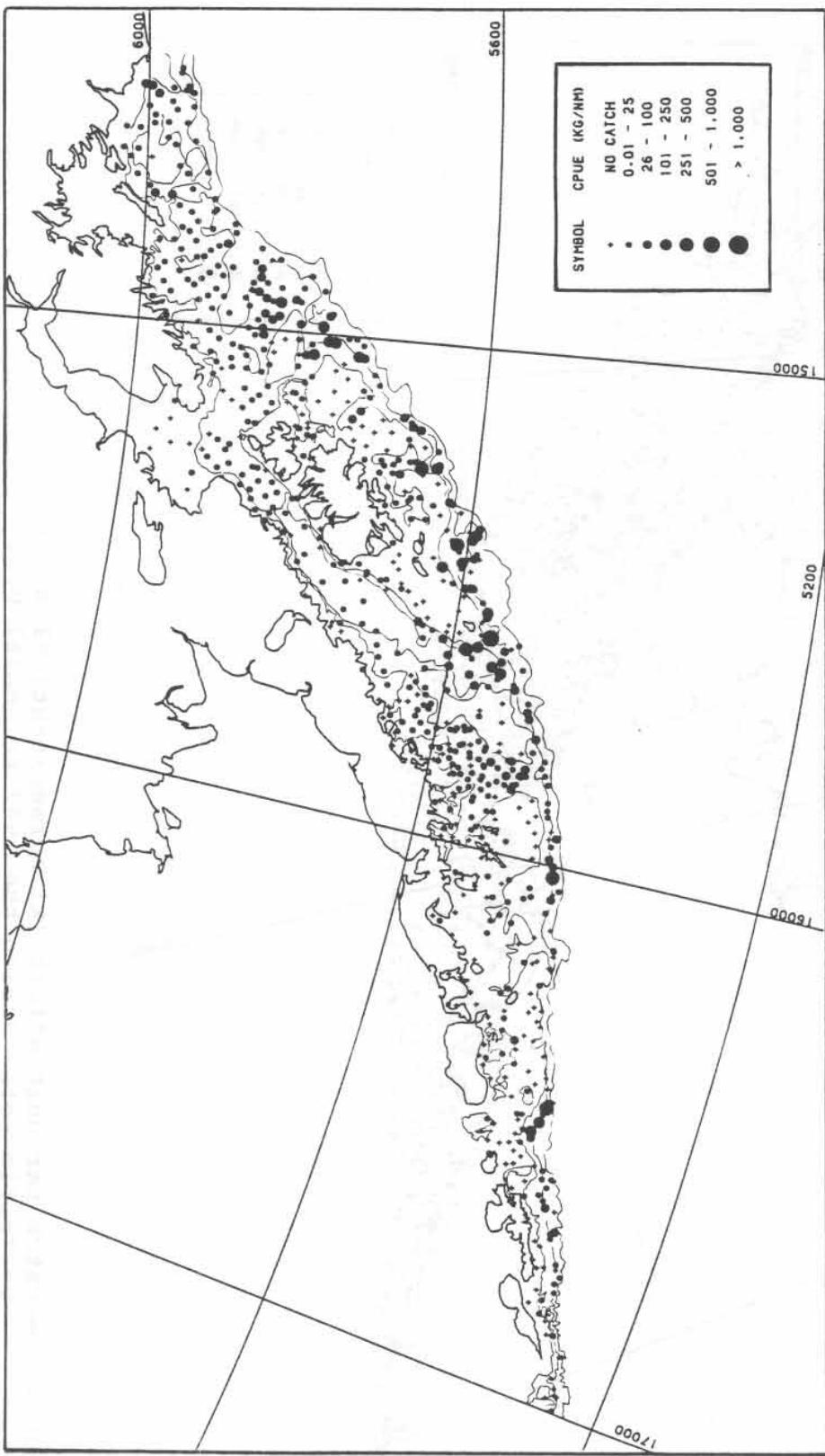


Figure 6.--Catch per unit effort (kilograms/nautical mile) of rex sole, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

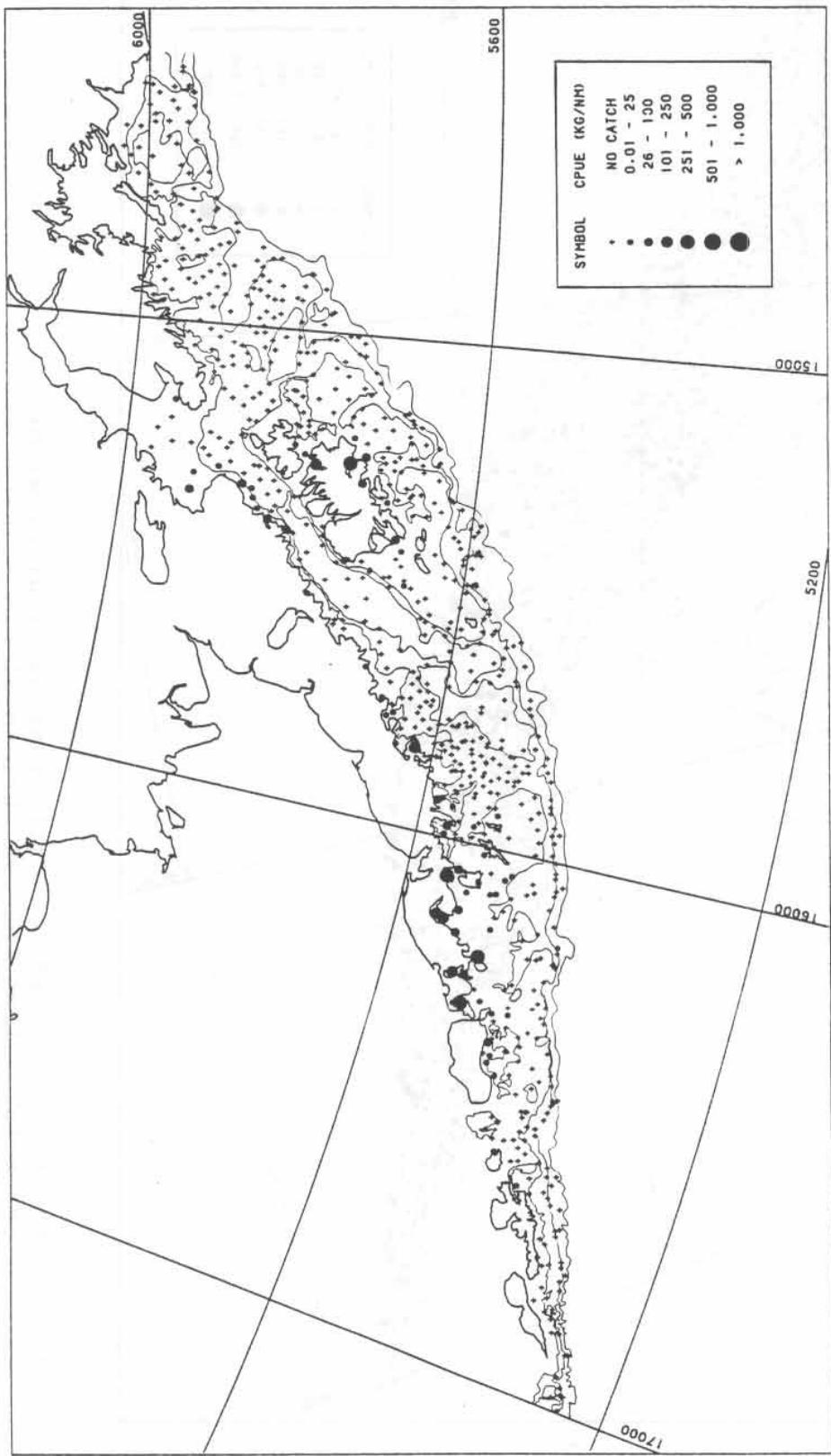


Figure 7.—Catch per unit effort (kilograms/nautical mile) of yellowfin sole, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

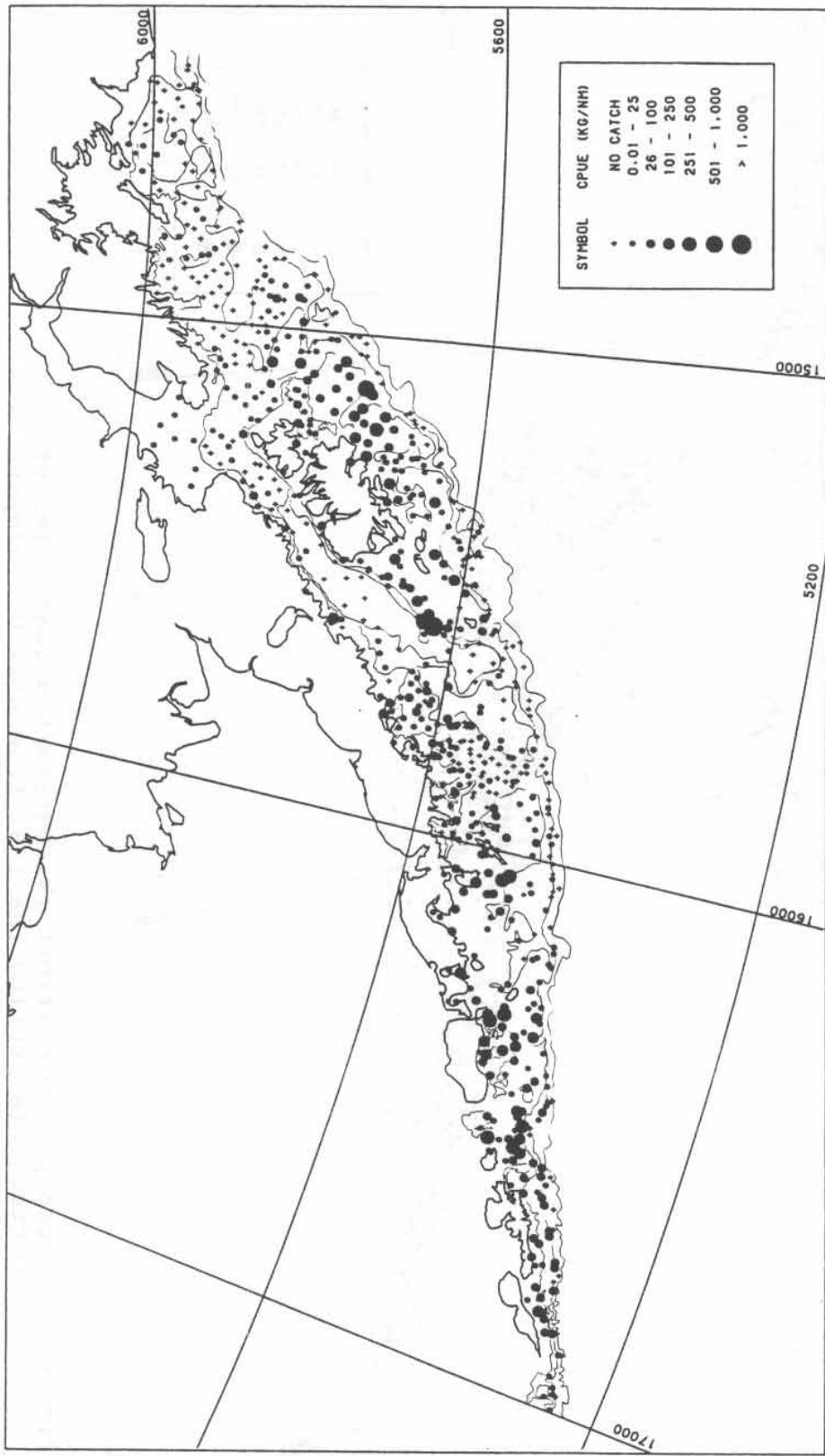


Figure 8.--Catch per unit effort (kilograms/nautical mile) of rock sole, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the

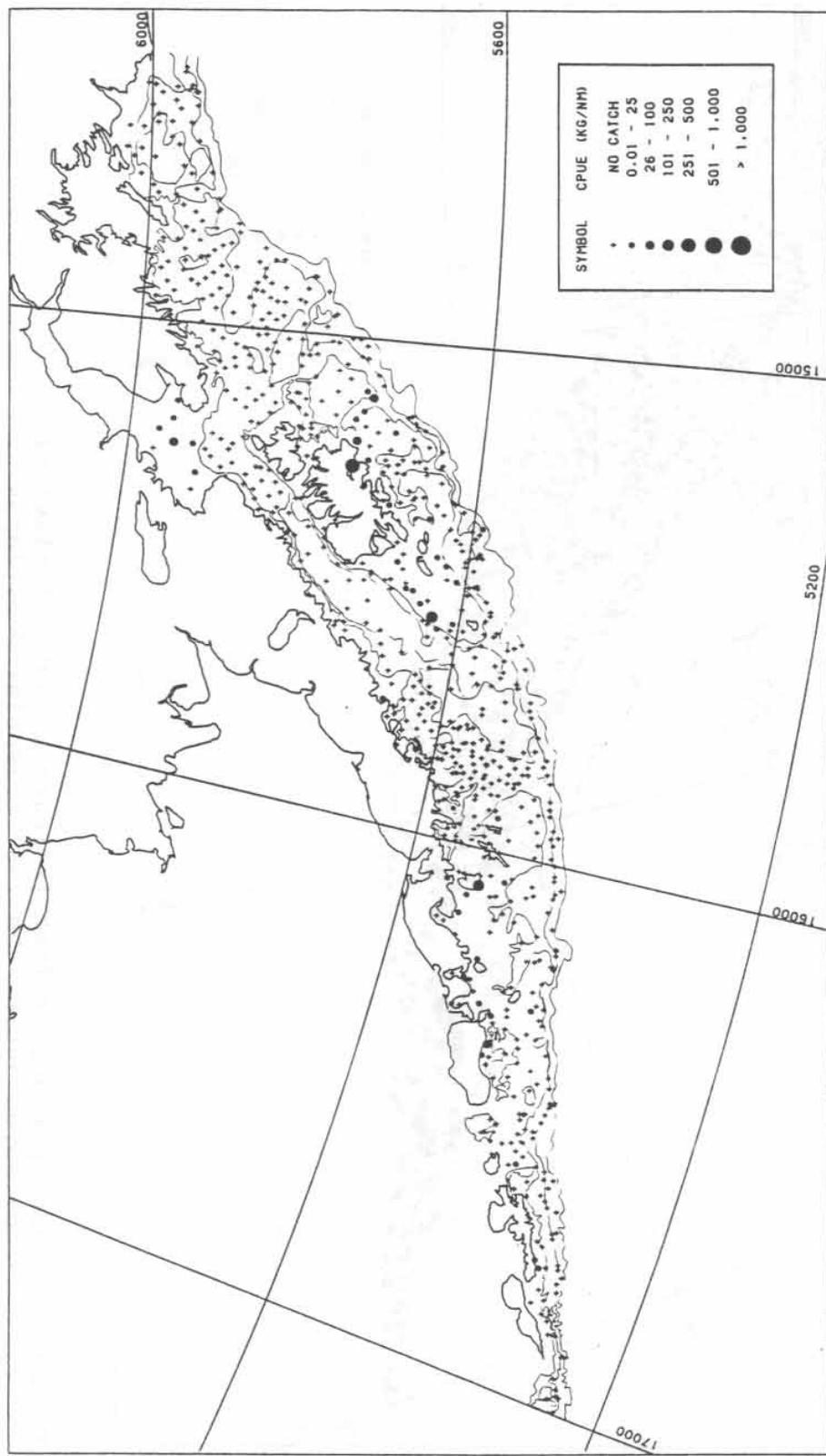


Figure 9.--Catch per unit effort (kilograms/nautical mile) of butter sole, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

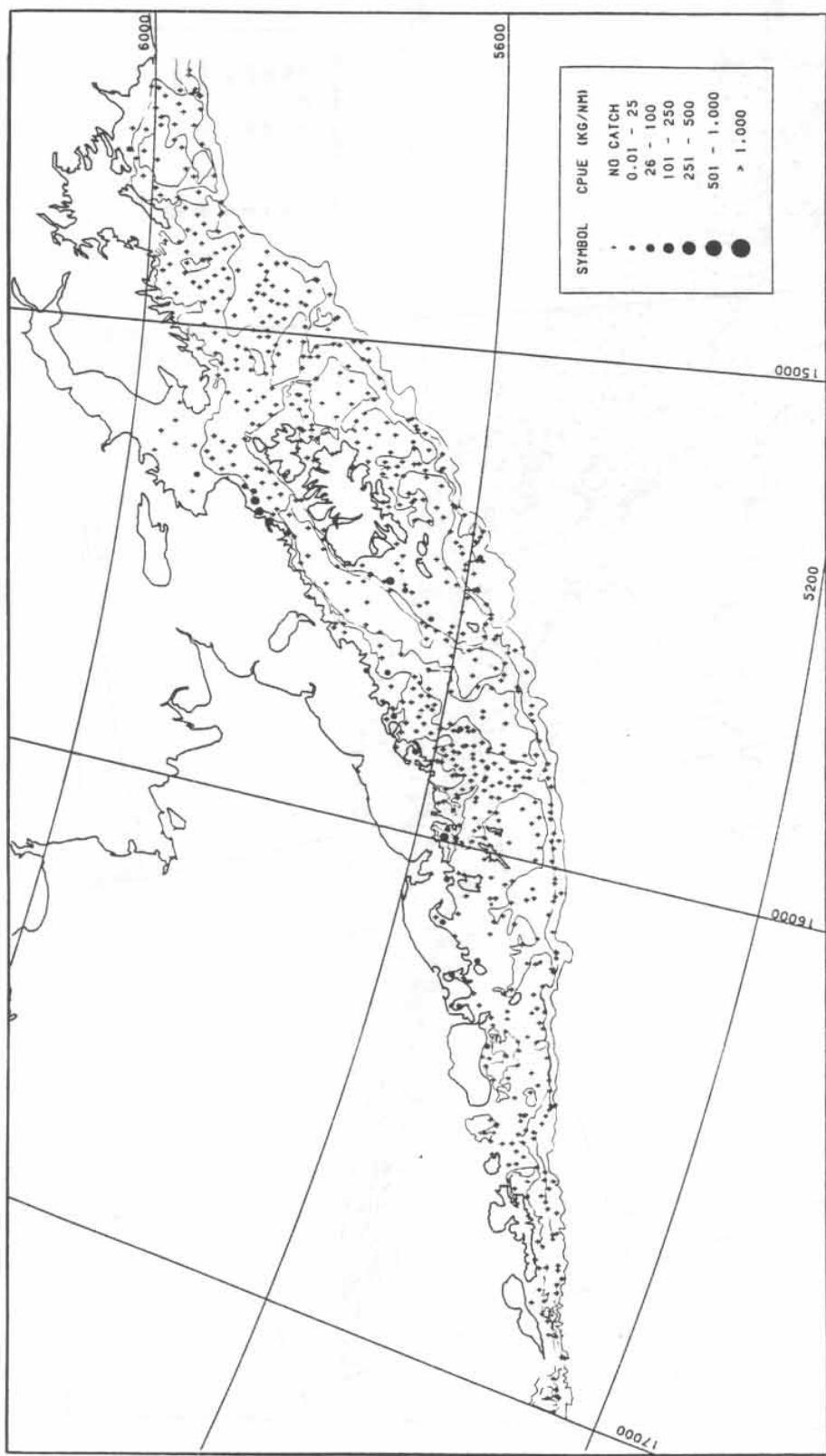


Figure 10.--Catch per unit effort (kilograms/nautical mile) of Alaska plaice, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

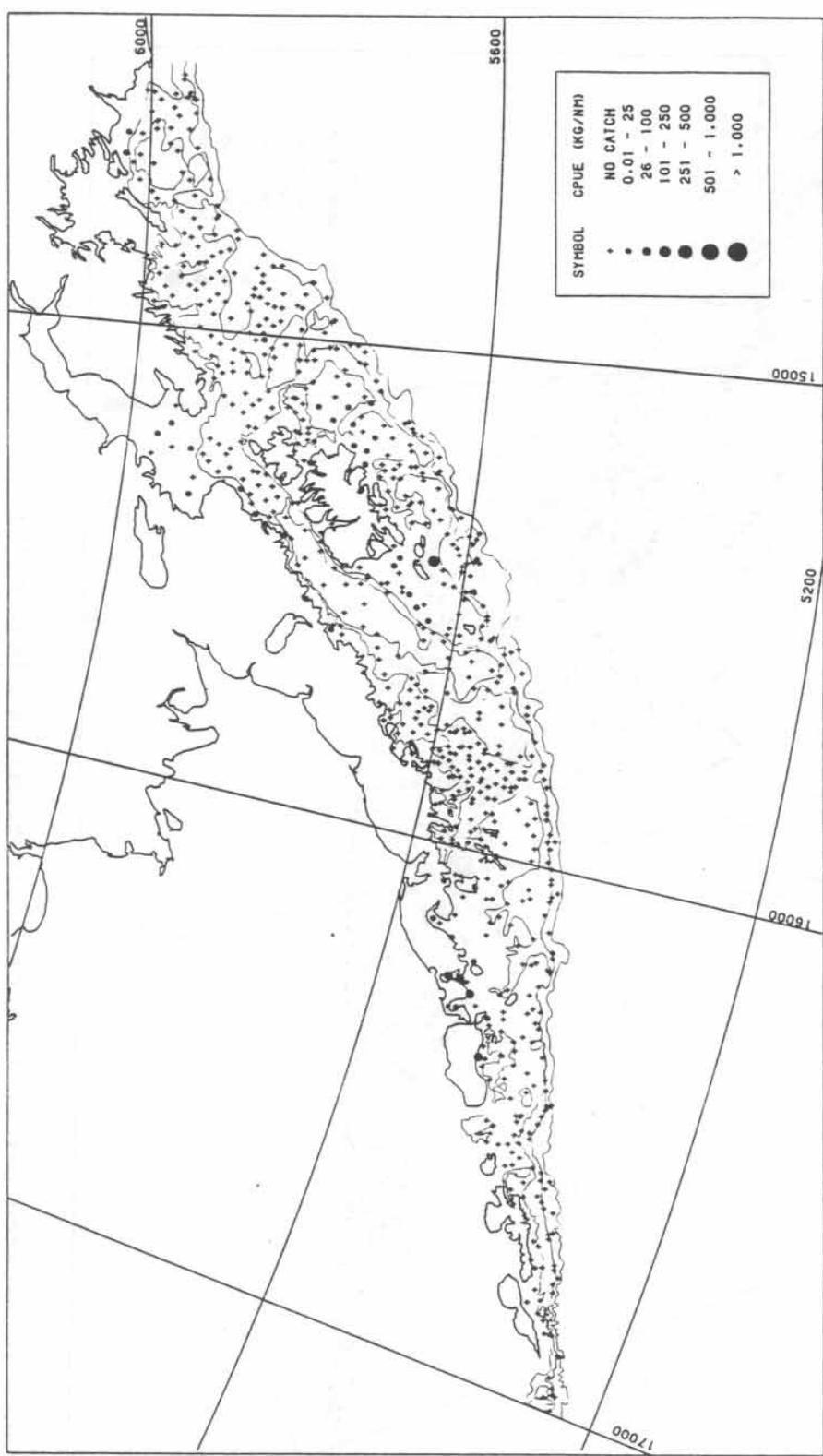


Figure 11.--Catch per unit effort (kilograms/nautical mile) of starry flounder, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

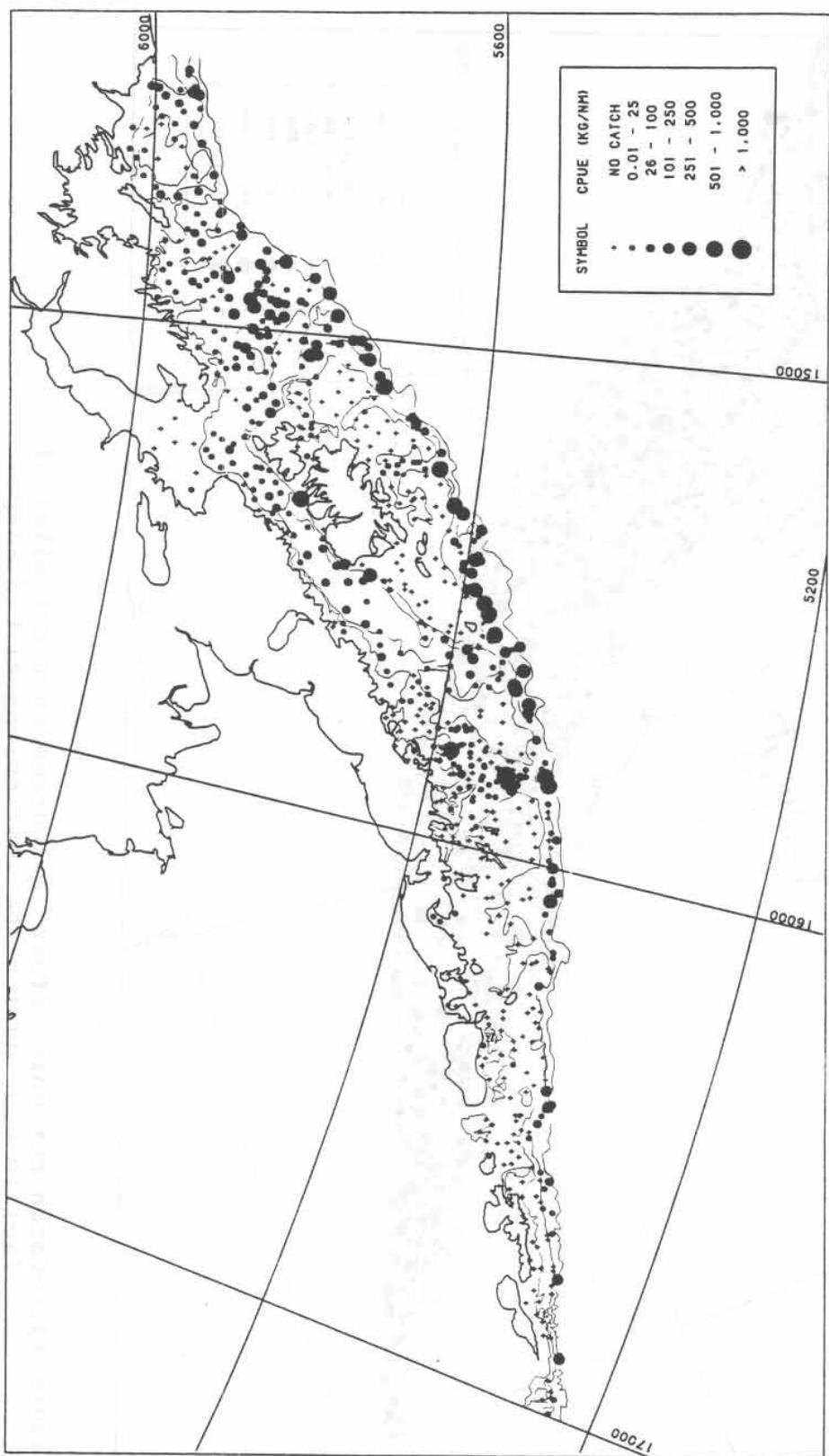


Figure 12. --Catch per unit effort (kilograms/nautical mile) of sablefish, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

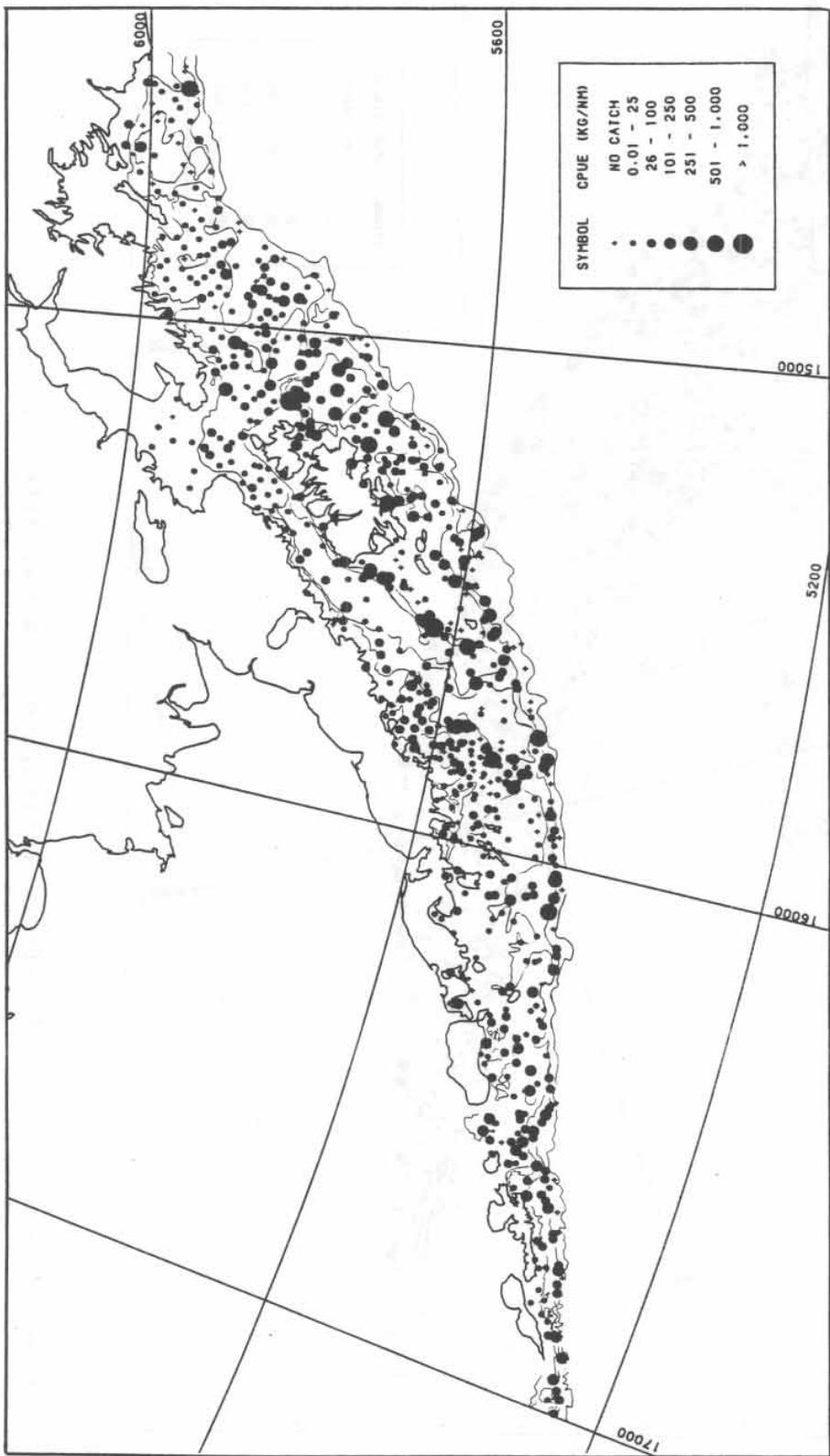


Figure 13.--Catch per unit effort (kilograms/nautical mile) of Pacific cod, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

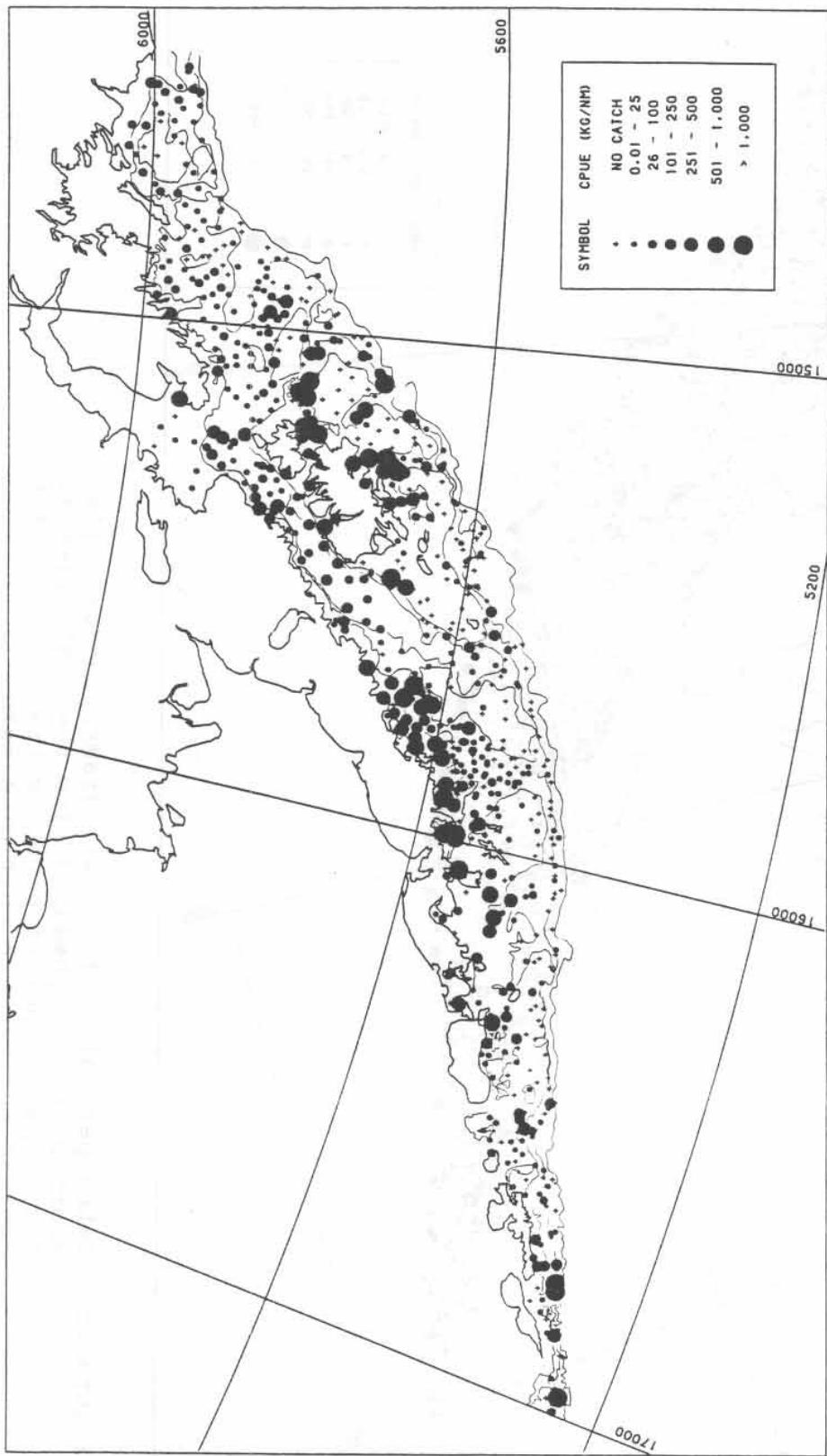


Figure 14.--Catch per unit effort (kilograms/nautical mile) of walleye pollock, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

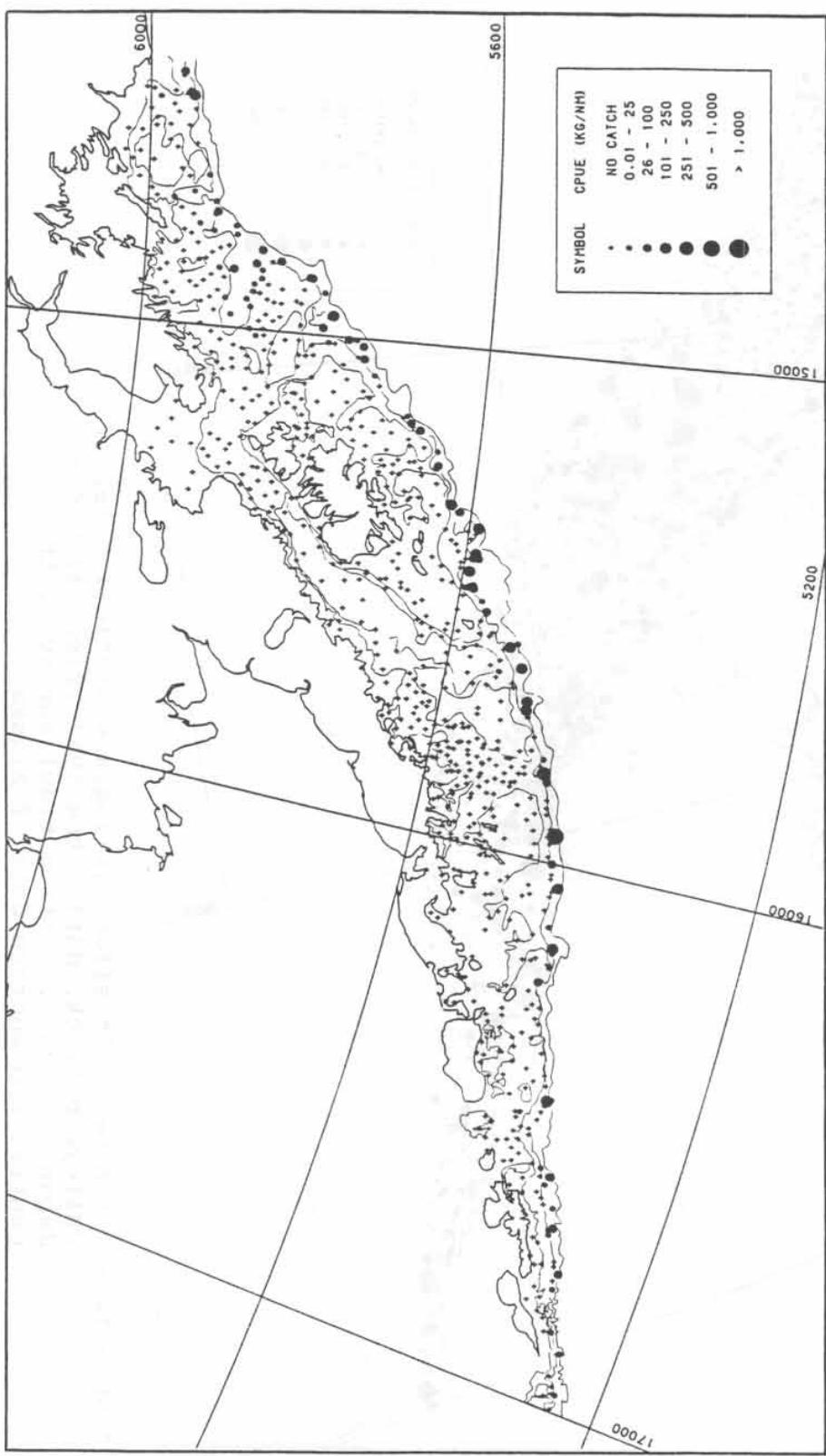


Figure 15.--Catch per unit effort (kilograms/nautical mile) of shortspine thornyhead, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

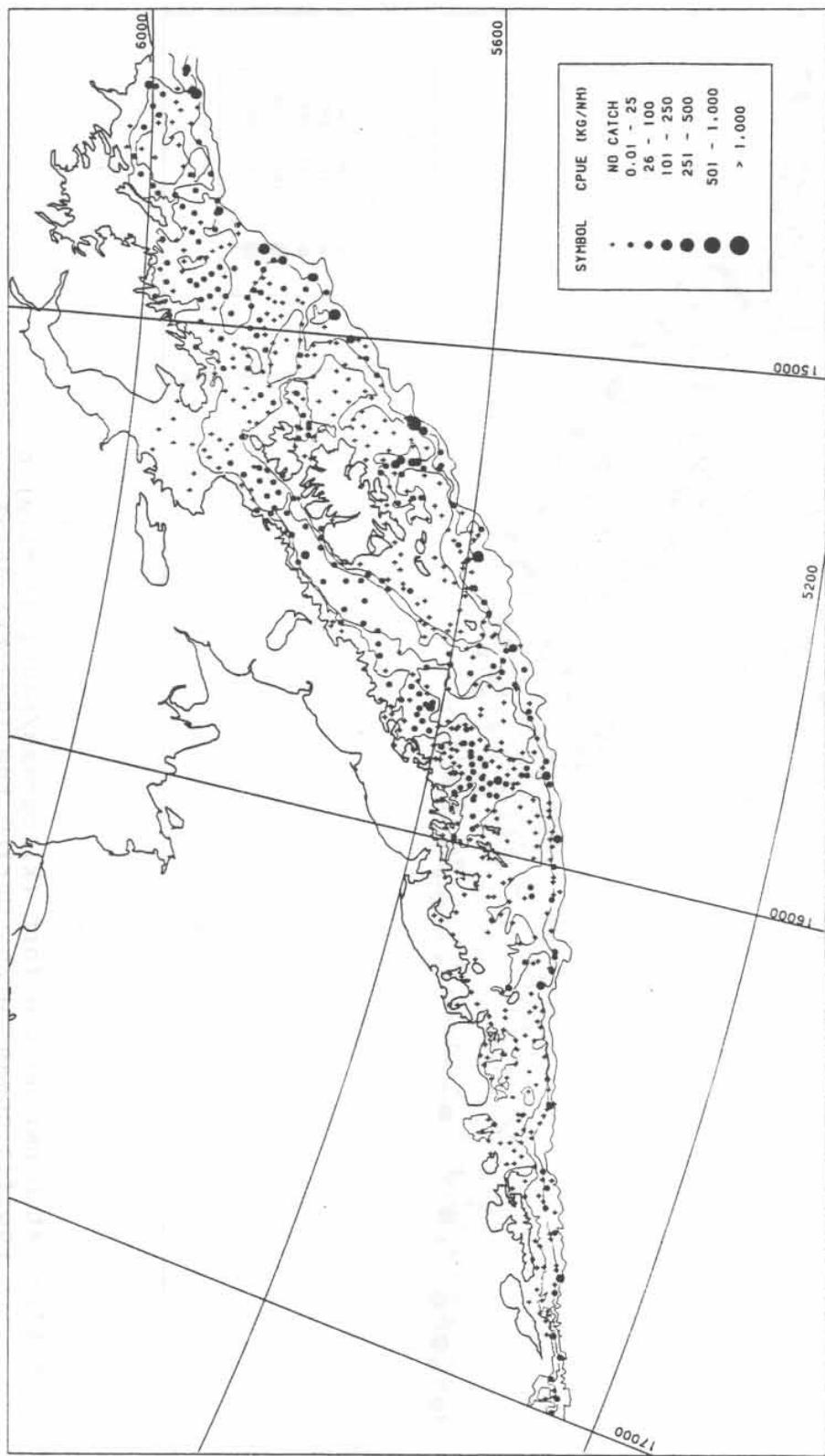


Figure 16.--Catch per unit effort (kilograms/nautical mile) of rougheye rockfish, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

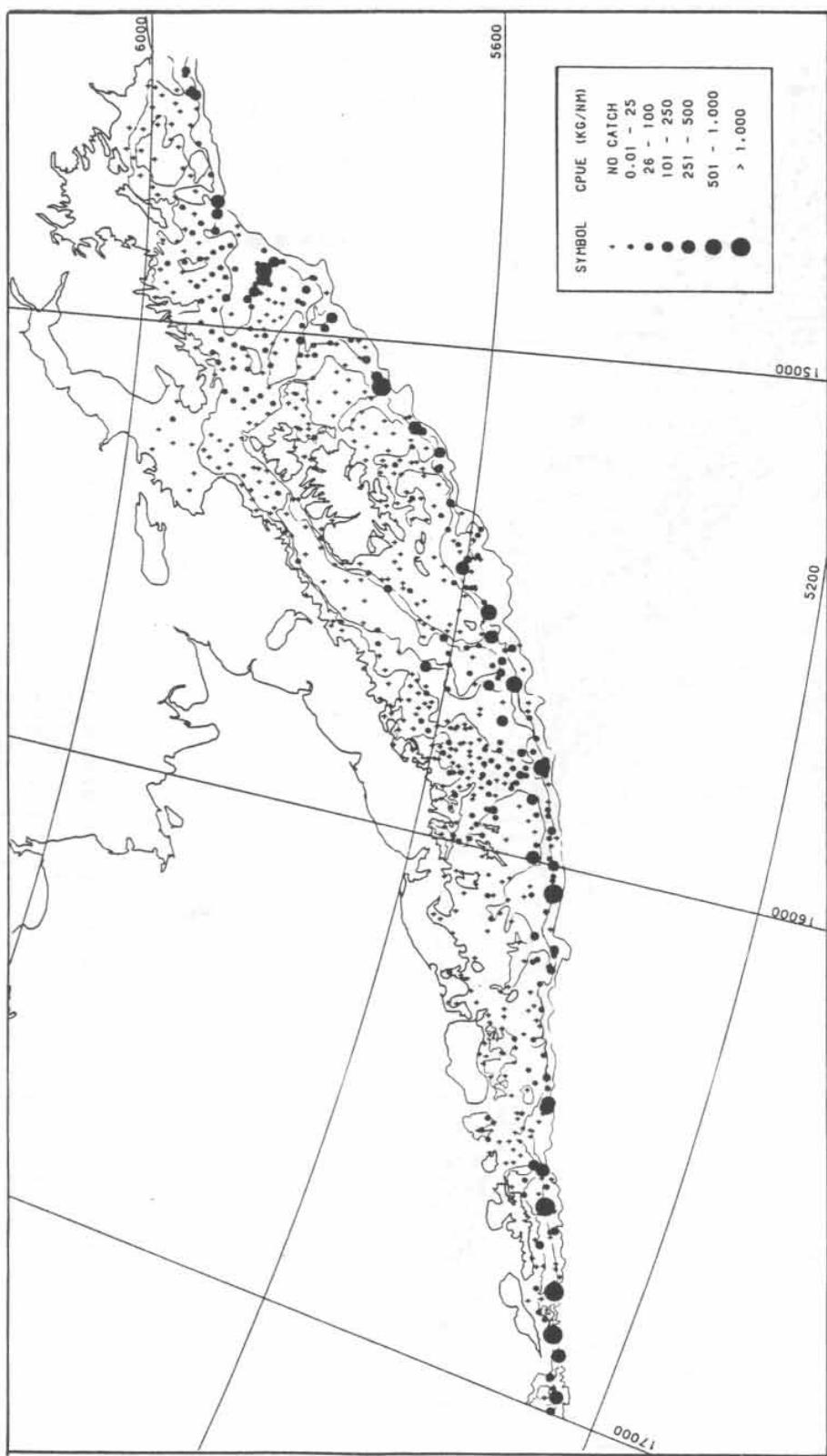


Figure 17.--Catch per unit effort (kilograms/nautical mile) of Pacific ocean perch, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

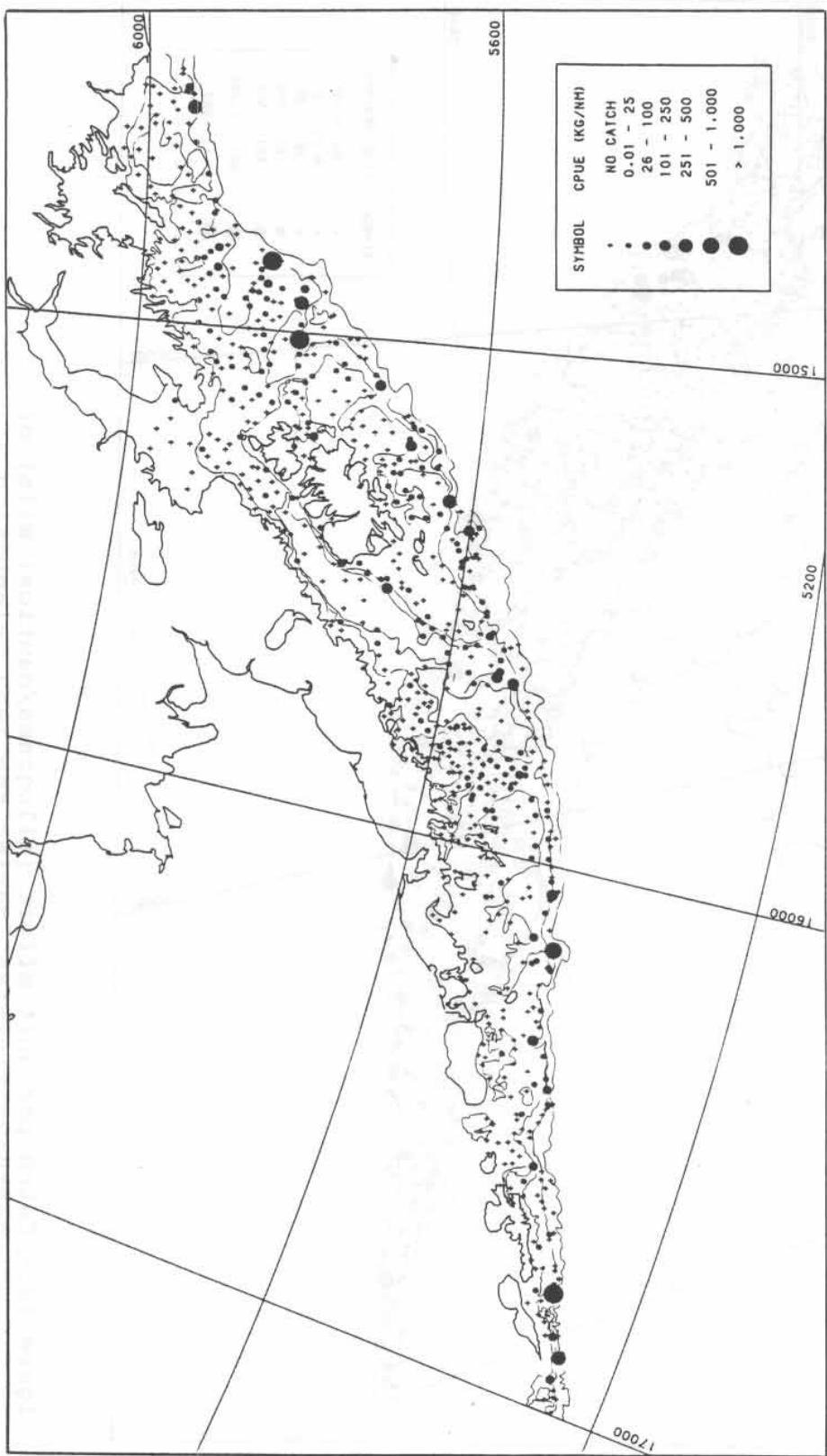


Figure 18.--Catch per unit effort (kilograms/nautical mile) of dusky rockfish, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

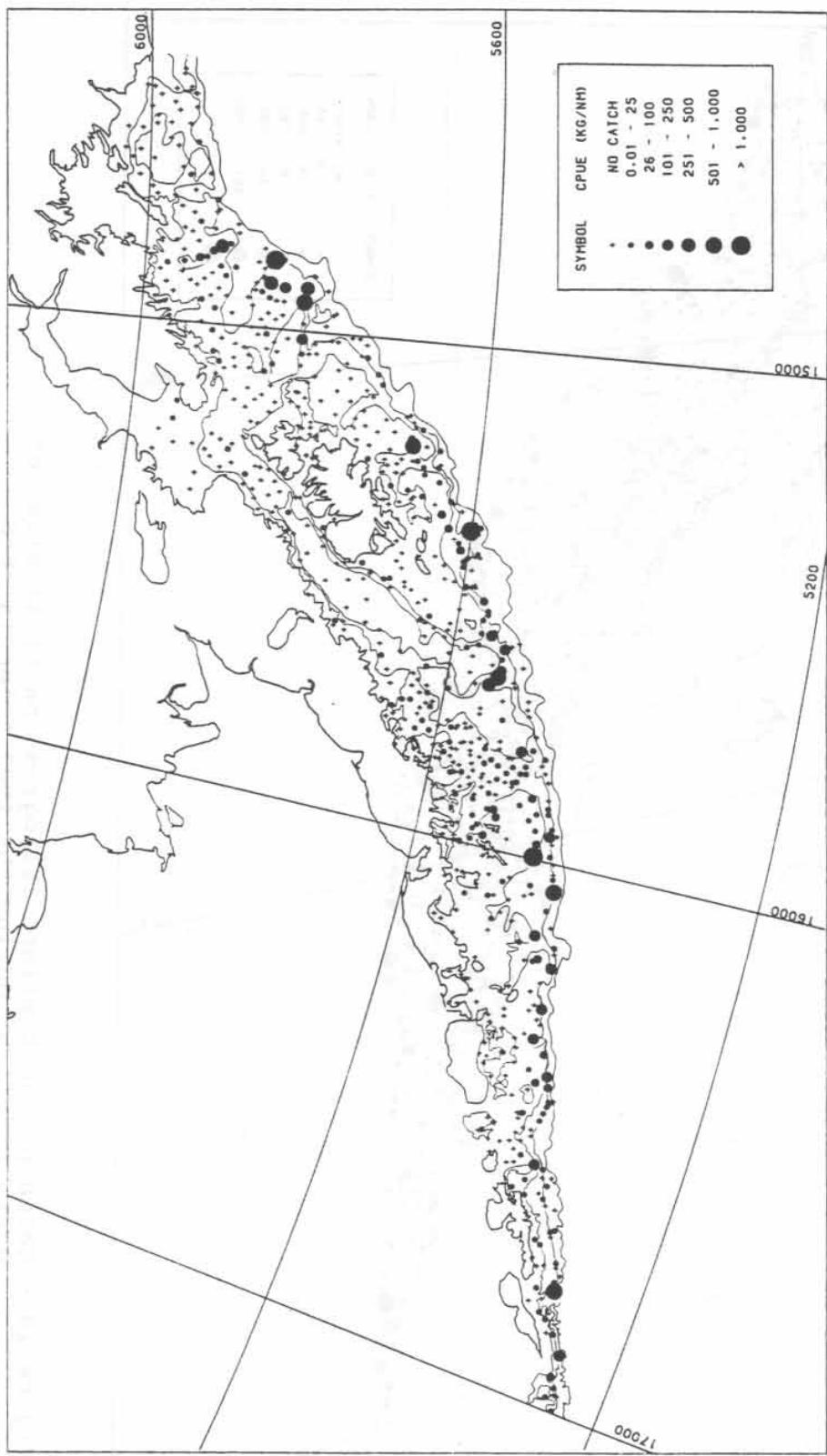


Figure 19.--Catch per unit effort (kilograms/nautical mile) of northern rockfish, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

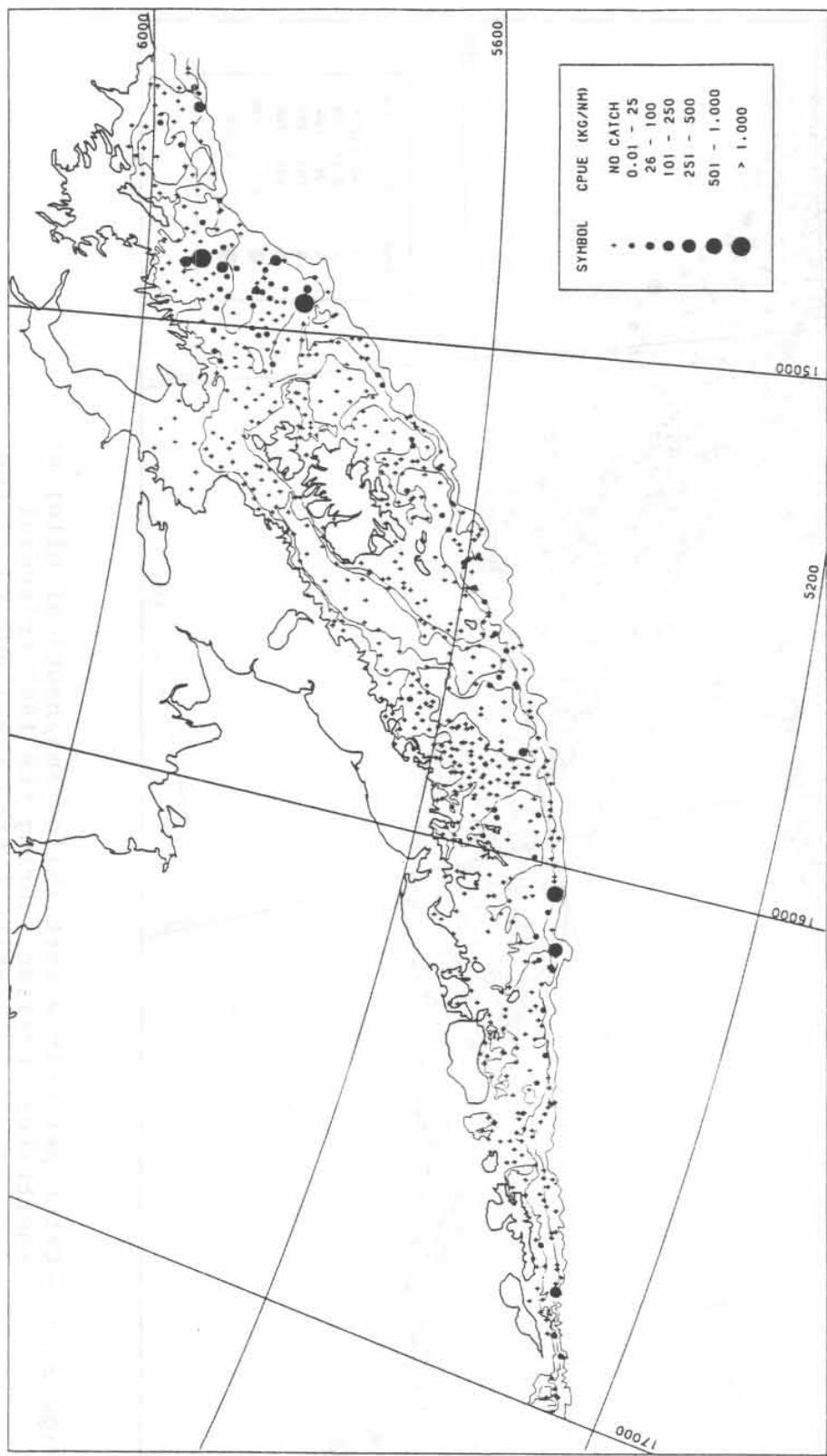


Figure 20.--Catch per unit effort (kilograms/nautical mile) of harlequin rockfish, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

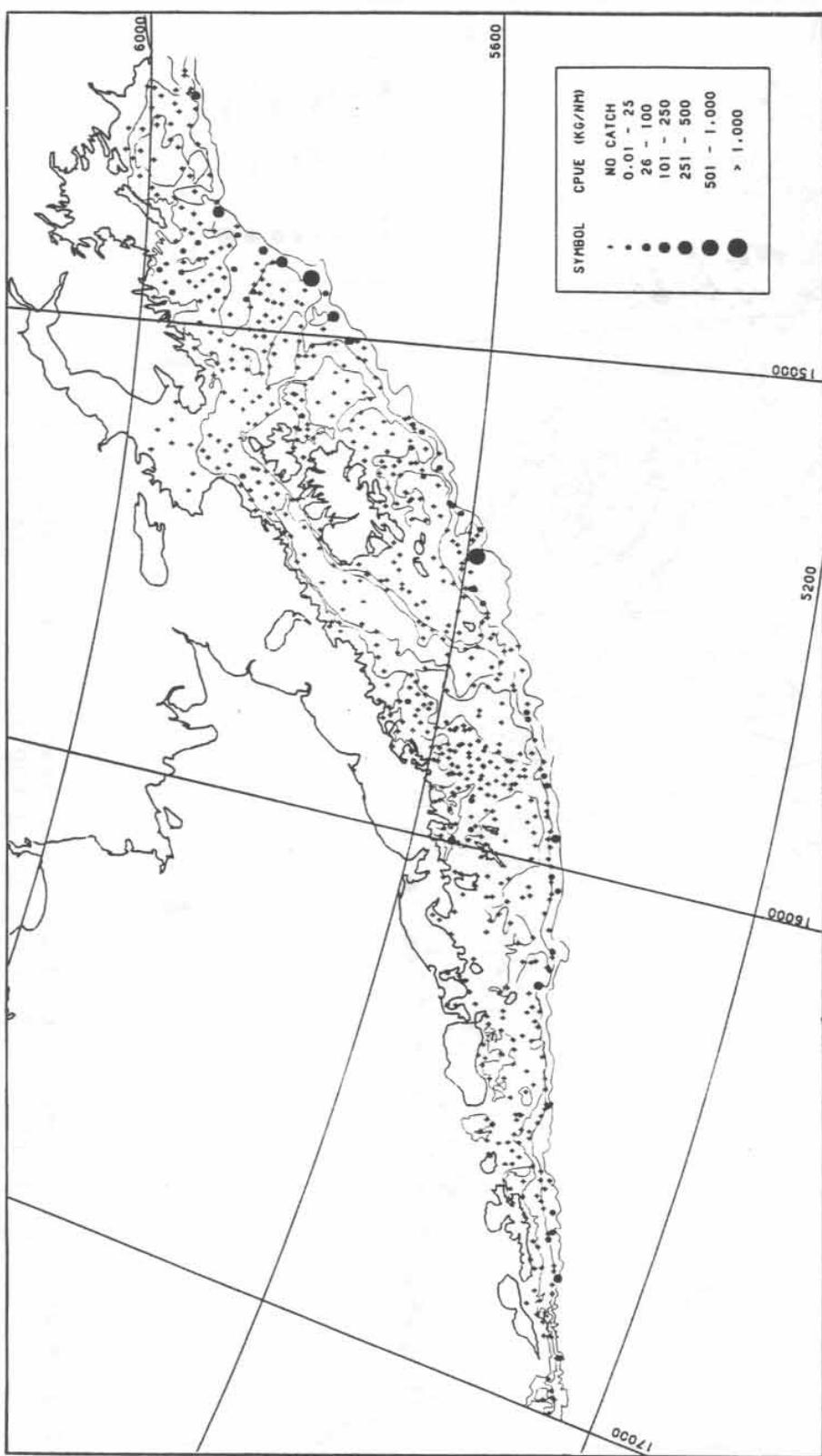


Figure 21.--Catch per unit effort (kilograms/nautical mile) of shortraker rockfish, during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

SECTION 2

Fishing log for the Taisei Maru No. 35

Station charts of haul numbers plotted adjacent to their
respective geographical locations.

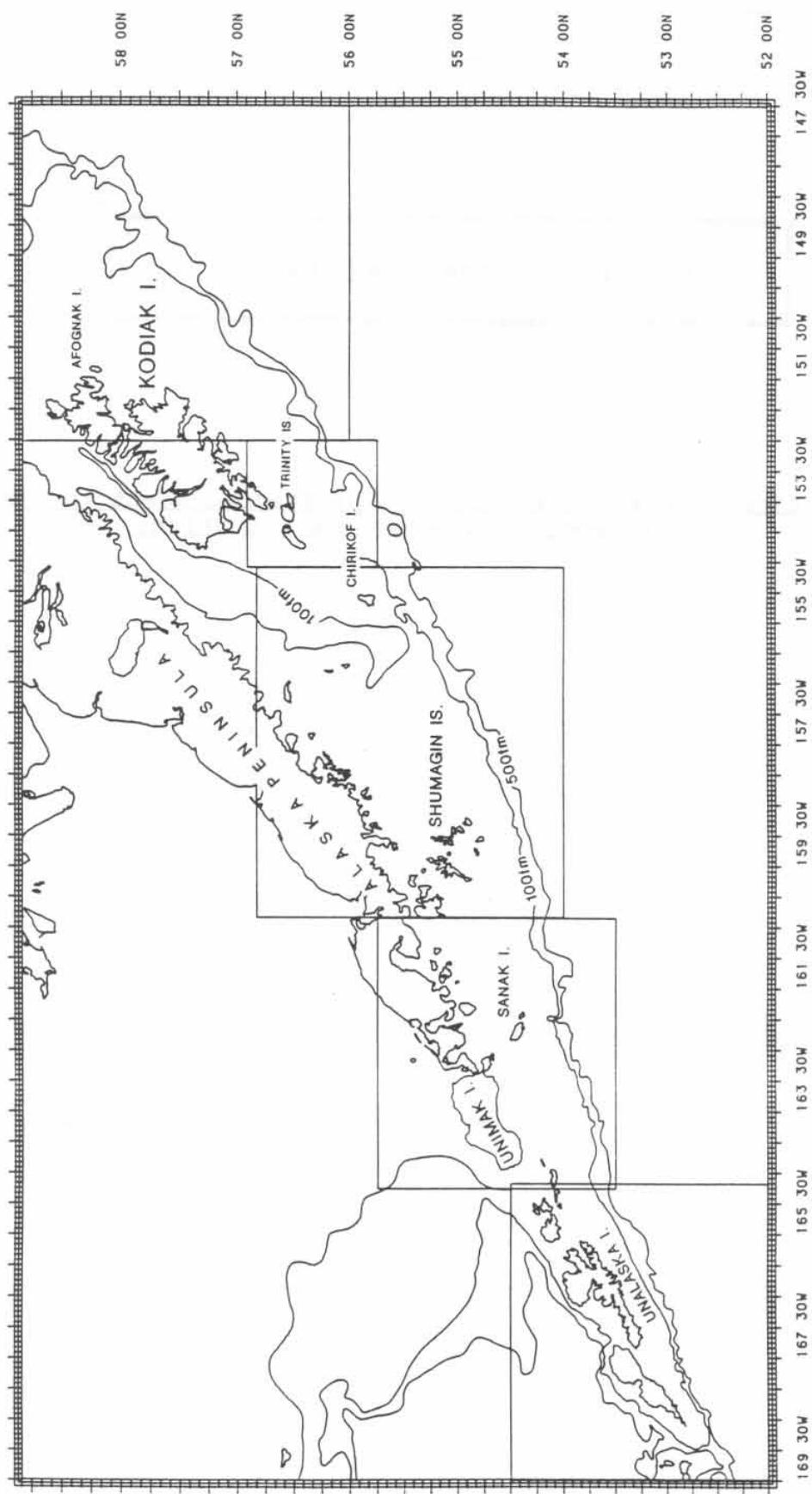


Figure 22.--Areas surveyed from May 22-July 8, 1987 by the Japanese chartered trawler Taisei Maru No. 35 (hauls 1-229) and cited in Figures 23-27.

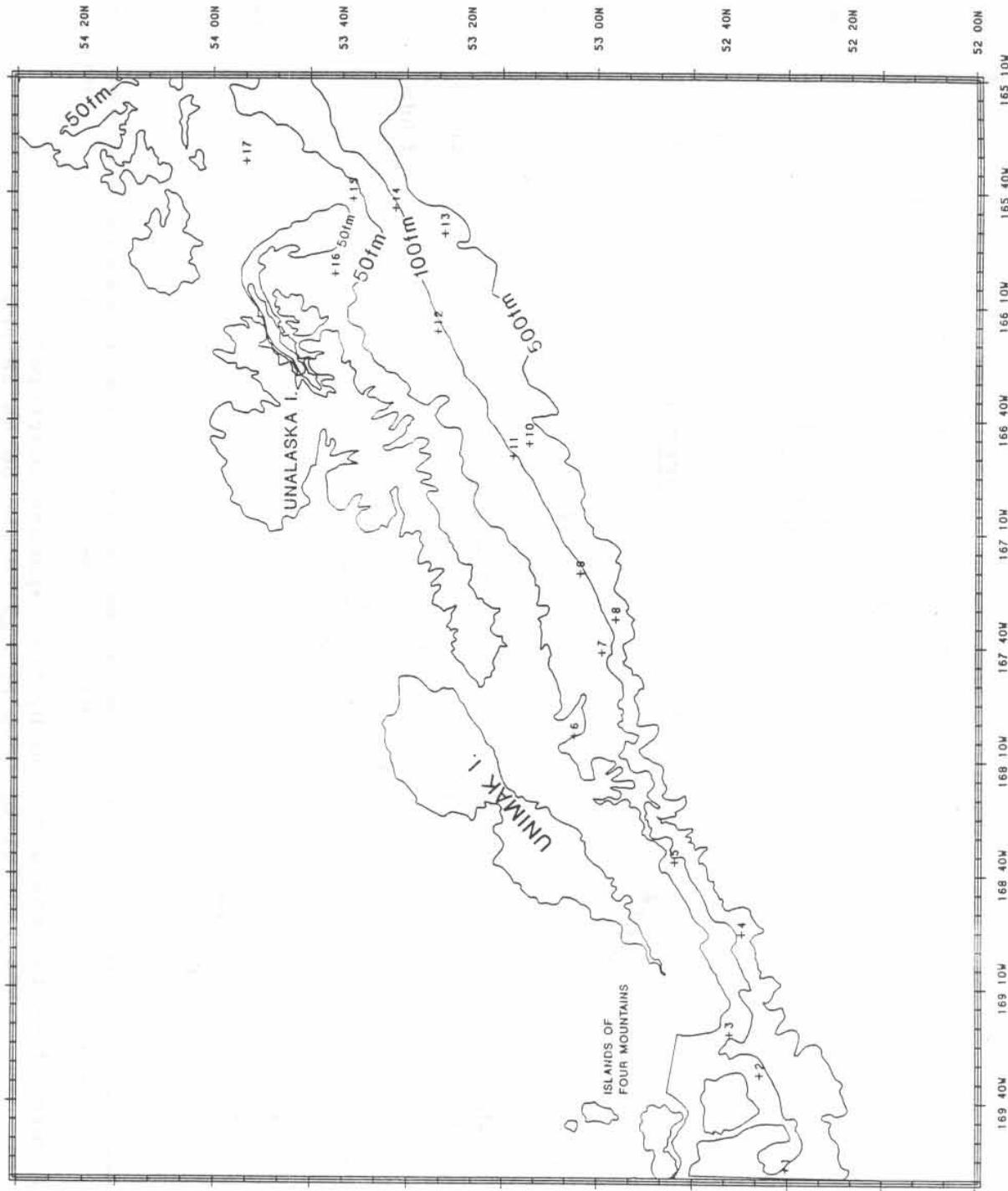


Figure 23.--Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Unalaska Island area, (hauls 1-17).

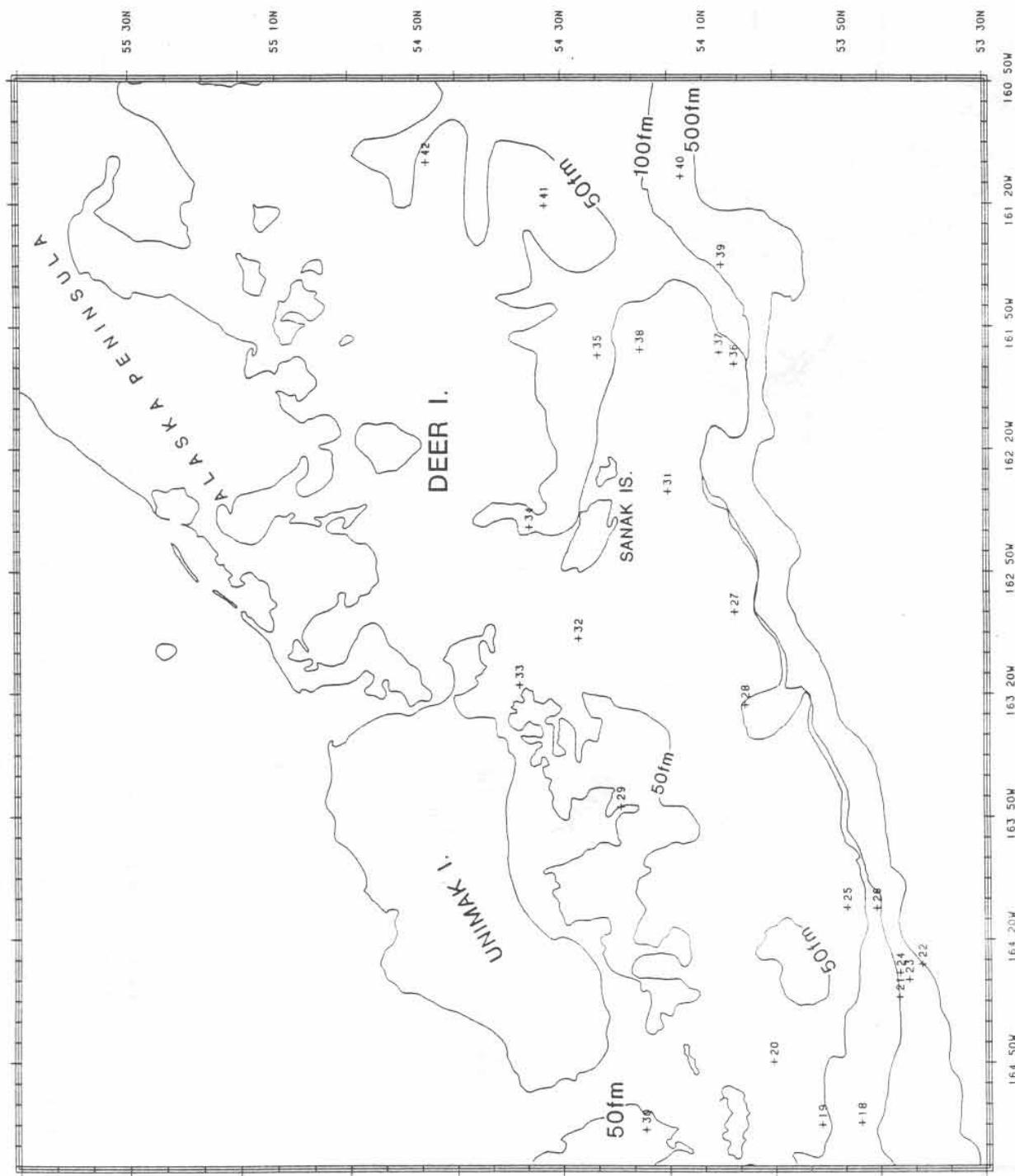


Figure 24.—Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Sanak Island area (hauls 18-42).

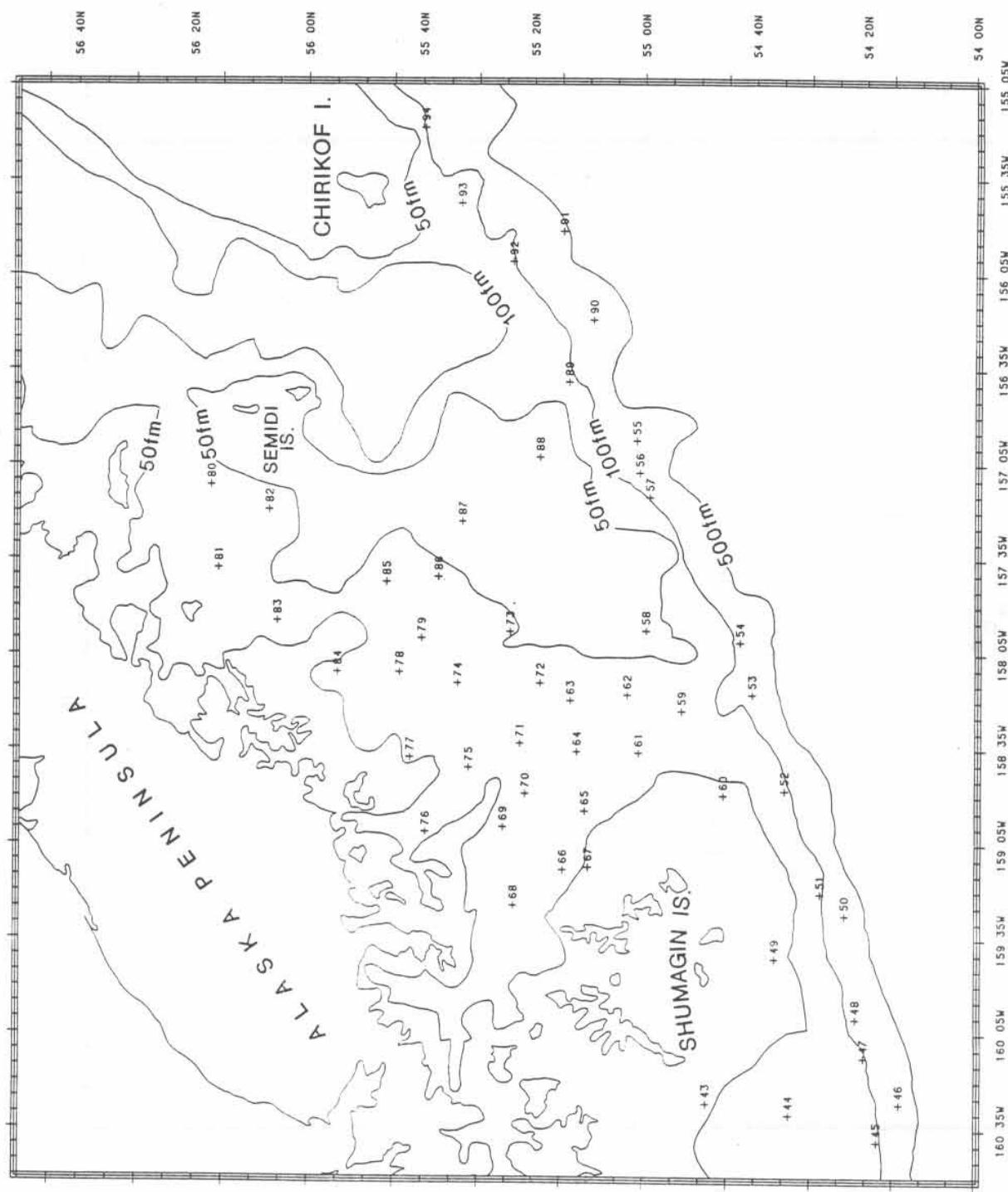


Figure 25.—Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Shumagin Islands and Chirikof Island areas (hauls 43-94).

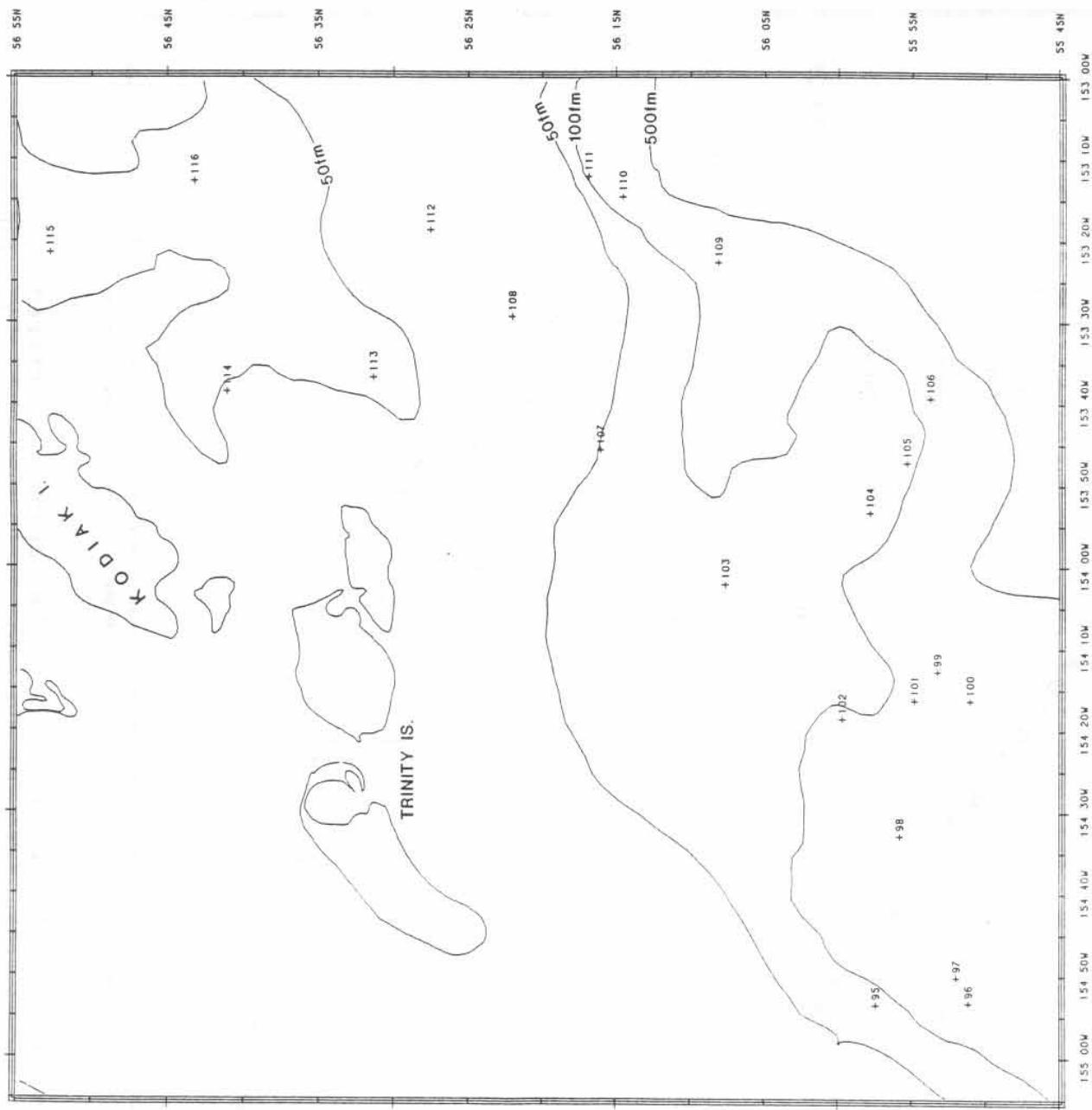


Figure 26.--Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Trinity Islands area (hauls 95-116).

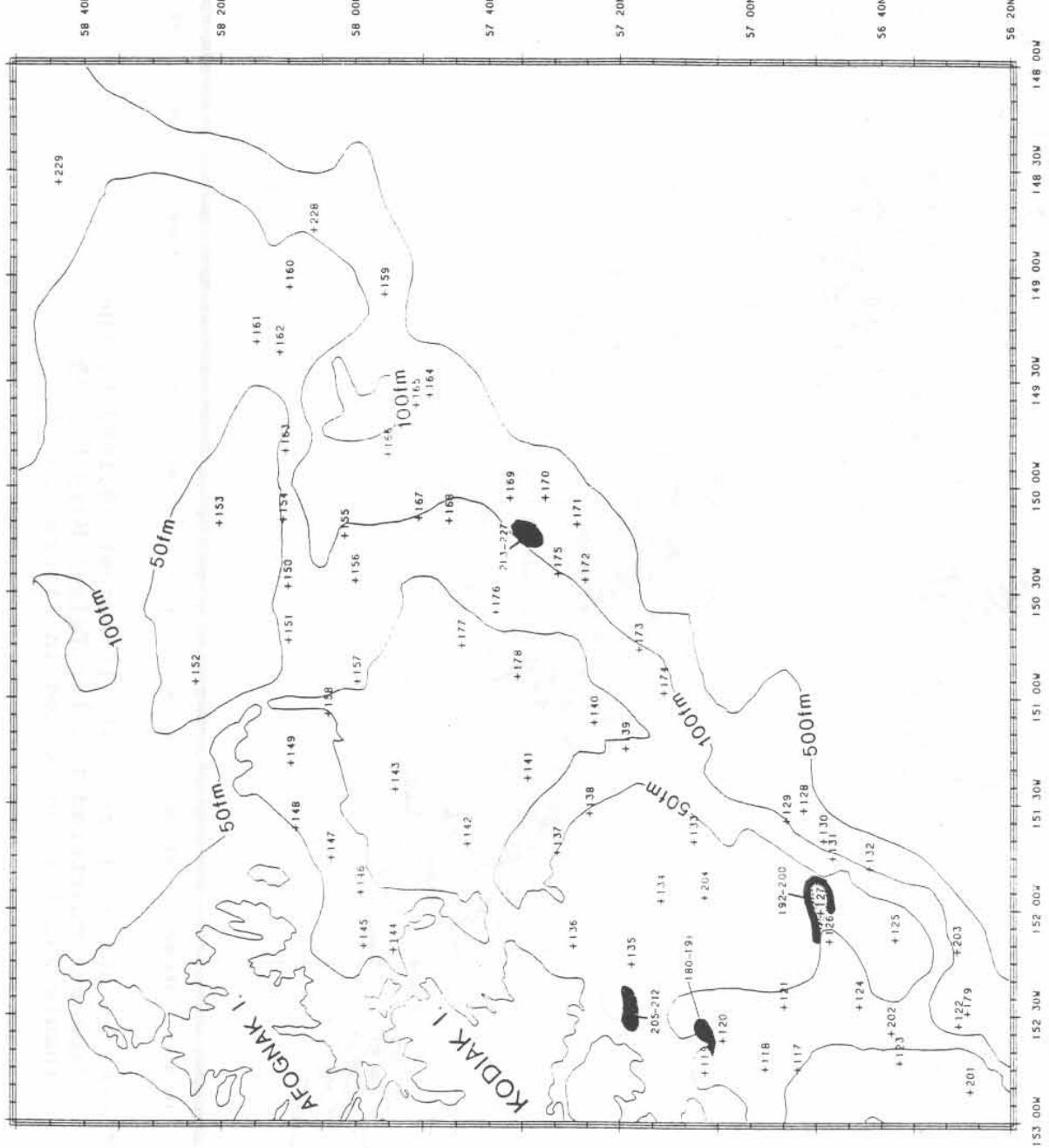


Figure 27.--Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Kodiak Island area (hauls 117-229).

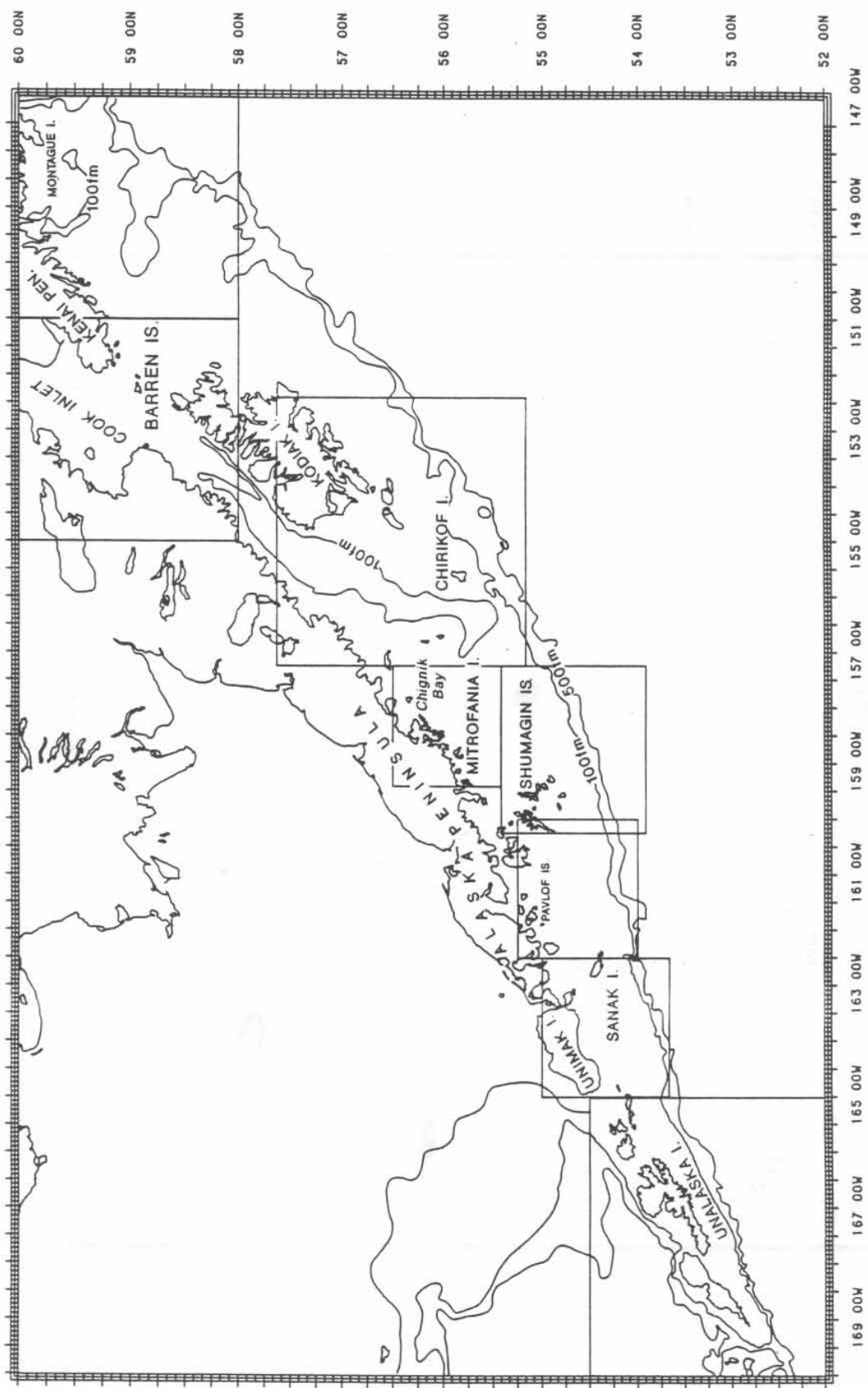


Figure 28.—Areas surveyed from July 15–August 29, 1987 by the Japanese chartered trawler Taisei Maru No. 35 (hauls 230–454) and cited in Figures 29–36.

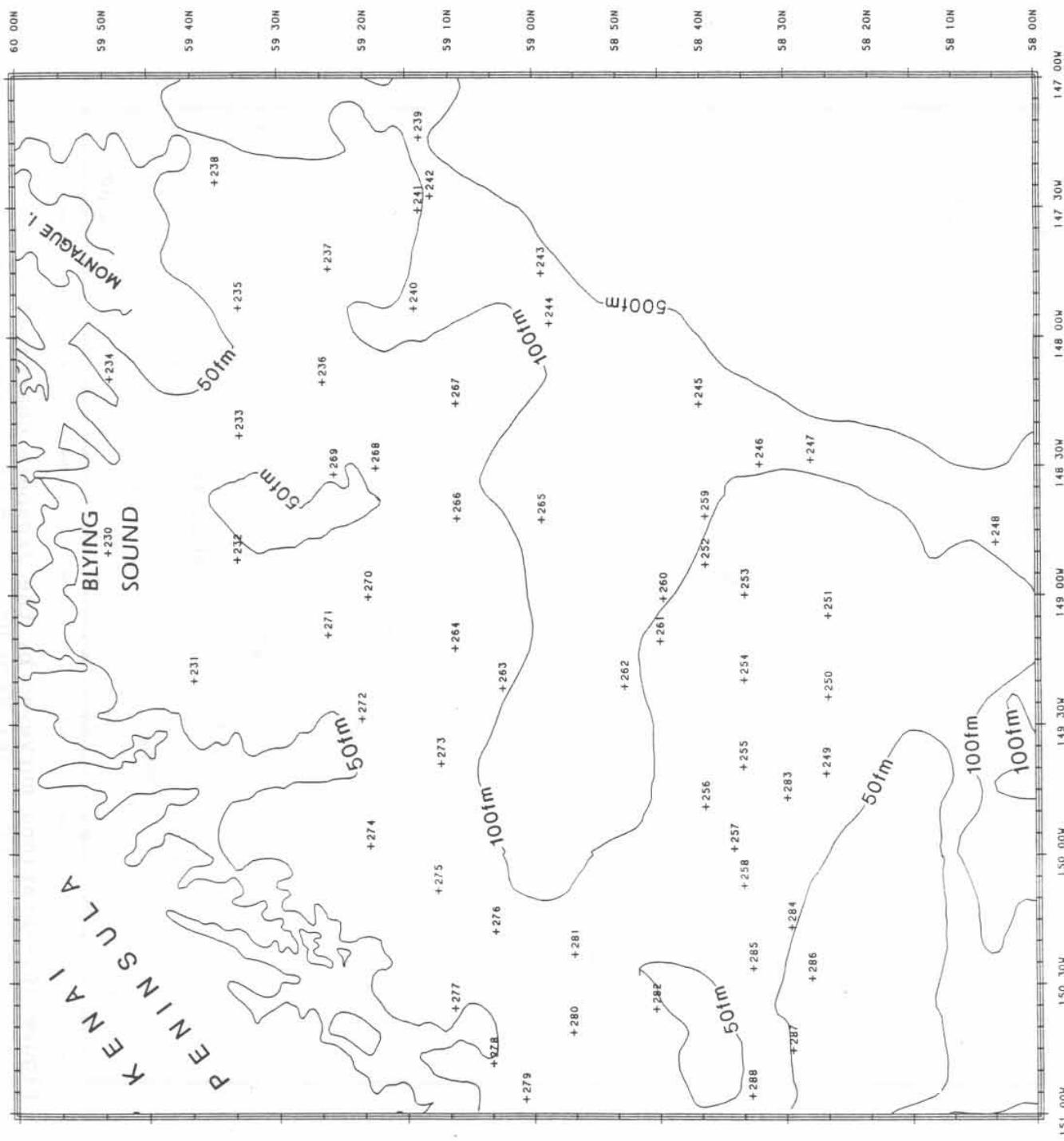


Figure 29.—Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Kenai Peninsula and Montague Island areas (hauls 230-288).

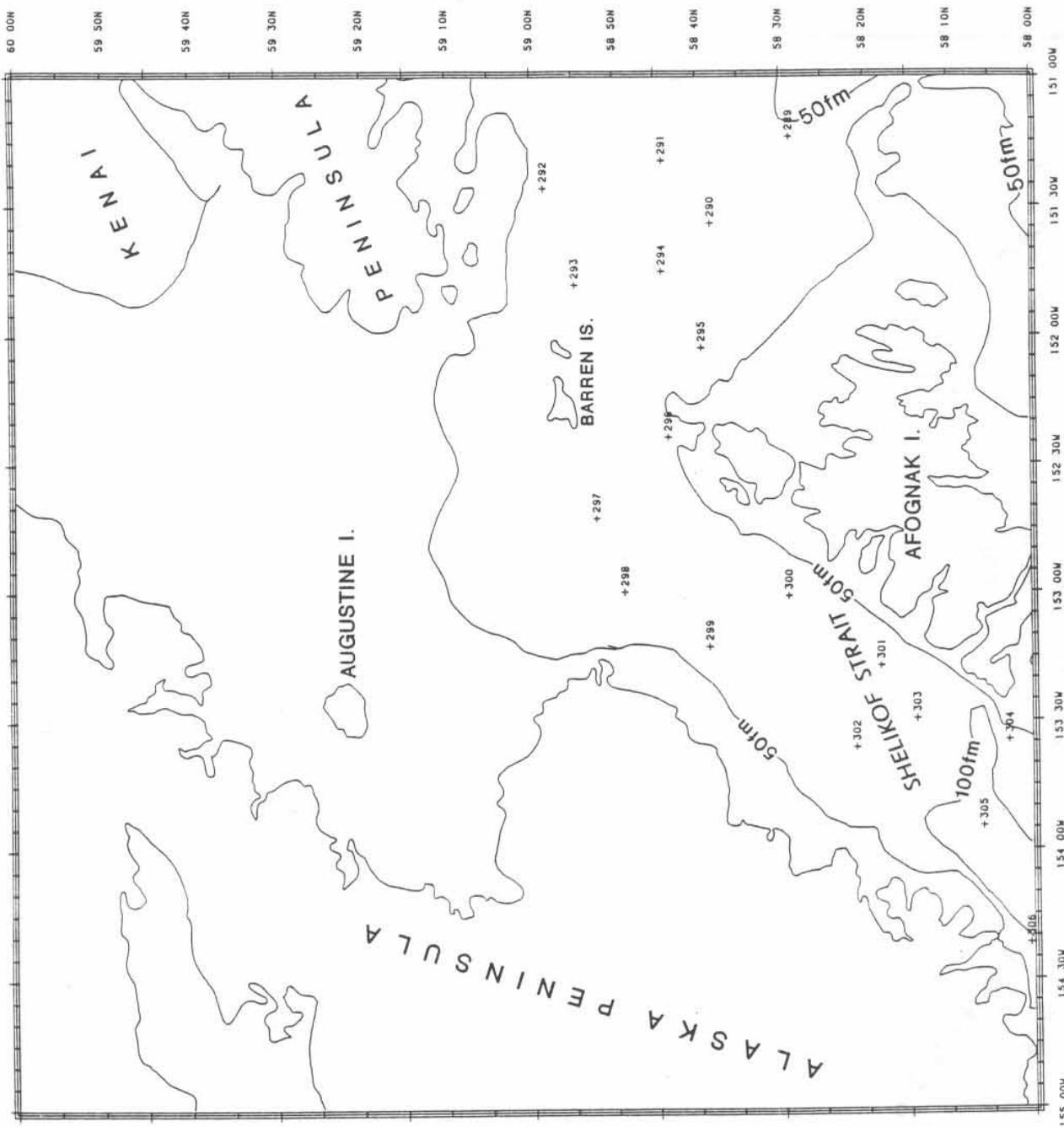


Figure 30. --Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Barren Islands area (hauls 289-306).

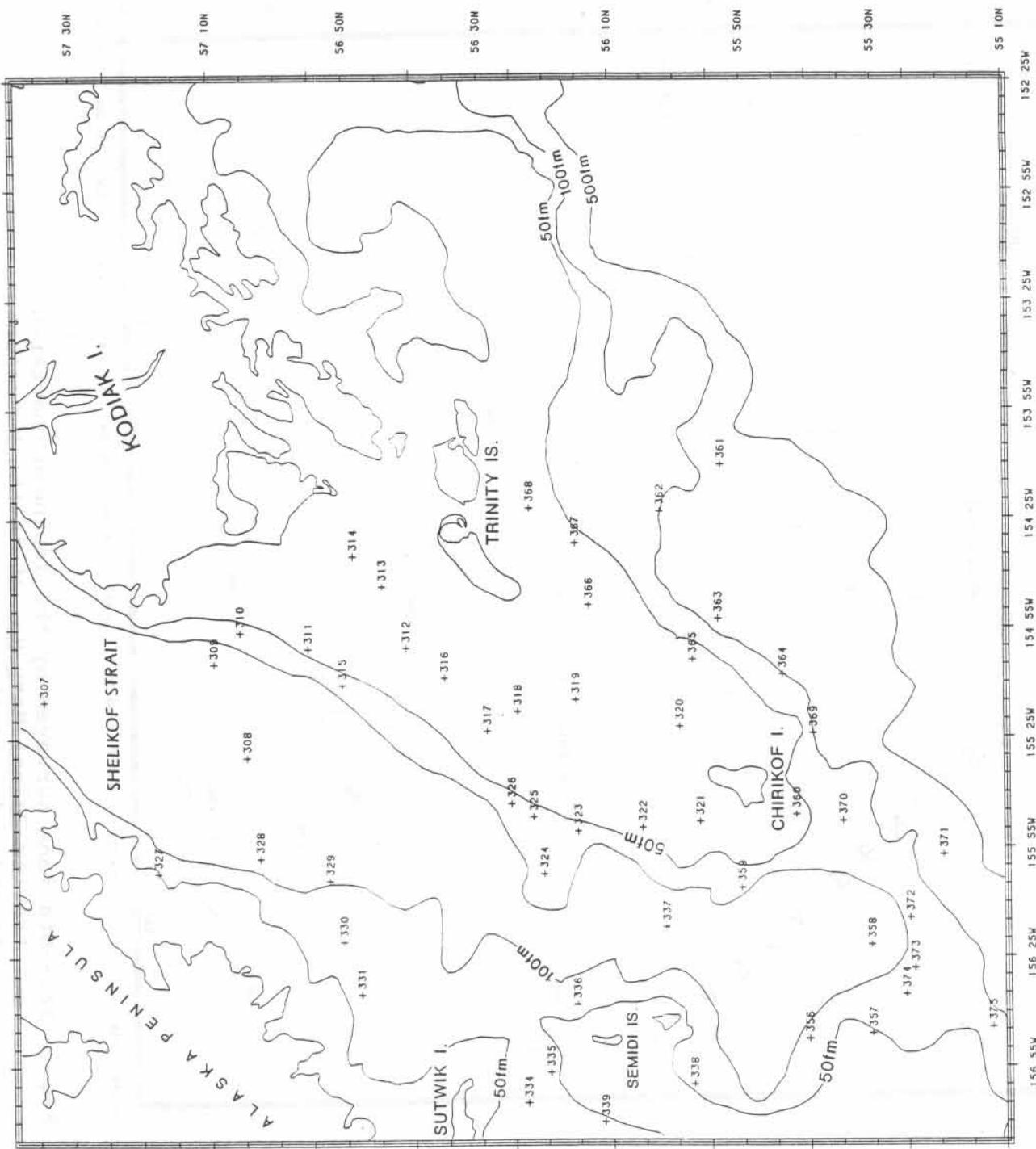


Figure 31.--Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Chirikof Island and Kodiak Island areas (hauls 307-331, 334-339 and 356-375).

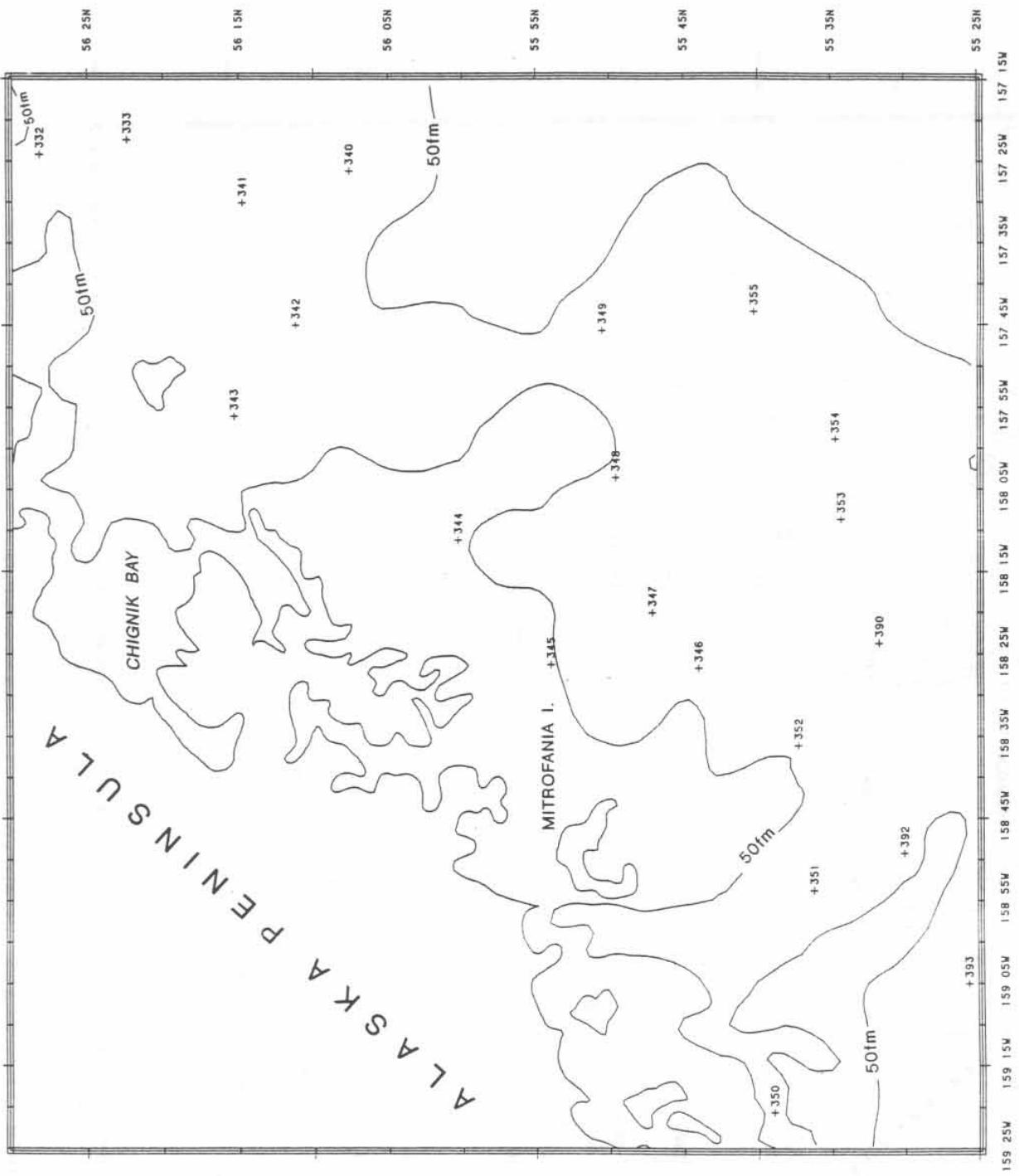


Figure 32.—Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Mitrofania Island and Chignik Bay areas (hauls 332, 333, 340-355, 390, 392 and 393).

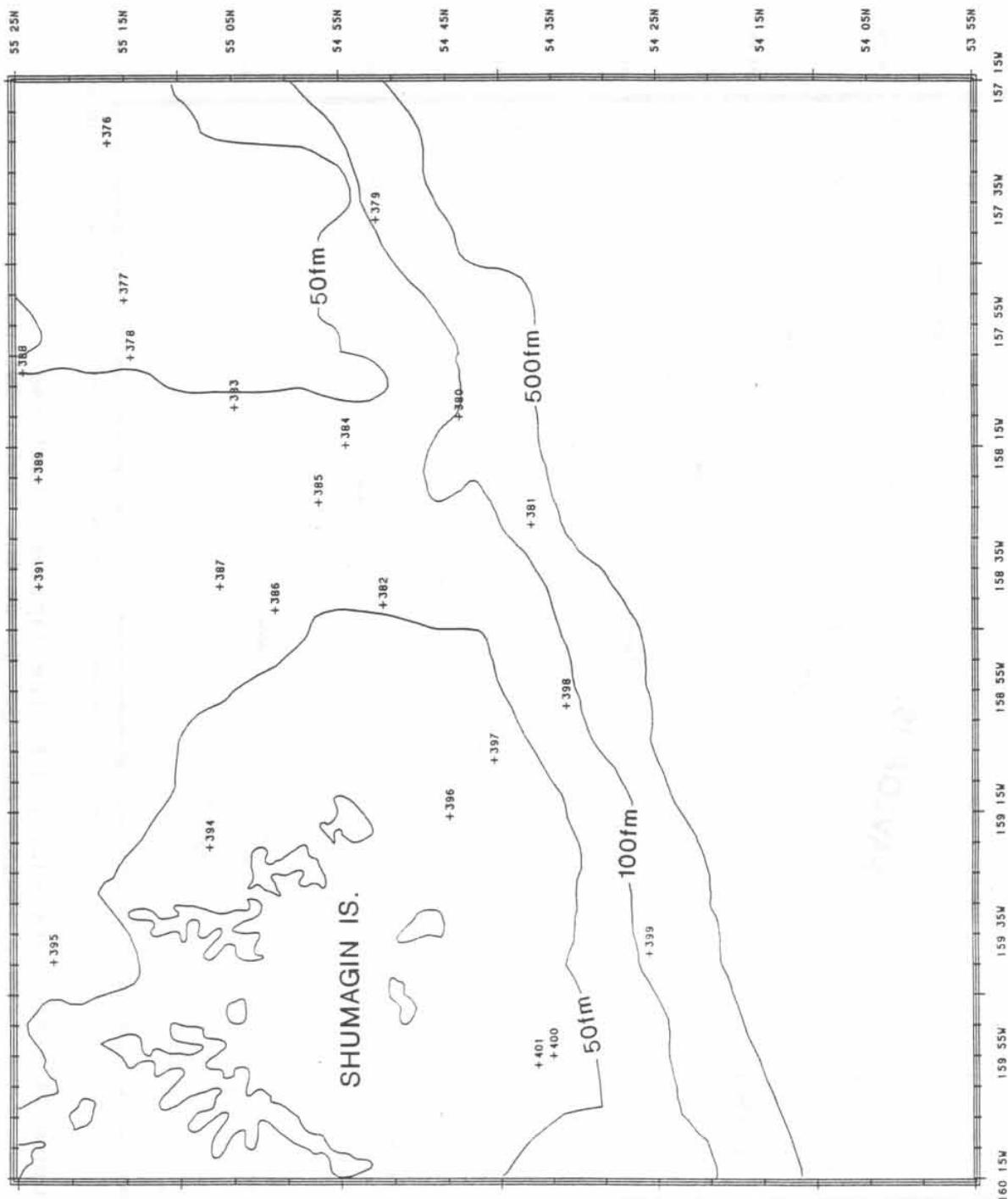


Figure 33. --Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Shumagin Islands area (hauls 376-389, 391 and 394-401).

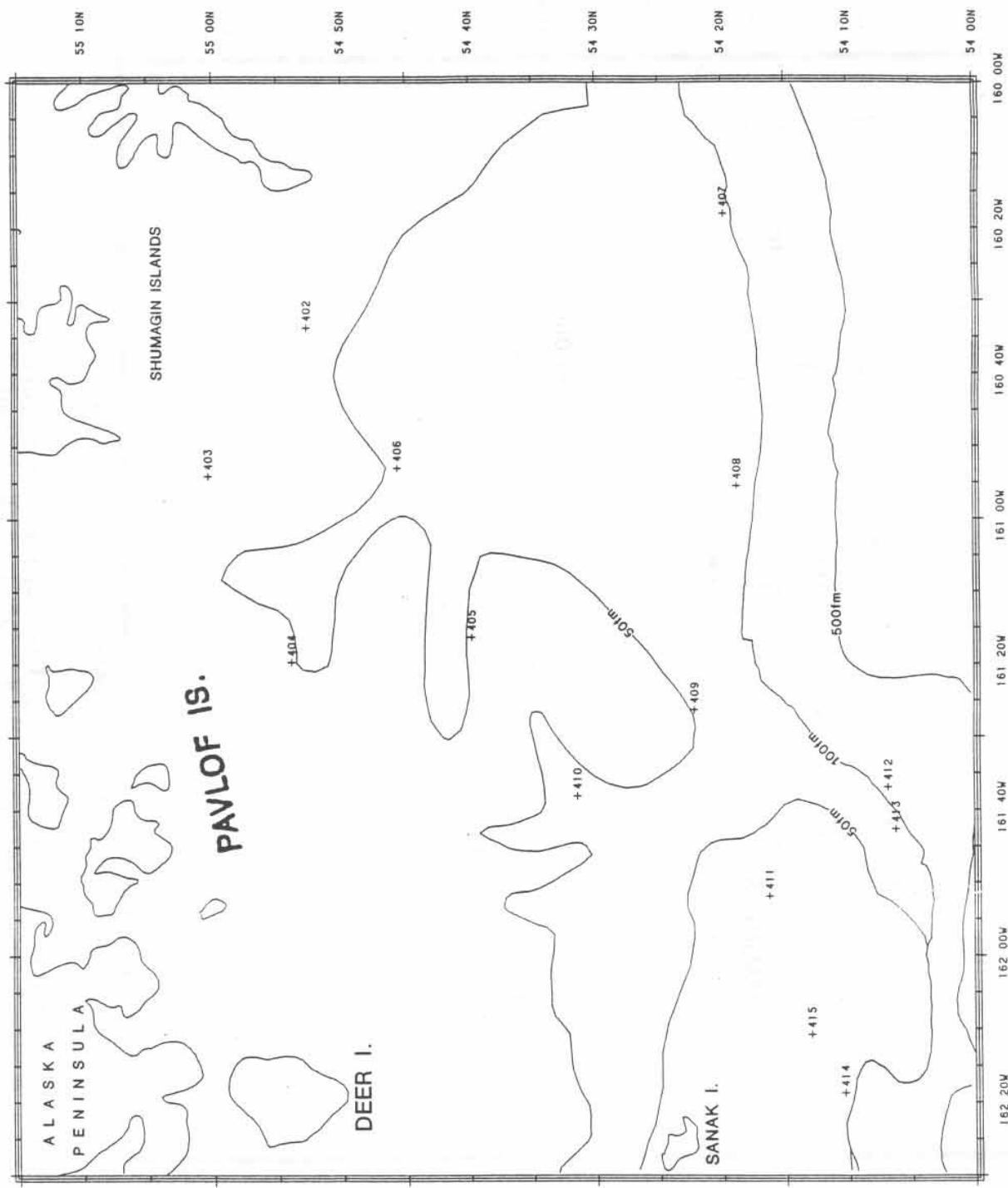


Figure 34.--Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Pavlof Islands area (hauls 402-415).

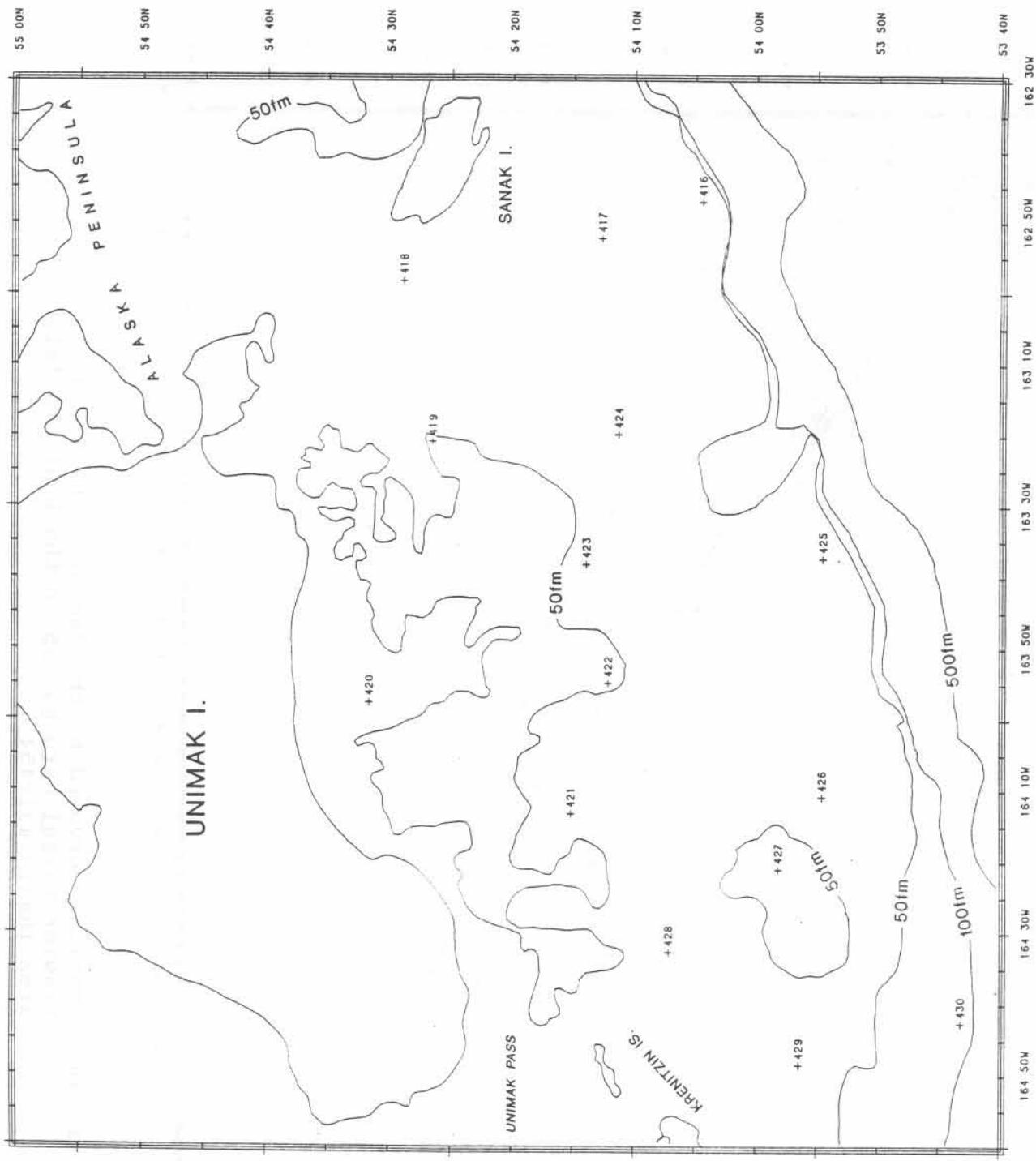


Figure 35.--Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Unimak Island area (hauls 416-430).

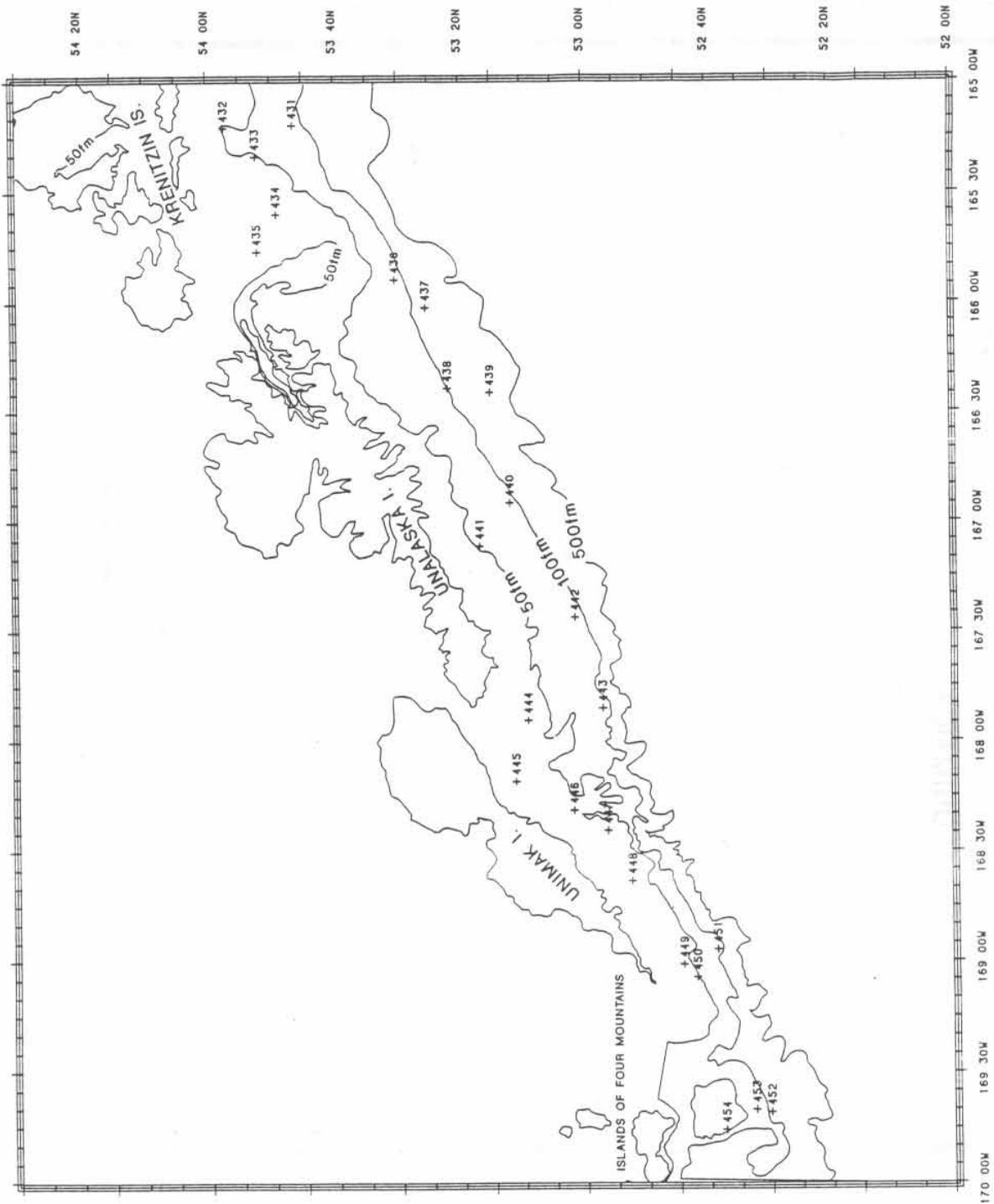


Figure 36.—Stations surveyed by the Japanese chartered trawler Taisei Maru No. 35 in the Unalaska Island area (hauls 431-454).

Section 2 (continued)

Fishing log for the Taisei Maru No. 35

Summary listings of species catches by haul

- Each haul entry includes the latitude, longitude, loran readings, bottom depth in fathoms, duration of tow, distance fished in nautical miles and the catch in kilograms for each major species.

- Species catches are unadjusted and expressed in kilograms.

KILOGRAMS OF CATCH TAKEN BY THE Taisei Maru No. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	1	2	3	4	5	6	7	8	9	10	11
MONTH/DAY/YEAR	5/22/87	5/22/87	5/22/87	5/22/87	5/22/87	5/23/87	5/23/87	5/23/87	5/23/87	5/23/87	5/23/87
LATITUDE START	52 30.3	52 34.3	52 39.1	52 37.2	52 47.7	53 3 5	52 59.2	53 2.6	53 10.8	53 13.3	53 13.3
LONGITUDE START	169 57.3	169 32.8	169 22.2	168 55.5	168 36.5	168 3 3	167 41.4	167 32.7	167 20.5	166 46.1	166 49.4
LATITUDE END	52 28.8	52 35.2	52 39.4	52 36.9	52 49.1	53 2 0	52 59.6	52 56.9	53 3.7	53 14.5	53 14.5
LONGITUDE END	169 35.0	169 30.9	169 18.8	168 55.7	168 35.7	168 0.5	167 44.8	167 36.0	167 17.4	166 49.5	166 46.8
LORAN START	48948.70	17056.20	17117.30	17193.50	17306.90	17483.90	17518.40	17529.20	17587.00	17704.90	17710.30
LORAN END	49028.60	48957.10	48933.00	48830.50	48786.50	48694.20	48590.10	48547.20	48368.60	48389.50	48380.00
GEAR DEPTH	120	79	68	301	93	63	63	219	100	153	98
DURATION IN HOURS	0.50	0.50	0.50	0.32	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.09	1.43	2.12	1.37	1.44	2.26	2.10	1.99	2.15	2.22	1.95
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	72.9	14.2	2.4	0.0	323.7	0.9	1882.4	1.0	457.0	17.8	17.4
PACIFIC COD	90.5	171.4	316.4	0.0	232.5	43.2	131.3	0.0	150.3	10.6	81.0
SABLEFISH	1.1	0.0	0.0	376.0	0.0	0.0	0.0	492.4	0.0	27.5	0.0
ARROWTOOTH FL.	72.8	0.0	37.5	0.0	306.3	20.0	35.0	53.7	54.5	68.9	106.0
HALIBUT	209.1	88.6	74.5	4.0	140.8	121.2	3.6	17.2	25.7	82.4	226.3
FLATHEAD SOLE	1.0	0.7	0.0	0.0	6.9	0.0	0.0	0.0	1.0	0.0	8.9
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	7.2	1.1	0.0	5.1	0.0	0.0	0.0
REX SOLE	7.7	0.0	0.0	0.0	0.0	7.0	0.4	0.6	12.5	1.3	71.5
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.3	2.5	1.0	0.0	0.0	24.3	36.3	0.0	33.2	0.0	24.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	124.0	1.2	83.5	0.0	2636.5	0.0	0.5	0.0	0.0	77.0	17.4
ROUGHEYE RKFH	11.0	0.0	0.5	0.0	6.3	0.0	0.0	82.1	0.0	7.0	0.0
THORNYHEADS	0.0	0.0	0.0	18.7	5.4	0.0	0.0	105.2	0.0	111.0	3.6
NORTHERN RKFH	2.1	14.7	174.1	0.0	49.1	0.0	9.4	0.0	0.5	0.5	1.9
DUSKY RKCFISH	0.0	0.0	87.0	0.0	80.5	0.0	17.5	0.0	0.0	0.0	2.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	8.8	0.0	0.0	221.3	0.0	21.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	2322.8	0.0	0.0	1464.4	0.0	0.0	0.0
SCULPINS	23.0	12.9	97.3	0.0	16.7	0.0	5.0	6.4	0.0	0.0	1.8
SKATES	0.0	14.5	0.0	0.0	3.9	0.0	20.0	0.0	0.0	0.0	1.3
SPINY DOGFISH	0.0	0.0	0.0	0.0	1.8	3.0	2.1	0.0	0.0	0.0	2.3
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILograms OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	12	13	14	15	16	17	18	19	20	21	22
MONTH/DAY/YEAR	5/24/87	5/24/87	5/24/87	5/24/87	5/24/87	5/24/87	5/24/87	5/24/87	5/24/87	5/24/87	5/24/87
LATITUDE START	53 25 2	53 24 2	53 31 8	53 38 4	53 41 2	53 55 0	53 47 7	53 53 4	54 0 2	53 42 2	53 39 0
LONGITUDE START	166 16 5	165 30 8	165 44 0	165 41 5	166 1 4	165 31 8	165 4 3	165 5 0	164 49 8	164 34 0	164 26 0
LATITUDE END	53 26 4	53 25 3	53 33 2	53 38 5	53 41 0	53 54 7	53 47 2	53 53 1	54 0 3	53 42 8	53 39 6
LONGITUDE END	166 13 5	165 48 2	165 41 7	165 44 0	165 28 1	165 1 2	165 1 8	165 46 6	164 30 6	164 30 6	164 30 0
LORAN START	17833 50	17874 40	17921 00	17955 20	17935 80	18045 00	18050 70	18074 30	18122 40	18067 00	18063 70
LORAN START	48236 40	48125 40	48104 80	48103 70	48212 10	48082 10	47922 60	47934 00	47860 50	47748 90	47700 90
LORAN END	17844 60	17884 00	17931 10	17951 70	17940 40	18048 70	18032 80	18077 40	18126 30	18073 70	18061 30
LORAN END	48243 60	48114 60	48095 80	48117 30	48194 50	48061 90	47904 20	47916 00	47842 60	47730 70	47723 30
GEAR DEPTH	86	301	85	46	44	45	81	32	104	410	410
DURATION IN HOURS	0 50	0 50	0 50	0 40	0 50	0 50	0 50	0 50	0 50	0 50	0 50
DISTANCE FISHED	2 16	1 90	1 95	1 54	2 00	2 22	2 00	1 92	1 90	2 13	2 44
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	1 / 717	1 / 717
POLLOCK	161 0	0 0	37 0	3 7	0 0	18 5	84 0	313 5	136 3	0 9	0 0
PACIFIC COD	120 4	0 0	149 9	265 0	83 1	537 9	260 0	131 8	120 2	90 5	0 0
SABLEFISH	0 0	280 3	66 2	0 0	0 0	0 0	0 0	0 0	10 8	114 5	
ARROWTOOTH FLH	377 2	2 8	3684 5	43 0	0 0	122 0	138 1	93 9	0 0	288 3	0 0
HALIBUT	33 8	0 0	1276 9	543 8	30 7	255 9	30 6	10 7	100 4	69 7	0 0
FLATHEAD SOLE	39 8	0 0	6 6	0 5	0 0	0 0	0 0	2 9	1 3	11 8	0 0
ENGLISH SOLE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
DOVER SOLE	0 0	0 1	2 8	0 0	0 0	0 0	0 0	0 0	0 0	0 6	0 0
REX SOLE	14 5	0 8	30 6	0 0	0 0	0 0	0 0	5 6	0 3	781 7	0 0
YELLOWFIN SOLE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
STARRY FLUNDER	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ROCK SOLE	33 7	0 0	30 6	16 1	27 0	208 5	0 0	221 4	85 0	9 4	0 0
BUTTER SOLE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ALASKA PLAICE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
PAC DC PERCH	0 3	0 0	639 1	152 0	9 1	0 0	0 0	0 0	0 0	754 2	0 0
ROUGH EYE RKFH	0 0	0 0	1 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
THORNYHEADS	0 0	96 7	32 3	0 0	0 0	0 0	0 0	0 0	0 0	1 7	42 0
NORTHERN RKFH	0 7	0 0	3 7	296 9	31 5	0 0	0 0	0 0	0 0	4 7	0 0
DUSKY RKCFISH	0 0	0 0	0 0	54 5	1 9	0 0	0 0	0 0	0 0	0 0	0 0
SHORTRAKER RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
HARLEQUIN RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
REDSTRIPE RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SHARPCHIN RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ATKA MACKEREL	3 1	0 0	3 5	3 7	4 4	0 0	1 2	1 3	2 4	3 5	0 0
GRENADEERS	0 0	350 5	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	1536 4
SCULPINS	8 8	0 0	37 5	105 1	30 5	4 3	0 0	5 9	13 3	11 2	0 0
SKATES	0 0	0 0	4 8	0 0	0 0	32 1	0 0	60 0	7 0	0 0	0 0
SPINY DOGFISH	2 3	0 0	18 0	0 0	1 3	4 0	9 4	6 8	4 7	1 5	0 0
SALMON SHARK	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SLEEPER SHARK	0 0	55 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
TANNER CRAB	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	1 4
KING CRAB	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
DUNGENESS CRAB	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
PINK SHRIMP	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SIDE STRIPE SHRIMP	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SCALLOP	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

KILograms OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	MARU NO.	33	DURING THE	1987	GULF OF	ALASKA	BOTTOM	TRawl	SURVEY
23	5/26/87	24	25	26	25	26	27	27	28	29
53 40.9	5/26/87	53 42.1	53 49.6	53 45.4	54 5.7	54 4.2	54 21.8	54 18.4	54 15.0	54 27.6
LATITUDE START	LATITUDE START	LATITUDE START	LATITUDE END	LATITUDE END	LATITUDE END	LATITUDE END	LATITUDE END	LATITUDE END	LATITUDE END	LATITUDE END
164 29.8	164 28.1	164 12.2	164 12.3	163 0.0	163 22.7	163 47.4	163 6.3	162 30.4	163 6.5	163 17.8
53 41.2	53 42.6	53 49.8	53 45.2	54 7.6	54 5.6	54 23.7	54 18.8	54 14.7	54 29.7	54 35.0
164 26.8	164 24.9	164 11.5	164 9.1	163 1.4	163 25.5	163 49.6	163 3.3	162 34.5	163 14.9	163 17.7
18066.60	18073.90	18123.00	18106.20	18232.60	18228.10	18270.30	18179.90	18306.50	18322.60	18343.00
LORAN START	LORAN START	LORAN END	LORAN END	LORAN END	LORAN END	LORAN END	LORAN END	LORAN END	LORAN END	LORAN END
47724.00	47716.40	47637.20	47633.00	47237.00	47328.50	47326.80	47797.50	47066.90	47287.40	47360.40
18071.70	18079.90	18124.20	18109.10	18237.90	18230.40	18275.30	18184.90	18302.60	18328.70	18341.60
47708.10	47699.20	47633.20	47614.80	47746.20	47385.80	47541.10	47962.80	47091.10	47295.70	47342.10
GEAR DEPTH	DURATION IN HOURS	DISTANCE FISHED	PERFORMANCE / GEAR							
24.6	0.50	0.50	0.717	44	68	41	54	52	66	36
0.50	1.80	1.99	0.717	0.17	0.50	0.30	0.50	0.50	0.50	0.30
0 /717	0 /717	0 /717	7 /717	1.95	2.04	2.15	2.25	1.82	2.42	2.18
POLLOCK	PACIFIC COD	SABLEFISH								
0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
354.7				374.0	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.										
HALIBUT	61.2	42.9	0.0	1040.1	0.0	7.2	78.2	426.9	18.6	30.5
FLATHEAD SOLE	0.0	0.2	0.0	141.8	28.4	80.1	82.6	660.5	660.5	55.7
ENGLISH SOLE	0.0	0.0	0.0	0.7	1.7	81.0	135.7	64.0	64.0	29.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	0.0	84.5	0.0	0.0	0.0	0.0	0.0	5.9	2.9	0.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	0.0	11.4	130.0	105.5	47.5	82.9
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	445.0	0.0	4.4	0.0	1.2	0.0	0.6	0.0	0.0
ROUGH EYE RWFH	6.3	10.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	129.5	267.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RWFH	0.0	5.6	0.0	166.7	0.0	492.7	7.4	0.0	0.0	0.0
DUSKY RGFISH	0.0	1.6	0.0	47.3	0.0	241.1	2.6	0.0	0.0	0.0
SHOR TRAKER RF	39.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARP CHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	1.2	0.0	2.7	0.0	1.2	0.3	0.0
GRENADEERS	1158.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.1	40.8	0.0	8.6	6.3	4.2	0.0	45.4	146.0	75.5
SKATES	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	3.5	0.0	0.0	2.3	0.0	2.1	13.7
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAIL #	MONTH / DAY / YEAR	MARU NO.	33	34	35	36	37	38	39	40	41	42	43
LATITUDE START	5/28/87	5/29/87	5/29/87	5/29/87	5/29/87	5/29/87	5/29/87	5/29/87	5/29/87	5/29/87	5/29/87	5/29/87	5/29/87
LONGITUDE START	54 34 .6	54 24 .9	54 24 .6	54 24 .7	54 19 .0	54 19 .0	54 19 .7	54 13 .1	54 32 .3	54 49 .0	54 48 .7	54 33 .8	54 30 .3
LATITUDE END	162 39 .1	161 57 .1	161 59 .2	161 56 .3	161 55 .8	161 35 .0	161 13 .5	161 20 .6	161 9 .7	160 26 .8	160 26 .8	160 30 .7	160 30 .8
LONGITUDE END	162 37 .8	161 53 .4	162 4 .4	162 3 .4	162 0 .2	161 33 .0	161 9 .3	161 20 .4	161 8 .0	160 23 .7	160 23 .7	160 30 .7	160 30 .8
LORAN START	18363.40	18359.10	18298.70	18307.20	18342.10	18320.50	18350.40	18350.40	18350.40	18306.90	18307.70	18391.60	18391.60
LORAN END	47125.10	46869.40	46880.50	46863.80	46861.00	46738.00	46609.70	46647.30	46577.70	46311.20	46341.20	46341.20	46341.20
GEAR DEPTH	47116.80	46847.10	46905.20	46886.40	46844.40	46726.70	46584.60	46565.30	46565.30	46292.40	46345.70	46345.70	46345.70
DURATION IN HOURS	0 .50	0 .50	0 .67	0 .50	0 .50	0 .50	0 .50	0 .75	0 .20	0 .50	0 .50	0 .50	0 .50
DISTANCE FISHED	2 .32	2 .22	2 .80	2 .25	1 .85	1 .90	2 .51	0 .81	2 .08	2 .07	2 .07	2 .10	2 .10
PERFORMANCE / GEAR	0 /717	0 /717	0 /717	1 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717
POLLOCK	122 .5	32 .2	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	1 .2	0 .2	40 .9	40 .9
PACIFIC COD	171 .1	32 .6	381 .6	3 .6	3 .6	3 .8	207 .6	0 .0	0 .0	58 .7	123 .0	83 .0	83 .0
SABLEFISH	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	62 .8	0 .0	0 .0	0 .0	0 .0	0 .0
ARROWTOOTH FL.	309 .8	943 .8	3082 .3	0 .0	0 .0	0 .0	1276 .4	0 .0	0 .0	69 .1	252 .3	542 .5	542 .5
HALIBUT	37 .4	13 .8	85 .0	144 .0	203 .6	840 .2	80 .8	0 .0	97 .5	69 .7	61 .1	107 .8	107 .8
FLATHEAD SOLE	203 .1	79 .1	2 .1	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	50 .2	241 .3	107 .2	107 .2
ENGLISH SOLE	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
DOVER SOLE	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
REX SOLE	9 .1	3 .7	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
YELLOWFIN SOLE	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
STARRY FLOUNDER	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
ROCK SOLE	4 .4	0 .0	0 .0	1 .4	0 .8	0 .8	0 .7	0 .0	0 .0	45 .0	273 .1	17 .6	17 .6
BUTTER SOLE	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
ALASKA PLAICE	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
PAC DC PERCH	0 .0	0 .0	190 .0	12 .3	7 .0	7 .0	92 .7	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
ROUGH EYE RKFH	0 .0	36 .0	4 .4	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
THORNYHEADS	0 .0	0 .0	3 .8	0 .0	0 .0	0 .0	36 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
NORTHERN RKFH	0 .0	0 .0	738 .7	32 .6	46 .0	0 .6	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
DUSKY RCKFISH	0 .0	0 .0	25 .7	3 .8	4 .4	4 .4	1391 .8	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SHORTRAKER RF	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
HARLEQUIN RF	0 .0	0 .0	0 .0	0 .4	0 .6	0 .6	646 .8	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
REDSTRIFE RF	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SHARPCHIN RF	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
ATKA MACKEREL	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .7	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
GRENADIERS	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SCULPINS	5 .8	0 .0	16 .7	0 .7	0 .7	0 .7	52 .5	0 .0	0 .0	6 .3	4 .7	4 .2	4 .2
SKATES	0 .0	8 .3	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SPINY DOGFISH	2 .0	2 .1	14 .5	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SALMON SHARK	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SLEEPER SHARK	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
TANNER CRAB	1 .7	0 .3	0 .2	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .1	0 .0	0 .0	0 .0
KING CRAB	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
DUNGENESS CRAB	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
PINK SHRIMP	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SIDE STRIPE SHRIMP	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SCALLOP	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	45	46	47	48	49	50	51	52	53	54	55
MONTH/DAY/YEAR	5/31/87	5/31/87	5/31/87	5/31/87	6/ 1/87	6/ 1/87	6/ 1/87	6/ 1/87	6/ 1/87	6/ 1/87	6/ 1/87
LATITUDE START	54 17 8	54 13 8	54 20 2	54 21 7	54 23 7	54 28 1	54 34 6	54 40 5	54 42 6	55 1 4	55 1 4
LONGITUDE START	160 38 6	160 26 7	160 12 4	160 0 3	159 41 2	159 27 4	159 20 6	158 48 0	158 17 6	158 1 2	156 57 5
LATITUDE END	54 17 9	54 12 5	54 21 4	54 21 8	54 37 7	54 24 5	54 28 2	54 35 0	54 42 3	54 43 3	55 1 1
LONGITUDE END	160 42 3	160 27 5	160 9 6	159 56 9	159 38 4	159 24 4	159 17 1	158 44 7	158 16 0	157 57 8	157 0 9
LORAN START	34026..30	34011..00	33930..90	33930..00	33843..70	33851..60	33823..60	33732..90	33649..60	33608..00	33414..00
LORAN END	46399..70	46331..60	46242..10	46169..40	46042..00	45971..70	45927..00	45725..40	45537..30	45436..90	45028..60
LORAN END	46421..90	46348..90	46225..10	46148..90	46024..20	45953..40	45906..30	45705..70	45525..20	45415..90	45049..30
GEAR DEPTH	101	284	104	134	43	200	104	87	159	107	301
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.19	2.05	1.96	2.01	2.10	1.90	2.03	1.92	2.00	2.08	2.00
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC COD	509.2	0.0	273.5	35.3	4.6	0.0	192.1	23.6	0.0	865.3	0.0
SABLEFISH	874.4	174.7	38.0	765.5	0.0	253.6	30.8	39.5	2978.8	19.3	1022.1
ARROWTOOTH FL.	1143.0	12.0	508.2	327.1	0.0	45.0	416.0	197.3	147.1	2284.3	17.7
HALIBUT	33.2	0.0	104.7	222.2	136.5	57.8	13.4	42.4	412.9	583.4	104.6
FLATHEAD SOLE	0.5	0.0	1.2	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	4.2	201.1	2.3	4.8	0.0	197.1	2.2	0.9	0.8	0.0	114.3
REX SOLE	89.3	35.3	610.6	84.1	0.0	40.5	0.0	17.5	1.1	2.5	2.8
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	247.9	0.0	23.3	336.1	7.0	0.0	40.3	0.0	7.6	40.2	0.0
ROUGHEYE RKFH	0.3	0.0	0.0	7.2	0.0	193.6	0.0	0.0	166.5	9.1	0.0
THORNYHEADS	0.0	267.5	0.0	148.3	0.0	850.5	0.0	0.0	501.7	2.6	274.3
NORTHERN RKFH	5.6	0.0	0.0	0.0	76.4	0.0	0.7	0.0	0.0	0.6	0.0
DUSKY RKFISH	2.9	0.0	0.0	0.0	0.0	7.9	0.0	0.0	0.0	0.0	0.0
SHORTTRAKER RF	0.0	6.9	0.9	0.0	0.0	148.7	0.0	0.0	0.0	1.4	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADLERS	0.0	344.8	0.0	0.0	0.0	0.0	70.3	0.0	0.0	0.0	0.0
SCULPTINS	9.7	1.0	151.0	39.2	0.0	1.9	25.2	0.3	48.3	0.0	0.9
SKATES	0.0	0.7	15.0	3.5	0.0	0.0	4.7	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALL OP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	56	57	58	59	60	61	62	63	64	65	66
MONTH/DAY/YEAR	6/ 2/87	6/ 2/87	6/ 2/87	6/ 2/87	6/ 3/87	6/ 3/87	6/ 3/87	6/ 3/87	6/ 3/87	6/ 4/87	6/ 4/87
LATITUDE START	55 0. 9	54 59. 0	54 59. 6	54 53. 2	54 45. 7	55 0. 9	55 13. 2	55 12. 1	55 10. 6	55 14. 6	
LONGITUDE START	157 7. 7	157 15. 4	157 57. 6	158 22. 9	158 49. 5	158 36. 0	158 17. 7	158 19. 6	158 35. 7	158 34. 4	159 13. 0
LATITUDE END	54 58. 4	54 57. 2	54 59. 6	54 51. 6	54 47. 1	55 2. 8	55 4. 9	55 13. 2	55 11. 9	55 12. 6	55 12. 4
LONGITUDE END	157 10. 4	157 17. 8	158 1. 5	158 26. 2	158 47. 0	158 34. 3	158 18. 2	158 23. 4	158 38. 9	158 55. 7	159 12. 2
LORAN START	33436. 30	33458. 60	33543. 50	33618. 80	33700. 60	33620. 30	33574. 10	33541. 60	33580. 40	33626. 00	33652. 80
LORAN END	45089. 30	45138. 20	45387. 60	45549. 80	45720. 00	45618. 30	45504. 10	45500. 50	45601. 70	45719. 00	45830. 40
GEAR DEPTH	205	104	45	98	49	109	96	82	110	112	82
DURATION IN HOURS	0. 50	0. 50	0. 58	0. 50	0. 50	0. 50	0. 50	0. 50	0. 50	0. 50	0. 50
DISTANCE FISHED	2. 11	2. 24	2. 29	2. 49	2. 04	2. 11	1. 98	2. 18	1. 83	2. 10	2. 20
PERFORMANCE / GEAR	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717
POLLOCK	0. 0	0. 0	0. 0	4. 6	0. 0	0. 3	0. 0	20. 5	3. 1	5. 9	25. 6
PACIFIC COD	0. 0	25. 0	0. 0	103. 4	37. 5	45. 5	13. 7	6. 2	2. 6	21. 9	147. 0
SABLEFISH	81B 2	22. 5	0. 0	40. 1	0. 0	32. 8	0. 0	5. 4	26. 9	15. 6	0. 0
ARROWTOOTH FL.	137. 0	537. 0	11. 2	262. 1	1. 8	358. 8	107. 0	333. 8	888. 2	1289. 5	681. 4
HALIBUT	158 2	72. 9	10. 7	179. 5	248. 0	173. 4	42. 3	30. 4	0. 0	46. 6	125. 0
FLATHEAD SOLE	0. 0	0. 4	0. 0	1. 4	0. 3	23. 0	36. 0	25. 5	182. 0	182. 0	97. 9
ENGLISH SOLE	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
DOVER SOLE	38. 7	12. 6	0. 0	0. 8	0. 0	6. 6	1. 4	3. 6	1. 9	0. 0	0. 4
REX SOLE	42. 0	120. 2	0. 0	36. 9	0. 0	16. 3	7. 7	6. 9	2. 1	0. 0	12. 7
YELLOWFIN SOLE	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
STARRY FLOUNDER	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
ROCK SOLE	0. 0	0. 0	0. 0	3. 0	0. 0	3. 8	1. 8	0. 0	0. 0	0. 0	0. 0
BUTTER SOLE	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
ALASKA FLAICE	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
PAC OC PERCH	0. 0	1. 6	115. 0	31. 7	158. 3	0. 0	2. 0	1. 0	0. 0	0. 0	1. 9
ROUGHEYE RKFH	13. 3	0. 9	0. 0	1. 3	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
THORNYHEADS	405. 5	4. 9	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
NORTHERN RKFH	0. 0	0. 0	0. 0	373. 0	44. 2	241. 0	1. 0	1. 2	4. 0	1. 3	2. 3
DUSKY RCKFISH	0. 0	0. 0	21. 7	41. 9	12. 4	0. 0	1. 6	18. 9	0. 0	0. 0	8. 7
SHORTRAKER RF	85. 0	16. 1	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
HARLEQUIN RF	0. 0	0. 0	52. 8	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
REDSTR IPE RF	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SHARPCHIN RF	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
ATKA MACKEREL	0. 0	0. 0	1. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
GRENADIERS	4. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SCULPINS	22. 3	0. 6	10. 2	0. 4	6. 4	3. 2	0. 8	0. 1	3. 8	4. 1	1. 1
SKATES	11. 6	4. 8	5. 3	5. 4	0. 0	14. 0	0. 7	3. 3	0. 0	104. 3	3. 1
SPINY DOGFISH	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 2	0. 0
SALMON SHARK	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SLEEPER SHARK	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
TANNER CRAB	3. 3	0. 2	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
KING CRAB	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
DUNGENESS CRAB	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
PINK SHRIMP	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SIDE STRIPE SHRIMP	0. 1	0. 1	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SCALLOP	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0

33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	78	79	80	81	82	83	84	85	86	87	88
MONTH/DAY/YEAR	6/ 6/87	6/ 6/87	6/ 7/87	6/ 7/87	6/ 7/87	6/ 7/87	6/ 7/87	6/ 7/87	6/ 7/87	6/ 8/87	6/ 8/87
LATITUDE START	55 44.0	55 40.1	56 17.0	56 15.7	56 6.8	56 5.3	55 34.8	55 46.2	55 37.1	55 32.9	55 18.9
LONGITUDE START	158 10.6	158 0.0	157 11.6	157 37.9	157 19.4	157 54.5	158 10.6	157 42.2	157 40.6	157 23.1	157 2.8
LATITUDE END	55 44.1	55 39.3	56 18.5	56 13.6	56 4.7	56 3.5	55 52.7	55 44.2	55 35.2	55 31.5	55 17.4
LONGITUDE END	158 7.0	157 36.7	157 14.1	157 38.2	157 20.4	157 35.2	158 10.9	157 42.1	157 39.7	157 20.7	156 39.8
LORAN START	33405.70	33398.60	33146.60	33205.20	33205.90	33284.00	33361.50	33337.30	33369.90	33350.30	33362.00
LORAN START	45401.60	45339.30	44977.70	45149.90	45042.30	45270.70	45387.20	45218.20	45222.20	45120.40	45023.60
LORAN END	33397.40	33395.00	33145.10	33214.80	33216.80	33293.30	33370.80	33345.10	33372.50	33350.80	33361.30
LORAN END	45378.00	45319.80	44991.70	45154.50	45051.50	45277.60	45391.70	45220.50	45219.80	45108.20	45008.20
GEAR DEPTH	67	69	69	71	85	82	71	60	49	53	
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
DISTANCE FISHED	2.09	2.04	2.01	2.07	2.20	1.89	2.12	2.02	1.97	2.27	
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	
POLLOCK	0.4	6.7	59.0	27.7	68.0	133.5	157.8	4.1	0.0	0.0	
PACIFIC COD	33.5	31.4	6.9	92.2	78.1	203.1	160.1	823.0	140.9	2.6	
SABLEFISH	3.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	5.4	0.0	
ARROWTOOTH FL.	533.1	278.6	92.4	111.2	181.3	287.6	612.4	1313.2	1289.7	0.2	
HALIBUT	36.4	49.8	102.6	163.3	205.3	272.6	169.9	232.7	142.1	75.7	
FLATHEAD SOLE	37.6	39.9	34.5	67.5	72.5	72.1	24.9	112.9	75.7	4.0	
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.8	1.3	0.0	0.0	0.0	
REX SOLE	11.0	1.2	0.0	1.3	3.1	0.3	0.8	30.9	20.2	0.4	
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ROCK SOLE	1.4	0.0	0.0	1.3	28.9	0.5	1.6	2.2	0.6	34.2	
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.8	
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	
ROUGH EYE RKFH	0.0	1.4	5.7	2.9	35.3	13.0	2.1	0.0	0.0	0.0	
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	
DUSKY RKFISH	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.9	1.6	0.0	
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SCULPINS	0.0	0.1	1.4	8.9	0.0	0.0	10.4	14.4	0.8	0.4	
SKATES	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TANNER CRAB	0.0	0.0	0.4	0.5	0.3	0.7	0.0	0.0	0.5	0.1	
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	87	88	89	90	91	92	93	94	95	96	97	98
MONTH/DAY/YEAR	6/ 8/87	6/ 9/87	6/ 9/87	6/ 9/87	6/ 9/87	6/ 9/87	6/ 9/87	6/ 9/87	6/ 9/87	6/ 9/87	6/ 10/87	6/ 10/87
LATITUDE START	55 13.7	55 9.3	55 14.8	55 23.8	55 33.2	55 39.7	55 57.4	55 51.1	55 51.9	55 55.8	55 53.2	55 53.2
LONGITUDE START	156 39.0	156 19.3	155 31.3	156 0.9	155 42.6	155 18.8	154 53.4	154 53.3	154 50.1	154 32.8	154 12.7	154 12.7
LATITUDE END	55 14.1	55 9.7	55 15.7	55 25.4	55 31.4	55 40.8	55 55.5	55 49.4	55 53.3	55 57.3	55 54.8	55 54.8
LONGITUDE END	156 35.5	156 16.3	155 48.2	156 3.3	155 40.4	155 15.7	154 55.0	154 47.3	154 47.3	154 30.6	154 15.1	154 15.1
LORAN START	33333.70	33311.10	33237.90	33222.60	33153.00	33083.90	32969.30	32993.70	32984.30	32939.30	3294.60	3294.60
LORAN END	33325.40	33303.70	33228.30	33221.20	33155.50	33074.10	32979.50	33003.50	32974.50	32929.80	32929.70	32929.70
GEAR DEPTH	44872.50	44772.30	44597.80	44658.00	44510.40	44343.10	44181.80	44200.60	44145.30	44039.90	43945.10	43945.10
DURATION IN HOURS	0.50	0.50	0.50	0.30	0.30	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.04	1.78	1.99	2.11	2.07	2.07	2.08	1.98	2.10	1.90	2.06	2.06
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	1 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	1.7	0.0	0.0	103.8	0.0	288.6	1.2	0.0	0.0	0.0	0.0	0.0
PACIFIC COD	140.0	0.0	0.0	72.0	383.5	4.4	243.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	1221.2	840.1	597.6	440.8	244.0	2945.6	498.0	1183.2	748.1	429.8	178.3	178.3
ARROWTOOTH FL.	605.6	0.0	0.0	175.7	1929.3	475.3	356.3	21.2	3.5	0.0	0.0	0.0
HALIBUT	742.4	0.0	0.0	39.8	233.2	225.0	110.1	11.8	0.0	0.0	0.0	0.0
FLATHEAD SOLE	0.5	0.0	0.0	4.8	3.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	170.0	41.1	18.3	3.3	0.0	24.5	7.2	64.2	40.4	33.5	69.0	69.0
REX SOLE	28.2	17.7	0.3	141.4	22.4	334.7	83.1	20.5	0.0	0.0	0.0	24.3
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	1243.1	0.0	0.0	1.5	0.3	829.3	30.4	0.0	0.0	0.0	0.0	0.4
ROUGH EYE RKFH	16.5	1.1	0.0	1.2	0.0	7.3	0.0	0.0	0.0	0.0	0.0	392.2
THORNYHEADS	0.0	234.3	23.9	0.0	0.0	108.2	6.1	85.4	91.4	218.5	332.1	332.1
NORTHERN RKFH	0.0	0.0	0.0	0.0	581.9	61.0	6.2	3.0	0.0	0.0	0.0	0.0
DUSKY RKFISH	171.0	0.0	0.0	0.0	13.3	2.8	8.3	10.1	0.0	0.0	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	0.0	0.0	3934.9
HARLEQUIN RF	1.6	0.0	0.0	0.0	3.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.4	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0
GRENADEERS	0.0	2497.9	1758.2	0.0	0.0	0.0	0.0	0.0	1011.2	134.2	490.6	0.0
SCULPINS	0.0	0.0	0.0	17.3	53.9	17.7	12.6	0.0	0.0	0.0	0.0	7.7
SKATES	0.0	0.0	0.0	0.6	0.0	0.0	0.0	3.6	0.0	1.8	0.0	0.0
SPINY DOGFISH	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.2	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	100	101	102	103	104	105	106	107	108	109	110
LATITUDE START	6/11/87	6/11/87	6/11/87	6/11/87	6/11/87	6/14/87	6/14/87	6/14/87	6/14/87	6/14/87	6/14/87	6/15/87
LONGITUDE START	33 31.0	33 34.8	33 39.7	36 7.6	33 37.8	33 33.3	33 33.7	36 16.0	36 22.1	36 8.1	36 14.3	
LATITUDE END	154 16.3	154 16.3	154 18.5	154 2.0	153 53.2	153 47.1	153 39.2	153 45.5	153 27.2	153 22.5	153 14.5	
LONGITUDE END	55 52.9	55 56.1	55 57.5	56 9.6	55 58.3	55 35.2	55 35.0	56 17.8	56 22.4	56 9.6	56 15.9	
GEAR DEPTH	154 16.9	154 19.1	154 17.4	154 1.5	153 56.7	153 44.2	153 36.6	153 43.8	153 23.6	153 20.1	153 11.8	
DURATION IN HOURS	0.50	0.50	0.60	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
DISTANCE FISHED	1.92	2.06	2.21	1.99	2.06	1.64	1.95	2.05	1.93	1.98	2.07	
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	
POLLOCK	0.0	0.0	0.0	1.1	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.8
PACIFIC COD	0.0	0.0	17.8	172.4	182.5	466.3	2.7	1.2	0.0	0.0	0.0	0.0
SABLEFISH	222.2	1573.4	0.0	19.0	0.9	1.4	673.6	0.0	0.0	1232.6	3371.8	
ARWINTOOTH FL.	0.0	66.4	41.3	9195.4	211.1	383.8	236.4	0.0	0.0	45.0	311.9	
HALIBUT	0.0	12.6	104.6	472.3	77.1	316.7	66.4	89.0	369.1	2.4	43.5	
FLATHEAD SOLE	0.0	0.0	0.0	28.5	7.4	3.0	1.5	0.0	0.0	0.0	10.7	
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DOVER SOLE	18.9	1065.8	0.0	4.8	11.6	1.4	539.9	0.0	0.0	60.0	680.7	
REX SOLE	0.0	41.4	11.9	413.8	281.5	135.8	99.4	0.0	0.0	0.0	15.1	
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ROCK SOLE	0.0	0.0	0.0	7.4	1.0	0.0	7.8	0.0	0.0	0.0	0.0	
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	4.0	8.8	1.1	0.6	0.0	0.0	
ROUGHEYE RKFH	0.0	0.0	3.6	0.4	0.0	0.0	19.1	0.0	0.0	0.0	2.5	
THORNYHEADS	46. B	139.4	0.0	0.0	0.0	0.0	216.3	0.0	0.0	109.8	167.0	
NORTHERN RKFH	0.0	0.0	7.4	2.8	0.0	2.5	1.2	183.1	71.3	0.0	0.0	
DUSKY RKFH	0.0	0.0	0.7	1.3	0.0	0.0	1.2	8.4	15.4	0.0	0.0	
SHORTRAKER RF	0.0	30.6	0.0	0.0	0.0	0.0	34.1	0.0	0.0	29.1	84.4	
HARLEQUIN RF	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	
GRENADIERS	209.6	238.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1359.2	597.6
SCULPINS	0.0	0.0	0.0	20.7	30.5	4.0	10.4	0.3	0.0	0.0	0.0	5.1
SKATES	0.0	2.6	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	23.4
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SLEEPER SHARK	0.0	46.1	25.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TANNER CRAB	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	111	112	113	114	115	116	117	118	119	120
MONTH/DAY/YEAR	6/15/87	6/15/87	6/15/87	6/15/87	6/17/87	6/17/87	6/17/87	6/17/87	6/17/87	6/17/87
LATITUDE START	56 16.9	56 27.5	56 31.4	56 41.1	56 52.8	56 52.8	56 52.8	56 52.8	56 54.9	56 54.9
LONGITUDE START	153 12.0	153 18.6	153 36.6	153 38.4	153 21.4	153 12.6	152 44.9	152 44.9	152 37.0	152 27.4
LATITUDE END	56 15.5	56 29.1	56 33.3	56 43.2	56 50.9	56 42.7	56 34.6	56 34.6	56 33.0	56 33.0
LONGITUDE END	153 14.0	153 21.9	153 37.7	153 38.6	153 19.8	153 9.3	152 44.0	152 44.0	152 35.1	152 25.7
LORAN START	32721.20	32688.50	32701.70	32663.70	32587.20	32614.30	32644.30	32531.80	32472.80	32497.30
LORAN START	43561.60	43546.10	43623.80	43597.30	43459.40	43499.30	43270.60	43246.70	43209.20	43188.10
LORAN END	32729.60	32687.20	32695.10	32655.30	32592.90	32611.10	32522.90	32502.60	32463.90	32478.00
LORAN END	43576.60	43555.50	43621.70	43591.30	43457.60	43434.10	43257.70	43237.60	43198.30	43192.00
GEAR DEPTH	87	41	60	82	93	85	68	77	85	90
DURATION IN HOURS	0.42	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.72	2.38	2.06	2.09	2.07	1.91	1.85	2.01	1.90	2.30
PERFORMANCE / GEAR	1 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	12.5	0.0	46.7	47.4	182.0	92.3	378.2	1879.0	1157.0	3958.8
PACIFIC COD	159.5	192.7	150.7	404.1	387.9	139.3	2.4	210.6	83.0	285.0
SABLEFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	6.5	10.4
ARROWTOOTH FL.	556.8	14.5	136.1	777.0	1326.5	793.3	364.0	740.7	1260.5	674.9
HALIBUT	346.6	104.8	37.0	56.2	253.9	505.2	25.4	251.7	54.1	39.3
FLATHEAD SOLE	3.2	6.4	3.0	821.2	99.8	344.0	115.8	162.7	999.8	163.9
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	11.0	0.0	0.0	1.3	6.4	0.0	0.0	0.0	0.0	0.0
REX SOLE	33.3	0.2	3.0	0.3	21.1	4.3	48.0	12.3	5.4	23.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	157.4	9.3	4.1	34.9	3.9	0.7	4.3	14.4	0.6	0.9
BUTTER SOLE	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA FLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC OC PERCH	74.6	0.0	0.0	0.0	0.0	1.1	1.1	0.0	0.0	0.0
ROUGHEYE RKFH	0.0	0.0	0.0	0.0	0.0	2.4	11.7	1.5	0.0	1.6
THORNYHEADS	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	17.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RKFISH	365.2	0.0	10.6	2.1	14.9	0.9	5.0	3.5	0.0	1.3
SHORTRAKER RF	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	21.9	13.9	41.1	23.4	186.9	12.2	4.5	19.6	27.7	36.6
SKATES	9.2	0.0	0.0	52.9	0.0	0.0	2.4	0.0	71.7	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	3.4	0.3	0.1	0.0	0.0	9.8	2.1
KING CRAB	0.0	0.0	0.0	4.3	3.2	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	122	123	124	125	126	127	128	129	130	131	132
MONTH/DAY/YEAR	6/18/87	6/18/87	6/18/87	6/18/87	6/18/87	6/18/87	6/18/87	6/18/87	6/19/87	6/19/87	6/19/87
LATITUDE START	56 28 1	56 37 3	56 43 4	56 37 9	56 47 9	56 49 2	56 51 8	56 54 4	56 48 8	56 47 4	56 41 8
LONGITUDE START	132 32 7	132 43 0	132 27 2	132 8 3	132 8 9	132 0 8	131 31 8	131 34 8	131 40 4	131 45 3	131 48 2
LATITUDE END	56 30 0	56 39 3	56 44 1	56 39 0	56 49 7	56 49 2	56 50 1	56 52 9	56 46 8	56 45 3	56 39 6
LONGITUDE END	152 31 6	152 42 8	152 23 3	152 5 6	152 6 7	151 57 0	151 35 7	151 38 3	151 42 5	151 47 8	151 50 3
LORAN START	32614.70	32593.60	32544.30	32426.30	30971.60	31022.20	31067.10	31183.00	31173.30	31151.30	31127.40
LORAN END	32605.30	32585.10	32536.10	32501.80	31071.20	31097.90	31168.10	31159.30	31144.30	31127.40	31122.10
LORAN END	43329.80	43328.00	43229.70	30972.70	31028.00	31009.80	30979.10	30977.90	30973.20	30974.60	30949.80
GEAR DEPTH	104	38	93	21	33	42	366	106	191	98	159
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.67	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.96	2.00	2.22	1.80	2.16	2.08	2.69	2.47	2.31	2.49	2.49
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	1 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	32.6	0.0	3.5	0.0	0.0	0.0	0.0	0.0	349.3	2.2	0.0
PACIFIC COD	117.0	0.1	15.7	0.0	100.1	0.0	0.0	0.0	62.0	2.9	102.5
SABLEFISH	2042.7	0.0	13.3	0.0	0.0	0.0	0.0	0.0	234.5	26.8	500.2
ARROWTOOTH FL.	332.6	0.3	1095.9	0.0	173.8	0.0	0.0	0.0	126.0	38.9	280.5
HALIBUT	57.3	427.6	279.9	130.0	210.0	406.3	6.7	149.2	32.6	136.3	302.7
FLATHEAD SOLE	1.1	0.0	85.7	0.0	20.9	1.0	0.0	1.3	0.0	0.8	100.9
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	8.9	0.0	3.2	0.0	0.0	0.0	0.0	0.0	35.1	77.2	64.0
REX SOLE	169.4	0.0	21.3	0.0	0.0	0.0	0.0	0.0	148.0	36.9	131.1
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.9
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	4.8	2.8	0.0	0.0	11.3	4.8	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	82.6	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	1.4	533.0
ROUGHEYE RKFH	5.0	0.0	107.8	0.0	0.0	0.0	0.0	0.0	933.1	0.0	201.5
THORNYHEADS	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.6	0.0	70.5
NORTHERN RKFH	2.3	0.5	0.8	0.0	1933.4	73.7	0.0	0.0	0.0	0.0	0.6
DUSKY RKFISH	2.9	0.0	0.0	0.0	357.7	1.1	0.0	0.0	0.0	1.1	5.9
SHORTRAKER RF	0.0	6.0	0.0	0.0	9.8	0.0	0.0	0.0	83.0	0.0	45.2
HARLEQUIN RF	0.5	0.0	0.0	0.0	0.4	10.5	0.0	0.0	0.0	0.0	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPFIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	192.4	0.0	0.0
SCULPINS	14.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.0	2.7
SKATES	0.0	0.0	1.7	126.3	0.0	0.0	0.0	3.1	0.0	7.8	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	133	134	135	136	137	138	139	140	141	142	143
LATITUDE START	6/20/87	6/20/87	6/20/87	6/20/87	6/20/87	6/20/87	6/20/87	6/20/87	6/20/87	6/21/87	6/21/87	6/21/87
LONGITUDE START	57 8 6	57 13 6	57 18 1	57 27 1	57 29 6	57 24 6	57 19 0	57 23 9	57 34 1	57 43 3	57 54 1	57 54 1
LATITUDE END	151 40 8	151 37 6	152 15 6	152 10 5	151 43 8	151 32 7	151 14 3	151 22 7	151 41 3	151 25 9	151 25 9	151 25 9
LONGITUDE END	57 10 4	57 14 5	57 18 0	57 29 3	57 29 0	57 24 5	57 21 2	57 25 5	57 35 8	57 45 2	57 55 4	57 55 4
GEAR DEPTH	151 42 3	152 1 5	152 20 0	152 9 5	151 39 6	151 27 4	151 14 9	151 4 5	151 23 8	151 43 9	151 22 6	151 22 6
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.99	2.27	2.38	2.26	2.32	2.83	2.19	2.04	2.33	2.35	2.35	2.35
PERFORMANCE / GEAR	0 / 717	0 / 717	1 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC COD	1536.7	45.8	2103.4	198.0	332.2	345.2	68.4	174.3	2.2	1029.5	212.8	212.8
SABLEFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	0.0	0.0	0.0	0.9	0.1	698.3	1226.3	974.4	76.4	0.0	0.0	0.0
HALIBUT	282.5	185.8	195.6	344.4	432.2	379.5	191.6	319.3	409.1	475.6	255.0	255.0
FLATHEAD SOLE	0.0	0.0	0.0	0.0	0.3	47.6	61.9	305.5	5.0	0.0	0.0	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.5	10.6	0.0	0.0	0.0
REX SOLE	0.0	0.0	0.0	0.0	0.0	57.4	141.2	0.3	0.7	0.0	0.0	0.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	3.5	2.9	58.1	10.4	0.0	2.4	0.0	5.7	20.2	1.4	60
ROCK SOLE	95.0	224.6	58.6	174.4	209.4	137.5	140.6	386.9	9.9	36.8	70.4	70.4
BUTTER SOLE	0.0	0.0	0.0	103.6	37.3	0.2	50.7	6.5	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGH EYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHTN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.4	0.0	32.7	7.6	7.7	1.9	0.0	6.4	0.9	23.9	14.3	14.3
SKATES	54.5	25.7	31.6	37.0	0.0	39.9	37.0	41.3	120.1	73.8	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO 39 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	144	145	146	147	148	149	150	151	152	153	154
LATITUDE START	6/22/87	6/22/87	6/22/87	6/22/87	6/22/87	6/22/87	6/22/87	6/22/87	6/23/87	6/23/87	6/24/87	6/24/87
LONGITUDE START	37 34.4	37	38.8	37 39.3	38 37.3	38 9.0	38 9.7	38 10.1	38 23.8	38 20.3	38 10.8	38 10.8
LATITUDE END	152 11.6	152 10.9	151 35.2	151 45.3	151 37.0	151 18.5	150 28.3	150 43.6	150 35.4	150 10.4	150 9.3	150 9.3
LONGITUDE END	57 55.5	57 38.9	57 39.5	58 5.3	58 9.6	58 9.8	58 9.7	58 10.0	58 24.0	58 18.0	58 9.1	58 9.1
LORAN START	11338 60	11390 70	11441 00	11521 00	11605 70	11682 20	11898 50	11830 00	12067 20	11912 20	11987 90	11987 90
LORAN END	11339 10	11394 30	11376 30	11387 30	11405 40	11405 40	11334 50	11336 60	11433 40	11349 10	11290 40	11290 40
GEAR DEPTH	71	96	90	90	82	60	55	37	26	77	77	77
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.10	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.00	1.95	2.02	2.10	2.03	2.06	2.27	0.37	2.32	1.98	1.98	1.98
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	1 / 717	1 / 717	1 / 717	1 / 717
POLLOCK	3489.9	351.3	384.4	133.8	0.0	2068.7	0.0	0.0	0.0	0.0	0.0	64.5
PACIFIC COD	601.5	106.3	152.0	140.5	69.2	390.7	55.8	333.4	0.0	0.1	70.0	70.0
SABLEFISH	0.0	15.8	9.4	7.9	0.0	0.0	0.0	1.7	0.0	0.0	130.0	130.0
ARROWTOOTH FL.	633.3	696.6	2319.0	1363.0	90.2	3103.2	38.9	481.0	0.0	0.0	191.3	191.3
HALIBUT	108.2	131.1	360.4	178.9	78.6	816.5	126.7	147.9	0.0	0.0	889.1	200.4
FLATHEAD SOLE	59.6	144.9	113.6	77.2	0.0	40.9	0.0	17.0	0.0	0.0	0.0	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0
DOVER SOLE	4.3	1.8	0.0	0.6	0.0	49.0	0.0	5.9	0.0	0.0	6.5	6.5
REX SOLE	0.8	0.9	0.0	0.0	0.0	15.9	0.0	2.6	0.0	0.0	16.4	16.4
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	16.0	2.0	0.3	2.3	30.0	6.8	3.4	129.3	0.0	0.0	1.7	1.7
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC OC PERCH	1.5	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	39.7
ROUGH EYE RFH	0.0	22.5	23.7	16.3	0.0	0.0	1.4	1.1	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	306.0
DUSKY RKTFISH	46.2	0.0	6.1	0.0	0.0	0.6	4.4	1.1	0.0	0.0	0.0	11279.1
SHOR TRAKER RF	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEGUTIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	43.5	10.3	5.4	3.5	0.0	4.3	1.0	0.9	0.0	1.7	7.5	7.5
SKATES	6.5	13.9	9.9	10.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	2.9	2.7	0.0	3.8	0.0	0.0	0.0	0.0
SAFETY SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	1.8	4.3	2.8	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	155	156	157	158	159	160	161	162	163	164
MONTH/DAY/YEAR	6/24/87	6/24/87	6/24/87	6/24/87	6/25/87	6/25/87	6/25/87	6/25/87	6/25/87	6/26/87
LATITUDE START	58 1.6	57 60.0	57 59.8	58 4.1	57 55.6	58 14.7	58 11.3	58 10.5	57 51.0	57 31.0
LONGITUDE START	150 14.0	150 26.7	150 55.4	151 4.5	149 5.3	149 3.2	149 18.8	149 21.7	149 34.0	149 36.8
LATITUDE END	58 0.4	58 0.1	58 0.8	58 5.7	57 55.9	58 10.6	58 15.1	58 9.6	57 48.0	57 52.7
LONGITUDE END	150 16.8	150 30.6	150 58.9	151 7.0	149 9.2	149 6.7	149 23.1	149 22.6	149 37.4	149 39.1
LORAN START	11892.40	11820.50	11687.40	11685.80	12170.60	12285.20	12251.50	12076.20	11988.60	11988.90
LORAN START	31242.80	31253.20	31275.10	31332.80	31091.90	31177.70	31234.60	31217.90	31101.40	31118.40
LORAN END	11870.30	11803.00	11680.10	11690.00	12154.10	12274.60	12235.80	12194.10	12050.00	11990.50
LORAN END	31240.30	31259.40	31305.90	31345.30	31100.20	31188.10	31244.00	31208.90	31252.70	31132.60
GEAR DEPTH	104	90	55	60	273	66	68	57	82	115
DURATION IN HOURS	0.30	0.30	0.30	0.30	0.45	0.30	0.30	0.30	0.50	0.50
DISTANCE FISHED	1.87	2.05	2.13	2.09	2.07	1.98	2.32	1.76	2.21	2.09
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	4.9	887.8	0.0	4390.9	0.0	0.0	0.0	0.0	4.6	0.0
PACIFIC COD	263.1	124.0	118.1	310.9	0.0	6.1	424.6	15.3	38.0	120.7
SABLEFISH	608.6	409.6	69.3	10.5	1206.5	0.0	214.6	3.8	61.0	191.1
ARROWTOOTH FL.	14629.1	1610.3	444.8	1365.0	32.2	21.0	3062.3	0.2	1126.3	92.3
HALIBUT	13850.0	489.3	211.1	377.0	0.0	6.9	592.5	227.9	60.1	241.9
FLATHEAD SOLE	5.5	49.7	23.0	43.2	0.0	3.9	141.8	0.0	12.6	16.1
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	21.2	61.5	0.9	17.4	34.2	1.2	5.7	0.0	13.3	32.6
REX SOLE	13.9	221.0	16.0	21.2	1.7	25.3	51.8	0.4	47.0	92.4
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.6	27.1	25.2	0.0	7.1	37.6	3.1	46.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	10.0	0.9	0.0	0.0	0.0	0.0	49.1	0.9	1.2	11.9
ROUGHEYE RKFH	0.0	0.0	0.0	0.0	3.2	9.9	0.0	0.0	0.0	3.1
THORNYHEADS	0.0	0.0	0.0	0.0	38.4	0.0	0.0	0.0	0.0	210.7
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	997.6	37.5	2098.6	0.0	0.0
DUSKY RCKFISH	0.0	0.0	0.0	10.8	4.8	0.0	121.9	9.3	587.9	2.3
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	710.4
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	77.7	132.7	1986.1	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHEW RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	1218.4	0.0	0.0	0.0
SCULPINS	0.0	9.4	0.3	7.7	0.0	1.3	1.7	0.0	0.0	36.2
SKATES	39.5	18.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0
SAFETY SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	166	167	168	169	170	171	172	173	174	175	176
MONTH/DAY/YEAR	6/26/87	6/26/87	6/26/87	6/26/87	6/27/87	6/27/87	6/27/87	6/27/87	6/27/87	6/28/87	6/28/87
LATITUDE START	57 33.1	57 50.6	57 46.1	57 36.8	57 31.5	57 26.6	57 25.2	57 17.0	57 13.2	57 29.5	57 38.9
LONGITUDE START	149 30.8	150 9.0	150 9.7	150 3.2	150 3.1	150 10.6	150 26.3	150 46.2	150 38.6	150 24.6	150 35.7
LATITUDE END	57 33.9	57 48.7	57 43.9	57 35.2	57 30.1	57 24.4	57 23.6	57 15.6	57 13.1	57 31.3	57 40.4
LONGITUDE END	149 34.9	150 10.6	150 9.0	150 6.0	150 5.9	150 10.1	150 28.7	150 48.7	151 2.7	150 22.6	150 38.1
LORAN START	11951.90	11832.00	11796.50	11767.70	11736.30	11671.80	11586.80	11448.80	11372.80	11618.40	11620.80
LORAN START	31167.00	31169.50	31144.30	31079.40	31048.00	31032.70	31052.10	31039.80	31039.80	31073.30	31143.60
LORAN END	11938.40	11810.50	11785.60	11743.70	11714.70	11663.30	11566.60	11429.30	11352.10	11638.80	11618.60
LORAN END	31178.20	31161.50	31130.70	31074.60	31045.00	31019.50	31046.80	31033.80	31045.70	31080.60	31157.70
GEAR DEPTH	139	104	97	191	284	328	153	98	104	50	
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
DISTANCE FISHED	2.28	2.08	2.15	2.25	2.04	2.16	2.09	2.26	2.24	2.15	
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	
POLLOCK	153.4	81.8	4.6	0.0	0.0	1.4	18.7	434.1	22326.8	240.1	0.0
PACIFIC COD	55.4	43.7	81.1	1.8	0.0	0.0	77.9	30.4	1004.0	32.9	362.0
SABLEFISH	237.0	75.3	151.1	483.0	513.2	327.8	956.5	822.9	6142.4	164.2	0.0
ARROWTOOTH FL.	135.6	1462.8	2879.8	13.6	9.9	6.3	108.4	70.5	753.4	218.5	93.6
HALIBUT	105.8	89.6	95.8	3.4	0.0	0.0	147.8	54.8	625.3	67.2	250.3
FLATHEAD SOLE	6.7	100.3	68.1	0.0	0.0	0.0	0.0	0.0	0.0	32.9	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.5	0.7
DOVER SOLE	42.9	54.5	192.6	25.2	43.1	48.6	150.3	27.9	74.2	120.6	0.0
REX SOLE	224.2	328.6	350.4	11.6	5.5	3.3	49.4	13.7	28.3	187.7	0.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	71.6	7.4	0.0	0.0	5.7	0.0	0.0	64.9	294.3	8180.7	0.0
ROUGH EYE RKFH	0.0	0.0	0.0	0.0	145.9	0.0	0.0	5.1	0.7	0.0	0.0
THORNYHEADS	73.8	0.7	0.0	0.0	114.3	35.5	36.2	85.3	1.7	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.8	113.0	0.0
DUSKY RCKFISH	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	7.5	798.5	0.0
SHORTFAKER RF	0.0	0.0	0.0	0.0	214.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEGUN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	5.0	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPchin RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	177.0	421.9	87.0	0.0	0.0	0.0	0.0
SCULPINS	0.0	11.2	16.8	0.9	0.0	0.0	13.5	0.0	0.0	0.0	0.0
SKATES	2.9	0.0	11.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	177	178	179	180	181	182	183	184	185	186	187
MONTH/DAY/YEAR	6/28/87	6/28/87	6/30/87	6/30/87	6/30/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87
LATITUDE START	57 44.1	57 35.7	56 26.8	57 35.9	57 7.1	57 7.0	57 5.7	57 6.6	57 6.2	57 5.5	
LONGITUDE START	150 45.2	150 54.0	152 29.2	152 44.3	152 42.7	152 43.3	152 40.8	152 44.5	152 43.9	152 42.0	
LATITUDE END	57 45.1	57 34.6	56 28.8	57 6.8	57 8.0	57 7.8	57 6.6	57 7.6	57 7.2	57 6.4	
LONGITUDE END	150 49.1	150 57.9	152 30.7	152 43.9	152 43.6	152 41.6	152 42.3	152 40.0	152 46.0	152 43.1	152 41.0
LORAN START	11610.00	11508.60	11046.80	32474.80	32470.20	32468.70	32467.00	32472.40	32473.10	32473.60	
LORAN END	31190.30	31156.30	30950.90	43205.10	43201.50	43192.70	43201.60	43185.30	43203.50	43202.10	43196.10
LORAN END	31197.90	31148.90	31042.70	32470.60	32465.10	32462.90	32469.20	32461.80	32466.30	32467.70	32468.20
GEAR DEPTH	44	44	163	80	78	80	82	83	78	79	83
DURATION IN HOURS	0.50	0.50	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
DISTANCE FISHED	2.31	2.39	2.17	0.89	1.01	1.03	1.07	1.03	2.09	1.08	1.07
PERFORMANCE / GEAR	1 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	0.0	0.0	2.7	205.8	257.7	276.5	191.0	286.2	396.0	382.5	300.6
PACIFIC COD	731.9	90.7	0.0	33.2	15.0	85.8	70.5	74.0	63.2	76.0	72.0
SABLEFISH	0.0	0.0	912.4	2.7	12.3	3.5	5.3	0.0	0.4	7.4	5.4
ARROWTOOTH FL.	72.5	3.5	45.2	352.4	468.7	379.9	466.7	898.0	586.8	447.6	719.9
HALIBUT	473.1	712.9	86.2	0.0	17.0	13.0	1.8	14.2	8.0	0.0	39.0
FLATHEAD SOLE	0.0	0.0	1.0	122.7	126.5	158.3	177.7	154.4	192.0	161.6	185.3
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
DOVER SOLE	0.0	0.0	0.0	89.8	0.0	0.0	1.0	0.0	5.3	2.5	1.2
REX SOLE	0.0	0.0	0.0	35.0	4.4	6.4	2.1	1.5	0.0	6.2	1.5
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ROCK SOLE	51.0	76.4	0.0	0.0	0.8	1.5	0.0	0.0	0.6	2.2	1.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLATE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGH-EYE RKFH	0.0	0.0	26.6	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.4
THORNHEADS	0.0	0.0	102.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0
DUSKY RKFISH	23.0	4.2	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
SHORTRAWER RF	0.0	0.0	25.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHEW RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADERS	0.0	0.0	34.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	13.6	3.4	12.9	0.0	4.0	1.3	1.6	0.0	6.8	1.8	5.3
SKATES	45.7	0.0	0.0	0.0	0.0	7.1	0.0	0.0	2.5	20.0	10.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SAFETY SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.9
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	188	189	190	191	192	193	194	195	196	197	198
MONTH/DAY/YEAR	7/ 1/87	7/ 1/87	7/ 2/87	7/ 2/87	7/ 2/87	7/ 2/87	7/ 2/87	7/ 2/87	7/ 2/87	7/ 2/87	7/ 2/87
LATITUDE START	37 5.8	37 6.5	37 6.4	37 6.2	36 48.5	36 48.6	36 48.5	36 49.4	36 49.6	36 48.5	36 48.9
LONGITUDE START	152 42.2	152 45.0	152 44.5	152 42.8	152 8.5	152 7.8	152 5.4	152 7.4	152 7.4	152 9.3	152 10.3
LATITUDE END	37 6.9	37 7.4	37 7.3	37 7.3	36 49.1	36 49.1	36 48.8	36 49.9	36 50.1	36 49.1	36 49.3
LONGITUDE END	152 41.3	152 43.8	152 43.4	152 41.9	152 7.4	152 10.0	152 7.5	152 11.7	152 9.4	152 11.6	152 12.4
LORAN START	32472.50	32473.50	32473.20	32471.50	31067.30	31068.80	31075.40	31064.60	31069.60	31064.10	31062.90
LORAN START	43195.80	43206.40	43204.30	43196.50	31027.10	31025.00	31019.70	31031.10	31028.30	31036.40	31029.90
LORAN END	32466.80	32467.90	32468.00	32465.90	31069.30	31063.50	31069.90	31059.00	31064.20	31058.30	31057.80
LORAN END	43186.70	43196.50	43195.00	43187.60	31030.20	31030.30	31024.70	31036.80	31034.30	31042.30	31035.10
GEAR DEPTH	83	79	80	82	53	54	52	53	51	51	55
DURATION IN HOURS	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
DISTANCE FISHED	1.13	1.11	1.03	1.11	1.15	1.20	1.19	1.29	1.23	1.33	1.20
PERFORMANCE / GEAR	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717
POLLOCK	115.0	360.1	113.0	168.5	0.8	0.0	3.9	6.0	7.8	0.0	94.7
PACIFIC COD	71.0	18.0	256.0	66.5	17.8	52.0	114.4	160.7	2931.9	178.3	53.5
SABLEFISH	6.8	1.3	7.5	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	593.1	319.1	374.8	464.7	29.7	64.2	370.3	100.5	310.7	192.7	176.6
HALIBUT	12.5	0.0	0.0	49.8	27.4	38.6	31.4	28.6	53.1	78.1	1.0
FLATHEAD SOLE	222.8	120.1	142.5	220.7	0.8	4.5	9.2	1.7	3.7	2.1	4.2
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	3.1	5.8	0.0	1.7	0.0	0.0	0.0	0.0	0.3	0.0	0.0
REX SOLE	1.8	13.5	3.2	1.4	0.7	2.7	0.8	2.7	1.1	0.2	11.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.3	0.5	0.0	0.0	2.5	3.9	23.1	7.1	19.3	22.3	4.8
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	15.0	1.4	0.3	2.7	0.5	0.2
ROUGH EYE RKFH	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	483.3	137.3	10.7	24.6	36.0	10.3
DUSKY RKFH	0.0	0.0	0.0	0.6	0.0	39.0	22.5	1.9	0.9	0.8	3.5
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEGUTN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENAIDIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	13.8	15.6	16.1	2.0	1.8	0.0	0.0	0.0	0.0	0.0	0.5
SKATES	0.0	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	3.4	1.3	21.7	12.6	0.7	0.9	0.7	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAIL #	199	200	201	202	203	204	205	206	207	208	209
MONTH/DAY/YEAR	7/ 3/87	7/ 3/87	7/ 3/87	7/ 3/87	7/ 3/87	7/ 4/87	7/ 4/87	7/ 4/87	7/ 5/87	7/ 5/87	7/ 5/87
LATITUDE START	56 49.3	56 49.7	56 26.3	56 38.6	56 28.4	57 6.3	57 18.2	57 18.1	57 19.7	57 20.5	57 18.4
LONGITUDE START	132 9.8	132 7.8	132 51.2	132 34.6	132 11.7	132 6.9	132 14.1	132 32.4	132 30.9	132 27.7	132 30.1
LATITUDE END	56 49.8	56 50.1	56 28.4	56 37.0	56 27.8	57 6.8	57 17.6	57 19.1	57 20.3	57 20.8	57 19.1
LONGITUDE END	132 11.9	132 9.9	132 51.7	132 31.6	132 15.4	132 9.1	132 16.3	132 31.5	132 29.8	132 28.2	132 29.0
LORAN START	11063.80	11068.30	11019.70	11028.50	11077.10	11059.30	11030.60				
LORAN END	31031.00	31029.90	30984.60	31017.30	30929.70	31113.60	31185.50				
LORAN END	11058.60	11063.00	11017.70	11034.10	11070.20	11052.20	11023.00				
GEAR DEPTH	35	53	28	90	107	45	37	55	52	48	55
DURATION IN HOURS	0.25	0.25	0.50	0.50	0.50	0.25	0.25	0.25	0.17	0.17	0.17
DISTANCE FISHED	1.22	1.19	2.10	2.27	2.11	1.30	1.33	1.14	0.82	0.70	0.80
PERFORMANCE / GEAR	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717
POLLOCK	5.8	6.3	0.0	239.0	4.1	0.0	0.0	1081.8	894.1	0.0	3783.8
PACIFIC COD	211.6	1997.5	7.8	145.8	27.2	51.0	25.5	31.0	85.9	44.0	47.5
SABLEFISH	0.0	0.0	0.0	36.3	300.1	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	155.8	119.0	0.0	380.1	94.1	0.4	0.0	184.2	216.0	266.6	279.0
HALIBUT	26.4	76.4	900.5	86.9	109.8	146.8	17.7	4.3	15.3	81.9	183.1
FLATHEAD SOLE	2.3	6.2	0.0	63.5	0.5	0.3	0.0	484.5	188.4	84.8	250.3
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.5	1.3
DOVER SOLE	0.0	0.0	0.0	0.0	33.5	5.6	0.0	0.0	0.0	0.0	0.0
REX SOLE	2.3	0.7	0.0	552.7	7.0	0.0	0.0	0.0	0.0	6.3	0.3
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	23.5	67.2
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	12.4	15.7
ROCK SOLE	22.0	3.2	0.7	0.0	0.0	0.0	0.0	39.0	37.5	107.2	7.3
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	15.6
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0
PAC DC PERCH	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE RKFH	0.0	0.0	0.0	1.6	7.2	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	26.0	232.1	0.9	0.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY ROCKFISH	0.7	13.3	0.0	7.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0
SHORTRAWER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.4	2.7	0.0	13.8	4.8	0.0	7.3	9.0	1.7	2.6	33.6
SKATES	0.0	4.4	0.0	0.0	0.0	0.0	0.0	12.5	44.2	11.0	76.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	1.8	0.0	7.9	0.0	0.0	0.0	0.0
SAFETY SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.4	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	210	211	212	213	214	215	216	217	218	219
MONTH/DAY/YEAR	7/ 5/87	7/ 5/87	7/ 5/87	7/ 6/87	7/ 6/87	7/ 6/87	7/ 6/87	7/ 6/87	7/ 7/87	7/ 7/87
LATITUDE START	57 17.9	57 17.7	57 33.0	57 32.9	57 33.2	57 33.4	57 33.3	57 31.6	57 33.0	57 34.0
LONGITUDE START	152 31.4	152 32.6	152 32.8	150 16.6	150 14.8	150 15.0	150 16.3	150 17.3	150 15.3	150 14.7
LATITUDE END	57 18.6	57 18.5	57 18.3	57 32.2	57 32.0	57 32.5	57 32.4	57 31.4	57 31.3	57 32.3
LONGITUDE END	152 31.4	152 31.6	152 31.6	150 18.2	150 16.2	150 16.4	150 18.0	150 19.7	150 19.3	150 18.1
LORAN START				11678.40			11681.10	11677.20	11671.50	11683.70
LORAN START				31079.60			31081.90	31083.00	31071.30	31077.70
LORAN END				11665.70			11668.30	11653.60	11647.70	11661.50
LORAN END				31077.80			31079.10	31076.00	31067.30	31077.80
GEAR DEPTH	56	56	56	128	145	139	124	120	156	131
DURATION IN HOURS	0.17	0.17	0.17	0.25	0.25	0.25	0.25	0.50	0.50	0.50
DISTANCE FISHED	0.80	0.80	0.84	1.18	1.20	1.20	1.22	2.36	2.25	2.28
PERFORMANCE / GEAR	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717
POLLOCK	2252.0	6993.7	2776.6	72.2	6.9	19.9	187.5	392.1	16.7	74.0
PACIFIC COD	12.4	13.8	34.3	14.2	4.8	13.6	14.9	36.0	17.5	34.0
SABLEFISH	0.0	0.0	0.0	93.9	252.7	169.3	10.9	21.9	653.4	88.8
ARROWTOOTH FL.										
HALIBUT	0.0	8.3	0.0	47.6	39.4	59.0	54.3	124.0	52.4	89.5
FLATHEAD SOLE	313.2	381.3	345.3	5.2	0.3	87.4	72.9	76.4	56.5	172.8
ENGLISH SOLE	0.8	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	3.2
DOVER SOLE	0.0	0.0	0.0	16.2	18.0	22.4	9.3	1.2	0.0	0.0
REX SOLE	0.2	0.3	0.9	20.4	16.8	33.0	49.2	92.5	62.6	13.1
YELLOWFIN SOLE	3.9	24.2	5.3	0.0	0.0	0.0	0.0	0.0	20.6	23.0
STARRY FLounder	4.5	2.6	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	9.2	31.2	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	1.4	2.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC OC PERCH	0.0	0.0	0.0	72.0	114.4	117.5	49.1	10.3	174.0	148.5
ROUGHEYE RKFH	0.0	0.0	0.7	1.2	1.0	1.1	0.0	0.0	33.2	11.5
THORNYHEADS	0.0	0.0	0.0	42.4	57.0	67.8	37.5	18.5	81.0	66.5
NORTHERN RKFH	0.0	0.0	0.0	2.4	0.0	0.0	1.1	1.3	0.5	0.7
DUSKY RCKFISH	0.0	0.0	0.0	1.5	0.0	2.2	2.1	0.0	0.0	2.7
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.3	0.0
HARLEGUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPchin RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	4.2	6.1	6.7	10.1	0.0	0.0	6.9	20.7	0.0	6.4
SKATES	115.1	78.6	77.0	0.0	1.8	0.0	0.0	0.0	2.5	2.7
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Salmon SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	6.8	6.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	221	222	223	224	225	226	227	228	229	230	231
MONTH/DAY/YEAR	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87
LATITUDE START	57 27.8	57 29.6	57 30.3	57 29.6	57 29.1	57 30.6	57 30.9	58 6.2	58 43.9	59 49.6	59 39.8
LONGITUDE START	150 21.0	150 18.4	150 19.5	150 19.9	150 20.3	150 16.7	150 19.0	148 47.0	148 33.5	148 50.1	149 19.8
LATITUDE END	57 26.5	57 28.5	57 29.2	57 28.6	57 27.9	57 27.9	57 29.4	58 29.6	58 46.2	59 47.5	59 39.1
LONGITUDE END	150 20.0	150 16.6	150 17.3	150 17.4	150 18.2	150 14.9	150 17.2	148 47.7	148 34.1	148 31.6	149 15.5
LORAN START	11627.10	11630.10	11648.40	11642.40	11637.40	11664.00	11654.70	12332.60	12367.80	13242.10	13032.30
LORAN END	11625.30	11632.60	11659.40	11663.50	11665.90	11666.20	11666.20	31126.20	31350.30	31819.30	31786.40
LORAN END	31048.60	31053.90	31059.30	31055.80	31053.30	31056.60	31061.60	31111.90	31366.80	31806.50	31777.00
GEAR DEPTH	186	180	164	175	175	175	164	191	145	103	118
DURATION IN HOURS	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.67	0.50	0.50	0.50
DISTANCE FISHED	1.39	1.31	1.63	1.69	1.62	1.49	1.62	2.47	2.34	2.25	2.31
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	0.0	4.5	106.6	26.5	44.5	1.4	90.0	0.0	1.7	29.0	35.1
PACIFIC COD	0.0	0.0	5.6	8.5	0.0	0.0	14.0	20.0	15.7	41.2	37.9
SABLEFISH	1124.3	370.2	372.0	326.0	191.7	477.2	139.5	418.2	415.5	22.0	81.0
ARROWTOOTH FL.	7.6	17.0	35.5	53.0	32.5	23.0	69.8	123.2	23.2	372.5	149.1
HALIBUT	0.0	0.0	19.3	0.0	0.0	50.3	0.0	48.0	0.0	0.0	37.6
FLATHEAD SOLE	0.0	0.0	0.1	0.2	0.0	0.0	1.3	0.0	0.8	101.9	46.8
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	64.6	28.9	31.5	59.5	34.8	38.8	36.4	22.5	6.1	4.7	1.3
REX SOLE	16.4	29.5	40.0	35.4	46.3	17.0	36.8	0.0	26.0	2.6	1.2
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	2.5	9.7	105.0	77.5	41.7	27.5	71.0	10.0	29.9	0.0	0.0
ROUGH EYE RKFH	45.8	41.6	82.8	101.2	70.1	92.0	33.9	306.2	8.6	0.0	0.0
THORNYHEADS	38.0	44.5	60.3	61.6	34.0	33.5	75.3	84.1	59.3	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.5	0.0	0.6	0.1	0.0	0.0	0.0	0.0
DUSKY RKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTRAKER RF	61.0	83.0	71.0	47.0	38.0	35.0	21.0	2911.7	0.0	17.5	18.2
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	224.6	7.3	7.4	27.5	91.6	0.0	0.0	0.0	0.0	0.0	0.0
SCULPING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.8	0.4	10.5	2.7
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	3.5	0.0	2.8
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.3	0.8
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	233	234	235	236	237	238	239	240	241	242
MONTH/DAY/YEAR	7/13/87	7/13/87	7/16/87	7/16/87	7/16/87	7/16/87	7/16/87	7/17/87	7/17/87	7/17/87	7/17/87
LATITUDE START	39 34.8	39 34.5	39 49.3	39 34.6	39 24.8	39 24.1	39 37.1	39 13.4	39 14.0	39 13.5	39 12.1
LONGITUDE START	148 51.7	148 22.8	148 9.7	147 53.1	148 10.4	147 44.1	147 24.1	147 13.8	147 33.4	147 30.6	147 27.4
LATITUDE END	39 34.9	39 34.3	39 49.0	39 33.0	39 23.7	39 24.6	39 39.0	39 13.7	39 14.2	39 13.8	39 10.7
LONGITUDE END	148 47.7	148 18.6	148 13.6	147 30.0	148 14.2	147 40.3	147 21.3	147 17.8	147 49.1	147 26.6	147 31.1
LORAN START	13091.20	13202.80	13396.50	13322.10	13161.40	13261.70	13461.90	13289.90	13132.20	13221.30	13222.00
LORAN END	31720.00	31681.80	31770.00	31642.60	31597.10	31554.20	31619.80	31427.90	31495.80	31440.70	31440.70
LORAN END	13108.80	13218.30	13378.30	13320.10	13136.10	13281.60	13490.00	13275.30	13151.20	13239.70	13194.00
GEAR DEPTH	82	107	66	59	107	61	71	98	104	104	191
DURATION IN HOURS	0.50	0.50	0.45	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.03	2.17	1.99	2.21	2.20	2.01	2.32	2.07	2.22	2.05	2.40
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	1 / 717	1 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	2.9	83.9	20.9	12.6	7.4	2.3	10.3	4.4	6.3	2.2	0.0
PACIFIC COD	1.9	18.3	6.0	1.6	6.3	9.7	9.3	46.0	69.8	145.6	0.0
SABLEFISH	16.9	56.5	4.9	14.9	123.8	3.4	15.9	39.7	18.5	147.7	241.4
ARROWTOOTH FL.	920.4	182.4	344.8	109.2	75.5	138.4	443.0	32.3	61.5	42.6	36.6
HALIBUT	0.0	0.0	1.6	12.0	30.4	0.0	64.8	82.4	10.3	249.3	3.6
FLATHEAD SOLE	246.4	68.5	70.7	14.6	5.9	3.9	90.4	0.2	4.8	2.5	0.0
ENGLISH SOLE	0.0	0.0	0.3	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0
DOVER SOLE	25.0	7.9	6.0	3.1	1.0	0.4	4.4	4.4	16.3	17.9	27.6
REX SOLE	16.3	8.8	10.7	0.7	1.4	9.4	11.8	8.4	4.9	34.5	29.7
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	1.3	0.0	0.0	0.9	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	1.6	7.9	646.5	96.1	179.8
ROUGHEYE RFH	0.0	0.0	2.5	0.0	1.8	0.0	15.3	3.2	41.0	11.7	102.0
THORNYHEADS	0.0	0.0	2.0	0.0	0.1	0.1	0.0	1.4	6.9	21.7	60.3
NORTHERN RFH	0.0	0.0	0.0	0.0	0.0	0.0	10.9	0.0	0.4	0.0	0.0
DUSKY ROCKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	23.1	0.0	1.2
SHORTRAKER RF	8.4	4.1	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	721.3
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.4	0.0	0.0	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	6.3	0.0	0.8	0.0	3.6	1.5	0.0	3.2	4.4	7.2	6.3
SKATES	5.4	12.5	0.0	7.0	0.0	0.0	3.4	1.3	2.6	4.8	0.0
SPINY DOGFISH	5.4	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	2.3	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIFE SHRIMP	0.5	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRawl SURVEY

HAUL #	243	244	245	246	247	248	249	250	251	252	253
MONTH/DAY/YEAR	7/17/87	7/18/87	7/18/87	7/18/87	7/18/87	7/19/87	7/19/87	7/19/87	7/19/87	7/19/87	7/20/87
LATITUDE START	58 59.0	58 58.0	58 40.1	58 33.0	58 26.9	58 25.2	58 24.9	58 24.9	58 39.5	58 34.8	
LONGITUDE START	147 43.4	147 37.0	148 15.6	148 29.6	148 28.7	148 47.8	149 41.3	149 23.6	149 4.7	148 52.9	149 0.0
LATITUDE END	58 38.6	58 36.5	58 38.6	58 30.7	58 25.3	58 2.9	58 25.3	58 24.9	58 25.1	58 41.7	58 35.0
LONGITUDE END	147 49.0	147 39.9	148 18.5	148 30.8	148 26.5	148 49.2	149 37.0	149 18.9	149 0.4	148 50.9	149 4.6
LORAN START	13032.30	12974.80	12742.50	12621.10	12575.80	12238.60	12316.50	12316.50	12399.00	12503.50	
LORAN END	31376.10	31388.20	31295.80	31271.00	31229.10	31118.60	31338.50	31306.50	31332.50	31332.50	
LORAN END	31013.70	12949.50	12717.30	12597.70	12572.50	12297.90	12258.70	12335.90	12420.40	12062.80	12483.40
LORAN END	31379.40	31292.40	31295.20	31214.60	31108.90	31329.50	31299.20	31270.70	31363.20	31341.30	
GEAR DEPTH	394	282	189	87	355	159	86	79	63	101	63
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	0.92	2.13	2.14	2.30	1.99	2.07	2.29	2.48	2.31	2.40	2.42
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	1 / 717	0 / 717	0 / 717	1 / 717	0 / 717	0 / 717	
POLLOCK	0.0	0.0	0.0	0.1	0.0	3.4	122.0	712.1	2.2	9.9	0.0
PACIFIC COD	0.0	0.0	2.4	77.7	0.0	3.4	69.9	320.3	129.1	38.0	84.1
SABLEFISH	135.4	658.8	119.2	0.0	1530.6	63.0	818.2	189.9	3.0	346.3	0.0
ARROWTOOTH FL.	0.0	0.0	0.0	8.4	46.4	15.3	63.6	1593.8	625.2	4.5	441.2
HALIBUT	0.0	0.0	0.0	417.0	11.8	99.5	134.7	66.4	37.0	1.0	76.4
FLATHEAD SOLE	0.0	0.0	0.0	0.0	0.0	0.0	171.6	57.0	26.5	15.7	67.8
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	22.6	48.4	11.3	6.4	47.2	19.5	162.1	31.5	0.0	3.6	9.8
REX SOLE	0.8	1.5	0.8	0.0	0.7	0.8	153.0	195.3	1.6	134.7	15.3
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	6.4	429.8	1.3	10.0	0.0	0.0	2.9	890.5	1.2
ROUGH EYE RKFH	8.0	0.0	667.2	31.3	240.1	219.7	0.0	0.0	0.6	0.0	0.0
THORNYHEADS	18.9	21.5	43.0	0.0	100.6	69.2	0.0	0.0	0.0	11.4	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	5375.9	2.3	0.0	0.0	427.0	81.1	10B9.8
DUSKY ROCKFISH	0.0	0.0	0.0	0.0	4457.7	0.0	0.0	0.0	29.1	5.4	59.8
SHORTRAKER RF	0.0	10.3	196.5	0.0	525.8	598.8	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	338.7	0.0	0.0	0.0	12.2	0.0	10.4
REDSTRIPE RF	0.0	0.0	0.0	0.0	597.4	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	423.4	633.0	0.0	0.0	527.1	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.0	0.0	30.6	4.6	1.8	87.8	0.0	6.4	0.0	0.0	1.4
SKATES	5.4	2.9	0.8	2.3	5.4	0.0	0.0	1.5	3.2	0.0	2.5
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	4.5	0.0	0.0
SalMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAIL #	254	255	256	257	258	259	260	261	262	263	264
MONTH/DAY/YEAR	7/20/87	7/20/87	7/20/87	7/20/87	7/20/87	7/21/87	7/21/87	7/21/87	7/21/87	7/21/87	7/21/87
LATITUDE START	58 34.9	58 35.0	58 35.3	58 36.1	58 34.9	58 37.5	58 44.3	58 44.7	58 49.1	59 3.7	39 9.3
LONGITUDE START	149 19.7	149 39.7	149 48.9	149 58.6	150 7.2	148 41.7	149 0.8	149 10.6	149 21.1	149 21.6	149 12.3
LATITUDE END	58 35.0	58 35.5	58 40.6	58 34.4	58 35.1	58 39.6	58 45.4	58 45.2	58 51.5	59 5.9	59 11.2
LONGITUDE END	149 24.2	149 44.3	149 52.7	150 1.3	150 11.1	148 46.0	149 4.4	149 14.8	149 21.5	149 20.6	149 9.1
LORAN START	12418.60	12332.90	12335.10	12262.40	12215.80	12623.30	12584.30	12546.00	12540.20	12674.30	12765.80
LORAN START	31363.90	31394.70	31436.20	31428.70	31133.70	31334.40	31396.90	31414.20	31457.20	31552.20	31576.50
LORAN END	12400.00	12317.50	12329.00	12235.30	12220.10	12606.00	12577.20	12531.50	12560.40	12699.30	12796.00
LORAN END	31371.60	31404.10	31447.90	31422.00	31439.90	31342.00	31408.40	31422.90	31564.90	31584.60	31584.60
GEAR DEPTH	68	67	85	67	63	104	116	101	118	98	93
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.38	2.41	2.21	2.21	2.02	2.21	2.10	2.22	2.36	2.24	2.46
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	167.8	606.0	49.9	0.0	117.8	5.4	22.0	47.4	0.0	21.3	97.6
PACIFIC COD	21.7	107.5	7.4	84.7	177.5	92.0	0.0	140.2	106.2	33.5	34.8
SABLEFISH	160.5	441.3	38.0	68.2	197.0	126.0	220.3	294.1	1032.3	98.4	81.7
ARROWTOOTH FL.	520.7	143.0	536.7	317.5	455.8	178.6	122.2	202.9	367.8	266.0	707.1
HALIBUT	2.4	108.2	58.4	292.0	87.0	39.4	30.7	0.0	820.6	20.4	179.3
FLATHEAD SOLE	68.9	35.7	168.0	29.2	9.1	0.0	1.3	0.0	4.1	1.0	32.1
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	48.8	32.2	28.0	19.0	13.5	2.0	12.9	20.5	6.4	4.7	3.3
REX SOLE	45.4	50.0	19.2	55.5	89.5	125.3	0.5	40.0	0.9	24.1	25.9
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	1.3	0.7	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	221.7	67.8
ROUGH EYE RKFH	0.0	0.0	1.9	0.0	0.0	1.5	0.0	0.1	16.8	5.0	29.2
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.4	22.4	20.0	6.7	1.2	0.0
NORTHERN RKFH	6.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0
DUSKY ROCKFISH	2.3	1.6	0.0	0.0	0.0	4.8	1.0	0.0	13.8	1.3	2.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.1	0.9	0.9
HARLEQUIN RF	0.4	0.0	0.0	0.0	0.0	11.7	0.6	0.0	63.3	0.5	4.5
RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	6.9	0.0	7.4	0.0	6.4	11.8	3.4	24.1	15.1	0.0	2.7
SKATES	0.0	4.3	0.0	0.0	0.0	7.4	3.8	3.2	2.2	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	265	266	267	268	269	270	271	272	273	274	275
MONTH/DAY/YEAR	7/22/87	7/22/87	7/22/87	7/22/87	7/22/87	7/22/87	7/23/87	7/23/87	7/23/87	7/23/87	7/23/87
LATITUDE START	58 59 0	59 9.1	59 9.2	59 18.6	59 23.5	59 19.5	59 24.2	59 20.3	59 11.1	59 19.3	59 11.4
LONGITUDE START	148 42 5	148 42.2	148 15.5	148 30.5	148 31.9	149 0.4	149 9.2	149 28.6	149 39.0	149 58.0	150 8.2
LATITUDE END	59 1.4	59 11.5	59 9.6	59 20.7	59 25.5	59 20.7	59 25.5	59 19.6	59 9.3	59 20.2	59 9.4
LONGITUDE END	148 42.4	148 41.8	148 11.2	148 32.8	148 30.6	149 4.2	149 12.9	149 33.0	149 42.1	150 2.0	150 10.4
LORAN START	12792.20	12886.20	12997.10	13022.20	13062.70	12910.40	12921.00	12806.90	12676.00	12684.90	12567.40
LORAN START	31465.90	31533.60	31495.10	31582.10	31617.90	31628.30	31670.90	31669.00	31622.20	31660.20	31660.20
LORAN END	12814.40	12909.80	13018.90	13032.60	13090.20	12906.50	12918.40	12783.10	12646.40	12538.80	12538.80
LORAN END	31481.90	31548.90	31492.00	31599.80	31632.30	31641.10	31683.70	31670.00	31614.90	31708.10	31650.10
GEAR DEPTH	126	71	67	51	53	104	109	67	85	100	71
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.40	2.37	2.23	2.42	2.45	2.29	2.27	2.37	2.40	2.25	2.33
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	43 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC COD	23 0	79.2	154.0	9.5	8.4	35.4	34.2	123.5	0.0	23.7	73.0
SABLEFISH	60 2	20.0	0.0	0.0	0.0	29.0	26.8	63.4	48.6	5.6	2.6
ARROWTOOTH FL.	107 1	98.0	1.8	0.0	12.5	158.9	194.8	295.6	1836.9	95.1	27.0
HALIBUT	0 0	43.2	127.3	99.7	53.6	72.1	55.0	18.6	39.8	0.0	66.2
FLATHEAD SOLE	1 9	3.5	0.0	0.0	2.4	62.4	40.5	125.9	6.6	5.1	1.3
ENGLISH SOLE	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	7.1	1.1	0.0	0.0	2.5	2.0	7.0	2.8	3.4	0.6	0.0
REX SOLE	2.2	10.0	8.3	0.4	5.8	2.1	3.6	3.9	10.9	0.5	3.7
YELLOWFIN SOLE	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0 0	0.0	0.0	0.0	1.6	2.4	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	10 6	25.5	3.9	0.0	3.8	0.0	0.4	31.9	13.5	0.9	1.6
ROUGH EYE RKFH	3 9	2.7	0.0	0.0	0.0	13.4	41.5	7.4	0.0	3.8	0.0
THORNYHEADS	66 0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0 6	18.3	1163.4	32.6	266.7	0.0	0.0	5.4	2.6	0.0	3.4
DUSKY RKFISH	0 1	52.0	54.2	2.8	17.5	0.0	0.0	23.2	0.0	2.0	0.1
SHORT TRAKER RF	1 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
HARLEGUIN RF	0 3	375.6	1.7	0.9	2139.0	0.0	0.0	0.0	0.7	0.0	8.7
RED STRIPE RF	0 0	0.0	69.4	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	9 4	0.0	0.0	0.0	0.0	6.8	11.4	7.9	10.9	2.7	4.5
SKATES	0 9	3.4	0.0	0.0	0.0	0.0	1.8	6.3	29.3	10.5	1.4
SPINY DOGFISH	46.1	7.9	0.0	0.0	0.0	17.3	0.0	0.0	0.0	0.0	0.0
Salmon SHARK	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dungeness CRAB	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	276	277	278	279	280	281	282	283	284	285
MONTH/DAY/YEAR	7/24/87	7/24/87	7/24/87	7/24/87	7/24/87	7/24/87	7/24/87	7/25/87	7/25/87	7/25/87
LATITUDE START	59 4.6	59 9.5	59 5.0	59 1.1	58 35.4	58 53.2	58 45.5	58 29.8	58 33.9	58 26.9
LONGITUDE START	150 17.8	150 35.7	150 48.5	150 36.7	150 41.3	150 23.2	150 36.0	149 46.9	150 26.3	150 28.8
LATITUDE END	59 5.9	59 9.7	59 3.1	58 39.6	58 54.9	58 34.6	58 44.6	58 30.0	58 35.3	58 24.8
LONGITUDE END	150 21.9	150 40.3	150 51.3	150 37.1	150 18.8	150 40.1	149 31.1	150 29.8	150 29.8	150 29.4
LORAN START	12463.20	12447.90	12356.40	12287.70	12282.90	12234.80	12220.80	12234.80	12122.30	12050.60
LORAN START	31629.60	31680.30	31667.50	31653.70	31601.70	31578.40	31535.80	31372.60	31413.00	31415.80
LORAN END	12460.80	12433.90	12327.10	12266.60	12294.00	12359.80	12178.50	12239.20	12117.10	12027.70
LORAN END	31642.20	31686.70	31659.70	31646.90	31594.10	31569.70	31535.90	31380.30	31424.80	31466.60
GEAR DEPTH	98	60	104	93	74	74	101	78	48	41
DURATION IN HOURS	0.50	0.50	0.50	0.38	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.45	2.36	2.39	1.72	2.22	2.32	2.32	2.19	2.23	2.24
PERFORMANCE / GEAR	0 / 717	0 / 717	1 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	1 / 717
POLLOCK	77.4	9.7	152.8	35.0	1.1	0.5	9.5	52.3	0.0	57.4
PACIFIC COD	5.9	97.2	64.7	9.0	21.7	832.1	101.7	56.0	3.7	129.1
SABLEFISH	7.6	5.3	63.3	12.3	26.2	194.3	352.5	96.4	0.0	221.3
ARROWTOOTH FL.	18.4	191.6	233.6	21.0	309.2	431.6	207.3	392.4	0.0	1589.4
HALIBUT	13.4	62.2	45.6	4.9	38.1	35.0	31.1	34.3	106.2	197.6
FLATHEAD SOLE	4.6	2.0	44.1	25.2	11.0	0.0	1.2	138.8	1.3	188.9
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	1.0	6.9	0.0	1.0	15.3	11.4	131.8	0.0	92.2
REX SOLE	0.5	0.4	1.4	0.0	4.2	27.7	23.6	92.2	0.0	16.8
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	4.4	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	1.1	3.4	1.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
ROUGHEYE RKFH	0.3	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	3.3
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	34.2	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RKFH	0.0	14.7	3.3	0.0	0.0	0.0	0.0	2.3	0.0	4.4
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	11.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.0	6.3	9.0	0.7	0.7	14.3	16.0	0.0	0.1	3.2
SKATES	4.8	0.0	0.0	1.2	0.0	0.0	4.3	0.0	0.0	19.3
SPINY DOGFISH	0.0	6.1	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	180.6
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 32 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	298	299	300	301	302	303	304	305	306	307
	7/28/87	7/28/87	7/28/87	7/28/87	7/28/87	7/28/87	7/28/87	7/28/87	7/28/87	7/29/87	7/30/87
LATITUDE START	58 48.8	58 38.7	58 29.2	58 18.2	58 21.2	58 13.9	58 2.9	58 6.1	58 0.5	57 34.2	57 4.6
LONGITUDE START	152 59.9	153 12.6	153 0.9	153 17.1	153 36.2	153 29.6	153 34.6	153 54.6	154 21.7	155 14.9	155 30.3
LATITUDE END	58 47.6	58 36.7	58 27.0	58 17.0	58 22.1	58 12.1	58 1.7	58 6.7	57 39.6	57 33.0	57 2.6
LONGITUDE END	153 3.6	153 10.3	153 2.7	153 21.1	153 40.0	153 27.7	153 37.5	153 58.6	154 24.8	155 18.0	155 30.6
LORAN START	11847.00	32077.40	32111.00	32186.20	32196.00	32223.50	32296.40	32362.70	32375.30	32575.30	32743.50
LORAN START	31716.90	43659.20	43554.40	43567.20	43678.90	43607.30	31519.30	43713.20	43857.70	44156.20	44259.70
LORAN END	11829.00	32085.00	32123.90	32197.00	32196.30	11354.10	32299.20	32372.10	32586.30	32753.60	32753.60
LORAN END	31714.20	43636.70	43549.90	43580.50	43703.00	31516.90	43738.60	43874.40	44176.50	44262.90	44262.90
GEAR DEPTH	85	90	96	97	94	98	118	110	142	150	148
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.28	2.39	2.35	2.38	2.19	2.12	1.93	2.18	1.93	2.09	2.08
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	13.0	17.2	51.8	37.3	34.0	10.9	131.7	142.2	39.8	237.5	79.3
PACIFIC COD	59.0	36.5	9.3	19.4	68.7	8.3	43.4	16.8	32.8	164.8	22.8
SABLEFISH	47.4	21.5	9.3	37.1	105.7	6.4	102.4	53.3	41.7	98.0	37.0
ARROWTOOTH FL.	294.2	297.1	119.8	220.4	564.4	275.4	373.9	398.8	94.4	254.8	76.0
HALIBUT	173.9	83.5	22.8	36.4	56.9	175.6	40.1	159.0	41.5	45.6	51.7
FLATHEAD SOLE	25.1	6.4	43.4	98.8	100.5	135.3	37.0	94.6	34.6	56.7	92.3
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	7.8	6.2	1.0	0.0	3.8	0.0	0.0	0.0	3.4	0.0	0.0
REX SOLE	0.6	2.4	0.1	0.2	1.9	0.1	1.8	0.4	0.0	0.5	0.6
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE RKFH	8.2	1.1	4.1	3.8	1.1	5.4	3.7	18.2	6.8	49.0	13.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
DUSKY RCKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.0
SHORTRAKER RF	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEGUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADEERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	1.1	3.1	7.4	19.0	0.0	0.0	0.0	0.0	1.1	23.5	34.1
SKATES	2.0	0.0	0.0	4.3	0.0	1.9	0.0	4.5	0.0	19.3	24.4
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.4	1.7	0.8	0.1	0.0	0.0	0.2	0.4	0.2
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.2	0.0	0.3	0.0	0.0	0.0	0.9	0.0	1.2	1.9
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	309	310	311	312	313	314	315	316	317	318	319
LATITUDE START	57 9 4	57 5 5	56 35 4	56 41 0	56 44 5	56 48 8	56 50 4	56 35 4	56 29 0	56 24 4	56 15 4	56 15 4
LONGITUDE START	135 4 7	134 36 1	135 0 3	135 43 6	134 35 4	135 10 6	135 8 6	135 23 2	135 17 8	135 14 7	135 14 7	135 14 7
LATITUDE END	57 7 9	57 3 7	56 53 2	56 38 9	56 45 3	56 50 6	56 48 1	56 33 8	56 27 6	56 23 1	56 15 3	56 15 3
LONGITUDE END	135 1 6	134 52 9	135 2 4	134 59 9	134 40 0	134 33 1	135 10 4	135 8 4	135 26 7	135 15 0	135 15 0	135 14 8
LORAN START	32678.20	32681.80	32735.30	32799.20	32775.40	32722.80	32774.80	32838.20	32891.30	32901.80	32933.80	32933.80
LORAN START	44086.60	44032.00	44072.70	44095.30	43982.40	43921.60	44143.10	44159.10	44264.00	44240.50	44242.40	44242.40
LORAN END	32679.70	32684.60	32748.60	32807.90	32745.80	32710.90	32785.00	32844.70	32903.90	32902.10	32934.30	32934.30
LORAN END	44066.50	44012.90	44087.90	44097.10	43957.80	43903.20	44147.30	44160.80	44289.30	44225.80	44242.90	44242.90
GEAR DEPTH	113	57	44	20	16	19	82	22	27	21	13	13
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.30	0.50	0.50	0.05	0.05
DISTANCE FISHED	2.26	2.44	2.47	2.13	2.15	2.22	2.36	1.61	2.45	2.01	0.11	0.11
PERFORMANCE / GEAR	0 / 717	0 / 717	1 / 717	0 / 717	0 / 717	0 / 717	1 / 717	0 / 717	0 / 717	0 / 717	7 / 717	7 / 717
POLLOCK	149.8	24.1	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC COD	93.0	1264.1	1465.1	0.4	0.0	0.0	0.0	74.6	0.0	0.0	2.0	0.0
SABLEFISH	95.5	967.4	15.2	0.0	0.0	0.0	0.0	54.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	141.7	9486.3	3333.7	0.0	0.0	0.0	0.0	371.7	0.0	0.0	0.0	0.0
HALIBUT	40.6	125.9	1265.0	160.5	212.8	419.1	148.5	258.2	374.0	278.3	0.0	0.0
FLATHEAD SOLE	58.1	36.4	21.3	1.0	0.0	0.0	0.0	88.6	7.1	0.0	0.0	0.0
ENGLISH SOLE	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.7	11.0	8.7	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
REX SOLE	0.0	0.8	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	7.6	25.7	0.0
ROCK SOLE	0.0	0.0	0.0	2.4	6.6	4.4	160.4	7.0	32.0	142.1	3.4	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.2	0.3	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.3	5.2	0.0	0.0	0.0
ROUGH EYE RKFH	4.4	4.0	1.3	0.0	0.0	0.0	0.0	1.0	0.3	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RKFISH	0.0	23.8	1.5	0.0	0.0	0.0	0.0	289.8	11.8	0.0	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEGUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	6.2	55.2	18.5	0.6	0.1	8.4	4.6	0.0	16.6	0.0	0.0	0.0
SKATES	0.0	0.0	24.6	78.9	0.0	0.0	44.7	35.7	128.3	102.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	320	321	322	323	324	325	326	327	328	329	330
MONTH/DAY/YEAR	7/31/87	8/ 1/87	8/ 1/87	8/ 1/87	8/ 1/87	8/ 1/87	8/ 1/87	8/ 1/87	8/ 1/87	8/ 1/87	8/ 1/87
LATITUDE START	55 39.6	55 36.6	56 5.3	56 15.2	56 20.4	56 22.0	56 25.4	57 17.8	57 2.8	56 52.4	56 30.5
LONGITUDE START	155 22.1	155 48.0	155 49.6	155 50.5	155 50.2	155 46.6	155 42.9	155 1.9	155 37.9	156 4.0	156 20.9
LATITUDE END	55 37.9	55 38.7	56 7.5	56 17.4	56 22.4	56 22.3	56 28.0	57 16.3	57 0.5	56 50.6	56 30.4
LONGITUDE END	155 21.1	155 48.4	155 49.7	155 51.4	155 59.2	155 42.2	155 43.6	155 58.9	155 58.1	156 6.6	156 24.9
LORAN START	33011.80	33071.80	32999.10	32999.80	32998.80	32963.50	32942.40	32734.90	32800.10	32859.40	32899.20
LORAN END	44327.30	44490.30	44479.70	44463.90	44526.40	44425.40	44395.80	44465.40	44444.10	44493.00	44606.30
GEAR DEPTH	33017.00	33063.90	33030.20	32992.10	32985.10	32953.50	32932.10	32736.90	32811.00	32872.70	32906.90
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.82	2.14	2.19	2.27	2.53	2.53	2.66	2.20	2.25	2.35	2.20
PERFORMANCE / GEAR	0 / 7117	0 / 7117	0 / 7117	0 / 7117	0 / 7117	0 / 7117	0 / 7117	0 / 7117	0 / 7117	0 / 7117	0 / 7117
POLLOCK	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	202.6	92.8	200.3
PACIFIC COD	1.0	0.0	2.9	4192.2	10.2	635.7	818.6	136.7	32.2	17.5	72.5
SABLEFISH	0.0	0.0	0.0	0.0	36.3	0.0	9.8	37.7	139.2	65.3	84.3
ARROWTOOTH FL.	0.0	0.0	0.0	0.0	387.3	563.9	672.3	2357.9	544.5	193.0	274.0
HALIBUT	68.6	126.7	211.6	399.9	23.8	241.5	60.1	193.8	27.4	145.6	136.7
FLATHEAD SOLE	0.0	0.0	0.0	11.5	5.3	29.0	98.2	23.0	2.9	8.8	39.5
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	27.5	7.1	5.4	13.3	9.4	18.0	4.6
REX SOLE	0.0	0.0	0.0	0.0	31.6	0.4	43.5	105.0	0.2	0.2	3.6
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	33.8	6230.1	0.9	682.8	33.8	1.7	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA FLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	5.5
ROUGH EYE RFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	10.5	4.5
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RICKFISH	0.0	0.0	0.0	0.0	6.3	4.1	0.0	1B.5	1.2	0.0	6.3
SHORTTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTR.IPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	8.6	0.0	0.0	0.0	0.0	0.0	0.0
GRENADEERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.0	3.7	0.1	147.4	2.8	0.0	0.0	39.4	29.0	36.7	4.4
SKATES	0.0	12.0	59.0	0.0	25.4	94.2	0.0	0.0	0.0	0.0	3.9
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #		343	344	345	346	347	348	349	350
MONTH/DAY/YEAR	B/ 4/87	B/ 4/87	B/ 5/87	B/ 6/87					
LATITUDE START	56 11.2	56 15.3	56 0.3	55 53.9	55 44.0	55 47.1	55 49.6	55 50.5	55 36.2
LONGITUDE START	157 45.0	157 56.0	158 11.2	158 26.3	158 26.7	158 20.0	158 3.6	157 45.7	158 33.8
LATITUDE END	56 10.5	56 14.3	55 58.2	55 52.4	55 42.0	55 48.9	55 49.6	55 50.8	55 36.1
LONGITUDE END	157 47.0	157 58.2	158 12.0	158 28.8	158 25.4	158 17.6	157 59.5	157 41.5	158 49.7
LORAN START	33239.20	33244.00	33339.90	33339.50	33439.80	33413.00	33368.20	33578.00	33527.30
LORAN END	45201.70	45268.70	45384.30	45489.30	45503.20	45457.30	45349.00	45333.80	45384.30
LORAN END	45246.40	45252.80	33330.70	33410.50	33445.20	33400.40	33359.70	33317.50	33358.70
GEAR DEPTH	45215.60	45283.90	45392.30	45507.50	45498.30	45439.40	45323.10	45207.20	45660.00
DURATION IN HOURS	0.37	0.40	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.33	1.56	2.21	2.14	2.17	2.29	2.29	2.34	2.25
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	200.0	284.8	1091.4	1750.1	6.4	30.4	0.0	0.7	85
PACIFIC COD	75.9	156.8	201.8	51.0	165.6	33.7	173.5	460.9	397.0
SABLEFISH	0.0	0.0	1.1	4.8	3.2	9.3	0.0	10.2	42.0
ARROWTOOTH FL.									
HALIBUT	175.2	4.0	59.1	55.0	37.2	27.2	87.1	183.5	85.3
FLATHEAD SOLE	12.5	90.7	11.7	28.4	1.8	23.0	0.8	24.9	45.1
ENGLISH SOLE	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	85.1
DOVER SOLE	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	0.3	0.3	1.9	11.0	7.2	7.0	0.0	21.0	1.4
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	1.9	2.7	22.2	14.8	0.0	3.4	17.5	73.2	9.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.4
PAC OC PERCH	1.9	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0
ROUGHEYE RKFH	3.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.4
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	2.7	3.3	0.0	0.0	0.0	0.0	0.0	38.2	0.4
DUSKY RKFISH	2.6	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0
SHORTTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	2.1	4.4	4.1	9.5	0.1	0.4	0.1	6.1	14.3
SKATES	0.0	3.3	26.0	0.0	0.0	0.0	0.0	25.1	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.6
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAIL #	353	354	355	356	357	358	359	360	361	362	363
MONTH/DAY/YEAR	8/ 6/87	8/ 6/87	8/ 6/87	8/ 7/87	8/ 7/87	8/ 7/87	8/ 7/87	8/ 7/87	8/ 8/87	8/ 8/87	8/ 8/87
LATITUDE START	55 34.3	55 34.7	55 40.3	55 40.1	55 30.4	55 30.5	55 50.2	55 41.9	55 53.1	55 2.5	55 53.6
LONGITUDE START	158 8.6	157 58.8	157 43.4	156 47.6	156 46.1	156 21.9	156 6.2	155 46.2	154 10.5	154 23.3	154 23.6
LATITUDE END	55 34.1	55 35.1	55 41.2	55 37.7	55 28.1	55 30.9	55 32.3	55 33.9	55 53.5	56 1.6	55 51.9
LONGITUDE END	158 4.5	157 34.6	157 39.4	156 46.8	156 45.4	156 17.8	156 3.8	155 44.0	154 13.8	154 27.2	154 55.4
LORAN START	33439.40	33417.30	33363.30	33251.30	33285.60	33238.10	33131.20	33126.50	32911.20	32896.60	32982.70
LORAN START	45402.10	45339.90	45234.50	44888.70	44899.70	44754.70	44614.90	44516.40	43947.10	43982.20	44174.20
LORAN END	33431.80	33407.00	33351.70	33259.20	33229.20	33228.60	33118.50	33130.00	32915.60	32906.80	32994.50
LORAN END	45376.80	45312.90	45208.40	44889.00	44900.40	44729.70	44595.90	44508.80	43963.00	44006.70	44195.40
GEAR DEPTH	73	72	74	69	32	120	93	37	180	96	189
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.34	2.42	2.40	2.45	2.42	2.34	2.46	2.32	1.86	2.36	2.35
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	1 / 717	0 / 717	1 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	80.4	36.2	715.7	1.4	0.0	4.7	435.8	0.0	1.3	0.4	0.0
PACIFIC COD	51.9	32.8	108.6	1499.8	14.7	16.5	2042.1	0.0	0.0	427.4	0.0
SABLEFISH	8.0	13.3	3.6	78.3	1.1	87.6	603.0	0.0	113.0	111.5	437.7
ARROWTOOTH FL.	637.4	510.1	1972.8	1231.2	58.4	122.0	1125.1	511.7	0.0	1272.5	70.7
HALIBUT	37.2	38.4	199.2	0.0	280.5	47.0	140.8	951.1	5.9	408.2	0.0
FLATHEAD SOLE	28.6	30.6	51.0	3.2	0.0	8.7	166.6	0.0	0.0	0.0	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.5	7.2	0.0	16.7	475.0	0.0	26.1	2.2	35.6
REX SOLE	0.4	0.0	20.5	146.3	2.0	191.2	734.8	0.0	2.1	199.7	76.3
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLounder	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	0.0	18.0	0.0	0.0	23.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
ROUGHEYE RKFH	27.0	22.0	2.4	0.0	0.0	3.6	0.0	0.0	244.6	0.0	33.6
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	135.8	0.0	162.6
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0
DUSKY RCKFISH	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	1.1	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	254.5	0.0	104.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.1	0.1	3.5	0.0	0.5	30.1	17.5	28.9	17.7	3.5	0.0
SKATES	0.0	2.4	0.0	40.0	0.0	3.9	46.2	0.0	0.0	0.0	7.5
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SAFON SHARK	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	364	365	366	367	368	369	370	371	372	373	374
MONTH/DAY/YEAR	8/ 8/87	8/ 8/87	8/ 9/87	8/ 9/87	8/ 9/87	8/12/87	8/12/87	8/12/87	8/13/87	8/13/87	8/13/87
LATITUDE START	55 43. 9	55 37. 6	56 13. 3	56 15. 4	56 22. 5	55 39. 3	55 34. 8	55 24. 6	55 23. 8	55 23. 8	55 23. 2
LONGITUDE START	155 7. 9	155 3. 7	154 48. 7	154 31. 9	154 22. 3	155 24. 0	155 48. 0	155 37. 1	156 14. 3	156 28. 2	156 35. 4
LATITUDE END	55 45. 0	55 59. 3	56 14. 6	56 15. 4	56 22. 0	55 38. 3	55 34. 7	55 19. 4	55 24. 5	55 24. 2	55 22. 9
LONGITUDE END	155 4. 9	155 3. 6	154 46. 4	154 29. 4	154 18. 4	155 27. 9	155 31. 5	156 0. 7	156 18. 2	156 32. 3	156 37. 4
LORAN START	33048. 10	32987. 00	32896. 70	32858. 90	32813. 70	33095. 20	33157. 10	33231. 60	33245. 70	33275. 30	33284. 30
LORAN START	44290. 10	44225. 70	44092. 40	43987. 90	43910. 80	44395. 00	44545. 30	44637. 80	44724. 40	44807. 60	44847. 10
LORAN END	33038. 30	32979. 70	32887. 40	32854. 80	32808. 90	33106. 30	33163. 80	33238. 40	33253. 30	33282. 00	33296. 70
LORAN END	44269. 70	44219. 70	44075. 00	43973. 80	43889. 50	44420. 20	44565. 70	44658. 20	44746. 90	44830. 70	44863. 90
GEAR DEPTH	106	42	22	45	19	104	108	156	108	93	79
DURATION IN HOURS	0. 30	0. 30	0. 33	0. 50	0. 50	0. 50	0. 50	0. 50	0. 50	0. 50	0. 50
DISTANCE FISHED	2. 05	1. 77	1. 82	1. 37	2. 23	2. 44	1. 99	2. 05	2. 18	2. 32	2. 55
PERFORMANCE / GEAR	0 /717	1 /717	0 /717	1 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717	0 /717
POLLOCK	0. 0	0. 0	0. 0	0. 0	36. 1	0. 0	0. 0	0. 0	0. 0	0. 2	0. 0
PACIFIC COD	282. 0	0. 0	4. 6	190. 5	578. 4	795. 3	317. 0	0. 0	324. 9	291. 5	312. 9
SABLEFISH	2152. 3	0. 0	0. 0	0. 0	0. 0	843. 5	235. 7	6. 4	36. 2	32. 0	7. 9
ARROWTOOTH FL.	2012. 6	0. 0	0. 0	0. 0	214. 8	0. 0	1202. 6	320. 7	133. 2	1113. 2	843. 1
HALIBUT	46. 5	196. 8	723. 0	134. 0	276. 7	3200. 3	182. 8	77. 9	259. 8	142. 7	244. 1
FLATHEAD SOLE	0. 7	0. 0	0. 0	21. 5	0. 0	35. 8	17. 7	0. 0	1. 4	0. 5	0. 0
ENGLISH SOLE	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
DOVER SOLE	1. 0	0. 0	0. 0	13. 1	0. 0	8. 3	35. 6	0. 0	11. 1	25. 7	1. 7
REX SOLE	32. 8	0. 0	0. 0	133. 2	0. 0	170. 3	411. 8	0. 0	96. 2	314. 3	30. 5
YELLOWFIN SOLE	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
STARRY FLOUNDER	0. 0	0. 0	0. 0	0. 0	0. 0	550. 9	0. 0	0. 0	0. 0	0. 0	0. 0
ROCK SOLE	0. 0	37. 8	2. 4	34. 2	124. 2	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
BUTTER SOLE	0. 0	0. 0	0. 0	0. 3	27. 8	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
ALASKA PLAICE	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
PAC DC PERCH	37. 7	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	299. 9	97. 3	110. 6	132. 8
ROUGHYEYE RKFH	14. 1	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	128. 8	11. 5	9. 5
THORNYHEADS	5. 8	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	328. 5	0. 0	0. 7
NORTHERN RKFH	83. 6	0. 0	0. 0	0. 0	0. 0	0. 0	46. 0	180. 7	0. 0	4. 4	392. 9
DUSKY RCKFISH	3. 0	0. 0	0. 0	0. 0	0. 0	0. 0	24. 0	30. 2	0. 0	7. 1	1951. 5
SHORTRAKER RF	12. 9	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	296. 8
HARLEQUIN RF	3. 9	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	1. 5
REDSTRIP RF	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SHARPchin RF	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
ATKA MACKEREL	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
GRENADIERS	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SCULPINS	4. 6	0. 0	2. 7	49. 1	4. 3	0. 0	9. 6	76. 6	20. 0	3. 1	0. 6
SKATES	4. 1	109. 0	66. 0	0. 0	74. 4	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SPINY DOGFISH	0. 0	1. 9	2. 8	2. 0	3. 2	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SALMON SHARK	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SLEEPER SHARK	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
TANNER CRAB	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
KING CRAB	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
DUNGENESS CRAB	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
PINK SHRIMP	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SIDE STRIPE SHRIMP	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SCALLOP	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	375	376	377	378	379	380	381	382	383	384	385
MONTH/DAY/YEAR	8/13/87	8/13/87	8/13/87	8/14/87	8/14/87	8/14/87	8/14/87	8/14/87	8/14/87	8/15/87	8/15/87
LATITUDE START	55 12.0	55 16.6	55 15.1	55 14.5	54 31.5	54 43.8	54 37.0	54 30.9	55 4.9	54 54.4	54 57.0
LONGITUDE START	156 44.3	157 25.3	157 50.8	158 0.2	157 37.7	158 10.1	158 27.8	158 40.9	158 8.4	158 14.6	158 24.0
LATITUDE END	55 10.9	55 16.7	55 15.0	55 14.5	54 30.8	54 45.8	54 37.7	54 33.1	55 2.6	54 52.4	54 58.6
LONGITUDE END	156 45.9	157 28.1	157 54.7	158 3.7	157 41.4	158 11.2	158 24.3	158 42.6	158 9.8	158 16.6	158 26.9
LORAN START	33350.20	33416.20	33474.40	33496.10	33529.90	33622.90	33682.30	33664.80	33547.80	33597.00	33608.20
LORAN END	44928.80	45163.60	45321.30	45379.60	45283.80	45467.70	45602.60	45661.40	45444.60	45498.30	45550.70
GEAR DEPTH	102	48	44	49	107	107	219	34	71	98	103
DURATION IN HOURS	0.33	0.37	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
DISTANCE FISHED	1.45	1.60	2.20	2.01	2.23	2.06	2.16	2.41	2.39	2.35	2.30
PERFORMANCE / GEAR	1 / 717	1 / 717	0 / 717	0 / 717	0 / 717	1 / 717	7 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	3.5	7.2
PACIFIC COD	93.5	0.7	0.0	0.0	1424.9	281.6	0.0	0.0	412.5	52.0	329.7
SABLEFISH	1069.4	0.0	0.0	0.0	188.1	2.5	2751.9	0.0	0.0	2.4	219.2
ARROWTOOTH FL.	636.1	0.0	0.0	0.0	3833.7	100.7	129.0	494.6	131.2	166.3	44.5
HALIBUT	27.9	69.3	0.0	0.0	0.0	1.5	0.8	0.0	0.0	41.0	25.8
FLATHEAD SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	14.9	0.0	0.0	0.0	0.0	36.6	3.8	27.7	0.0	6.0	14.5
REX SOLE	53.8	0.0	0.0	0.0	0.0	87.0	14.7	2.3	0.0	96.4	85.5
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLounder	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	3.0	0.2	0.0	0.0	0.0	0.0	1.7	2.9	1.7
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	30.0	153.1	3.1	0.3	1.5	941.3	0.0	0.1	0.0	2.9	75.8
ROUGH EYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	48.8	0.0	0.0	2.0	3.4
THORNY HEADS	0.0	0.0	0.0	0.0	0.0	0.0	56.5	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.0
DUSKY RKFISH	3.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	52.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.1	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARP CHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.5	0.0	0.0	0.0	0.0	6.3	0.0	25.3	0.0	11.3	1.0
SKATES	0.0	0.0	0.0	42.0	8.5	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Salmon shark	0.0	0.0	0.0	0.0	0.0	110.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	386	387	388	389	390	391	392	393	394	395	396
MONTH/DAY/YEAR	8/15/87	8/15/87	8/16/87	8/16/87	8/16/87	8/16/87	8/16/87	8/17/87	8/17/87	8/17/87	8/18/87
LATITUDE START	55 1 1	55 6 2	55 24 4	55 23 0	55 31 7	55 23 0	55 30 0	55 25 6	55 7 3	55 21 7	54 44 B
LONGITUDE START	158 41 7	158 37 8	158 2 6	158 20 2	158 23 7	158 37 9	158 49 2	159 3 0	159 20 7	159 39 4	159 15 7
LATITUDE END	55 1 9	55 7 8	55 24 0	55 23 3	55 34 0	55 21 0	55 31 9	55 24 2	55 9 5	55 22 6	54 43 3
LONGITUDE END	158 45 4	158 34 8	158 6 7	158 24 4	158 24 3	158 40 3	158 51 3	159 7 9	159 20 5	159 43 1	159 13 3
LORAN START	33632.20	33605.80	33464.40	33506.90	33481.60	33545.00	33543.30	33594.40	33695.90	33686.10	33760.30
LORAN END	45653.00	45622.30	45379.00	45490.20	45500.40	45600.70	45663.80	45768.30	45990.40	45879.30	
LORAN END	45637.30	33593.60	33474.70	33514.90	33474.10	33537.70	33540.40	33606.10	33687.60	33691.20	33760.20
GEAR DEPTH	45601.50	45601.50	45505.10	45516.90	45501.40	45618.50	45674.90	45788.50	45882.50	46013.00	45866.60
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.28	2.37	2.38	2.42	2.33	2.44	2.30	2.17	2.22	2.28	2.05
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	1 / 717
POLLOCK	0.4	22.9	1.3	3.4	38.4	28.5	49.5	32.7	2.5	437.6	0.0
PACIFIC COD	1325.4	78.8	666.5	46.7	42.5	0.0	5.2	19.6	63.2	49.8	2.8
SABLEFISH	817.8	118.0	48.7	2.2	3.1	5.6	12.2	12.0	0.0	0.0	0.0
ARROWTOOTH FL.											
HALIBUT	230.3	110.8	163.3	5.9	80.1	42.1	53.7	38.4	84.3	155.4	184.6
FLATHEAD SOLE	89.8	117.7	31.0	26.0	42.2	165.4	62.8	42.5	29.6	63.9	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7	0.0
DOVER SOLE	9.9	6.4	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	43.8	14.3	36.4	3.6	0.0	0.6	1.8	0.4	0.0	3.4	0.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	66.8	3.7
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC PERCH	1.2	0.0	1.5	0.8	0.0	0.0	0.0	0.0	1.0	0.0	0.0
ROUGHEYE RFH	0.0	21.5	0.0	5.2	41.2	47.3	11.3	6.8	0.0	3.5	0.0
THORN HEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RFH	0.0	0.0	0.0	3.8	0.9	0.0	0.0	0.2	133.1	0.4	0.4
DUSKY ROCKFISH	2.3	0.0	0.0	3.7	0.0	0.0	0.0	3.8	1.3	5.3	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	3.7	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	22.9	7.2	0.0	6.2	7.0	4.2	0.1	8.4	0.0	11.6	6.1
SKATES	1.2	3.0	4.5	0.0	1.4	29.4	0.0	2.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.1	0.0	0.1	0.1	0.4	0.3	0.2	0.3	0.4	0.2
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.1	0.0	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	397	398	399	400	401	402	403	404	405	406	407
LATITUDE START	8/18/87	8/18/87	8/18/87	8/18/87	8/18/87	8/19/87	8/19/87	8/19/87	8/19/87	8/19/87	8/20/87	8/20/87
LONGITUDE START	54 40.6	54 33.7	54 25.8	54 35.0	54 36.3	54 32.7	55 0.3	54 33.9	54 39.9	54 43.7	54 19.8	54 18.0
LATITUDE END	159 6.5	158 57.6	159 38.3	159 55.1	159 56.5	160 33.6	160 54.0	161 19.6	161 16.2	160 32.8	160 18.0	160 18.0
LONGITUDE END	54 39.1	54 32.7	54 25.0	54 35.2	54 34.4	54 52.7	55 1.7	54 51.8	54 37.8	54 46.5	54 18.8	54 18.8
GEAR DEPTH	159 3.8	159 1.3	159 42.4	159 55.3	159 55.9	160 37.7	160 56.2	161 19.1	161 14.7	160 49.3	160 21.8	160 21.8
DURATION IN HOURS	0.50	0.50	0.50	0.03	0.50	0.50	0.43	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.15	2.37	2.54	0.24	2.08	2.38	1.84	2.14	2.24	2.23	2.44	2.44
PERFORMANCE / GEAR	1 / 717	0 / 717	0 / 717	1 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC COD	0.0	0.7	2.6	0.0	1.9	9.4	68.0	25.1	48.6	422.8	903.4	903.4
SABLEFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.9	107.9
ARROWTOOTH FL.	0.0	1326.8	1450.4	0.0	0.0	0.0	686.2	473.0	259.7	293.0	375.1	2499.2
HALIBUT	28.9	117.9	130.9	0.0	0.0	0.0	524.7	142.2	584.2	326.4	42.0	33.9
FLATHEAD SOLE	0.0	0.7	1.7	0.0	0.0	0.0	83.5	57.0	51.5	66.8	44.1	1.3
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	0.0	4.2	2.6	0.0	0.0	0.0	0.0	0.0	2.6	9.7	5.6	0.6
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.3	0.0	0.0	0.0
STARRY FLounder	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	4.1	14.2	2.0	0.0	0.0	2.9	23.8	28.7	15.3	36.4	1.3	1.3
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	23.5	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	7.8	9.6	0.0	0.0	0.0	0.0	509.2	0.0	0.5	1.2	0.0	14.0
ROUGH EYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	45.5	7.4	0.0	0.0	0.0	0.0	2720.2	3.0	1.2	0.3	0.0	17.0
DUSKY RKFISH	6.0	0.8	0.0	0.0	0.0	0.0	26.5	9.5	0.7	0.0	0.0	1.3
SHORTTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.7	0.0	0.0	0.0	0.0	0.0	27.4	0.0	0.0	0.0	0.0	0.0
RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	5359.6	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	6.2	12.7	0.0	0.0	0.0	0.6	9.4	2.4	9.7	10.7	3.8	0.3
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.0	0.0	0.0
SPTNY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
WING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 39 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	408	409	410	411	412	413	414	415	416	417	418
MONTH/DAY/YEAR	8/20/87	8/20/87	8/20/87	8/21/87	8/21/87	8/21/87	8/21/87	8/21/87	8/22/87	8/22/87	8/22/87
LATITUDE START	54 18 8	54 22 2	54 31 3	54 16 3	54 6 8	54 6 2	54 10 3	54 12 9	54 4 4	54 12 6	54 28 9
LONGITUDE START	160 35 4	161 26 3	161 38 0	161 51 9	161 36 8	161 42 6	162 18 7	162 10 8	162 47 1	162 52 3	162 58 3
LATITUDE END	54 18 9	54 23 0	54 31 3	54 14 2	54 5 6	54 6 4	54 9 3	54 13 0	54 4 3	54 15 0	54 29 6
LONGITUDE END	160 39 5	161 30 0	161 42 1	161 52 5	161 40 1	161 46 3	162 15 5	162 51 2	162 52 7	163 1 7	
LORAN START	34061.50	34122.50	34124.30	34196.90	34186.50	34201.00	34273.20	34248.70	34351.70	34344.90	34320.20
LORAN END	46499.90	46683.80	46753.60	46837.50	46782.50	46976.00	46949.70	47161.40	47195.40	47238.70	
DURATION IN HOURS	0.30	0.50	0.45	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
DISTANCE FISHED	2.40	2.34	2.38	2.16	2.28	2.21	2.12	0.63	2.40	2.33	2.16
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	0 0	0 0	0 0	0 0	0 0	12.2	0 0	3.0	0 0	0 0	0 4
PACIFIC COD	1968 2	3 3	0 4	0 0	0 0	243.1	0 0	0 0	0 0	9 9	39 0
SABLEFISH	61.2	0 0	0 0	0 0	6.0	4.8	127.3	0 0	0 0	0 0	0 0
ARROWTOOTH FL.	2598 2	0 0	0 0	0 0	90.4	33.2	75.4	0 0	0 0	0 4	0 2
HALIBUT	282 7	32.3	134.7	82.8	83.4	14.2	28.0	0 0	75.7	42.8	174.2
FLATHEAD SOLE	0 9	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ENGLISH SOLE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
DOVER SOLE	2.4	0 0	0 0	0 0	0 0	4.2	0 0	27.3	0 0	0 0	0 0
REX SOLE	18.4	0 0	0 0	0 0	0 0	4.2	0 0	18.9	0 0	0 0	0 0
YELLOWFIN SOLE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
STARRY FLOUNDER	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ROCK SOLE	1.3	0 0	0 0	17.7	2.4	0 0	0 0	2.1	1.0	4.3	14.5
BUTTER SOLE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	42.2
ALASKA PLAICE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
PAC DC PERCH	26.2	72.3	0 0	20.3	46.7	8 0	20.6	0 0	16.7	0 0	0 0
ROUGH EYE RKFH	0 0	0 0	0 0	0 0	14.5	0 0	167.8	0 0	0 0	0 0	0 0
THORNYHEADS	0 0	0 0	0 0	0 0	326.8	5 0	152.3	0 0	0 0	0 0	0 0
NORTHERN RKFH	2.9	423.3	6.3	126.8	0 0	0 0	0 0	0 0	690.9	0 0	0 0
DUSKY ROCKFISH	25.3	53.4	0 0	23.4	5.3	0 0	0 0	0 0	20.8	0 0	0 0
SHORTTRAKER RF	0 0	0 0	0 0	0 0	7.0	0 0	171.9	0 0	0 0	0 0	0 0
HARLEQUIN RF	6.8	1.3	0 0	0 1	0 0	0 0	0 0	0 0	0 3	0 0	0 0
RED STRIPE RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SHARPCHEW RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ATKA MACKEREL	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
GRENADIERS	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SCULPINS	5.0	6.1	0 0	0 0	0.7	101.6	106.2	11.0	0 0	1.8	1.2
SKATES	14.3	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SPINY DOGFISH	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SALMON SHARK	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SLEEPER SHARK	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
TANNER CRAB	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
KING CRAB	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
DUNGENESS CRAB	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
PINK SHRIMP	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
WHITE STRIPE SHRIMP	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SCALLOP	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	420	421	422	423	424	425	426	427	428	429
LATITUDE START	8/22/87	8/23/87	8/23/87	8/23/87	8/23/87	8/23/87	8/23/87	8/23/87	8/24/87	8/24/87	8/24/87
LONGITUDE START	54 26 5	54 31 7	54 15 1	54 12 1	54 13 9	54 11 3	53 54 5	53 54 5	53 56 4	53 56 4	53 56 4
LONGITUDE END	163 20 9	163 57 7	164 13 3	163 34 9	163 38 2	163 19 8	163 37 3	164 10 9	164 21 1	164 32 8	164 48 4
LATITUDE END	54 25 4	54 31 9	54 14 7	54 12 1	54 14 0	54 10 6	53 53 5	53 54 8	53 58 8	54 6 8	53 54 4
LONGITUDE END	163 24 9	164 1 8	164 9 0	163 50 9	163 34 4	163 16 2	163 34 4	164 15 2	164 25 0	164 37 0	164 47 0
LORAN START	34379.40	34455.00	18221.80	18227.60	18249.30	18255.60	18178.60	18143.80	18170.00	18108.20	
LORAN START	47372.70	47596.20	47671.60	47561.80	47466.10	47356.50	47444.90	47635.00	47696.60	47773.70	47847.20
LORAN END	34391.80	34464.20	18224.20	18231.30	18253.10	18256.10	18173.80	18140.20	18145.20	18164.40	18101.20
LORAN END	47396.40	47621.10	47646.10	47538.60	47443.90	47334.90	47449.90	47659.60	47719.50	47797.00	47836.30
GEAR DEPTH	56	44	37	57	49	40	42	44	44	44	49
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.27	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.66	2.43	2.58	2.35	2.24	2.24	1.18	2.37	2.42	2.47	2.27
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	1 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	35.5	1.2	0.0	2.7	0.0	0.0	0.0	0.0	1.0	0.0	0.0
PACIFIC COD	169.9	47.4	16.5	92.7	383.8	18.1	7.3	4.1	324.0	16.7	97.2
SABLEFISH	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	179.3	32.7	0.0	241.7	17.8	2.1	0.0	0.0	409.3	4.2	0.0
HALIBUT	37.9	205.8	83.5	37.2	253.9	57.4	0.0	20.7	199.4	105.6	32.0
FLATHEAD SOLE	126.9	85.9	0.0	37.6	123.1	18.3	0.0	0.0	3.1	0.0	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	44.4	7.0	0.0	15.4	0.0	0.0	0.0	0.0	13.1	0.0	0.0
YELLOWFIN SOLE	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	94.0	163.5	7.7	26.8	151.7	19.1	4.9	27.3	42.4	10.9	52.5
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	20.7	0.0	0.0
ROUGHYEYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.0	134.8	0.0	1.0
DUSKY RCKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	4.2	0.0	1.4
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0
REDSTRIP RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	B.3	0.8	2.9	12.4	0.0	0.7	2.7	0.0	4.0	10.6	1.2
SKATES	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
SAFETY SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 33 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HULL #	MONTH/DAY/YEAR	430	431	432	433	434	435	436	437	438	439
LATITUDE START	8/24/87	8/25/87	8/25/87	8/25/87	8/25/87	8/25/87	8/25/87	8/25/87	8/26/87	8/26/87	8/26/87
LONGITUDE START	53 43 2	53 46 4	33 57 2	33 52 3	33 49 0	33 32 1	33 30 4	33 23 3	33 22 1	33 15 2	33 12 0
LATITUDE END	164 42 3	165 11 9	165 12 6	165 20 4	165 35 9	165 46, 0	165 53, 7	166 1, 3	166 23, 5	166 24, 7	166 55, 0
LONGITUDE END	53 43 2	53 44 9	53 57, 0	53 49, 9	53 49, 9	53 53, 5	53 29, 5	53 24, 4	53 21, 8	53 14, 1	53 10, 8
LORAN START	18060 10	18034 70	18080 70	18048 70	18012 10	18010 90	17898 20	17862 30	17805 10	17769 70	17692 00
LORAN END	47796 70	47960 40	47981 40	48015 60	48093 20	48152 80	48151 80	48181 00	48284 30	48275 80	48412 40
GEAR DEPTH	164 46, 9	165 15, 4	165 16, 7	165 21, 9	165 40, 3	165 49, 5	165 37, 7	166 4, 9	166 27, 3	166 28, 1	166 38, 3
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.57	2.60	2.43	2.58	2.61	2.49	2.59	2.49	2.30	2.28	2.36
PERFORMANCE / GEAR	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717	0 / 717
POLLOCK	0.0	1.3	0.0	1.1	1.4	0.0	0.0	0.0	33.4	0.0	0.0
PACIFIC COD	429.5	131.7	3.4	357.6	276.0	24.1	314.0	6.5	398.9	0.0	78.9
SABLEFISH	37.9	3.7	0.0	0.0	0.0	0.0	0.0	6.5	4.9	86.8	0.0
ARWINTOOTH FL.											
HALIBUT	112.3	44.4	256.7	86.1	34.6	171.9	8.7	11.3	514.4	3.5	180.3
FLATHEAD SOLE	10.6	6.6	0.0	2.7	0.0	0.0	6.3	8.2	2.3	0.0	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0
REX SOLE	3.1	111.0	0.0	0.5	0.0	0.0	6.3	14.0	63.8	0.0	0.4
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	25.4	0.0	5.4	195.3	115.7	25.5	25.5	3.2	38.1	0.0	36.6
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC. OC. PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	10239.5	0.0
ROUGH-EYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	3.9	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.6	0.0	43.1	4.5
NORTHERN RKFH	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.0
DUSKY RCKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	3.9
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	3.6	0.0	0.0
GRENAIDIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0
SCULPINS	0.0	0.0	0.0	3.9	13.7	1.0	0.0	0.3	0.0	0.0	0.0
SKATES	29.7	12.0	0.0	17.5	0.0	2.0	0.0	0.0	0.0	1.4	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	441	442	443	444	445	446	447	448	449	450	451
MONTH/DAY/YEAR	8/26/87	8/27/87	8/27/87	8/27/87	8/27/87	8/27/87	8/27/87	8/28/87	8/28/87	8/28/87	8/28/87
LATITUDE START	53 17.0	53 1.6	52 57.1	53 9.3	53 11.3	53 1.5	52 56.4	52 52.6	52 44.3	52 42.1	52 38.8
LONGITUDE START	167 6.7	167 26.3	167 31.1	167 54.3	168 10.9	168 18.8	168 24.3	168 38.1	169 0.9	169 4.3	168 56.7
LATITUDE END	53 15.8	53 1.1	52 56.9	53 9.4	53 9.0	52 59.5	52 54.6	52 52.3	52 44.2	52 42.2	52 39.6
LONGITUDE END	167 9.8	167 30.3	167 54.4	167 58.0	168 12.2	168 18.6	168 24.3	168 41.8	169 1.1	169 4.2	168 59.7
LORAN START	17691.30	17567.50	17482.80	17537.60	17504.70	17432.80	17388.20	17327.60	17214.30	17191.60	17198.10
LORAN START	48478.60	48530.10	48626.10	48671.10	48746.80	48753.80	48761.40	48805.80	48869.90	48876.70	48839.20
LORAN END	17678.40	17555.40	17473.00	17528.40	17488.70	17420.70	17378.50	17315.20	17213.00	17192.50	17192.80
LORAN END	48490.00	48546.40	48639.70	48745.80	48687.30	48746.70	48756.50	48819.60	48876.40	48852.40	
GEAR DEPTH	51	85	77	41	36	46	47	49	56	56	57
DURATION IN HOURS	0.30	0.50	0.42	0.50	0.50	0.50	0.50	0.50	0.05	0.50	
DISTANCE FISHED	2.21	2.44	2.03	2.25	2.47	2.38	1.84	2.27	0.18	0.12	1.97
PERFORMANCE / GEAR	1 / 717	0 / 717	1 / 717	0 / 717	0 / 717	1 / 717	0 / 717	6 / 717	6 / 717	1 / 717	
POLLACK	0.1	52.3	9512.7	0.0	0.0	0.4	0.0	2.4	0.0	0.0	0.0
PACIFIC COD	94.0	518.6	255.3	40.8	0.3	38.8	4.6	239.4	0.0	0.0	328.7
SABLEFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	0.0	44.4	13.9	0.0	0.0	15.7	0.0	4.2	0.0	0.0	0.7
HALIBUT	79.9	73.7	57.0	30.2	0.0	86.3	123.9	84.4	0.0	0.0	399.0
FLATHEAD SOLE	0.0	0.5	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	0.0	0.0	1.4	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	26.4	45.4	49.7	32.2	2.9	130.8	45.0	62.3	0.0	0.0	2.8
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	79.0	0.0	5204.4	0.4	0.0	0.4	1.9	0.0	0.0	0.0	534.7
ROUGH EYE RKFH	0.0	0.0	25.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
THORNYHEADS	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	29.7	0.0	1953.3	14.6	0.0	1.7	1.5	0.0	0.0	0.0	329.8
DUSKY RKFISH	2.1	0.0	1950.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	417.3
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.4	0.0	370.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.5
RED STRIPE RF	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	4.3	0.0	21.4	1.7	0.0	9.6	0.0	721.0	0.0	0.0	10.9
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5
SPINY DOGFISH	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	95.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE TAISEI MARU NO. 35 DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #		452	453	454
MONTH/DAY/YEAR	8/29/87	8/29/87	8/29/87	8/29/87
LATITUDE START	32 30 2	32 32.7	32 37.6	
LONGITUDE START	169 40 8	169 40.0	169 45.5	
LATITUDE END	52 30 0	52 32.4	52 37.7	
LONGITUDE END	169 44 7	169 43.7	169 43.4	
LORAN START	17006.90	17022.50	17029.40	
LORAN END	48973.00	48977.20	49009.80	
LORAN END	16992.10	17008.50	17037.70	
GEAR DEPTH	137	85	38	
DURATION IN HOURS	0.50	0.50	0.27	
DISTANCE FISHED	2.39	2.25	1.30	
PERFORMANCE / GEAR	0 /717	0 /717	1 /717	
POLLACK	5467.4	1.2	0.0	
PACIFIC COD	98 9	47.0	1.7	
SABLEFISH	17.8	0.0	0.0	
ARROWTOOTH FL	47.6	1.1	0.0	
HALIBUT	109.1	151.0	137.8	
FLATHEAD SOLE	0.0	0.0	0.0	
ENGLISH SOLE	0.0	0.0	0.0	
DOVER SOLE	0.0	0.0	0.0	
REX SOLE	0.0	0.0	0.0	
YELLOWFIN SOLE	0.0	0.0	0.0	
STARRY FLOUNDER	0.0	0.0	0.0	
ROCK SOLE	0.0	1.5	0.7	
BUTTER SOLE	0.0	0.0	0.0	
ALASKA PLAICE	0.0	0.0	0.0	
PAC OC PERCH	925.4	5.9	0.0	
ROUGH-EYE RKFH	14.7	0.0	0.0	
THORNYHEADS	3.4	0.0	0.0	
NORTHERN RKFH	0.0	0.0	11.2	
DUSKY RKKFISH	0.0	0.0	0.0	
SHORTRAKER RF	0.0	0.0	0.0	
HARLEQUIN RF	0.0	0.0	0.0	
REDSTRIPE RF	0.0	0.0	0.0	
SHARPCHEW RF	0.0	0.0	0.0	
ATKA MACKEREL	0.0	0.0	34.4	
GRENADIERS	0.0	0.0	0.0	
SCULPINS	10.8	2.1	10.7	
SKATES	0.0	47.1	0.0	
SPINY DOGFISH	0.0	0.0	0.0	
SALMON SHARK	0.0	0.0	0.0	
SLEEPER SHARK	0.0	0.0	0.0	
TANNER CRAB	0.0	0.0	0.0	
KING CRAB	0.0	0.0	0.0	
DUNGENESS CRAB	0.0	0.0	0.0	
PINK SHRIMP	0.0	0.0	0.0	
SIDE STRIPE SHRIMP	0.0	0.0	0.0	
SCALLOP	0.0	0.0	0.0	

Section 2 (continued)

Fishing log for the Taisei Maru No. 35

Summary listings of catch rates in descending order of magnitude for selected species of commercial interest

- Catch rates (kg/nm) are standardized to a trawl width of approximately 15 meters. The fishing efficiency adjustments between vessels, used in the distribution and abundance plots in Section 1, are not used.

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ARROWTOOTH FLounder

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
155	4095.5	2.9	104	369	258.0	1.3	104	264	150.5	1.0	93
103	2419.1	1.5	90	373	251.2	0.9	93	325	149.3	0.6	45
310	2035.4	1.2	57	189	244.8	1.1	79	185	147.0	0.8	78
121	1305.3	1.2	90	181	242.9	0.9	78	207	146.2	1.5	52
14	989.2	1.2	85	359	239.4	2.3	93	353	142.6	0.6	73
149	788.6	1.3	82	64	238.8	0.7	110	196	140.2	0.8	53
311	749.2	0.9	44	232	235.0	0.8	82	47	135.7	0.6	104
168	701.2	0.9	97	349	233.4	0.2	66	44	135.2	0.9	77
161	691.0	0.7	68	139	232.9	0.7	66	302	134.9	1.5	94
146	601.0	1.5	90	383	231.2	0.7	71	403	134.6	1.9	57
36	576.3	2.0	98	375	229.7	1.6	102	202	133.8	1.4	90
54	575.0	1.1	107	183	228.3	1.0	82	78	133.5	0.6	67
288	572.6	1.3	101	430	227.9	0.8	85	250	132.0	1.1	79
408	566.8	1.2	85	138	226.8	1.2	66	327	129.6	1.4	98
407	536.2	0.9	86	345	224.6	1.4	66	294	129.1	1.0	87
364	514.0	1.6	106	191	219.2	0.9	82	210	128.6	1.4	56
326	464.1	1.4	66	338	217.5	0.5	52	35	128.2	0.7	79
93	459.1	1.5	96	116	217.4	0.7	85	296	127.1	1.0	85
184	456.4	1.3	83	186	217.0	1.0	79	315	126.8	1.0	82
355	430.3	1.7	74	208	211.4	0.6	48	57	125.5	0.5	104
289	413.5	1.3	66	386	210.1	1.1	77	30	122.8	0.6	66
156	411.2	1.2	90	180	207.3	0.9	80	237	122.6	1.1	67
273	405.1	0.7	85	335	202.8	0.4	63	262	118.3	1.3	118
285	371.5	0.8	98	114	194.6	1.4	82	258	118.1	1.2	63
167	368.2	0.9	104	118	192.9	1.0	77	332	118.0	1.3	93
249	364.4	1.3	86	190	190.5	0.9	80	297	117.4	1.2	98
187	352.2	1.1	83	145	187.0	1.2	96	438	117.1	1.1	90
39	351.7	1.9	104	105	186.4	0.6	98	360	115.5	0.8	37
119	347.3	1.1	78	209	182.6	2.0	55	234	114.5	1.2	68
86	342.7	0.5	60	351	177.8	1.5	85	94	113.0	1.2	139
158	341.9	1.1	60	352	174.1	0.6	66	5	111.4	0.5	93
85	340.3	0.8	71	287	173.5	1.0	55	151	110.9	0.5	55
147	339.8	1.2	90	374	173.1	0.7	79	354	110.4	1.0	72
113	335.5	0.7	93	194	172.7	0.4	52	324	109.6	1.1	123
330	324.1	1.6	96	111	169.5	1.9	87	137	109.3	0.5	55
65	302.1	1.0	112	392	169.1	0.8	75	68	108.2	0.7	82
399	298.9	0.5	87	385	168.5	2.3	103	51	107.3	0.6	104
182	294.8	1.1	80	296	168.2	1.2	82	387	105.9	0.9	104
398	293.1	0.4	85	144	165.8	1.3	71	339	103.6	0.3	57
362	282.3	1.5	96	211	165.0	1.3	56	117	103.0	1.0	68
26	279.2	1.2	68	346	162.3	0.4	66	252	101.6	1.1	101
188	275.7	0.9	83	66	162.1	0.6	82	384	101.5	1.3	98
45	273.2	1.2	101	402	160.1	0.3	40	238	100.0	0.9	71
72	271.0	0.7	68	137	157.6	0.6	55	212	97.7	1.3	56
163	266.9	0.7	82	331	157.1	0.7	60	281	97.4	0.8	74
356	263.1	1.2	69	89	155.4	0.9	108	389	96.5	0.8	75
370	261.3	1.9	108	120	153.6	1.1	82	253	95.4	0.5	63
124	258.4	1.2	84	151.2	1.1	82	304	95.3	1.1		

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ARROWTOOTH FLOUNDER

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	S P E C I E S A R R O W T O O T H F L O U N D E R	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	S P E C I E S A R R O W T O O T H F L O U N D E R	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	S P E C I E S A R R O W T O O T H F L O U N D E R	
283	93.8	0.8	78	106	39.6	1.3	156	307	30.8	1.6	115	30.8	0.8	82	291	30.8	0.8	45	
406	93.4	0.4	52	131	39.0	1.1	98	291	30.5	0.8	85	30.5	0.6	85	17	30.0	0.6	54	
12	91.4	1.1	86	350	58.7	1.0	57	75	29.7	0.4	139	29.7	1.2	139	347	56.3	0.5	29.3	
234	90.7	1.2	66	329	57.4	0.9	113	193	166	28.6	0.8	116	166	0.3	260	55.9	0.3	28.6	
305	90.0	1.3	110	347	56.3	0.5	68	193	260	28.5	0.4	98	260	0.5	113	55.5	0.5	28.5	
95	89.7	1.5	101	77	55.9	0.3	60	166	113	28.5	0.4	38	113	0.4	111	55.1	0.8	28.5	
70	89.6	0.9	93	200	55.5	0.5	53	53	11	28.5	0.4	98	11	0.4	333	53.1	0.8	28.3	
323	89.3	0.6	53	59	55.1	0.8	98	82	333	28.3	0.3	38	333	0.6	62	33.8	0.6	28.3	
122	88.8	2.3	104	76	54.0	0.6	82	87	62	28.3	0.4	96	62	0.9	28.1	53.8	0.7	71	
427	88.5	0.4	57	52	53.8	0.9	77	81	28.1	0.7	52	81	0.7	52	422	53.8	0.7	27.1	
390	87.9	1.4	77	422	53.8	0.7	57	19	27.1	0.3	50	19	0.4	50	104	53.6	1.0	104	
367	87.0	0.8	45	104	53.6	1.0	107	176	176	26.8	0.4	50	176	1.4	106	175	53.2	1.4	104
230	86.7	1.1	103	175	53.2	1.4	104	129	129	26.7	1.4	106	129	1.0	106	52	53.2	1.4	106
206	84.6	1.2	55	278	51.2	1.0	104	300	300	26.7	1.7	96	300	0.9	96	154	50.6	0.9	26.7
380	84.6	1.5	107	154	50.6	0.9	77	344	344	26.0	0.8	77	344	0.9	77	301	48.5	1.0	26.0
61	83.6	0.7	109	126	44.7	0.6	97	67	67	24.7	0.3	44	67	0.9	44	261	47.8	0.8	23.5
433	80.5	0.4	53	431	44.2	1.4	90	101	228	24.5	1.1	191	228	0.8	191	51	46.8	0.8	21.8
197	80.4	0.3	51	69	46.8	0.8	89	217	217	25.8	2.2	120	217	0.8	120	46.8	0.9	25.8	
63	80.2	0.4	82	282	46.8	0.9	101	358	358	25.6	1.5	120	358	0.9	120	154	51.2	1.0	120
48	80.0	1.2	134	295	46.4	0.7	72	172	172	25.5	1.9	153	172	0.7	153	107	50.6	1.0	25.5
83	79.7	0.5	82	126	44.7	0.6	53	67	67	24.7	0.3	44	67	0.9	44	301	48.5	1.0	23.5
379	78.1	1.4	107	431	44.2	1.4	90	228	228	24.5	1.1	191	228	0.8	191	44.2	4.4	1.4	24.3
198	77.0	0.5	55	233	44.0	1.1	107	214	214	24.3	1.6	145	214	1.1	145	44.0	1.1	107	21.4
110	74.1	1.9	200	92	43.6	0.5	107	215	215	24.2	2.1	139	215	1.0	139	195	43.3	0.5	24.2
280	72.9	0.8	74	193	43.3	0.5	53	80	80	24.1	0.4	87	80	0.5	87	134	43.1	0.5	24.1
336	72.7	1.3	90	82	43.1	0.5	89	306	306	24.1	1.5	142	306	0.5	142	277	42.9	0.5	23.8
79	71.5	0.9	69	277	42.9	0.8	60	348	348	23.8	0.3	48	348	0.8	48	431	41.3	0.7	23.4
21	70.9	0.5	104	259	42.3	0.2	104	203	203	23.4	1.7	107	203	0.2	107	259	42.3	0.2	23.4
174	70.3	1.7	98	271	42.2	1.1	109	148	148	23.3	0.2	60	148	1.1	60	193	42.2	1.1	23.3
34	69.9	0.5	77	328	42.2	1.1	134	213	213	22.4	2.1	128	213	1.1	128	328	41.9	0.5	22.4
436	69.9	0.4	84	391	41.9	0.5	95	274	274	22.1	0.8	100	274	0.5	100	270	41.9	0.5	22.1
403	68.5	0.4	67	343	41.3	0.7	87	216	216	22.0	2.5	124	216	1.2	124	343	41.3	0.7	22.0
303	68.0	1.2	98	340	40.3	2.2	82	265	265	21.9	1.0	126	265	1.0	126	259	40.3	2.2	21.9
43	67.7	0.4	50	440	40.0	0.4	82	140	140	21.9	1.7	197	140	0.4	197	237	36.0	1.1	21.9
298	67.6	1.1	85	220	37.8	2.1	131	266	266	21.7	0.6	71	266	1.1	71	341	35.5	1.0	21.7
199	66.9	0.5	55	270	36.3	1.2	104	342	342	21.5	0.4	66	342	1.2	66	270	35.5	1.2	21.5
334	65.9	0.8	90	53	36.2	1.5	159	227	227	21.2	1.2	164	227	1.5	164	340	35.5	1.5	21.2
272	65.3	0.8	67	18	36.2	0.3	81	140	140	20.8	0.4	48	140	0.3	48	237	36.0	1.1	20.8
299	65.1	0.9	90	237	36.0	1.1	61	219	219	20.0	1.9	141	219	1.1	141	341	35.5	1.0	20.0
393	64.2	0.8	89	341	35.5	1.0	79	412	412	19.5	1.3	145	412	0.9	145	290	35.3	0.3	19.5
97	64.0	1.5	191	419	41.9	0.5	56	290	290	19.4	0.9	82	290	0.5	82	371	35.3	0.3	19.4
404	63.5	1.0	55	113	34.6	0.4	60	29	29	19.3	0.2	52	29	0.4	52	372	32.7	1.2	19.3
165	63.5	1.1	115	372	32.7	1.2	108	24	24	18.5	1.1	139	24	1.1	139	372	32.7	1.2	18.5
71	63.4	0.5	82	393	32.2	0.7	71	308	308	18.0	1.2	148	308	0.6	148	371	32.0	0.7	18.0
263	62.2	0.8	98	371	32.0	0.6	156	236	236	18.0	1.0	107	236	0.6	107	371	31.9	0.6	18.0
307	60.0	1.7	150	56	31.9	1.2	205	414	414	17.5	1.7	208	414	1.1	208	231	31.7	1.2	17.5
132	59.8	1.0	159	231	31.7	1.1	118	177	177	17.4	0.8	44	177	1.1	44	231	31.1	0.6	17.4
388	59.7	0.8	63	255	31.1	0.6	67	42	42	17.4	0.5	55	42	0.5	55	255	31.1	0.6	17.4

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ARROWTOOTH FLOUNDER

HAIL	CATCH KG/1 0 NM	AV WGT (KG)	GEAR DEPTH (F.M.)	HAUL	CATCH KG/1 0 NM	AV WGT (KG)	GEAR DEPTH (F.M.)
1	17.1	0.6	120	229	4.9	1.4	145
173	16.3	1.4	98	6	4.6	0.2	63
101	15.9	1.5	276	423	4.4	1.4	49
15	15.5	0.9	46	55	4.4	2.2	301
224	15.4	1.7	175	31	4.3	0.7	36
10	15.3	0.4	153	276	3.9	0.5	98
248	15.1	1.2	159	247	3.8	1.9	355
363	14.8	2.1	189	446	3.7	0.3	46
240	14.5	1.4	104	443	3.6	1.0	77
192	14.3	0.5	53	112	3.4	0.2	41
293	14.2	1.0	71	169	3.0	1.2	191
73	14.1	0.3	52	46	2.9	1.3	284
292	13.5	0.6	66	269	2.8	0.8	53
357	13.4	0.4	52	58	2.7	0.3	45
9	13.3	0.7	100	221	2.7	1.5	186
8	13.3	0.7	219	170	2.4	1.6	284
337	12.8	1.1	115	437	2.3	0.9	141
74	12.4	0.3	77	245	1.9	2.8	189
50	11.6	1.2	200	28	1.9	1.2	54
218	11.5	1.7	156	435	1.5	1.3	41
109	11.2	1.1	279	171	1.5	1.6	328
241	10.9	2.0	104	33	1.3	0.4	44
223	10.7	1.3	164	448	1.0	0.4	47
246	10.4	0.9	87	251	1.0	0.9	63
179	10.2	1.2	163	428	0.9	1.1	44
225	9.9	1.2	175	394	0.9	0.4	39
452	9.8	2.1	137	97	0.8	1.7	394
102	9.8	0.7	82	178	0.8	0.6	44
442	9.5	0.4	85	439	0.8	0.9	219
3	9.3	0.4	68	13	0.7	1.4	301
150	9.3	0.5	60	424	0.5	2.1	40
23	9.2	2.2	246	60	0.5	0.3	49
7	8.7	0.4	63	267	0.4	0.6	67
130	8.3	1.2	191	453	0.3	0.3	85
239	8.2	2.2	98	135	0.2	0.2	30
381	8.0	2.9	219	451	0.2	0.2	87
413	7.9	0.4	87	204	0.2	0.4	45
32	7.8	0.3	33	417	0.1	0.2	33
159	7.7	1.5	273	382	0.1	0.1	54
226	7.6	1.9	175	123	0.1	0.3	38
242	7.5	1.4	191	162	0.1	0.2	57
420	7.5	0.4	44	87	0.1	0.2	49
279	6.4	1.2	93	418	0.0	0.0	26
275	6.1	0.9	71	432	0.0	0.1	53
160	5.6	0.2	66	136	0.0	0.1	27
222	5.5	1.4	180	2B4			
96	5.3	1.2	5.2	41			
434							

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC HALIBUT

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FIM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FIM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FIM)	CATCH KG/1.0 NM	AV WGT (KG)
155	3878.0	19.6	104	246	94.9	27.8	87	322	53.4	2.3	34
377	967.4	3.5	44	138	94.4	15.7	60	325	53.6	10.1	45
369	686.7	16.3	104	323	92.2	8.9	55	94	53.5	15.0	139
293	452.8	16.3	71	370	91.7	15.2	108	154	53.0	9.5	77
14	342.8	3.1	85	362	90.5	20.4	96	386	52.9	20.9	77
311	284.3	7.7	44	316	89.0	9.6	22	407	52.1	11.6	86
286	265.7	4.0	41	140	86.9	4.3	48	157	51.9	21.1	55
201	238.0	6.4	28	136	84.6	9.6	27	5	51.2	6.4	93
39	231.5	10.6	104	404	79.9	19.2	55	374	50.1	11.6	79
366	220.5	9.2	22	133	78.8	3.2	41	396	50.0	20.5	34
360	214.6	36.6	57	318	76.9	5.0	21	1	49.2	11.0	120
153	212.7	8.7	26	83	75.5	22.7	82	82	48.9	12.8	B3
149	207.5	11.0	82	176	71.6	14.7	50	420	47.0	4.5	44
15	196.0	14.3	46	138	70.2	10.8	66	285	46.2	7.1	98
89	190.5	10.6	108	257	69.2	9.4	67	327	46.1	21.5	98
30	190.0	20.0	66	342	69.0	17.5	66	139	45.8	8.0	66
3	184.1	20.7	68	368	68.9	4.4	19	135	45.6	4.3	30
262	171.0	20.0	118	341	68.6	16.7	79	134	45.4	1.5	39
121	170.6	14.9	90	162	67.8	25.3	57	418	44.8	5.4	26
403	166.2	18.3	57	60	67.5	24.8	49	147	44.6	16.3	90
178	165.6	16.2	44	332	66.0	19.8	93	337	44.1	27.0	115
108	163.7	9.2	36	124	66.0	8.0	93	355	43.5	19.9	74
451	159.2	15.0	87	118	65.6	21.0	77	303	43.4	25.1	98
31	151.5	20.0	36	85	65.5	14.9	71	427	43.1	4.5	57
296	147.2	24.8	82	208	65.0	4.3	48	84	42.0	13.1	B2
54	146.8	11.9	107	357	64.3	16.5	52	312	41.4	5.5	20
146	145.2	23.4	90	115	64.2	31.7	93	81	41.3	9.6	71
401	140.0	37.5	46	17	64.0	2.2	45	349	41.0	12.2	66
116	138.5	36.1	85	241	63.7	41.3	104	61	40.4	9.1	109
292	134.1	18.7	66	423	63.4	4.1	49	125	40.1	6.2	21
161	133.7	11.6	68	143	63.2	2.7	34	298	39.9	9.7	85
317	130.1	3.1	27	204	62.7	2.4	45	219	38.1	5.9	68
380	125.7	17.1	107	385	62.4	14.4	103	435	38.3	8.6	41
156	125.0	11.4	90	372	62.4	18.6	108	382	38.3	9.8	54
103	124.3	14.3	90	365	61.7	3.6	42	264	38.2	25.6	93
209	119.8	36.6	55	408	61.7	17.7	85	26	38.1	17.1	43
123	118.7	4.2	38	11	61.3	2.6	78	86	37.8	4.4	60
177	113.7	18.9	44	38	61.1	29.1	37	59	37.7	10.6	98
142	112.3	4.4	30	352	60.4	12.2	66	447	37.4	20.7	49
127	108.4	10.7	42	454	59.7	34.9	38	56	36.7	19.8	205
111	105.5	20.4	87	174	58.3	19.2	98	49	36.1	17.1	43
314	104.8	2.1	19	164	57.2	34.6	197	388	35.9	20.4	63
287	102.3	10.1	55	93	55.5	19.4	96	215	35.9	12.5	139
53	101.6	14.2	159	432	55.3	17.1	55	305	35.9	13.2	110
105	101.1	15.8	98	313	54.9	9.7	16	395	35.7	19.4	71
99	100.5	20.0	191	48	54.4	10.6	134	200	35.6	15.3	93
137	97.5	10.8	95	367	54.3	19.1	45	37	35.5	20.6	43
141	97.5	3.1	37	126	54.0	14.0	53	289	35.8	6.8	64

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC HALIBUT

	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
HAUL			HAUL			HAUL			
1.45	35.2	32.8	96	42	24.3	3.6	55	421	18.0
4.53	35.1	4.7	85	387	24.5	36.9	104	193	17.9
1.72	34.8	16.4	153	112	24.4	4.6	416	416	17.5
2.91	34.5	19.1	82	107	24.1	29.7	46	340	17.4
1.51	34.1	2.8	55	376	24.0	4.6	48	336	17.3
4.02	33.2	4.7	40	196	24.0	7.6	53	21	17.1
3.15	32.9	9.9	82	428	23.7	8.1	44	57	17.0
3.21	32.9	2.7	29	248	23.6	16.6	159	106	17.0
1.97	32.6	19.5	51	255	23.5	12.0	67	223	16.8
3.30	32.5	10.5	96	191	23.5	16.6	82	226	16.6
2.32	32.4	14.8	79	168	23.3	8.7	97	253	16.5
3.73	32.2	28.5	93	68	23.3	18.7	82	270	16.5
1.73	31.7	4.6	52	430	22.9	6.6	85	175	16.4
1.29	31.6	14.9	106	268	22.9	33.2	51	214	16.2
4.10	31.4	5.9	41	166	22.8	13.2	139	217	15.9
1.50	30.9	26.7	52	167	22.5	12.8	104	36	15.9
1.76	30.0	12.8	82	258	22.5	17.4	63	40	15.8
3.59	30.5	12.1	113	452	22.5	21.8	137	442	15.8
3.79	30.3	12.9	107	87	21.6	3.3	49	122	15.3
1.50	30.1	8.4	60	411	21.3	16.6	39	44	15.2
2.97	30.0	12.8	82	220	21.3	12.3	131	334	15.0
2.67	29.9	21.2	67	394	21.1	4.1	48	50	15.0
3.81	29.9	21.9	219	320	20.9	5.7	19	119	14.9
3.33	29.9	20.4	38	294	20.9	17.9	87	275	14.9
6.6	29.7	8.3	82	239	20.8	27.5	98	443	14.7
2.16	29.4	18.2	124	28	20.7	2.4	54	194	14.6
2.0	29.3	3.9	52	448	20.6	6.4	47	113	14.6
1.31	29.1	13.8	98	335	20.5	15.1	63	424	14.3
4.38	28.5	15.7	70	29	20.4	3.3	52	163	14.2
1.44	28.3	12.0	71	148	20.3	11.2	60	192	14.2
6	28.1	9.3	63	446	20.1	3.3	46	32	14.2
4.7	28.0	15.0	104	441	20.1	8.9	51	78	14.1
3.78	27.8	4.0	49	202	20.0	9.7	90	239	14.1
9.5	27.7	13.8	101	132	19.9	14.4	159	114	14.1
2.03	27.2	36.4	107	350	19.9	7.8	57	250	14.0
3.10	27.0	5.0	57	213	19.8	11.9	128	344	14.0
3.99	27.0	14.5	87	104	19.6	12.9	107	256	13.8
3.51	25.9	19.1	85	371	18.7	19.9	156	345	13.5
5.5	25.7	104.4	301	433	18.5	7.2	53	384	12.8
7.7	26.5	6.1	60	187	19.1	19.5	83	72	13.8
2.84	26.4	3.3	48	288	18.8	15.8	101	302	13.4
3.98	26.0	10.7	85	43	18.7	4.1	50	120	13.5
1.30	25.9	19.1	85	371	18.7	19.9	156	345	13.5
1.02	24.8	9.5	82	412	18.0	8.0	143	409	12.4

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC HALIBUT

SPECIES PACIFIC HALIBUT

H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
218	12. 4	18. 8	136	12	8. 2	2. 1	86	185	2. 0	8. 0	78
195	12. 3	7. 2	53	18	8. 0	3. 1	81	206	2. 0	1. 1	55
231	12. 3	28. 8	118	301	8. 0	12. 1	97	160	1. 8	6. 9	66
308	12. 2	12. 9	148	45	7. 9	8. 3	101	436	1. 8	8. 7	84
392	12. 2	17. 9	75	429	7. 8	6. 4	49	361	1. 6	5. 9	180
269	12. 1	4. 5	53	27	7. 7	1. 7	41	69	1. 5	6. 1	85
271	11. 9	27. 5	109	419	7. 5	2. 9	56	343	1. 3	4. 0	87
290	11. 9	13. 1	82	397	7. 5	9. 6	45	389	1. 3	5. 9	75
364	11. 9	9. 3	106	444	7. 5	4. 3	41	128	1. 2	3. 4	366
326	11. 8	3. 3	66	205	7. 4	1. 4	37	74	1. 2	5. 0	77
52	11. 6	8. 5	87	434	7. 4	2. 7	41	33	1. 1	1. 0	44
199	11. 3	5. 3	55	63	7. 3	4. 3	82	7	0. 9	1. 2	63
62	11. 2	7. 1	96	260	7. 2	15. 4	116	183	0. 9	1. 8	82
65	10. 9	5. 8	112	236	7. 2	15. 2	107	169	0. 7	3. 4	191
307	10. 7	22. 8	150	184	7. 2	7. 1	83	242	0. 7	3. 6	191
297	10. 7	7. 4	98	117	7. 2	8. 5	68	109	0. 6	2. 4	279
24	10. 6	7. 2	139	282	7. 0	15. 6	101	254	0. 5	2. 4	68
306	10. 6	6. 9	142	130	6. 9	10. 9	191	198	0. 4	1. 0	55
331	10. 4	3. 2	60	182	6. 6	13. 0	80	234	0. 4	1. 6	66
207	10. 3	7. 6	52	414	6. 5	14. 0	208	437	0. 3	1. 3	141
110	10. 3	14. 5	200	9	6. 3	3. 2	100	252	0. 2	1. 0	101
304	10. 2	10. 0	118	347	6. 2	5. 4	68				
417	10. 2	2. 5	33	328	6. 0	27. 4	134				
375	10. 1	2. 8	102	223	5. 8	19. 3	164				
278	10. 0	15. 2	104	188	5. 8	6. 3	83				
358	9. 9	9. 4	120	211	5. 4	4. 2	56				
92	9. 9	8. 0	107	165	5. 4	7. 7	115				
67	9. 8	4. 0	44	300	5. 1	11. 4	96				
405	9. 8	8. 4	67	263	4. 8	20. 4	98				
383	9. 7	4. 9	71	70	4. 6	18. 8	93				
228	9. 6	16. 0	191	324	4. 6	7. 9	123				
266	9. 5	5. 4	71	426	4. 5	4. 1	44				
393	9. 3	38. 4	89	8	4. 2	17. 2	219				
391	9. 0	21. 0	95	272	4. 1	13. 7	67				
280	9. 0	6. 4	74	51	4. 0	5. 1	104				
346	9. 0	5. 3	66	75	3. 7	7. 6	85				
431	8. 9	7. 4	90	413	3. 4	1. 0	87				
309	8. 8	13. 5	115	35	3. 3	3. 4	79				
181	8. 8	8. 5	78	71	3. 1	6. 0	82				
273	8. 7	8. 0	65	19	3. 1	1. 5	52				
16	8. 6	5. 1	44	101	3. 0	12. 6	276				
34	8. 4	6. 2	77	96	2. 9	11. 8	284				
406	8. 4	2. 6	52	247	2. 7	11. 6	355				
251	8. 4	2. 8	63	276	2. 7	13. 4	98				
353	8. 3	18. 6	73	235	2. 8	2. 4	59				
354	8. 3	19. 2	72	58	2. 6	10. 7	45				
422	8. 3	2. 2	57	240	2. 4	10. 3	104				
283	8. 2	17. 1	78	279	2. 1	6. 9	93				

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES FLATHEAD SOLE

H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	S P E C I E S F L A T H E A D S O L E	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	S P E C I E S F L A T H E A D S O L E
119	27.5	1.3	78	44	26.9	0.9	77	42	12.6	0.4	55	
211	24.9	0.5	56	387	26.0	0.4	104	404	12.6	0.3	55	
206	22.2	0.5	55	167	25.2	0.3	104	341	12.0	0.3	79	
212	21.5	0.4	56	115	25.2	0.4	93	250	12.0	0.4	79	
114	20.5	0.5	82	419	25.0	0.3	56	340	12.0	0.3	82	
210	20.5	0.5	56	302	24.0	0.3	94	297	11.7	0.6	98	
209	16.3	0.4	55	230	23.6	0.3	103	138	11.5	0.3	66	
207	12.7	0.4	52	65	22.9	0.5	112	355	11.1	0.3	74	
191	10.4	0.4	82	308	21.8	0.4	148	406	11.0	0.2	52	
188	10.3	0.4	83	301	21.7	0.3	97	67	10.9	0.7	44	
116	9.4	0.3	85	121	21.5	0.4	90	158	10.8	0.3	60	
187	9.0	0.4	83	305	21.4	0.4	110	137	10.7	0.3	55	
183	8.7	0.6	82	28	20.9	0.5	54	350	10.5	0.3	57	
182	8.0	0.4	80	386	20.6	0.6	77	74	10.5	0.2	77	
184	7.8	0.4	83	238	20.4	0.4	71	149	10.4	0.3	82	
186	7.8	0.4	79	75	20.2	0.3	85	393	10.3	0.3	89	
139	7.3	0.5	66	124	20.2	0.3	93	79	10.2	0.2	69	
190	7.2	0.4	80	86	20.1	0.4	60	231	10.0	0.3	118	
180	7.2	0.4	80	71	20.1	0.2	82	300	9.7	0.3	96	
208	6.7	0.3	48	83	20.0	0.3	82	278	9.7	0.3	104	
181	6.5	0.3	78	402	19.9	0.5	40	12	9.6	0.7	84	
43	6.4	0.5	50	315	19.7	0.3	82	62	9.5	0.2	96	
232	6.2	0.3	82	420	19.6	0.5	44	390	9.5	0.2	77	
70	5.8	0.3	93	326	19.3	0.4	66	304	9.4	0.3	118	
189	5.6	0.4	79	351	19.3	0.2	85	78	9.4	0.3	67	
64	4.8	0.3	110	147	19.2	0.3	90	330	9.4	0.4	96	
185	4.8	0.3	78	68	18.9	0.3	82	80	9.0	0.3	87	
34	4.5	0.2	77	35	18.7	0.3	79	383	9.0	0.5	71	
285	4.4	0.4	98	234	18.6	0.3	66	370	8.9	0.3	108	
118	4.2	0.3	77	30	18.4	0.6	66	306	8.8	0.4	142	
256	3.9	0.3	85	82	17.2	0.3	85	271	8.8	0.3	107	
249	3.9	0.3	86	81	17.1	0.3	71	69	8.7	0.3	85	
145	3.8	0.6	96	168	16.6	0.3	97	367	8.7	0.4	45	
120	3.7	0.3	85	233	16.5	0.3	107	287	8.3	0.3	55	
76	37.0	0.2	82	403	16.2	0.2	57	33	8.3	0.3	44	
288	35.6	0.4	101	405	15.6	0.4	67	77	8.1	0.3	60	
391	35.5	0.2	95	144	15.4	0.4	71	175	8.0	0.3	104	
399	35.5	0.5	93	332	15.2	0.4	93	310	7.8	0.4	57	
161	32.0	0.6	68	392	14.3	0.3	75	255	7.8	0.4	67	
29	33.5	0.4	52	254	15.2	0.3	68	369	7.7	0.6	104	
303	33.4	0.3	98	393	14.7	0.3	71	279	7.7	0.7	93	
283	33.2	0.3	78	253	14.7	0.3	63	103	7.5	0.5	90	
117	32.8	0.3	68	202	14.6	0.3	90	394	7.4	0.4	39	
423	30.5	0.6	49	270	14.3	0.3	104	345	6.9	0.3	66	
343	30.4	0.4	87	307	13.3	0.3	150	257	6.9	0.3	67	
146	29.4	0.3	90	422	12.8	0.4	57	264	6.8	0.3	93	
85	29.3	0.3	71	156	12.7	0.3	90	388	6.8	0.4	63	
272	27.8	0.4	67	309	12.6	0.3	115	66	6.8	0.4	82	

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES FLATHEAD SOLE

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
354	6.6	0.3	72	14	1.8	0.4	85	331	0.3	0.4	60
325	6.4	0.9	45	196	1.7	0.4	53	27	0.5	0.6	41
353	6.4	0.3	73	437	1.6	0.3	141	337	0.4	0.5	115
32	6.4	0.3	33	135	1.5	0.2	104	277	0.4	0.4	60
84	6.1	0.4	82	112	1.5	0.6	41	346	0.4	0.3	66
63	6.1	0.3	82	299	1.5	0.3	90	227	0.4	0.3	164
251	6.0	0.9	63	166	1.4	0.3	139	192	0.4	0.4	53
298	5.8	0.4	65	273	1.4	0.4	85	265	0.4	0.3	126
384	5.7	0.4	98	236	1.4	0.3	107	36	0.4	0.7	98
197	5.7	0.9	55	335	1.4	0.4	63	20	0.4	0.4	52
385	5.6	0.2	75	140	1.4	0.5	48	106	0.4	0.2	136
349	5.6	0.3	66	431	1.3	0.4	90	379	0.4	0.7	107
327	5.5	0.6	98	216	1.3	0.2	124	399	0.3	0.6	87
126	5.4	0.4	53	436	1.3	0.4	B4	372	0.3	0.5	108
61	5.4	0.3	109	385	1.2	0.5	103	284	0.3	0.3	48
347	5.3	0.2	68	92	1.2	0.3	107	291	0.3	0.7	82
72	5.2	0.3	68	274	1.2	0.2	100	47	0.3	1.2	104
352	5.1	0.3	66	73	1.1	0.3	52	260	0.3	0.2	116
342	4.9	0.3	66	87	1.1	0.3	49	59	0.3	0.7	98
333	4.9	0.4	38	240	1.1	0.3	104	275	0.3	0.4	71
311	4.8	0.4	44	220	1.1	0.3	131	122	0.3	0.5	104
424	4.6	0.7	40	52	1.1	1.0	87	407	0.3	0.7	86
194	4.3	0.3	52	289	1.1	0.4	66	129	0.3	0.7	106
151	3.9	0.4	55	324	1.0	0.5	123	127	0.3	0.2	42
165	3.8	0.4	115	160	1.0	0.5	66	282	0.3	0.4	101
235	3.5	0.3	59	237	1.0	0.3	61	312	0.3	0.5	20
252	3.4	0.3	101	199	1.0	0.4	39	2	0.2	0.7	79
334	3.1	0.4	90	111	1.0	0.6	87	219	0.2	0.4	141
163	3.0	0.5	82	276	1.0	0.5	98	9	0.2	0.5	100
200	2.9	0.5	53	105	1.0	0.4	98	1	0.2	0.5	120
21	2.9	0.5	104	197	0.9	0.4	51	263	0.2	0.3	98
344	2.8	0.3	77	296	0.9	0.7	82	179	0.2	0.3	163
339	2.7	0.4	57	262	0.9	0.3	118	31	0.2	0.9	36
323	2.7	0.4	55	19	0.8	0.3	52	380	0.2	0.2	107
280	2.6	0.7	74	446	0.8	0.2	46	348	0.2	0.3	48
110	2.5	0.5	200	338	0.8	0.4	52	408	0.2	0.9	B5
315	2.5	0.8	93	266	0.8	0.4	71	94	0.2	0.8	139
316	2.5	0.3	22	113	0.8	0.4	60	26	0.2	0.7	68
11	2.4	0.4	98	195	0.7	0.4	53	15	0.2	0.5	46
258	2.4	0.3	63	93	0.7	0.7	96	132	0.2	0.3	159
213	2.2	0.3	128	356	0.7	0.6	69	364	0.2	0.7	106
430	2.2	0.7	85	427	0.7	0.4	57	131	0.2	0.2	98
217	2.1	0.2	120	336	0.7	0.4	90	229	0.2	0.8	145
193	2.1	0.2	54	241	0.6	0.3	104	398	0.2	0.3	85
104	1.9	0.2	107	328	0.6	0.6	134	204	0.1	0.3	45
329	1.8	0.4	113	433	0.6	0.5	53	214	0.1	0.1	145
198	1.8	0.3	55	269	0.5	0.5	33	89	0.1	0.2	108
358	1.8	0.5	120	438	0.5	0.2	90	203	0.2	0.2	107

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 13 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 13 M NET WIDTH
BASED ON 15 M NET WIDTH

SPECIES DOVER SOLE

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	
101	254 . 5	0 . 8	276	379	8 . 6	1 . 0	107	. 57	2 . 9	1 . 0	104		
110	161 . 8	1 . 0	200	202	7 . 7	0 . 6	90	219	2 . 9	0 . 5	141		
106	136 . 2	0 . 8	156	165	7 . 7	0 . 5	113	40	2 . 9	0 . 8	388		
101 . 1	1 . 4	93	155	7 . 6	0 . 8	104	131	2 . 8	0 . 6	98			
359	51 . 0	0 . 7	200	363	7 . 5	0 . 8	189	189	2 . 7	1 . 2	79		
50	48 . 3	0 . 6	284	214	7 . 4	0 . 5	145	184	2 . 7	1 . 3	83		
46	46 . 9	0 . 7	97	255	7 . 0	0 . 7	67	372	2 . 7	0 . 9	108		
168	43 . 6	1 . 1	108	174	6 . 9	0 . 6	98	326	2 . 6	1 . 0	66		
89	37 . 1	0 . 8	86	361	6 . 9	1 . 1	180	217	2 . 6	0 . 4	120		
249	35 . 4	0 . 5	153	213	6 . 8	0 . 6	128	245	2 . 6	0 . 9	189		
172	31 . 5	0 . 8	78	250	6 . 6	0 . 8	79	4	2 . 6	0 . 9	301		
283	29 . 4	0 . 5	104	256	6 . 5	0 . 8	85	282	2 . 6	0 . 8	101		
175	28 . 1	0 . 5	301	173	6 . 5	0 . 5	98	122	2 . 4	1 . 0	104		
95	22 . 9	0 . 5	186	128	6 . 4	0 . 5	366	310	2 . 4	1 . 1	57		
221	21 . 6	1 . 0	98	232	6 . 4	0 . 6	82	386	2 . 3	1 . 4	77		
285	20 . 4	0 . 8	163	323	6 . 3	0 . 7	55	327	2 . 2	0 . 9	98		
179	18 . 3	0 . 7	197	414	6 . 3	1 . 3	208	334	2 . 2	0 . 9	90		
164	17 . 9	0 . 7	108	381	6 . 3	0 . 7	219	13	2 . 1	1 . 0	301		
370	17 . 3	0 . 4	175	138	5 . 8	0 . 9	66	118	2 . 0	0 . 9	77		
224	16 . 5	0 . 8	191	94	5 . 8	0 . 8	139	311	2 . 0	0 . 9	44		
99	16 . 4	0 . 7	106	373	5 . 8	0 . 9	93	233	1 . 9	0 . 6	107		
129	15 . 9	0 . 6	284	243	5 . 8	0 . 7	394	337	1 . 8	1 . 0	115		
96	15 . 7	0 . 8	90	242	5 . 7	0 . 7	191	95	1 . 8	1 . 2	101		
156	14 . 9	0 . 7	279	169	5 . 5	0 . 5	191	298	1 . 8	0 . 8	85		
109	13 . 7	0 . 6	104	375	5 . 4	0 . 9	102	369	1 . 8	0 . 8	104		
167	13 . 7	0 . 5	136	330	5 . 4	0 . 9	76	72	1 . 8	0 . 9	68		
218	13 . 6	0 . 6	191	367	5 . 3	0 . 9	45	154	1 . 7	0 . 7	77		
130	12 . 9	0 . 6	273	100	4 . 8	0 . 7	388	115	1 . 6	0 . 5	93		
159	11 . 4	0 . 5	301	261	4 . 8	0 . 9	101	234	1 . 6	0 . 4	66		
90	12 . 8	0 . 4	175	248	4 . 6	0 . 8	159	290	1 . 6	0 . 9	82		
226	12 . 4	0 . 9	82	91	4 . 5	0 . 9	391	120	1 . 5	0 . 9	85		
149	11 . 7	0 . 7	355	257	4 . 5	0 . 9	67	61	1 . 5	1 . 1	109		
247	11 . 4	0 . 8	159	228	4 . 5	0 . 9	191	356	1 . 5	0 . 9	104		
132	10 . 7	0 . 6	301	241	4 . 5	0 . 4	104	271	1 . 5	0 . 5	126		
287	10 . 7	0 . 6	55	216	3 . 8	0 . 6	124	265	1 . 5	0 . 5	126		
244	11 . 2	0 . 4	282	158	4 . 4	0 . 7	60	278	1 . 5	0 . 5	87		
171	11 . 1	0 . 5	328	328	3 . 9	1 . 1	134	294	1 . 5	0 . 7	87		
227	11 . 0	0 . 5	164	358	3 . 5	0 . 9	66	380	1 . 5	1 . 0	107		
254	10 . 7	0 . 8	68	289	3 . 9	0 . 5	63	336	1 . 4	1 . 1	90		
287	10 . 7	0 . 6	240	308	3 . 8	0 . 9	104	387	1 . 5	1 . 1	104		
225	10 . 6	0 . 5	175	241	3 . 8	0 . 6	124	265	1 . 5	0 . 5	126		
170	10 . 4	0 . 4	284	297	3 . 7	0 . 6	98	246	1 . 5	0 . 5	87		
223	9 . 5	0 . 5	164	358	3 . 5	0 . 9	120	188	1 . 4	1 . 0	83		
97	9 . 5	0 . 7	394	258	3 . 5	0 . 8	63	336	1 . 4	1 . 1	90		
215	9 . 3	0 . 6	139	281	3 . 4	0 . 9	74	324	1 . 4	1 . 2	123		
166	9 . 3	0 . 5	139	111	3 . 4	0 . 8	87	203	1 . 4	0 . 7	107		
170	9 . 1	0 . 5	180	385	3 . 3	1 . 1	103	306	1 . 4	1 . 1	142		
222	9 . 0	0 . 6	203	163	3 . 1	0 . 7	82	299	1 . 4	1 . 0	90		
56	8 . 8	0 . 9	101	260	3 . 0	1 . 2	116	151	1 . 4	0 . 5	55		
288	8 . 7	0 . 7	410	104	3 . 0	1 . 1	107	262	1 . 3	0 . 9	118		
98													

SPECIES DOVER SOLE				SPECIES DOVER SOLE				GEAR DEPTH (F.M.)			
HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (F.M.)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (F.M.)				
383	1.3	1.0	71	335	0.4	0.8	63				
161	1.3	0.7	68	62	0.4	0.7	96				
229	1.3	1.0	145	83	0.4	0.7	82				
103	1.3	1.0	90	374	0.3	1.7	79				
8	1.3	1.3	219	114	0.3	1.3	82				
384	1.2	0.9	98	291	0.3	0.7	82				
325	1.2	0.4	45	315	0.3	0.7	82				
273	1.2	0.7	85	160	0.3	0.6	66				
48	1.2	1.0	134	295	0.3	0.7	72				
144	1.1	0.6	71	332	0.3	0.6	93				
239	1.1	0.5	98	231	0.3	0.7	118				
263	1.1	0.7	98	364	0.3	1.0	106				
230	1.1	0.8	103	73	0.3	1.0	52				
45	1.0	1.1	101	121	0.2	1.0	90				
238	1.0	0.5	71	52	0.2	0.9	87				
220	1.0	0.5	131	266	0.2	0.5	71				
329	1.0	0.9	113	236	0.2	0.5	107				
302	0.9	0.8	94	280	0.2	1.0	74				
412	0.9	0.7	145	341	0.2	0.5	79				
439	0.9	1.3	219	157	0.2	0.9	55				
63	0.9	0.7	82	300	0.2	1.0	96				
388	0.9	0.8	63	277	0.2	0.5	60				
92	0.9	0.7	107	44	0.2	0.8	77				
26	0.8	1.5	68	53	0.2	0.8	159				
191	0.8	0.8	82	187	0.2	0.4	83				
252	0.8	0.6	101	82	0.2	0.8	85				
124	0.8	1.6	93	293	0.2	0.6	71				
14	0.8	0.9	85	253	0.2	0.8	63				
235	0.7	0.8	59	59	0.2	0.8	98				
264	0.7	0.7	93	309	0.1	0.7	115				
185	0.6	0.6	78	147	0.1	0.6	90				
272	0.6	0.9	67	331	0.1	0.6	60				
47	0.6	0.8	104	21	0.1	0.6	104				
119	0.6	1.1	78	196	0.1	0.3	53				
117	0.6	0.7	68	274	0.1	0.6	100				
51	0.6	1.1	104	344	0.1	0.2	77				
186	0.6	1.2	79	355	0.1	0.5	74				
269	0.6	0.6	53	237	0.1	0.4	61				
408	0.5	0.6	85	66	0.1	0.4	82				
116	0.5	0.6	85	77	0.0	0.2	60				
64	0.5	0.6	110								
182	0.5	1.0	80								
362	0.5	0.7	96								
145	0.5	0.6	96								
259	0.5	0.7	104								
270	0.5	0.7	104								
105	0.4	1.4	98								
		5	93								

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES REX SOLE

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (Fm)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (Fm)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (Fm)	CATCH KG/1.0 NM	AV WGT (KG)
370	206.6	0.4	108	384	19.0	0.4	98	242	6.1	0.3	191
21	192.1	0.5	104	227	17.2	0.3	164	221	5.8	0.3	186
47	163.1	0.5	104	224	16.1	0.3	175	99	5.8	0.4	191
359	156.4	0.6	93	363	16.0	0.4	189	263	5.6	0.3	98
202	127.5	0.5	90	10	15.8	0.4	153	226	5.6	0.3	175
103	108.9	0.5	90	438	14.5	0.5	90	264	5.5	0.3	93
168	85.3	0.3	97	225	14.1	0.3	175	229	5.5	0.3	145
167	B2.7	0.4	104	117	13.6	0.7	68	86	5.4	0.3	60
94	79.5	0.4	139	215	13.5	0.3	139	115	5.3	0.4	93
104	71.5	0.5	107	257	13.2	0.5	67	93	5.3	0.5	96
373	70.9	0.4	93	137	12.9	0.4	55	282	5.3	0.6	101
196	56.4	0.4	90	337	12.8	0.6	115	158	5.3	0.4	60
18	56.0	0.6	81	132	12.6	0.4	159	120	5.2	0.3	85
367	54.0	0.6	45	179	12.5	0.3	163	208	5.1	0.2	48
166	48.4	0.3	139	223	12.1	0.3	164	219	5.1	0.3	141
175	45.7	0.3	104	161	11.7	0.3	68	96	5.1	0.4	284
122	45.3	0.4	104	172	11.6	0.3	153	124	5.0	0.5	93
362	44.3	0.6	96	220	11.4	0.3	131	90	4.9	0.3	301
105	43.4	0.4	98	163	11.1	0.4	82	198	4.8	0.5	55
250	41.2	0.4	79	255	10.9	0.4	67	52	4.8	0.5	87
358	40.2	0.4	120	50	10.5	0.4	200	347	4.7	0.3	66
369	36.5	0.5	104	111	10.1	0.6	87	256	4.5	0.5	85
249	35.4	0.5	86	386	10.1	0.6	77	218	4.5	0.3	156
92	35.1	0.4	107	254	10.0	0.4	68	355	4.5	0.7	74
129	31.4	0.4	106	385	10.0	0.5	103	414	4.4	0.6	208
356	31.3	0.5	69	101	9.9	0.4	276	398	4.3	0.5	92
259	29.7	0.3	104	56	9.8	0.4	205	154	4.3	0.4	77
252	29.4	0.3	101	325	9.7	0.5	45	336	4.3	0.7	90
57	28.1	0.5	104	222	9.6	0.3	180	232	4.2	0.3	82
131	26.9	0.4	98	261	9.4	0.4	101	149	4.0	0.4	82
138	26.1	0.5	66	241	8.8	0.3	104	408	4.0	0.5	85
106	25.1	0.7	156	419	8.7	0.4	56	157	3.9	0.5	59
258	23.2	0.6	63	213	8.5	0.3	128	285	3.9	0.4	98
372	23.1	0.5	108	44	8.5	0.4	77	155	3.9	0.6	104
72	22.5	0.5	68	46	8.5	0.4	284	61	3.8	0.7	109
431	22.3	0.6	90	364	8.4	0.6	106	380	3.7	0.5	207
283	22.0	0.6	78	14	8.2	0.3	85	110	3.6	0.5	200
165	21.7	0.3	115	85	8.0	0.5	71	12	3.5	0.3	86
45	21.4	0.4	101	388	8.0	0.3	63	422	3.4	0.3	57
383	21.1	0.4	71	130	7.9	0.5	191	181	3.3	0.5	78
95	20.9	0.5	101	59	7.8	0.4	98	253	3.3	0.4	63
24	20.9	0.3	139	323	7.3	0.3	55	118	3.2	0.6	77
326	20.7	0.6	66	89	7.2	0.5	108	173	3.2	0.3	98
48	20.6	0.4	134	214	6.9	0.3	145	422	3.2	0.7	104
379	20.4	0.5	107	160	6.7	0.3	66	8	3.1	0.5	219
216	19.8	0.4	124	189	6.4	0.4	79	66	3.0	0.3	82
375	19.4	0.3	102	374	6.3	0.5	79	427	2.8	0.3	57
217	19.3	0.4	120	281	6.3	0.4	74	234	2.8	0.2	66

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES REX SOLE

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
102	2.8	0.5	82	340	1.0	0.3	82	344	0.5
437	2.8	0.5	141	280	1.0	0.4	74	392	0.4
78	2.8	0.3	67	199	1.0	0.5	55	159	0.4
345	2.7	0.3	66	398	0.9	0.4	85	194	0.4
289	2.7	0.4	66	412	0.9	0.4	145	443	0.4
238	2.7	0.3	71	331	0.9	0.2	60	251	0.4
174	2.6	0.3	98	35	0.9	0.3	79	68	0.4
180	2.6	0.7	80	352	0.9	0.2	66	244	0.1
164	2.6	0.5	197	272	0.9	0.3	67	236	0.3
286	2.6	0.0	101	188	0.8	0.6	83	81	0.3
5	2.5	0.5	93	275	0.8	0.3	71	42	0.3
169	2.5	0.3	191	30	0.8	0.5	66	192	0.3
237	2.4	0.3	61	395	0.8	0.3	71	350	0.3
273	2.4	0.3	85	271	0.8	0.4	109	9	0.3
405	2.3	0.3	67	389	0.8	0.4	75	200	0.3
266	2.2	0.3	71	113	0.8	0.3	60	278	0.3
233	2.1	0.3	107	171	0.8	0.3	328	79	0.3
239	2.1	0.2	98	329	0.8	0.5	113	294	0.3
71	2.1	0.2	82	311	0.7	0.3	44	53	0.3
34	2.1	0.3	77	121	0.7	1.0	90	75	0.3
62	2.0	0.6	96	82	0.7	0.3	85	231	0.3
267	1.9	0.3	67	183	0.7	0.5	82	143	0.2
291	1.9	0.6	82	186	0.7	0.3	79	330	0.2
1	1.8	0.9	120	39	0.7	0.6	104	446	0.2
334	1.8	0.4	90	55	0.7	0.4	301	144	0.4
346	1.7	0.3	66	191	0.7	0.5	82	13	0.2
203	1.7	0.3	107	73	0.6	0.4	52	243	0.2
63	1.7	0.3	82	404	0.6	0.4	55	209	0.3
190	1.6	0.9	80	430	0.6	0.5	85	211	0.2
297	1.6	0.5	98	54	0.6	0.6	107	290	0.2
19	1.6	0.4	52	230	0.6	0.2	103	84	0.3
347	1.6	0.3	68	151	0.6	0.4	55	248	0.2
420	1.6	0.3	44	299	0.6	0.2	90	262	0.2
187	1.6	0.5	83	351	0.6	0.2	85	245	0.2
185	1.6	0.5	78	212	0.6	0.5	56	140	0.2
119	1.5	0.5	78	64	0.6	0.3	110	335	0.4
29	1.5	0.2	52	361	0.6	0.4	180	310	0.2
287	1.4	0.3	55	399	0.5	0.5	87	247	0.2
406	1.4	0.3	52	381	0.5	0.4	219	235	0.2
170	1.3	0.2	284	339	0.5	0.3	57	43	0.2
269	1.3	0.3	53	196	0.5	0.4	53	127	0.2
436	1.3	0.4	84	77	0.5	0.4	60	7	0.1
11	1.3	0.3	98	270	0.5	0.3	104	70	0.1
193	1.3	0.4	54	304	0.5	0.2	118	295	0.1
116	1.2	0.3	85	357	0.5	0.5	52	308	0.1
195	1.2	0.4	53	341	0.5	0.3	79	298	0.1
240	1.2	0.2	104	265	0.5	0.4	126	440	0.3
182	1.1	0.4	80	302	0.5	0.1	94	32	0.1

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ROCK SOLE

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	
323	1436.8	0.8	55	30	13.7	0.6	66	333	3.4	0.4	38	0.4	38
325	151.6	0.6	45	447	13.6	0.5	49	339	3.4	0.4	57	0.4	57
140	105.3	0.3	48	142	13.4	0.3	30	344	3.3	0.6	77	0.6	77
32	96.1	0.5	33	6	13.1	0.4	63	360	3.2	0.7	57	0.7	57
43	73.2	0.6	50	148	12.9	0.7	60	430	3.2	0.8	85	0.8	85
17	64.0	0.6	52	429	12.8	0.7	49	436	3.2	0.7	84	0.7	84
402	55.6	0.7	40	443	12.8	0.5	77	207	4.9	0.5	52	0.5	52
134	54.9	0.4	39	177	12.3	0.4	44	424	4.7	0.4	40	0.4	40
17	52.1	0.7	45	365	11.9	0.8	42	44	4.4	0.5	44	0.5	44
33	50.6	0.3	44	67	11.5	0.4	44	348	4.2	0.5	48	0.5	48
206	49.2	0.5	55	42	11.3	0.4	55	144	4.2	0.4	71	0.4	71
137	47.2	0.3	55	316	11.0	0.8	22	357	4.1	0.4	52	0.4	52
136	42.8	0.4	27	163	10.9	0.4	82	410	4.1	0.5	41	0.5	41
433	42.0	0.8	53	418	10.8	0.4	26	119	4.0	0.5	78	0.5	78
314	40.1	0.6	19	194	10.8	0.4	52	352	4.0	0.7	66	0.7	66
28	38.2	0.5	54	200	10.3	0.4	53	288	3.9	0.3	101	0.3	101
423	37.6	0.5	49	442	9.7	0.5	85	404	3.7	0.5	55	0.5	55
420	37.4	0.4	44	197	9.4	0.3	51	345	3.6	0.5	66	0.5	66
112	36.7	0.5	41	427	9.2	0.4	57	341	3.6	0.7	79	0.7	79
27	35.4	0.4	41	86	9.1	0.6	60	417	3.9	0.4	33	0.4	33
446	35.2	0.6	46	5	8.8	0.6	93	87	3.4	0.5	49	0.5	49
139	33.6	0.5	66	115	8.8	0.5	93	331	3.3	0.5	60	0.5	60
208	32.4	0.5	48	196	8.7	0.3	33	398	3.1	0.8	85	0.8	85
317	32.2	0.8	27	438	8.7	0.9	90	105	3.1	0.7	98	0.7	98
287	31.3	0.4	55	322	8.6	0.6	34	195	3.1	0.4	53	0.4	53
209	31.1	0.3	55	440	8.6	0.7	82	26	3.1	0.7	68	0.7	68
369	30.9	0.8	19	161	8.5	0.4	68	335	3.0	0.5	63	0.5	63
151	29.8	0.4	53	212	8.3	0.4	56	126	2.9	0.3	53	0.3	53
133	26.5	0.4	41	14	8.2	0.7	85	396	2.4	0.4	34	0.4	34
29	26.0	0.4	52	403	8.2	0.5	57	292	2.3	0.5	66	0.5	66
176	25.4	0.3	50	12	8.2	0.7	86	113	2.4	0.2	60	0.2	60
138	25.4	0.4	66	9	8.1	0.4	100	141	2.4	0.3	37	0.3	37
204	25.2	0.4	45	289	8.0	0.5	66	428	2.4	0.6	44	0.6	44
31	19.0	0.4	36	444	7.9	0.4	41	21	2.3	0.4	66	0.4	66
419	18.5	0.6	56	157	6.7	0.4	55	425	2.3	0.5	42	0.5	42
178	17.7	0.3	44	16	7.5	0.5	44	198	2.1	0.4	55	0.4	55
143	17.4	0.4	34	338	7.5	0.5	52	350	2.1	0.4	57	0.4	57
448	16.9	0.4	47	81	7.2	0.4	71	284	2.0	0.3	48	0.3	48
394	16.7	0.5	39	441	6.7	0.5	51	160	1.9	0.4	60	0.4	60
349	16.4	0.6	66	210	6.0	0.4	56	193	1.8	0.4	54	0.4	54
296	14.9	0.7	82	422	6.0	0.4	57	102	1.8	0.7	82	0.7	82
406	14.0	0.5	52	13	5.8	0.6	46	421	1.7	0.3	37	0.3	37
367	13.9	0.6	45	49	5.7	0.6	43	60	1.6	0.5	49	0.5	49
135	13.7	0.4	30	435	5.7	0.7	41	315	1.5	0.6	82	0.6	82

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TONS- BASED ON 15 M NET WIDTH

SPECIES ROCK SOLE

HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
73	1.5	0.5	52	145	0.5	0.5	96	340	0.2	0.4	82
321	1.4	0.5	29	336	0.5	0.5	90	85	0.2	0.4	71
253	1.4	0.5	63	413	0.5	1.0	87	279	0.2	0.5	93
123	1.3	0.4	38	186	0.5	0.5	79	156	0.2	0.4	90
93	1.3	0.8	96	180	0.5	0.8	80	388	0.1	0.3	63
150	1.3	0.4	60	153	0.5	0.3	26	255	0.1	0.7	67
127	1.3	0.3	42	154	0.4	0.4	77	168	0.1	0.3	83
251	1.2	0.5	63	83	0.4	0.8	82	75	0.1	0.6	85
192	1.2	0.4	53	278	0.4	0.7	104	120	0.1	0.3	85
405	1.2	0.4	67	107	0.4	0.5	46	351	0.1	0.6	85
432	1.2	0.5	55	295	0.4	0.5	72	302	0.1	0.5	94
313	1.1	0.9	16	61	0.4	0.6	109	82	0.1	0.5	85
118	1.1	0.6	77	290	0.4	0.5	82	108	0.1	0.2	36
116	1.1	0.6	85	399	0.4	0.7	87	330	0.1	0.4	96
397	1.1	0.4	45	374	0.4	0.5	79	291	0.1	0.4	82
285	1.0	0.4	98	286	0.4	0.3	41	146	0.1	0.3	90
114	1.0	0.5	82	327	0.4	0.8	98	167	0.1	0.3	104
416	1.0	0.4	44	382	0.4	0.6	54	70	0.1	0.3	93
34	1.0	0.4	77	384	0.4	0.6	98	1	0.1	0.2	120
277	1.0	0.4	60	268	0.4	0.4	51	294	0.1	0.3	87
318	0.9	0.6	21	78	0.4	0.7	67	337	0.1	0.3	115
162	0.9	0.4	57	453	0.3	0.7	85	378	0.1	0.2	49
343	0.9	0.7	87	234	0.3	0.7	66	298	0.0	0.2	85
2	0.9	0.6	79	80	0.3	0.7	87				
395	0.9	0.6	71	334	0.3	0.7	90				
201	0.9	0.4	28	168	0.3	0.6	83				
347	0.8	0.7	68	184	0.3	0.6	83				
181	0.8	0.4	78	454	0.3	0.7	38				
401	0.8	0.5	46	254	0.3	0.7	68				
377	0.8	0.4	44	408	0.3	0.7	85				
298	0.8	0.4	63	407	0.3	0.7	86				
342	0.7	0.4	66	36	0.3	1.4	98				
293	0.7	0.6	71	103	0.3	1.0	90				
451	0.7	0.9	87	3	0.2	0.2	68				
366	0.7	0.6	22	38	0.2	0.8	37				
58	0.7	0.6	45	237	0.2	0.9	61				
297	0.7	0.6	98	189	0.2	0.5	79				
252	0.7	0.5	101	414	0.2	1.0	208				
124	0.7	0.4	93	121	0.2	0.9	90				
445	0.7	0.4	36	332	0.2	0.5	93				
437	0.6	0.8	141	68	0.2	0.8	82				
383	0.6	0.7	71	37	0.2	0.8	43				
147	0.6	0.4	90	117	0.2	0.3	68				
411	0.6	0.6	39	39	0.2	0.7	104				
185	0.6	0.4	78	76	0.2	0.7	82				
84	0.5	0.6	82	324	0.2	0.5	123				
269	0.5	0.5	53	202	0.2	0.2	90				
311	0.5	0.8	44	187	0.2	0.3	83				

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWNS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWNS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWNS- BASED ON 15 M NET WIDTH

SPECIES SABLEFISH

SPECIES SABLEFISH

SPECIES SABLEFISH

HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)
110	801.3	2.7	200	130	106.5	2.6	191	2.6	180	30.4	3.6
53	732.6	1.5	159	169	105.6	2.7	191	29.8	104	1.3	10.4
94	700.0	2.6	139	156	104.6	2.5	90	414	29.5	3.5	208
381	626.7	3.3	219	214	103.6	2.6	145	236	29.5	2.6	107
93	581.6	1.8	96	23	96.9	2.1	246	245	27.4	3.3	189
174	573.0	1.9	98	255	95.9	1.8	67	304	26.1	1.9	118
364	549.6	1.6	106	224	94.9	2.4	175	387	26.1	2.8	104
122	545.6	2.7	104	363	91.6	3.3	189	302	25.3	1.6	94
221	397.9	2.6	186	229	87.3	2.4	145	294	25.2	1.8	87
375	386.1	2.3	102	228	83.3	3.7	191	362	24.7	1.4	96
247	378.3	3.2	355	282	79.5	2.5	101	297	24.1	1.7	98
101	376.2	2.6	276	252	75.6	2.9	101	407	23.2	1.7	86
89	313.4	3.0	108	171	74.7	2.7	328	22	23.1	3.2	410
109	306.2	3.1	279	203	74.5	2.2	107	307	23.1	3.2	150
96	273.9	3.0	284	13	72.6	3.2	301	283	23.0	2.4	78
159	286.7	3.2	273	215	69.5	2.2	139	263	23.0	3.2	98
164	251.7	2.8	197	261	69.4	2.7	101	309	20.8	3.3	115
95	251.4	2.4	301	132	68.2	2.7	159	330	20.1	2.6	96
90	232.2	2.9	301	289	67.5	1.8	66	219	19.9	1.8	141
172	225.1	2.6	153	50	65.7	2.0	200	167	19.0	1.9	104
262	215.2	3.1	118	352	62.4	1.3	66	439	18.7	1.8	219
45	209.0	1.6	101	352	58.2	2.4	175	358	18.4	2.6	120
310	207.6	1.9	97	337	58.1	2.2	115	14	17.8	1.5	85
179	206.8	2.8	163	100	56.9	2.6	388	264	17.4	1.7	93
4	206.8	3.6	301	285	51.8	2.9	98	231	17.3	2.2	118
56	190.7	2.4	205	260	51.6	2.9	116	157	17.0	2.2	55
173	190.6	1.8	98	166	51.1	3.1	139	356	16.8	1.5	69
386	187.8	2.4	77	238	51.1	2.3	63	257	16.2	2.3	67
48	187.3	2.5	134	385	49.9	2.7	103	291	16.1	2.5	82
249	187.0	2.5	86	242	49.5	3.0	191	47	15.5	2.3	104
222	185.8	2.6	180	161	48.4	2.4	68	248	15.0	3.2	159
369	181.0	2.5	104	331	46.4	1.6	60	163	14.5	1.7	82
97	175.2	2.6	394	165	45.0	1.8	115	272	14.0	1.1	67
155	170.4	3.2	104	379	44.2	1.9	107	278	13.9	3.0	104
106	169.9	2.4	156	128	42.9	3.0	366	220	13.8	2.3	131
226	157.5	1.9	175	99	42.6	3.1	191	329	13.7	3.0	113
26	154.1	1.7	68	227	42.4	2.2	164	233	13.6	2.2	107
244	152.1	3.4	282	46	41.9	2.0	284	408	13.3	1.3	85
91	147.7	1.9	391	250	40.1	2.4	79	202	13.0	1.9	90
218	143.3	2.3	156	175	40.0	2.0	104	288	12.9	2.9	101
359	128.3	1.9	93	213	40.0	1.7	128	305	12.5	2.6	110
95	125.3	2.5	101	241	37.7	2.5	104	265	12.3	2.9	126
170	123.7	2.8	284	168	36.8	1.9	97	40	12.3	2.6	388
8	121.7	2.7	219	254	35.3	2.0	68	315	12.0	2.3	82
218	118.3	1.6	108	281	34.8	2.3	74	324	11.0	2.2	123
223	112.3	2.0	164	328	34.8	3.7	134	298	10.9	1.4	85
98	111.3	2.7	410	34.7	35	3.5	394	32	10.8	1.5	87
92	109.4	1.6	107	154	34.4	1.7	77	388	10.7	1.5	63

SPECIES SABLEFISH		SPECIES SABLEFISH		SPECIES SABLEFISH		SPECIES SABLEFISH	
HAUL	CATCH KG/1 O NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1 O NM	AV WGT (KG)	GEAR DEPTH (FM)
306	10.6	2.2	142	393	2.9	1.7	89
273	10.6	1.9	85	354	2.9	1.7	72
239	10.0	2.6	98	392	2.8	1.5	75
333	9.4	1.6	38	21	2.7	1.5	104
256	9.0	2.5	85	187	2.6	2.7	83
327	9.0	3.4	98	158	2.6	1.7	60
308	8.8	3.1	148	183	2.6	1.8	82
372	8.7	2.1	108	138	2.6	1.4	66
59	8.4	1.7	98	296	2.4	3.1	82
301	8.2	1.8	97	146	2.4	2.3	90
51	7.9	1.3	104	121	2.4	2.4	90
430	7.7	1.4	85	120	2.4	2.4	85
61	7.6	0.9	109	349	2.3	1.5	66
64	7.2	1.4	110	347	2.2	1.6	68
373	7.2	1.9	93	300	2.1	1.4	96
270	6.6	2.2	104	147	2.0	2.6	90
181	6.4	1.5	78	326	1.9	1.2	66
280	6.2	1.5	74	119	1.8	1.6	78
10	6.1	1.7	153	353	1.8	1.6	73
271	5.8	2.4	109	182	1.8	1.7	80
129	5.7	2.1	106	24	1.7	1.3	139
335	5.3	1.5	63	276	1.6	2.5	98
57	5.3	1.9	104	374	1.6	1.6	79
230	5.1	1.7	103	180	1.6	1.4	80
351	5.1	1.9	85	303	1.6	2.1	98
103	5.0	1.3	90	371	1.5	2.1	156
54	4.9	1.5	107	86	1.4	1.1	60
299	4.7	2.7	90	71	1.4	1.1	82
131	4.7	2.2	98	437	1.3	1.6	141
336	4.5	1.7	90	274	1.3	1.4	100
217	4.5	1.8	120	63	1.3	1.3	82
266	4.4	1.7	71	412	1.3	3.0	145
216	4.4	2.2	124	70	1.3	1.3	93
191	4.4	3.1	82	68	1.3	1.3	82
240	4.4	3.1	104	346	1.3	1.3	66
452	4.2	2.3	96	391	1.2	2.8	95
65	3.7	1.6	112	162	1.1	1.9	57
186	3.6	1.5	79	438	1.1	1.6	90
238	3.5	1.8	80	277	1.2	0.9	60
235	3.4	1.2	93	345	1.2	1.6	87
311	3.4	1.5	137	413	1.1	1.6	87
188	3.2	1.7	44	295	0.9	1.3	72
124	3.1	1.9	83	355	0.8	1.8	74
290	3.0	1.6	78	431	0.7	1.9	67
			82			0.7	90

SPECIES	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)		KG PER NAUTICAL MILE FOR ALL SURVEY TOWS- BASED ON 15 M NET WIDTH
				100	200	
SABLEFISH	390	0.7	1.5	77	63	
	251	0.7	3.0		107	
	380	0.6	2.5			
	189	0.6	1.3	79		
	332	0.6	2.5		93	
	275	0.6	0.9	71		
	338	0.6	1.2	52		
	384	0.5	2.4	98		
	389	0.5	2.2	75		
	105	0.4	1.4	98		
	85	0.4	0.8	71		
	151	0.4	0.8	55		
	422	0.4	1.7	57		
	287	0.3	1.4	55		
	350	0.3	1.3	57		
	344	0.3	1.1	77		
	1	0.3	1.1	120		
	357	0.2	1.1	52		
	339	0.2	1.1	57		
	104	0.2	0.9	107		
	185	0.1	0.4	78		

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC COD		SPECIES PACIFIC COD		SPECIES PACIFIC COD		SPECIES PACIFIC COD	
HAUL	CATCH KG/1.0 NM	GEAR DEPTH (FM)	AV WGT (KG)	HAUL	CATCH KG/1.0 NM	GEAR DEPTH (FM)	AV WGT (KG)
196	1323.2	2.0	53	362	94.8	2.4	96
323	966.8	1.7	55	174	93.7	1.7	98
200	931.8	1.8	53	199	90.8	1.9	55
194	533.9	2.2	52	438	90.8	4.2	90
139	490.6	2.1	30	383	90.4	2.0	71
359	434.6	2.7	93	430	87.5	4.5	85
72	433.4	2.0	68	5	84.5	3.8	93
408	429.3	2.6	85	289	84.4	2.1	66
133	428.7	1.9	41	3	78.1	1.9	68
379	334.5	3.1	107	372	78.0	2.6	108
311	329.3	4.4	44	158	77.9	2.1	60
396	320.5	3.4	69	367	77.2	2.2	45
386	304.3	2.3	77	433	76.9	1.8	53
310	271.2	2.3	57	151	76.9	1.2	55
142	243.2	0.4	30	385	75.0	2.2	103
54	217.9	2.3	107	137	75.0	1.8	55
292	217.7	1.5	66	197	74.5	1.3	51
85	213.3	2.1	71	155	73.7	3.0	104
407	193.8	2.3	86	47	73.1	2.7	104
281	187.8	1.5	74	364	72.0	2.2	106
177	175.9	1.4	44	380	71.6	2.6	107
369	170.6	2.6	104	31	70.5	1.2	36
326	161.1	1.8	66	427	70.1	1.6	57
370	159.1	2.5	108	195	69.2	1.4	53
144	157.5	1.9	71	18	68.1	3.0	81
287	152.4	2.2	55	250	67.6	3.3	79
109	148.8	2.0	98	443	65.9	3.5	77
30	147.4	1.5	66	373	65.8	2.4	93
388	146.6	1.9	63	120	64.9	2.8	85
368	144.0	1.5	19	336	64.3	2.6	90
325	141.5	2.5	45	374	64.2	1.8	79
451	140.5	3.8	87	138	63.9	1.7	66
93	138.9	2.2	96	436	63.5	4.4	84
17	134.5	3.9	45	2	62.8	2.2	79
190	130.1	2.9	80	95	61.2	2.2	101
334	127.8	2.3	90	434	58.7	2.4	41
45	121.7	2.6	101	448	58.5	2.1	47
442	111.3	5.5	85	207	58.2	2.9	52
36	108.7	3.4	98	413	57.6	2.2	87
406	105.2	1.3	52	39	57.2	2.8	104
176	103.6	1.5	50	83	56.3	2.2	82
349	103.1	1.7	66	118	54.9	2.3	77
114	101.2	2.4	62	339	54.1	1.9	57
149	99.3	2.1	82	143	52.7	1.1	34
115	98.1	2.3	93	343	52.6	2.0	87
161	95.8	2.2	68	338	51.2	1.8	52
15	95.5	2.3	46	51	49.5	2.7	104
423	95.1	3.5	49	136	48.6	0.6	27

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC COD

H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
191	31. 4	2. 8	82	191	154	18. 6	2. 2	89	61	10. 6	2. 3
122	31. 2	2. 1	104	122	154	18. 5	1. 9	77	60	10. 2	0. 7
209	31. 1	2. 5	55	172	172	18. 3	2. 0	153	71	10. 1	1. 7
285	30. 2	2. 6	98	253	253	18. 2	1. 2	63	389	10. 1	2. 1
342	29. 9	2. 0	66	92	17. 9	1. 8	107	444	10. 1	0. 6	41
251	29. 3	1. 5	63	148	17. 9	0. 7	60	418	10. 0	0. 1	26
12	29. 2	5. 7	86	246	17. 7	3. 4	87	6	10. 0	3. 3	63
157	29. 0	1. 3	55	440	17. 5	4. 6	82	230	9. 6	2. 6	103
335	29. 0	1. 9	63	266	17. 5	1. 2	71	390	9. 5	2. 7	77
145	28. 5	2. 3	96	387	17. 4	2. 1	104	351	9. 5	2. 5	85
169	28. 4	1. 6	115	330	17. 2	2. 4	96	67	9. 3	0. 9	44
294	27. 3	1. 4	87	297	17. 2	1. 4	98	211	9. 0	2. 8	56
272	27. 3	1. 4	67	315	16. 6	3. 1	82	163	9. 0	1. 6	82
341	26. 7	2. 4	79	240	16. 5	2. 3	104	220	9. 0	1. 8	131
431	26. 5	3. 3	90	302	16. 4	1. 8	94	48	8. 4	2. 7	134
126	25. 7	1. 2	53	275	16. 4	1. 1	71	192	8. 6	0. 9	53
121	24. 8	2. 4	90	139	16. 4	1. 8	66	189	8. 5	2. 6	79
193	24. 0	1. 5	54	27	16. 1	2. 0	41	78	8. 4	1. 4	67
355	23. 7	2. 4	74	249	16. 0	2. 2	86	306	8. 4	2. 7	142
441	23. 6	1. 1	51	185	15. 8	2. 4	78	252	8. 3	1. 5	101
255	23. 4	1. 5	67	394	15. 8	0. 4	39	210	8. 1	3. 1	36
198	23. 3	1. 3	55	42	14. 8	1. 1	55	270	8. 1	2. 1	104
81	23. 3	2. 6	71	108	14. 7	0. 3	36	79	8. 1	2. 9	69
16	23. 1	1. 7	44	340	14. 4	2. 8	82	231	8. 0	2. 2	118
282	22. 9	1. 8	101	206	14. 2	1. 9	55	175	8. 0	1. 7	104
119	22. 9	2. 3	78	278	14. 2	1. 4	104	299	8. 0	2. 1	90
21	22. 2	2. 7	104	429	14. 0	1. 9	49	263	7. 8	1. 6	98
262	22. 1	1. 8	118	446	13. 7	1. 8	46	76	7. 8	2. 5	82
259	22. 0	1. 5	104	298	13. 6	2. 4	85	181	7. 8	2. 5	78
204	21. 8	1. 3	45	283	13. 4	1. 9	78	347	7. 7	1. 2	68
11	21. 7	4. 8	98	150	13. 3	1. 2	60	35	7. 7	2. 5	79
59	21. 7	2. 1	98	129	13. 1	1. 3	106	290	7. 6	2. 6	82
277	21. 6	1. 4	60	75	12. 6	3. 2	85	219	7. 6	2. 1	141
131	21. 6	1. 4	98	345	12. 5	1. 5	66	217	7. 5	1. 9	120
212	21. 4	2. 9	56	166	11. 9	1. 8	139	264	7. 4	1. 8	93
1	21. 3	1. 5	120	271	11. 7	2. 1	109	293	7. 2	1. 0	71
178	21. 1	1. 2	44	350	11. 7	1. 9	57	354	7. 1	1. 8	72
44	20. 7	2. 0	77	239	11. 6	2. 2	98	328	7. 0	2. 1	134
422	20. 7	2. 1	57	353	11. 6	2. 5	73	173	7. 0	1. 4	98
452	20. 4	2. 3	137	384	11. 6	2. 5	98	203	6. 8	1. 5	107
309	20. 2	2. 7	115	395	11. 4	1. 7	71	92	6. 4	2. 6	87
68	20. 2	2. 3	82	405	11. 4	2. 1	67	404	6. 1	1. 6	55
257	20. 1	1. 4	67	134	11. 2	1. 4	39	216	6. 0	1. 9	124
168	19. 7	1. 5	97	304	11. 1	2. 6	118	213	5. 9	2. 0	128
352	19. 7	1. 1	66	167	11. 0	2. 2	104	333	5. 9	1. 3	38
32	19. 6	0. 9	33	453	10. 9	1. 9	85	57	5. 8	1. 9	104
180	19. 5	2. 8	80	420	10. 8	1. 1	44	215	5. 6	1. 7	139
403	19. 3	2. 0	57	205	10. 6	1. 8	37	274	5. 5	2. 0	100

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC COD

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	SPECIES PACIFIC COD	GEAR DEPTH (FM)
308	5.4	3.3	148	295	1.5	0.6		72
435	5.4	2.4	41	63	1.5	0.2		82
65	5.1	2.2	112	366	1.4	4.6		22
280	5.1	1.1	74	447	1.4	1.1		49
254	4.8	2.0	68	37	1.4	1.9		43
393	4.7	2.8	89	437	1.3	2.2		141
265	4.7	2.1	126	276	1.3	2.0		98
162	4.5	2.2	57	49	1.2	0.9		43
424	4.5	2.3	40	392	1.2	5.2		75
233	4.5	2.3	107	38	1.1	1.9		37
69	4.5	2.5	85	94	1.0	2.2		139
291	4.4	1.0	82	288	1.0	2.1		101
301	4.3	4.9	97	284	0.9	0.9		48
227	4.3	2.0	164	426	0.9	2.0		44
102	4.2	1.4	82	409	0.8	1.2		45
228	4.0	1.8	191	248	0.8	0.7		159
218	3.8	1.8	156	396	0.8	0.7		34
305	3.8	2.1	110	87	0.7	1.3		49
428	3.8	1.7	44	432	0.7	3.4		55
124	3.7	2.4	93	454	0.7	1.7		38
329	3.7	2.2	113	64	0.7	2.6		110
62	3.6	2.3	96	106	0.7	2.7		156
421	3.6	3.3	37	117	0.7	0.2		68
358	3.5	2.1	120	322	0.6	2.5		34
425	3.4	2.4	42	130	0.6	1.5		191
357	3.4	1.5	52	77	0.6	2.2		60
229	3.3	2.0	145	245	0.6	2.4		189
279	2.7	1.3	93	318	0.6	2.0		21
73	2.6	2.6	52	399	0.5	0.9		87
237	2.5	1.6	61	141	0.5	1.1		37
224	2.5	2.1	175	401	0.5	0.3		46
10	2.4	2.7	193	232	0.5	1.9		82
417	2.3	0.5	33	169	0.4	1.8		191
402	2.2	0.3	40	235	0.4	1.6		59
268	2.2	1.1	51	107	0.3	0.1		46
238	2.1	2.4	71	320	0.3	0.1		19
300	2.1	1.9	96	376	0.2	0.1		48
201	2.1	0.4	28	398	0.2	0.7		85
303	2.0	1.7	98	445	0.1	0.5		36
324	2.0	2.0	123	312	0.1	0.1		20
214	2.0	2.4	145	410	0.1	0.4		41
269	1.9	0.8	53	286	0.1	0.3		41
80	1.8	1.7	87	123	0.0	0.1		38
256	1.8	1.5	85	153	0.0	0.1		26
223	1.7	1.9	164					
160	1.6	1.5	66					
234	1.5	2.0	66					
236	1.5	2.1						
			107					

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES WALLEYE POLLACK

H A U L	C A T C H KG/1.0 NM	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H KG/1.0 NM	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H KG/1.0 NM	A V W G T (K G)	G E A R D E P T H (F M)
211	4576.7	0.8	56	395	100.3	1.0	71	31	21.1	1.0	36
209	3784.9	0.5	55	146	99.6	1.1	90	264	20.8	1.0	93
443	2453.3	1.0	77	185	99.2	1.2	78	167	20.6	1.2	104
174	2083.0	1.0	98	343	95.6	1.1	87	328	20.3	0.6	134
212	1730.5	0.7	56	145	94.3	1.2	96	233	20.2	0.3	107
210	1473.7	1.0	56	24	93.6	1.1	139	308	18.8	0.6	148
432	1125.3	1.0	137	183	93.5	1.3	82	353	18.0	1.1	73
158	1099.9	1.0	60	359	92.7	1.4	93	1	17.2	1.0	120
144	913.5	0.9	71	32	92.2	1.1	33	154	17.1	1.0	77
120	901.1	1.5	85	351	90.0	0.7	85	219	16.5	1.1	141
332	697.0	1.1	93	287	87.1	1.0	59	276	16.5	0.7	98
334	609.1	1.1	90	217	81.7	1.2	120	82	16.2	0.6	85
207	605.3	0.7	52	191	79.5	1.3	82	80	15.4	1.1	87
149	525.7	0.9	82	342	78.7	0.9	66	367	14.6	1.3	45
206	496.8	1.0	55	216	75.6	1.2	124	122	14.1	1.3	104
118	489.4	1.4	77	94	68.6	0.9	139	225	13.5	1.1	175
7	469.3	0.9	63	175	58.9	1.1	104	285	13.4	1.1	98
345	428.1	1.0	66	190	57.4	1.3	80	283	12.5	1.0	78
33	344.2	0.9	44	307	55.9	0.8	150	271	12.1	1.1	109
404	327.1	1.0	55	202	53.1	1.3	90	113	11.9	1.0	60
138	319.6	0.9	66	188	53.3	1.4	83	114	11.9	1.5	82
119	318.8	1.3	78	327	48.2	1.4	98	296	11.8	1.0	85
341	310.1	1.0	79	115	46.0	1.1	93	231	11.7	0.7	118
340	279.2	1.1	82	20	45.7	0.9	52	300	11.5	1.0	96
344	258.5	0.8	77	329	41.9	1.0	113	392	11.3	1.1	75
403	230.0	0.9	57	198	41.3	1.1	55	442	11.2	0.3	85
156	226.7	1.2	90	12	39.0	0.9	86	261	11.2	0.9	101
137	186.8	0.8	55	84	39.0	1.1	82	277	10.7	0.8	93
186	185.4	1.1	79	83	37.0	1.2	82	288	10.6	0.9	101
350	174.0	1.2	57	254	36.9	1.0	68	44	10.2	0.7	77
189	169.8	1.1	79	304	33.6	1.1	118	132	10.2	0.8	159
355	156.1	1.2	74	278	33.5	1.0	104	306	10.1	0.8	142
182	140.5	1.3	80	305	32.1	1.2	64	215	8.2	1.3	139
250	130.3	1.0	79	147	33.4	0.3	90	14	9.9	1.4	85
19	148.5	0.9	52	164	33.1	1.1	139	265	9.3	0.8	126
187	147.1	1.3	83	309	32.6	0.7	115	390	8.6	1.2	77
184	145.5	1.4	83	223	32.2	1.2	64	301	8.2	1.1	97
180	121.1	1.2	80	34	27.6	0.8	77	273	7.7	1.0	85
296	135.1	1.0	82	220	30.5	1.1	131	302	8.1	0.9	94
181	133.6	1.1	78	258	30.5	1.2	63	393	7.9	1.0	89
255	131.6	0.9	67	213	30.1	1.0	128	330	7.9	1.0	96
406	129.2	1.1	52	249	27.9	1.2	86	354	7.8	1.2	72
187	107.0	1.2	68	116	32.1	1.0	110	215	8.2	1.3	139
117	104.7	1.1	108	289	29.2	1.1	66	347	7.7	1.0	175
370	104.7	1.0	78	18	22.0	1.1	81	230	7.7	0.7	68
173	100.6	1.0	78					18	10.3	0.6	103

KG PER NAUTICAL MILE FOR ALL
SURVEY TONS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TONS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TONS- BASED ON 15 M NET WIDTH

SPECIES WALLEYE POLLACK

H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
437	6.7	1.1	141	385	1.6	0.7	103	434	0.3	1.4	41
293	6.6	1.0	71	346	1.5	1.1	66	42	0.3	0.6	59
391	6.1	1.1	95	240	1.5	0.9	104	95	0.3	0.6	101
66	6.1	1.4	82	222	1.5	1.1	180	388	0.3	1.3	63
234	5.9	0.9	66	15	1.4	1.0	46	103	0.3	1.1	90
2	5.2	0.1	79	65	1.4	1.5	112	71	0.3	1.1	82
310	5.2	1.3	57	259	1.3	1.1	104	51	0.3	1.1	104
260	5.2	0.7	116	168	1.1	1.1	97	453	0.3	0.6	85
387	5.1	1.2	104	239	1.1	0.7	98	420	0.3	0.6	44
263	5.0	1.0	98	121	1.1	1.5	90	431	0.3	1.3	90
63	4.9	1.1	82	163	1.1	0.9	82	280	0.3	1.1	74
294	4.7	1.0	87	85	1.1	1.0	71	69	0.2	1.0	85
11	4.7	1.0	98	203	1.0	0.8	107	8	0.2	1.0	219
17	4.6	0.9	45	358	1.0	1.2	120	29	0.2	0.5	52
172	4.4	1.0	153	290	1.0	0.7	82	30	0.2	0.9	200
336	4.3	0.4	90	59	1.0	0.9	98	433	0.2	1.1	53
292	4.0	0.6	66	295	1.0	1.1	72	21	0.2	0.9	104
10	3.9	1.0	153	64	0.8	1.5	110	427	0.2	1.0	57
111	3.8	1.3	87	124	0.8	1.7	93	6	0.2	0.9	63
299	3.8	0.9	90	248	0.8	0.7	159	277	0.2	0.9	60
218	3.6	1.2	156	405	0.8	0.9	67	352	0.2	0.9	66
196	3.5	1.1	53	364	0.8	0.7	98	110	0.2	0.8	200
297	3.5	0.9	98	35	0.8	1.1	79	315	0.2	0.3	82
155	3.2	0.9	104	232	0.7	1.5	82	349	0.2	0.7	66
298	3.0	0.7	85	389	0.7	1.1	75	67	0.1	0.3	44
235	3.0	0.7	59	99	0.7	1.0	191	311	0.1	0.6	44
200	2.9	1.1	53	414	0.7	1.0	208	272	0.1	0.3	67
214	2.8	1.0	145	76	0.7	0.5	82	281	0.1	0.5	74
303	2.7	0.8	98	324	0.7	0.6	123	418	0.1	0.1	26
30	2.6	0.9	66	394	0.6	0.8	39	78	0.1	0.1	67
412	2.6	1.4	145	179	0.6	2.7	163	446	0.1	0.1	46
195	2.6	0.9	53	422	0.6	0.7	57	386	0.1	0.4	77
199	2.5	0.8	55	237	0.6	0.3	61	362	0.1	0.2	96
106	2.4	1.1	156	3	0.6	0.2	68	43	0.0	0.2	50
48	2.4	1.4	134	448	0.6	0.8	47	77	0.0	0.2	60
238	2.3	0.7	71	274	0.6	0.8	100	373	0.0	0.2	93
53	1.9	0.9	159	241	0.6	1.1	104	407	0.0	0.2	86
337	1.9	0.7	115	89	0.4	0.4	108	441	0.0	0.1	91
252	2.2	1.4	101	275	0.6	0.8	71	382	0.0	0.1	54
282	2.1	1.4	101	251	0.5	1.1	63				
270	1.9	1.2	104	130	0.5	1.1	191				
61	1.9	1.2	109	226	0.5	1.4	175				
337	1.9	0.7	115	89	0.4	0.4	108				
246	1.8	1.4	87	192	0.4	0.4	53				
194	1.8	1.3	52	75	0.4	0.8	85				
236	1.8	0.6	107	229	0.4	0.6	145				
79	1.7	1.0	69	361	0.3	1.3	180				
335	1.7	0.7	63	171	0.3	0.7	328				
333	1.7	1.0	38	356	0.3	1.4	69				

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES SHORTSPINE THORNYHEAD

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
50	220.2	0.6	200	381	12.9	0.3	219	0.7	93
53	123.4	0.5	159	171	12.8	0.3	328	0.4	104
56	94.5	0.6	205	229	12.5	0.5	145	0.1	61
99	79.3	0.4	191	242	12.4	0.5	191		
371	78.8	0.5	156	100	12.0	0.5	388		
412	70.5	0.4	145	220	11.5	0.3	131		
55	67.5	0.8	301	226	11.1	0.3	175		
24	66.0	0.2	139	225	10.3	0.3	175		
90	64.7	0.6	301	245	9.9	0.3	189		
46	64.2	0.4	284	439	9.3	0.3	219		
98	56.6	0.4	410	159	9.1	0.3	273		
106	54.6	0.3	156	14	8.7	0.8	85		
164	49.8	0.5	197	170	8.6	0.3	284		
361	41.2	0.3	180	22	8.5	0.4	410		
110	39.7	0.5	200	437	7.8	0.3	141		
48	36.3	0.6	134	40	7.1	0.3	388		
23	35.4	0.2	246	4	6.7	0.3	301		
414	35.3	0.4	208	128	6.4	0.3	366		
363	34.0	0.4	189	91	5.9	0.5	391		
101	33.3	0.4	276	241	5.5	0.3	104		
215	27.8	0.3	139	203	5.5	0.2	107		
109	27.3	0.3	279	260	5.2	0.4	116		
8	26.0	0.4	219	244	5.0	0.3	282		
94	25.7	0.3	139	243	4.8	0.4	394		
13	25.0	0.3	301	261	4.7	0.4	101		
169	25.0	0.3	191	217	3.9	0.4	120		
247	24.9	0.4	355	252	2.5	0.4	101		
10	24.6	0.3	153	122	2.2	0.5	104		
214	23.4	0.3	145	5	2.0	2.7	93		
179	23.2	0.3	163	240	1.6	0.4	104		
227	22.9	0.4	164	57	1.5	0.4	106		
97	21.4	0.4	394	364	1.5	0.4	118		
224	21.2	0.4	284	262	1.4	0.2	87		
96	21.2	0.3	191	413	1.2	0.4	104		
130	21.2	0.3	153	57	1.1	0.3	137		
172	20.1	0.3	164	266	1.0	0.5	71		
223	18.2	0.4	175	440	1.0	0.5	82		
218	17.7	0.4	156	11	1.0	0.4	104		
213	17.7	0.3	128	36	0.7	0.3	98		
228	16.7	0.3	191	452	0.7	1.1	137		
248	16.4	0.3	159	54	0.7	0.4	107		
166	15.9	0.5	139	443	0.4	0.8	77		
216	15.1	0.3	124	21	0.4	0.6	104		
219	14.9	0.3	141	173	0.4	0.4	98		
222	14.5	0.3	180	239	0.4	0.3	98		
132	13.9	0.2	159	111	0.3	0.5	87		
265	13.5	0.4	126	263	0.3	0.3	98		
221	13.5	0.4	186	167	0.2	0.7	104		

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES SHORTSPINE THORNYHEAD

HAIL	CATCH KG/1.0 NM	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
50	220.2	200	381	12.9	219	373	0.2	93
53	123.4	159	171	12.8	328	259	0.1	104
56	94.5	205	229	12.5	145	237	0.0	61
99	79.3	191	242	12.4	191			
371	78.8	156	100	10.0	388			
412	70.5	145	220	11.5	131			
55	67.5	301	226	11.1	175			
24	66.0	139	225	10.3	175			
90	64.7	301	245	9.9	189			
46	64.2	284	439	9.3	219			
98	56.6	410	159	9.1	273			
106	54.6	156	14	8.7	85			
164	49.8	197	170	8.6	284			
361	41.2	180	22	8.5	410			
110	39.7	200	437	7.8	141			
48	36.3	134	40	7.1	388			
23	35.4	246	4	6.7	301			
414	35.3	208	128	6.4	366			
363	34.0	189	91	5.9	391			
101	33.3	276	241	5.5	104			
215	27.8	139	203	5.5	107			
109	27.3	279	260	5.2	116			
8	26.0	219	244	5.0	282			
94	25.7	139	243	4.8	394			
13	25.0	301	261	4.7	101			
169	25.0	191	217	3.9	120			
247	24.9	355	252	2.5	101			
10	24.6	153	122	2.2	104			
214	23.4	145	5	2.0	93			
179	23.2	163	240	1.6	104			
227	22.9	164	57	1.5	101			
97	21.4	394	364	1.5	106			
224	21.2	284	262	1.4	118			
96	21.2	191	413	1.2	87			
130	21.2	153	57	1.1	104			
172	20.1	164	266	1.0	71			
223	18.2	175	440	1.0	82			
218	17.7	156	11	1.0	104			
213	17.7	128	36	0.7	98			
228	16.7	191	452	0.7	137			
248	16.4	159	54	0.7	107			
166	15.9	139	443	0.4	77			
216	15.1	124	21	0.4	104			
219	14.9	141	173	0.4	98			
222	14.5	180	239	0.4	98			
132	13.9	159	111	0.3	87			
265	13.5	126	263	0.3	98			
221	13.5	186	167	0.2	104			

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ROGHEYE ROCKFISH

H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1. 0 N M	A V W G T (K G)
130	198.7	1.6	191	106	4.8	1.4	156	395	1.3	0.5	71
245	153.4	1.4	189	354	4.8	0.8	72	172	1.2	1.3	153
164	119.1	1.4	197	387	4.7	1.1	104	330	1.2	0.5	96
99	93.7	1.5	191	89	4.2	0.9	108	342	1.2	0.7	66
361	64.7	1.5	180	76	4.2	1.6	82	187	1.2	1.2	83
121	61.1	1.3	90	305	4.1	0.9	110	263	1.2	0.6	98
228	61.0	1.2	191	147	4.1	1.2	90	389	1.1	0.9	75
247	59.3	1.5	355	83	3.6	0.9	82	337	1.1	1.1	115
248	52.2	0.9	159	364	3.6	1.6	106	184	1.0	1.0	83
64	50.8	1.3	308	327	3.6	0.9	98	437	1.0	1.2	141
50	50.1	1.5	200	262	3.5	0.6	118	309	1.0	1.1	115
53	41.0	1.3	159	238	3.4	0.4	71	304	0.9	0.6	118
132	39.8	1.7	159	116	3.2	0.8	85	329	0.9	0.6	113
414	38.9	1.6	208	56	3.2	1.4	205	70	0.9	0.5	93
169	31.9	1.5	191	412	3.1	0.8	145	300	0.9	1.0	96
371	30.9	1.1	156	308	3.1	1.2	148	438	0.9	1.3	90
226	30.4	1.8	175	432	3.1	1.1	137	274	0.9	0.8	100
224	29.5	1.7	175	270	3.1	0.9	104	310	0.9	1.3	57
124	25.4	0.6	93	241	3.0	0.9	104	102	0.8	0.4	82
223	25.0	1.6	164	372	2.8	1.3	108	301	0.8	1.9	97
340	24.8	0.9	82	334	2.6	1.6	90	404	0.8	0.6	55
225	21.3	1.8	175	24	2.6	1.2	139	36	0.8	1.1	98
242	20.9	1.1	191	160	2.6	1.1	66	220	0.8	1.3	131
8	20.3	1.6	219	1	2.6	0.7	120	239	0.8	0.6	98
221	16.2	1.6	186	219	2.6	1.4	141	265	0.8	0.8	126
222	13.5	1.6	180	392	2.4	0.7	75	296	0.8	0.8	82
307	11.5	1.1	150	336	2.4	0.5	90	385	0.8	0.9	103
363	11.2	1.6	189	94	2.3	1.1	107	285	0.8	1.1	98
381	11.1	1.0	219	5	2.3	0.3	93	159	0.8	1.6	273
227	10.3	1.6	164	328	2.3	0.7	134	358	0.8	0.7	120
391	10.2	0.4	95	373	2.1	0.9	93	165	0.7	0.8	115
240	9.7	1.0	104	243	2.0	1.6	394	234	0.7	0.2	66
390	9.3	0.5	77	298	1.9	1.4	85	81	0.6	0.6	71
271	9.0	0.7	109	229	1.8	0.8	145	44	0.6	0.5	77
74	8.7	0.6	77	203	1.8	0.4	107	115	0.6	1.2	93
35	8.5	0.8	79	23	1.8	1.6	246	266	0.6	0.4	71
82	8.5	0.8	85	48	1.8	0.5	134	110	0.6	1.2	200
341	7.9	0.8	79	94	1.7	1.5	139	355	0.5	1.2	74
218	7.3	1.3	156	306	1.7	1.7	142	84	0.5	0.7	82
246	7.1	1.8	87	120	1.7	0.8	85	213	0.5	1.2	128
443	6.7	1.2	77	393	1.6	0.9	89	65	0.5	1.0	112
264	6.2	0.6	93	272	1.6	0.9	67	351	0.5	0.5	85
332	6.2	1.3	93	10	1.5	0.7	153	256	0.5	0.6	139
146	6.1	0.8	90	451	1.5	0.8	87	215	0.4	1.1	139
145	6.0	0.9	96	80	1.5	1.0	87	384	0.4	0.5	98
353	6.0	0.7	73	77	1.4	2.8	60	119	0.4	0.5	78
179	6.0	1.7	163	303	1.3	0.4	78	236	0.4	0.9	107
75	6.0	0.6	85	303	1.3	1.2	104	212	0.4	0.7	56

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC OCEAN PERCH

H A U L	C A T C H K G / 1 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	
438	2330	7	0.5	90	240	22.7	0.5	104	106	2.2	0.7	156
443	1342	2	0.6	77	224	22.6	0.6	175	348	2.2	0.1	48
5	958	5	0.4	93	122	22.1	0.6	104	217	2.2	0.7	120
174	763	2	0.6	98	227	21.6	0.7	164	265	2.2	0.7	126
89	319	0	0.8	108	3	20.6	0.2	68	327	2.1	0.7	98
259	248	7	0.8	104	441	19.8	0.1	51	398	2.1	0.4	85
380	239	2	0.5	107	216	19.8	0.7	124	38	2.1	0.1	37
94	197	1	0.6	139	385	17.3	0.7	103	359	2.1	1.1	93
252	194	2	0.8	101	409	17.2	0.1	45	397	2.0	0.4	45
452	190	5	0.7	137	10	17.1	0.6	153	228	2.0	0.6	191
21	165	4	0.8	104	263	15.8	0.6	98	103	1.9	0.3	90
14	171	6	0.4	85	132	15.6	0.6	159	413	1.9	0.7	87
239	163	5	0.6	98	166	15.5	0.7	139	53	1.9	0.8	159
370	150	5	0.8	108	172	15.3	0.6	153	167	1.9	0.8	104
451	142	1	0.2	87	102	14.1	0.3	82	437	1.8	0.3	141
401	135	9	0.2	46	160	13.0	0.2	66	49	1.8	0.6	43
131	112	1	0.4	98	225	12.7	0.7	175	316	1.8	1.0	22
24	110	0	0.7	139	375	10.8	0.6	102	238	1.8	0.4	71
246	97	8	0.7	87	154	10.5	0.6	77	358	1.6	1.1	120
48	82	3	0.7	134	51	10.4	0.6	104	245	1.5	0.6	189
203	80	1	0.7	107	54	10.1	0.5	107	453	1.4	0.8	85
336	69	2	0.9	90	315	10.1	1.0	82	105	1.3	0.7	98
173	68	2	0.5	98	412	10.1	0.9	145	169	1.2	0.6	191
45	59	3	0.6	101	364	9.7	1.0	106	195	1.2	0.1	53
15	54	8	0.3	46	337	9.7	0.9	115	26	1.2	0.3	68
376	53	1	0.2	48	226	9.1	0.6	175	329	1.1	1.4	113
261	52	3	0.9	101	95	7.6	0.9	101	179	1.0	0.7	163
357	50	0	0.3	52	192	7.2	0.2	53	374	0.9	0.4	79
165	48	4	0.6	115	272	7.0	0.6	67	267	0.9	0.4	67
215	48	2	0.6	139	59	6.7	0.5	98	221	0.9	0.6	186
219	47	5	0.7	141	292	6.5	0.8	66	269	0.9	0.6	53
214	46	9	0.6	145	229	6.3	0.9	145	425	0.8	0.2	42
241	45	9	0.6	104	47	6.2	0.5	104	377	0.8	0.0	44
60	43	1	0.2	49	408	5.7	0.6	85	330	0.8	1.1	96
218	38	0	1.3	156	266	5.6	0.9	71	277	0.8	0.3	60
36	35	5	0.5	98	411	5.2	0.1	39	342	0.7	0.2	66
373	30	0	0.7	131	414	4.8	0.9	208	242	0.7	0.9	191
1	29	2	0.9	120	37	3.1	0.5	43	251	0.7	0.3	63
223	31	7	0.6	164	11	4.7	0.7	98	62	0.5	0.7	96
58	27	9	0.1	45	407	3.0	0.3	86	193	0.7	0.2	54
262	30	9	0.7	118	426	4.5	0.1	44	384	0.6	0.4	98
213	30	0	0.6	128	416	3.9	0.2	44	447	0.6	0.1	49
163	35	5	0.6	104	222	3.2	0.7	180	200	0.4	0.1	53
67	24	5	0.2	44	155	4.8	0.9	43	66	0.5	0.3	82
371	23	3	0.7	156	16	2.3	0.2	44	2	0.4	0.3	79
111	22	7	0.5	87	248	2.4	0.7	159	237	0.4	0.2	61

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES DUSKY ROCKFISH

	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	
154	2982.2	0.9	77	269	4.0	0.9	53	118	0.9	0.7	77	115	194	0.9	1.0
246	1014.7	1.3	87	287	4.0	0.9	55	194	0.9	0.7	52	392	0.9	1.3	75
443	302.9	1.4	77	113	3.8	0.9	93	392	0.9	1.0	124	326	1.4	66	216
39	383.5	1.5	104	60	3.4	0.8	49	176	0.8	1.5	50	174	1.1	107	49
162	174.9	1.3	57	92	3.3	1.1	60	388	0.8	1.2	63	277	0.8	0.8	123
111	111.2	1.4	87	261	3.3	0.8	60	324	0.8	1.4	123	110.9	0.9	1.0	82
431	110.9	1.5	87	108	2.2	0.7	101	296	0.8	1.0	82	92.0	0.9	0.7	82
126	92.0	0.9	53	402	2.2	0.5	40	384	0.8	1.2	98	74.4	1.1	60	384
174	74.4	1.1	98	113	2.7	0.9	60	122	0.8	1.5	104	64.3	1.3	157	55
313	64.3	1.3	82	288	2.1	0.9	101	364	0.8	1.5	106	62.2	1.5	107	54
28	62.2	1.5	54	161	2.1	1.2	68	278	0.7	0.8	104	60.9	1.5	107	79
374	43.9	1.5	108	49	2.1	0.8	43	45	0.7	1.5	101	43.9	1.5	108	402
89	32.1	1.2	66	337	2.2	1.2	115	93	0.7	0.9	96	29.3	1.3	288	53
160	29.3	1.3	93	173	1.7	1.2	68	330	0.7	1.4	96	25.2	1.4	161	53
370	25.2	1.4	108	372	1.7	1.2	108	268	0.6	1.4	91	21.5	1.3	29	49
3	21.5	1.3	68	202	1.7	1.2	90	213	0.6	1.5	128	20.3	1.3	66	89
373	20.3	1.3	93	146	1.6	0.9	90	356	0.6	1.5	69	19.7	0.8	94	66
15	19.7	0.8	46	397	1.5	0.9	45	220	0.6	1.4	131	18.8	0.8	67	44
192	18.8	0.8	53	103	323	1.3	55	302	0.6	1.2	94	12.9	1.0	173	98
253	12.9	1.0	63	71	1.4	1.4	82	386	0.6	1.2	77	12.7	1.5	372	108
26	12.7	1.5	68	54	1.17	1.4	1.0	163	0.5	1.2	82	12.7	1.1	202	68
267	12.7	1.1	67	304	1.4	1.3	118	254	0.5	2.0	98	10.4	1.0	68	90
409	12.7	0.8	45	104	1.6	0.9	90	1.1	0.5	1.0	44	12.1	0.8	71	45
144	12.1	0.8	71	394	1.3	0.8	39	168	0.5	1.0	97	11.8	1.2	323	55
385	11.8	1.2	103	75	1.3	0.9	85	441	0.5	1.0	91	11.5	1.2	71	55
266	11.5	1.2	71	38	1.3	0.7	37	274	0.5	1.0	82	10.4	1.0	282	82
193	10.4	1.0	54	329	1.3	1.3	113	62	0.4	1.6	101	9.8	1.0	68	62
59	8.8	7.0	98	258	1.2	1.2	63	85	0.4	1.6	71	7.1	0.9	304	68
401	7.1	0.9	46	158	1.2	1.0	60	24	0.4	1.6	139	6.6	1.2	46	39
251	6.6	1.2	63	375	1.2	1.7	102	195	0.4	0.9	53	5.3	1.6	252	102
200	6.2	0.8	53	252	1.2	1.1	101	196	0.4	0.8	53	6.0	0.7	104	98
411	6.0	0.7	39	104	1.0	1.0	98	181	0.4	1.6	96	5.1	1.3	329	113
239	5.8	1.2	98	132	1.2	1.2	139	293	0.4	1.1	71	5.1	0.9	67	63
177	5.5	1.0	44	412	1.1	1.3	143	103	0.3	1.3	90	5.1	1.2	158	60
408	5.5	1.6	85	348	1.1	1.2	48	255	0.3	1.6	67	4.9	1.0	178	102
58	5.3	0.9	45	285	1.1	1.3	98	429	0.3	1.4	49	4.8	0.8	104	44
369	5.1	1.3	104	150	1.0	0.9	60	311	0.3	1.5	44	4.8	1.1	121	60
272	5.1	0.9	67	342	1.0	1.3	143	203	0.3	1.3	90	5.1	1.2	412	60
310	5.1	1.2	57	178	1.0	0.8	44	393	0.3	1.3	107	4.9	0.6	36	44
425	4.9	1.0	42	37	0.9	0.8	43	334	0.3	1.3	89	4.5	0.3	36	44
108	4.5	0.3	36	426	0.9	1.1	1.1	83	0.3	1.3	90	4.4	1.1	22	1.1
7	4.4	1.3	63	426	0.9	1.1	139	83	0.3	1.1	82	4.1	1.1	22	1.1
316	4.1	1.3	22												

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES NORTHERN ROCKFISH

	HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FPM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FPM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FPM)
246	1223	7	0.6	87	174	10.5	0.6	98	103	0.7
401	726	0	0.5	46	369	9.9	0.7	104	402	0.7
162	612	3	0.6	57	59	9.3	0.5	98	173	0.7
126	496	7	0.6	53	348	9.3	0.4	48	408	0.4
374	400	6	0.8	79	16	8.7	0.5	44	122	0.6
443	400	6	0.4	77	161	8.5	0.5	68	326	0.6
267	273	1	0.6	67	37	8.0	0.8	43	247	0.6
160	263	8	0.5	66	268	7.5	0.6	51	273	0.6
253	235	8	0.6	63	441	7.5	0.4	51	66	0.4
192	233	3	0.6	53	287	7.0	0.6	55	11	0.5
357	189	3	0.6	52	288	6.2	0.6	101	44	0.5
416	159	7	0.6	44	2	5.4	0.6	79	1	0.5
92	144	4	0.6	107	111	5.3	1.0	87	385	0.5
36	138	1	1.1	98	194	5.0	0.6	52	447	0.5
154	133	8	0.7	77	454	4.8	0.1	38	216	0.4
28	127	2	0.9	54	376	4.8	0.2	48	150	0.4
200	108	3	0.5	53	197	4.3	0.5	51	446	0.4
15	107	0	0.5	46	266	4.1	0.7	71	203	0.4
409	100	4	0.4	45	407	3.6	1.0	86	64	0.4
251	96	8	0.6	63	444	3.4	0.2	41	403	0.3
370	90	7	0.8	108	237	2.8	0.5	61	62	0.3
58	90	4	0.4	45	7	2.3	0.5	63	83	0.3
451	87	6	0.7	87	278	2.3	0.5	104	72	0.3
373	79	6	0.8	93	29	1.8	0.9	52	106	0.3
60	65	6	0.3	49	102	1.8	0.5	82	217	0.3
193	63	5	0.6	54	398	1.6	0.5	85	172	0.3
269	60	4	0.6	53	198	1.5	0.7	55	360	0.2
67	58	4	0.3	44	94	1.5	0.5	139	429	0.2
107	49	6	0.4	46	410	1.5	0.6	41	201	0.2
26	44	8	0.7	68	24	1.4	2.8	139	339	0.2
3	43	0	0.6	68	45	1.3	0.5	101	61	0.2
394	33	3	0.2	39	254	1.3	0.5	68	124	0.2
411	32	6	0.3	39	272	1.2	0.6	67	225	0.2
426	29	1	0.7	44	333	1.2	0.3	38	51	0.2
425	28	7	0.7	42	21	1.2	0.7	104	359	0.2
196	25	3	0.5	53	258	1.1	0.7	63	12	0.2
364	21	3	0.8	106	343	1.1	0.7	87	39	0.2
108	20	5	0.3	36	342	1.1	0.5	66	223	0.2
49	20	2	0.3	43	372	1.1	0.6	108	54	0.1
127	19	7	0.5	42	213	1.0	0.6	128	220	0.1
5	17	8	0.8	93	14	1.0	0.5	85	352	0.1
252	17	7	0.6	161	63	1.0	0.8	82	123	0.1
93	14	5	0.6	96	362	1.0	0.6	96	202	0.1
38	13	8	0.1	37	384	0.9	0.9	98	340	0.1
277	12	0	0.5	60	388	0.8	0.5	63	331	0.1
397	11	7	0.4	45	105	0.8	0.6	98	9	0.1
199	11	2	0.4	55	275	0.8	0.4	71	265	0.1
195	10	6	0.5	53	95	0.8	0.3	101	132	0.1

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWNS- BASED ON 15 M NET WIDTH

SPECIES HARLEQUIN ROCKFISH

H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)
162	590. 8	0. 2	57	262	0. 1	0. 5
269	484. 7	0. 1	53	441	0. 1	0. 1
37	178. 2	0. 5	104	254	0. 1	0. 4
443	95. 4	0. 5	77	36	0. 1	0. 4
266	83. 0	0. 2	71	416	0. 1	0. 3
246	77. 1	0. 4	87	287	0. 1	0. 3
161	29. 9	0. 3	68	265	0. 1	0. 3
160	20. 5	0. 4	66	107	0. 0	0. 2
261	14. 9	0. 3	101	425	0. 0	0. 1
58	12. 8	0. 2	45	426	0. 0	0. 2
401	7. 3	0. 2	46	108	0. 0	0. 1
362	4. 4	0. 3	96	411	0. 0	0. 0
451	4. 4	0. 5	87	67	0. 0	0. 1
258	3. 0	0. 3	63			
127	2. 8	0. 1	42			
251	2. 8	0. 3	63			
277	2. 4	0. 2	60			
253	2. 2	0. 2	63			
275	2. 0	0. 2	71			
408	1. 5	0. 5	85			
263	1. 0	0. 3	98			
364	1. 0	0. 4	106			
92	0. 9	0. 4	107			
5	0. 5	0. 5	93			
174	0. 5	0. 4	98			
200	0. 5	0. 2	53			
89	0. 4	0. 4	108			
267	0. 4	0. 2	67			
239	0. 4	0. 2	98			
195	0. 4	0. 2	53			
264	0. 3	0. 2	93			
409	0. 3	0. 0	45			
374	0. 3	0. 5	79			
173	0. 3	0. 4	98			
102	0. 2	0. 3	82			
397	0. 2	0. 2	45			
273	0. 1	0. 3	85			
37	0. 1	0. 4	43			
333	0. 1	0. 1	38			
93	0. 1	0. 3	96			
259	0. 1	0. 3	104			
357	0. 1	0. 2	52			
122	0. 1	0. 5	104			
394	0. 1	0. 1	39			
268	0. 1	0. 1	51			
278	0. 1	0. 2	104			
237	0. 1	0. 2	61			
12b	0. 1	0. 4	53			

SPECIES HARLEQUIN ROCKFISH

G E A R D E P T H (F M)	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)
1. 18	262	0. 1	0. 5	1. 18	262	0. 1	0. 5
51	441	0. 1	0. 1	51	441	0. 1	0. 1
68	254	0. 1	0. 4	68	254	0. 1	0. 4
98	36	0. 1	0. 4	98	36	0. 1	0. 4
44	416	0. 1	0. 3	44	416	0. 1	0. 3
55	287	0. 1	0. 3	55	287	0. 1	0. 3
126	265	0. 1	0. 3	126	265	0. 1	0. 3
46	107	0. 0	0. 2	46	107	0. 0	0. 2
42	425	0. 0	0. 1	42	425	0. 0	0. 1
44	426	0. 0	0. 2	44	426	0. 0	0. 2
36	108	0. 0	0. 1	36	108	0. 0	0. 1
39	411	0. 0	0. 0	39	411	0. 0	0. 0
44	67	0. 0	0. 1	44	67	0. 0	0. 1

KG PER NAUTICAL MILE FOR ALL
SURVEY TONS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TONS- BASED ON 15 M NET WIDTH
TOWS- BASED ON 15 M NET WIDTH

SPECIES SHORTTRAKER ROCKFISH

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
99	944.4	7.2	191	111	1.6	2.7	87
228	579.9	4.8	191	412	1.5	7.0	145
164	168.0	4.0	197	236	1.1	2.4	107
242	147.8	4.0	191	233	1.0	0.8	107
248	142.3	5.7	159	147	0.9	3.7	90
247	130.0	2.2	355	395	0.9	3.9	71
361	67.3	4.2	180	440	0.9	3.9	82
B	54.7	2.9	219	393	0.5	2.0	89
168	46.8	3.1	191	53	0.3	1.4	159
245	45.2	3.4	189	439	0.3	1.6	219
414	39.9	3.7	208	47	0.2	0.9	104
50	38.5	3.0	200	265	0.2	1.1	126
222	27.0	4.0	180	264	0.2	0.5	93
363	21.8	3.3	189	262	0.2	0.9	118
221	21.6	4.1	186	274	0.1	0.5	100
223	21.4	4.4	164				
110	20.1	4.2	200				
56	19.8	4.3	205				
130	17.7	1.9	191				
224	13.7	3.9	175				
226	11.6	4.4	175				
225	11.5	3.5	175				
23	10.7	1.6	246				
261	9.0	1.1	101				
132	8.9	2.2	159				
106	8.6	4.9	156				
101	7.3	3.1	276				
109	7.2	4.9	279				
227	6.4	3.5	164				
179	5.8	2.8	163				
218	5.5	3.6	156				
10	4.7	4.2	153				
381	4.1	2.3	219				
230	4.1	0.7	103				
231	3.9	0.6	118				
96	3.8	4.0	104				
126	2.5	3.8	273				
364	3.3	4.3	106				
4	3.2	0.7	301				
299	3.1	4.8	90				
232	2.8	2.8	284				
333	1.9	7.6	82				
123	1.7	6.0	38				
4.6	1.7	1.4	284				

KG FER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES SIDESTRIPE SHRIMP

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	SPECIES SIDESTRIPE SHRIMP	GEAR DEPTH (FM)
308	0.5	0.0	148	235	0.0	0.1		59
230	0.3	0.0	103	172	0.0	0.1		153
307	0.3	0.0	150	57	0.0	0.1		104
328	0.2	0.0	134	56	0.0	0.0		205
305	0.2	0.1	110	337	0.0	0.1		115
65	0.2	0.0	112	414	0.0	0.1		208
231	0.2	0.0	118	390	0.0	0.1		77
327	0.2	0.0	98	387	0.0	0.0		104
64	0.1	0.0	110	166	0.0	0.0		139
232	0.1	0.0	82	220	0.0	0.1		131
110	0.1	0.0	200	412	0.0	0.1		145
261	0.1	0.0	101	130	0.0	0.1		191
61	0.1	0.0	107	229	0.0	0.0		145
106	0.1	0.1	156	217	0.0	0.1		120
260	0.1	0.1	116	297	0.0	0.1		98
301	0.1	0.0	97	437	0.0	0.1		141
309	0.1	0.1	115	132	0.0	0.0		159
271	0.1	0.0	109					
264	0.1	0.0	93					
48	0.0	0.0	134					
233	0.0	0.0	107					
66	0.0	0.0	82					
288	0.0	0.0	101					
263	0.0	0.1	98					
179	0.0	0.0	163					
215	0.0	0.0	139					
216	0.0	0.1	124					
277	0.0	0.1	60					
299	0.0	0.1	90					
391	0.0	0.0	95					
276	0.0	0.0	98					
265	0.0	0.0	126					
221	0.0	0.1	186					
116	0.0	0.1	85					
145	0.0	0.0	61					
51	0.0	0.1	90					
241	0.0	0.1	104					
167	0.0	0.1	104					
203	0.0	0.0	107					
84	0.0	0.1	B2					
168	0.0	0.1	97					
372	0.0	0.1	108					
330	0.0	0.1	96					

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES BROAD SNOW CRAB (=TANNER CRAB)

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	SPECIES	BROAD SNOW CRAB (=TANNER CRAB)	GEAR DEPTH (FM)	AV WGT (KG)
190	11.0	0.9	80	300	0.1			96	
191	5.9	0.6	82	391	0.1			95	
210	4.5	0.6	36	321	0.1			29	
187	4.3	0.7	83	71	0.1			82	
211	4.0	0.5	56	115	0.1			93	
209	3.8	0.4	55	394	0.1			39	
181	3.6	0.9	78	67	0.1			44	
180	3.2	1.1	80	82	0.1			85	
119	2.7	0.7	78	332	0.1			93	
188	2.5	0.5	83	392	0.1			75	
183	1.7	0.7	82	351	0.1			85	
146	1.1	0.7	90	317	0.1			27	
184	1.1	0.5	.83	396	0.0			34	
182	1.0	1.0	80	306	0.0			142	
207	1.0	0.7	52	393	0.0			89	
212	0.9	0.7	56	63	0.0			82	
114	0.9	0.9	82	65	0.0			112	
206	0.7	0.8	55	278	0.0			104	
147	0.7	0.9	90	87	0.0			49	
186	0.7	0.7	79	116	0.0			85	
155	0.6	0.8	104	76	0.0			82	
189	0.6	0.3	79	77	0.0			60	
232	0.6	0.6	82	72	0.0			68	
185	0.5	0.7	78	406	0.0			52	
145	0.5	0.9	96	331	0.0			60	
120	0.5	0.3	85	303	0.0			78	
75	0.4	0.2	85	74	0.0			77	
193	0.4	0.2	54	256	0.0			85	
301	0.4	0.3	97	390	0.0			77	
192	0.3	0.3	53	387	0.0			104	
194	0.3	0.2	52	309	0.0			115	
69	0.3	1.2	85	389	0.0			75	
70	0.3	0.5	93	352	0.0			66	
68	0.2	0.5	82	363	0.0			189	
238	0.2	1.0	71						
302	0.2	0.4	94						
83	0.2	0.7	82						
149	0.2	0.3	82						
262	0.2	0.4	118						
86	0.1	0.5	60						
81	0.1	0.2	71						
342	0.1	0.3	66						
345	0.1	0.2	66						
80	0.1	0.4	87						
329	0.1	0.5	113						
307	0.1	0.4	150						
395	0.1	0.4	71						
137	0.1	0.4	55						

SECTION 3

Fishing log for the Lets Go

Station charts of haul numbers plotted adjacent to their
respective geographical locations

Note: Hauls 99-149 were completed in the eastern Gulf of Alaska
by the Auke Bay Laboratory.

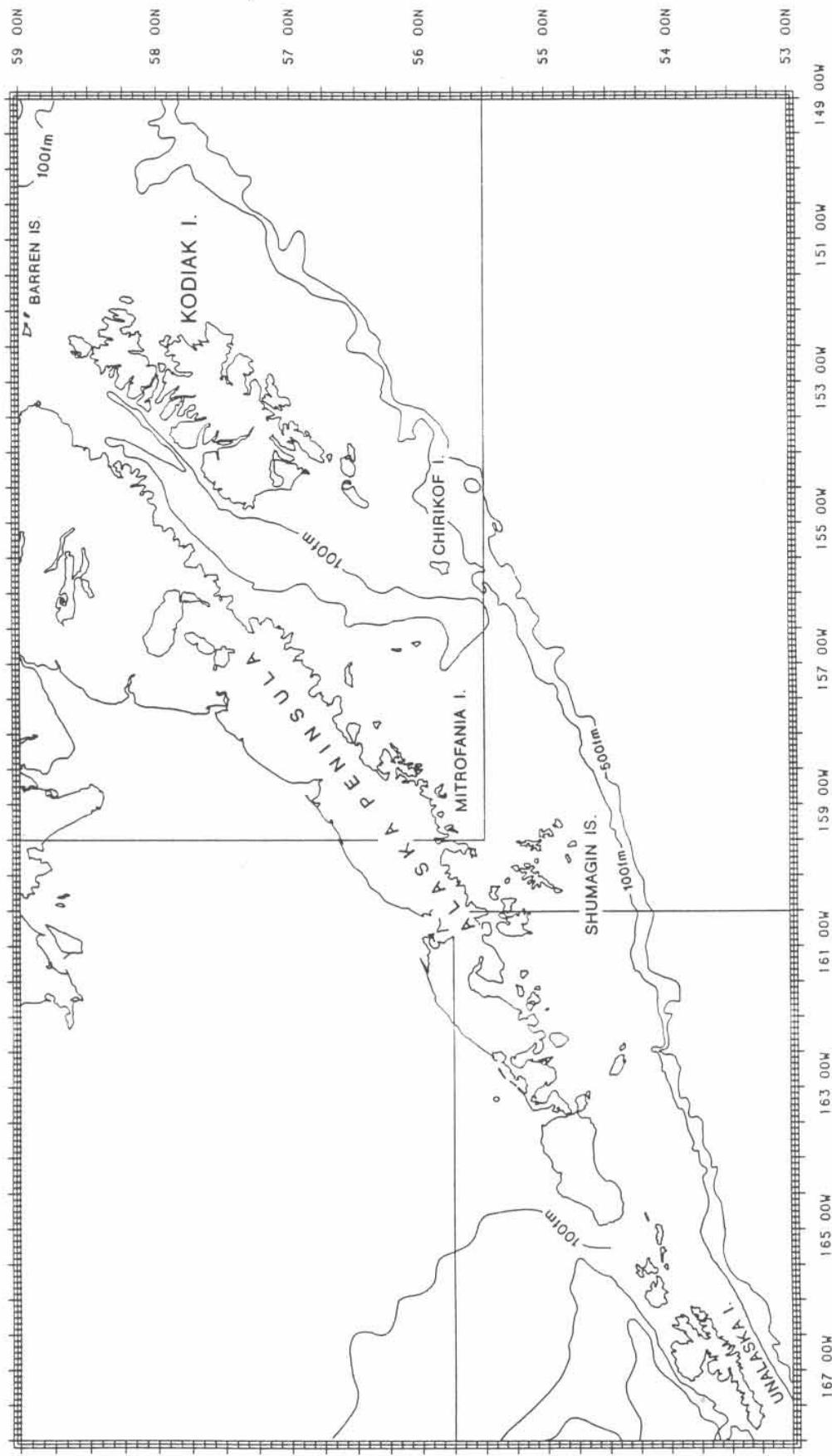


Figure 37.—Areas surveyed from May 31-July 8, 1987 by the U.S. chartered trawler Lets Go (1-98) and cited in Figures 38-39 (not shown, hauls 99-149 completed in the eastern Gulf of Alaska by the Auke Bay Laboratory.

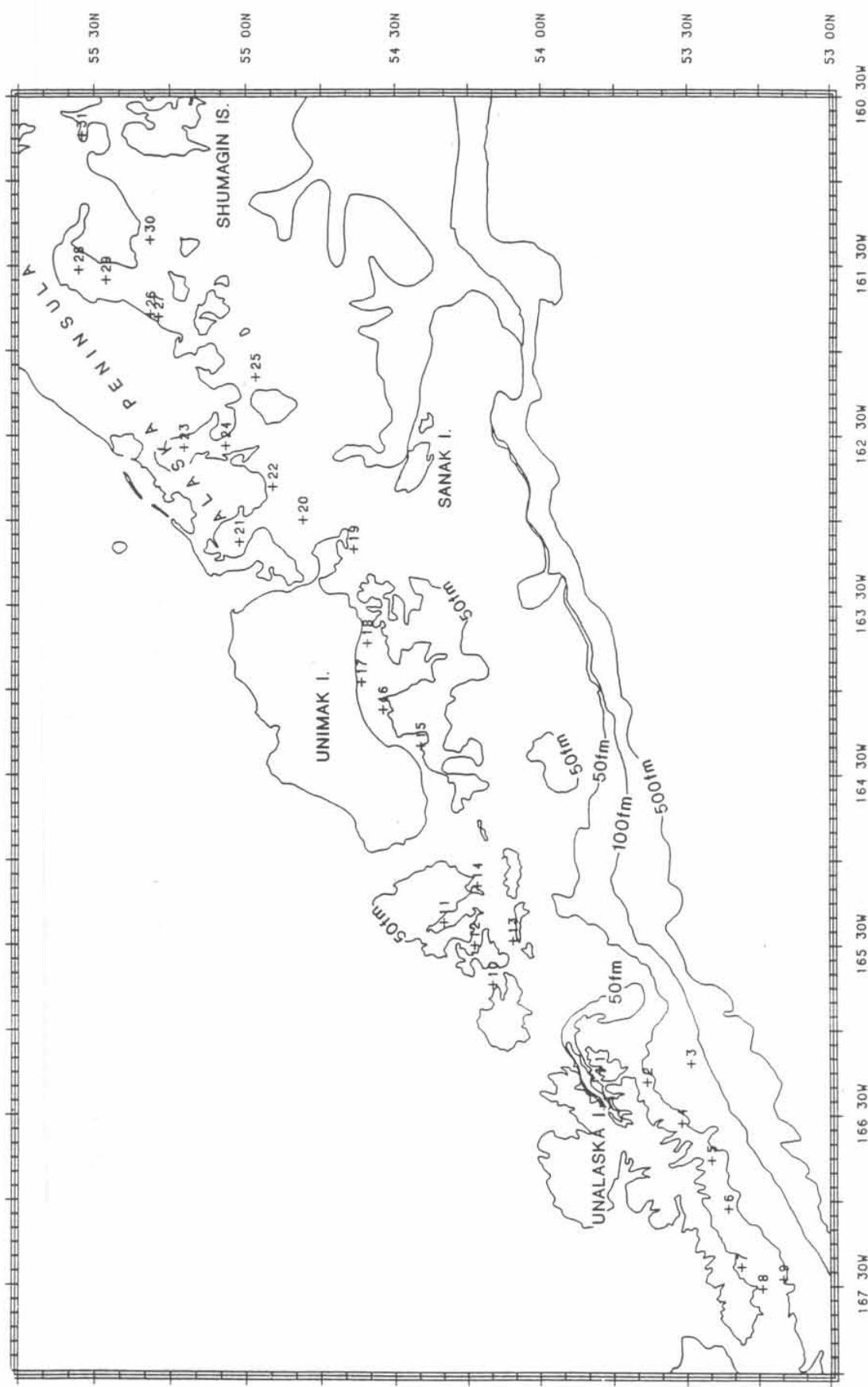


Figure 38.--Stations surveyed by the U.S. chartered trawler Lets Go in the Unalaska Island and Shumagin Islands areas (hauls 1-31).

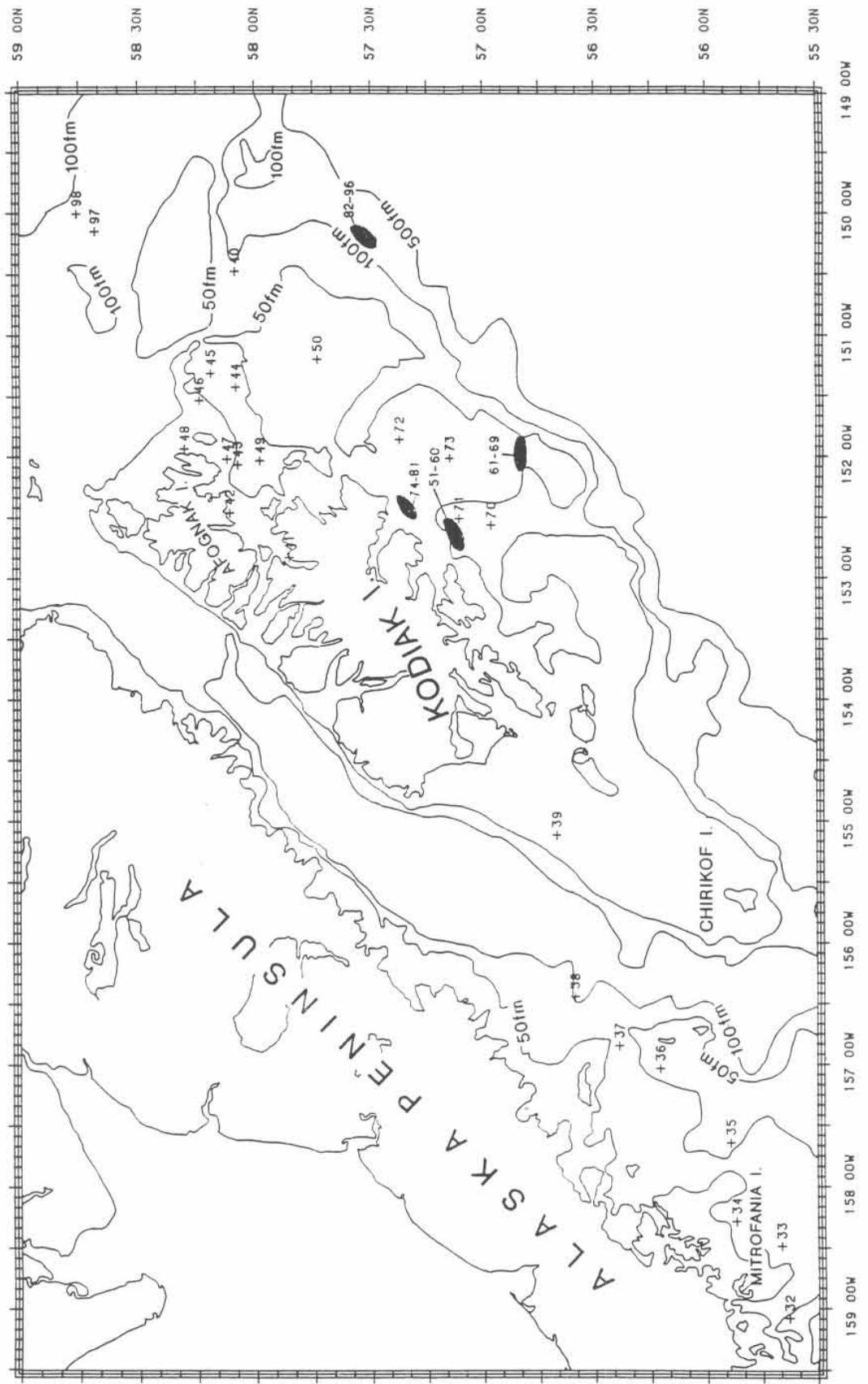


Figure 39.—Stations surveyed by the U.S. chartered trawler Lets Go in the Mitrofania Island, Kodiak Island and Barren Islands areas (hauls 32-98).

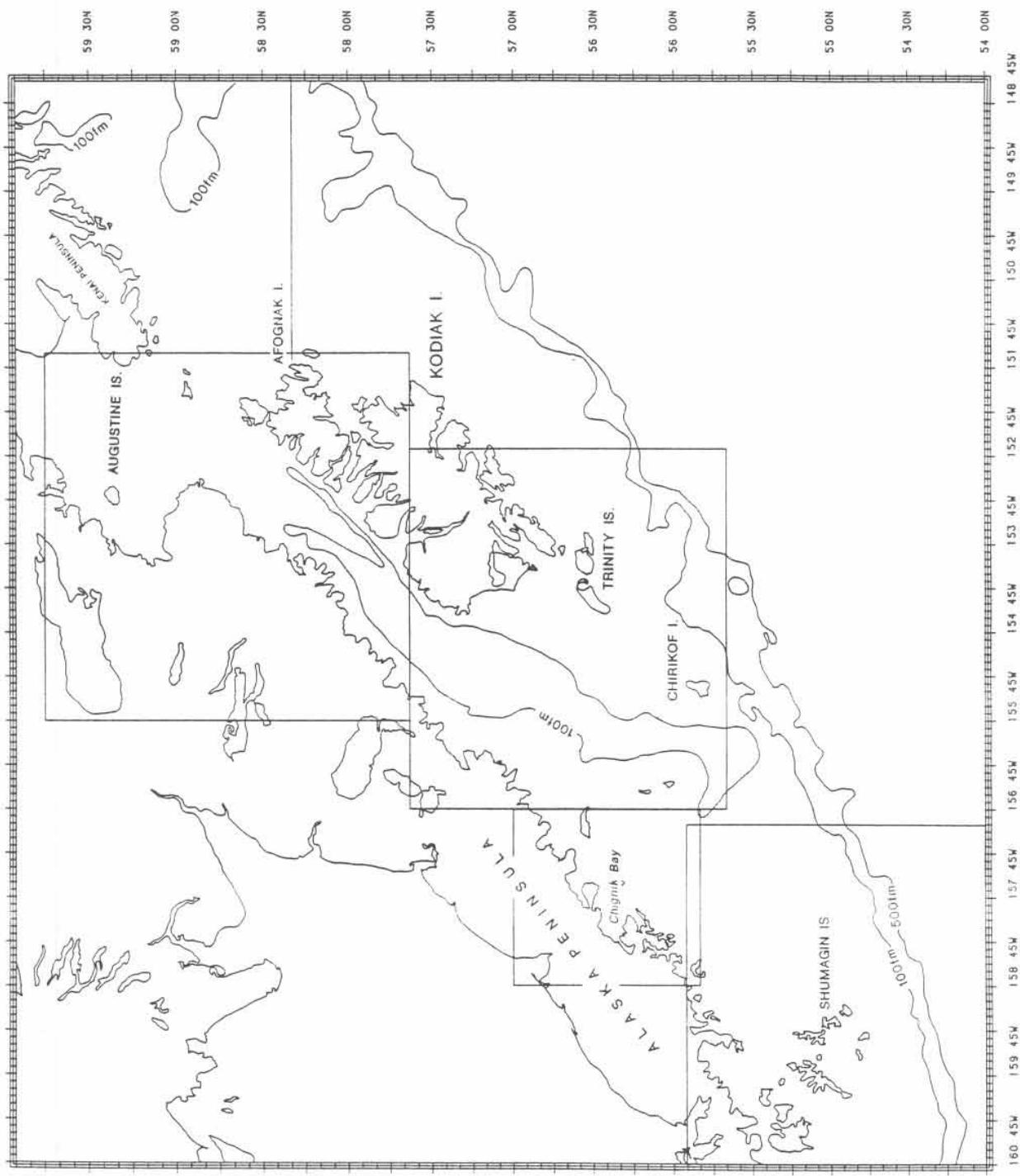


Figure 40.--Areas surveyed from July 31-September 6, 1987 by the U.S. chartered trawler Lets Go (hauls 150-280) and cited in Figures 41-45.

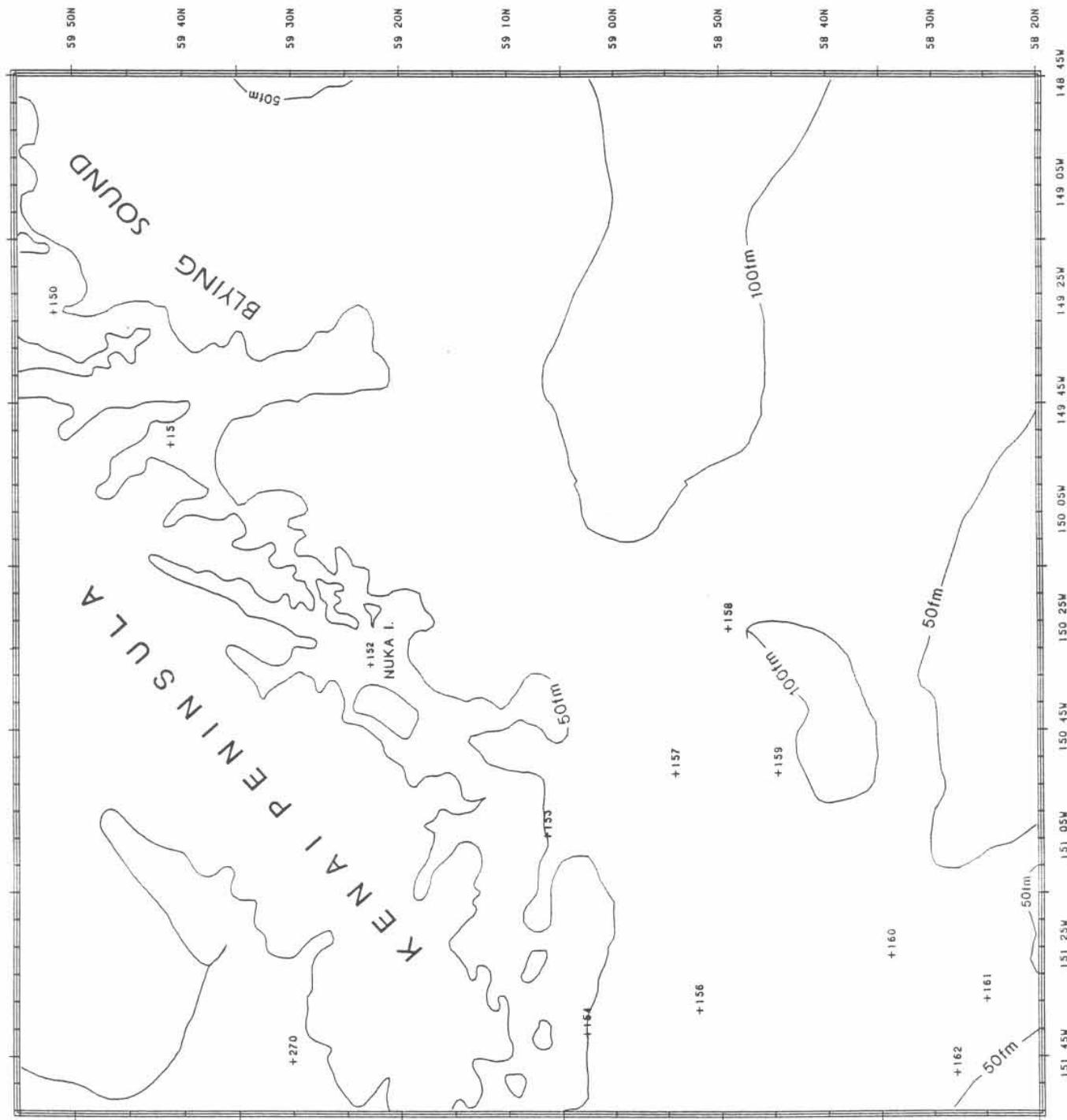


Figure 41.--Stations surveyed by the U.S. chartered trawler Lets Go in the Kenai Peninsula area (hauls 150-154, 156-1'2 and 270'.

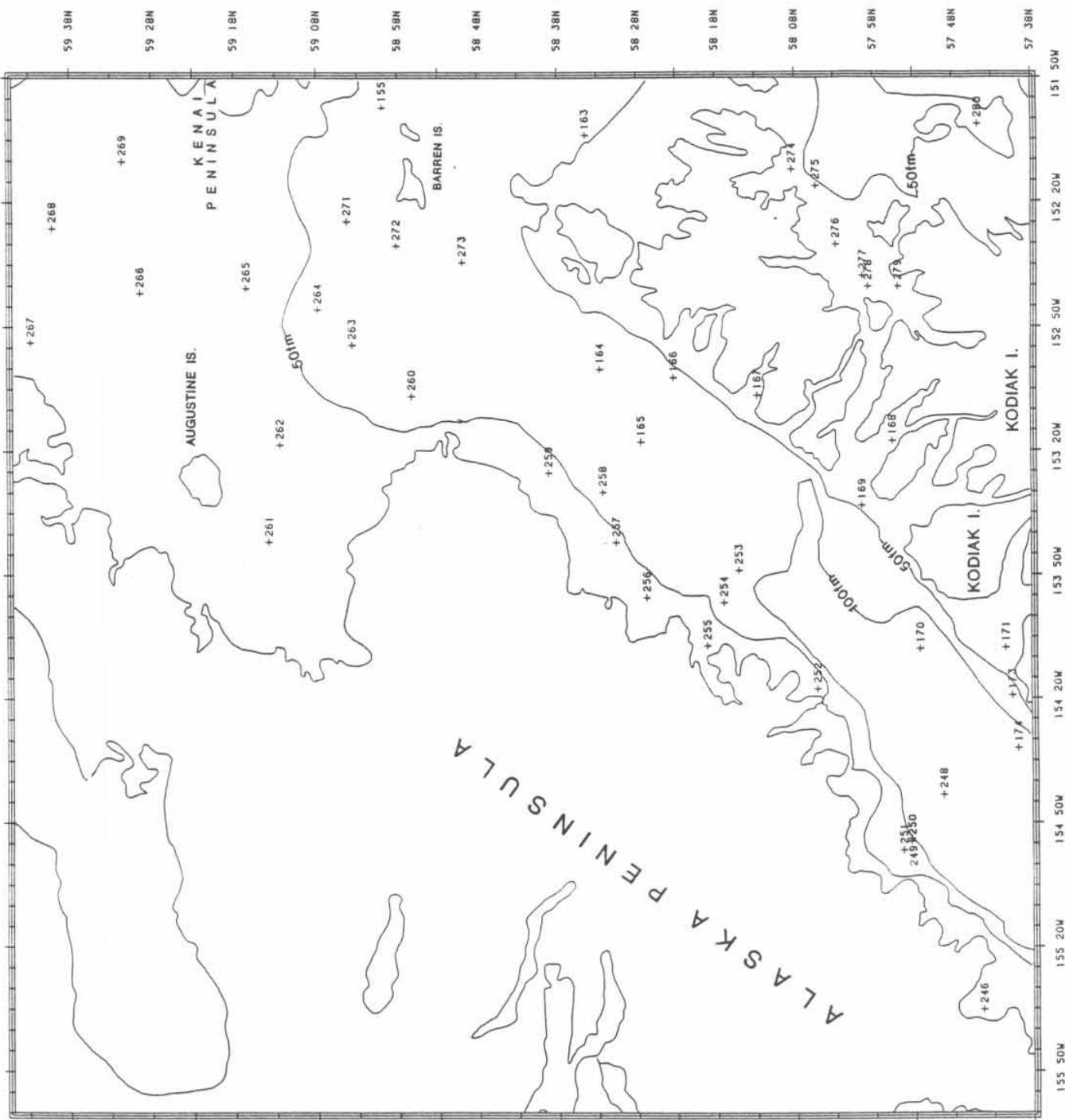


Figure 42.—Stations surveyed by the U.S. chartered trawler Letus Go in the Kodiak Island and Augustine Island areas (hauls 155, 163-171, 173, 174, 246, 248-269 and 271-280).

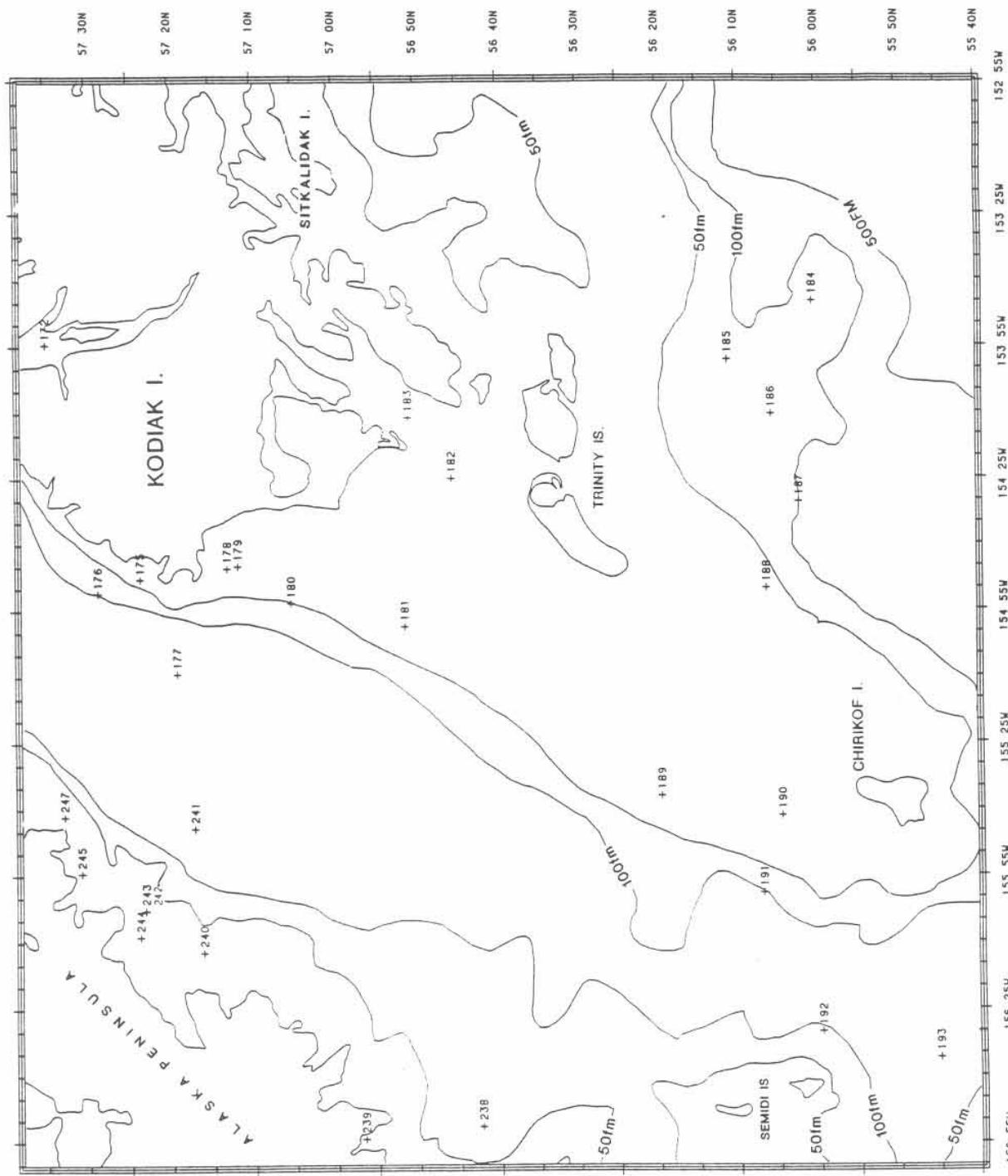


Figure 43.—Stations surveyed by the U.S. chartered trawler Go in the Chirikof Island and Kodiak Island areas (hauls 172, 175-193, 238-245 and 247).

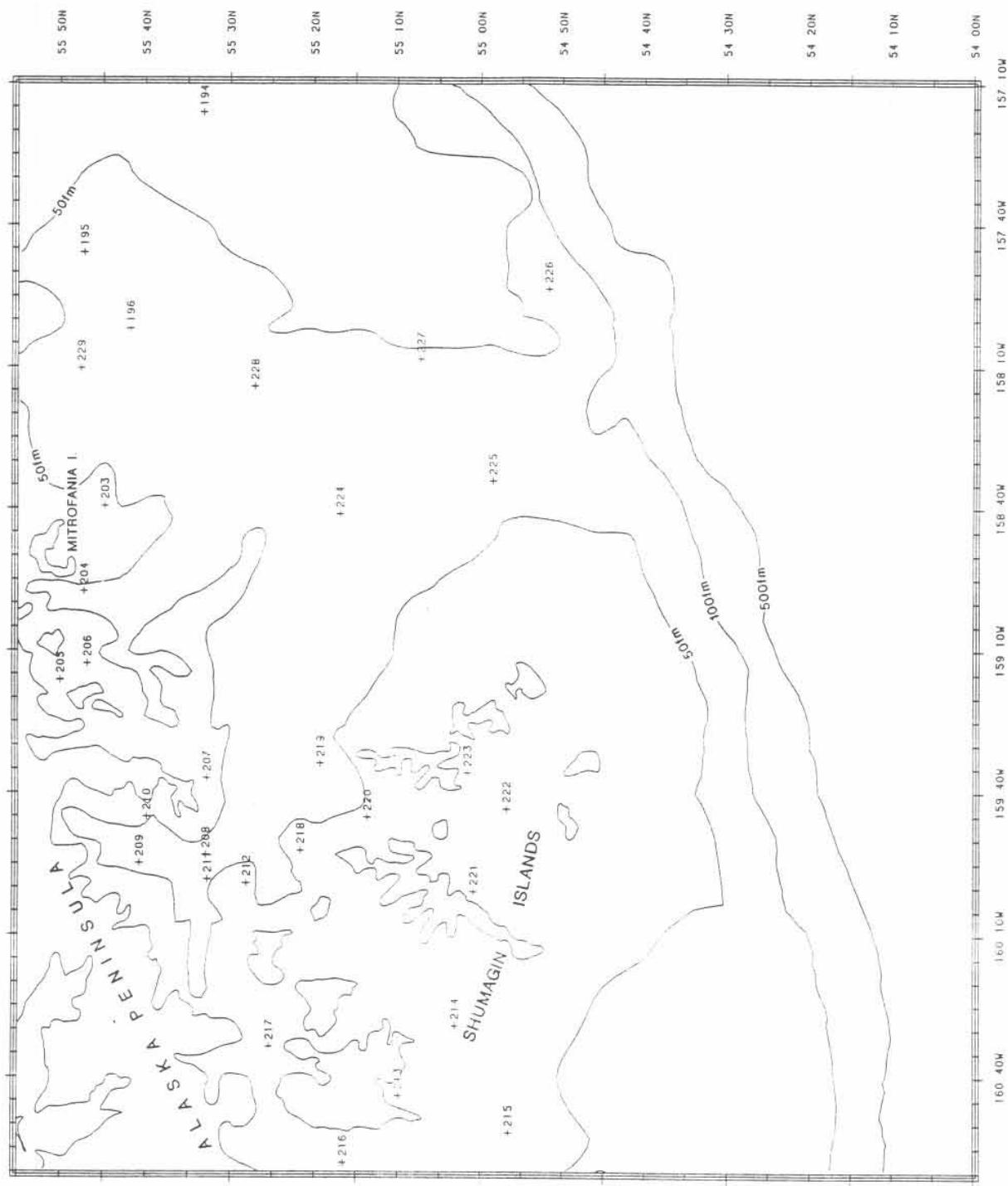


Figure 44.--Stations surveyed by the U.S. chartered trawler Lets Go in the Shumagin Islands area (hauls 194-196 and 203-229).

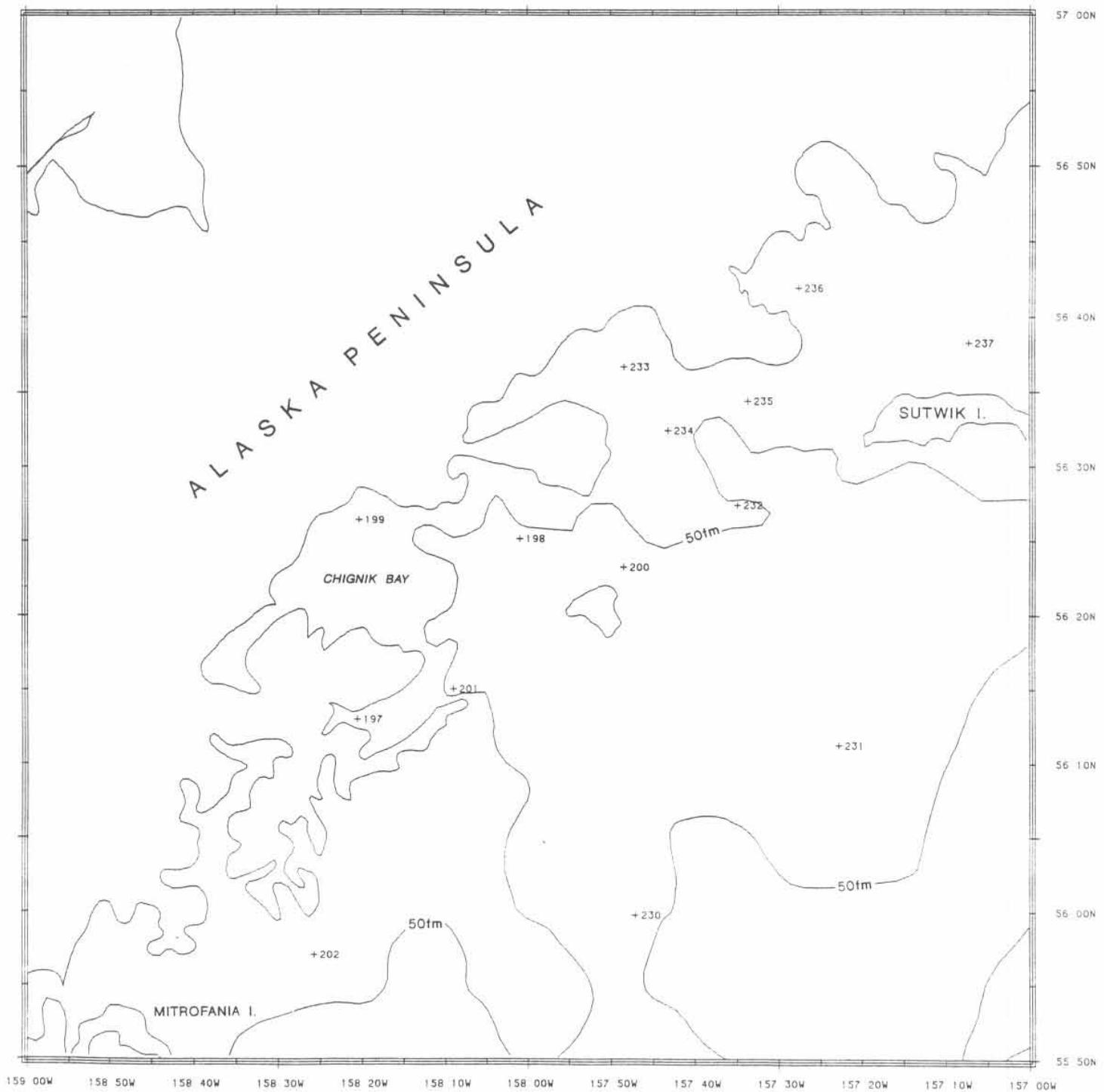


Figure 45.--Stations surveyed by the U.S. chartered trawler Lets Go in the Chignik Bay area (hauls 197-202 and 230-237).

Section 3 (continued)

Fishing log for the Lets Go

Chronological listings of each attempted haul

- Each haul entry includes the latitude, longitude, loran readings, bottom depth in fathoms, duration of tow, distance fished in nautical miles and the catch in kilograms for each major species.

- Species catches are unadjusted and expressed in kilograms.

Note: Hauls 99-149 were completed in the eastern Gulf of Alaska by the Auke Bay Laboratory.

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	1	2	3	4	5	6	7	8	9	10	11
LATITUDE START	5/31/87	5/31/87	5/31/87	5/31/87	5/31/87	5/31/87	5/31/87	5/31/87	5/31/87	5/31/87	5/31/87	5/31/87
LONGITUDE START	53 47.9	53 38.2	53 29.2	53 31.1	53 24.9	53 21.4	53 18.6	53 14.3	53 9.9	54 9.9	54 20.0	54 20.0
LONGITUDE END	166 13.8	166 18.2	166 11.6	166 32.7	166 45.6	167 2.7	167 30.9	167 23.3	167 27.6	165 43.7	165 21.7	165 21.7
LONGITUDE END	53 49.2	53 38.6	53 29.2	53 32.0	53 24.3	53 19.4	53 18.1	53 14.2	53 8.3	54 11.2	54 20.8	54 20.8
LORAN START	166 14.6	166 15.9	166 9.1	166 30.9	166 43.2	167 3.0	167 25.7	167 33.8	167 27.7	165 44.9	165 24.2	165 24.2
LORAN START	17947.20	17892.80	17861.30	17831.50	17722.00	17621.60	17621.60	17621.60	17621.60	18095.90	18169.00	18169.00
LORAN START	48289.20	48240.00	48348.70	48348.70	48470.20	48558.40	48581.90	48559.90	48559.90	48173.30	48068.60	48068.60
LORAN END	17952.00	17899.00	17866.00	17839.40	17773.80	17711.60	17653.70	17614.50	17599.80	18100.50	18169.40	18169.40
LORAN END	48296.30	48280.70	48227.50	48341.70	48377.80	48466.80	48568.10	48594.50	48552.90	48182.10	48084.10	48084.10
GEAR DEPTH	37	45	75	47	46	48	28	35	52	44	44	44
DURATION IN HOURS	0.40	0.30	0.50	0.30	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.40	1.46	1.50	1.42	1.56	1.96	1.55	1.72	1.40	1.51	1.67	1.67
PERFORMANCE / GEAR	0 / 170	0 / 170	0 / 170	7 / 170	7 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170
POLLOCK	4.1	0.9	17.2	104.2	0.0	429.8	88.2	186.9	324.8	43.5	13.2	324.1
PACIFIC COD	10.7	171.7	88.0	54.0	0.0	89.6	1.6	34.0	16.8	13.6	13.6	0.0
SABLEFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL	1.6	149.2	279.4	36.1	0.0	30.2	2.0	0.7	9.5	3.8	1.6	38.3
HALIBUT	68.9	45.3	319.1	18.5	0.0	44.9	72.8	14.9	23.0	1.3	0.0	0.0
FLATHEAD SOLE	5.2	0.1	10.4	0.0	0.0	0.0	0.0	0.0	0.0	15.9	0.0	0.0
ENGLISH SOLE	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0
YELLOWFIN SOLE	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	2.9	38.8	23.1	15.9	0.0	161.3	106.4	30.2	27.2	6.1	6.8	6.8
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	6.8	0.5	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	1.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	7.7	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	5.0	0.0	0.0	0.9	0.0	0.0	7.7	0.0	5.9	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	3.2	0.5	1.4	1.4	0.0	4.3	4.1	1.0	7.3	2.3	131.1	0.0
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	12	13	14	15	16	17	18	19	20	21	22
LATITUDE START	6/ 5/87	6/ 5/87	6/ 5/87	6/ 5/87	6/ 6/87	6/ 6/87	6/ 6/87	6/ 6/87	6/ 6/87	6/ 6/87	6/ 6/87	6/ 6/87
LONGITUDE START	54 13 6	54 5 7	54 13 1	54 24 8	54 32 5	54 35 6	54 38 4	54 48 6	55 1 3	54 54 6	54 54 6	54 54 6
LATITUDE END	165 29 8	165 28 3	165 8 8	164 19 4	164 6 6	163 56 9	163 43 1	163 10 0	162 59 7	163 7 4	162 47 9	162 47 9
LONGITUDE END	54 13 5	54 6 5	54 12 6	54 23 2	54 31 5	54 36 6	54 35 9	54 38 4	54 47 0	55 0 6	54 55 3	54 55 3
LORAN START	18131.00	18097.70	18154.30	18253.70	18293.70	18317.30	18323.50	18356.10	18395.70	18431.40	18420.90	18420.90
LORAN END	48103.40	48081.30	47985.40	47717.50	47650.30	47596.50	47512.80	47314.30	47256.30	47309.90	47185.60	47185.60
GEAR DEPTH	165 27.0	165 26 2	165 6 5	164 18 3	164 4 8	163 54 3	163 45 4	163 7 3	163 0 4	163 6 3	162 45 3	162 45 3
DURATION IN HOURS	0.50	0.50	0.45	0.50	0.50	0.50	0.50	0.50	0.50	0.49	0.30	0.30
DISTANCE FISHED	1.66	1.47	1.46	1.74	1.48	1.52	1.33	1.58	1.66	1.00	1.62	1.62
PERFORMANCE / GEAR	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170
POLLOCK	0 5	0 0	7 9	0 1	1 8	3 2	258 1	0 2	3 0	408 2	0 0	0 0
PACIFIC COD	105 6	0 0	0 1	87 1	20 0	26 1	163 3	26 8	3 0	161 3	0 0	0 0
SABLEFISH	0 0	0 0	0 0	0 0	0 0	0 0	0 9	0 0	0 0	0 0	0 0	0 0
ARROWTOOTH FL.	7 1	0 0	6 6	30 4	12 2	0 0	151 0	6 4	0 0	0 5	0 0	0 0
HALIBUT	13 7	1 6	45 6	71 6	11 6	56 2	49 7	9 3	23 4	42 8	16 2	16 2
FLATHEAD SOLE	0 1	0 0	0 0	3 2	1 4	0 0	78 5	0 7	0 0	161 3	0 0	0 0
ENGLISH SOLE	0 0	0 0	0 0	0 0	0 0	0 0	30 8	0 0	0 0	0 0	0 0	0 0
DOVER SOLE	0 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
REX SOLE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
YELLOWFIN SOLE	0 0	0 0	0 0	0 0	0 0	0 0	101 2	3 6	0 5	445 2	0 0	0 0
STARRY FLounder	0 0	0 0	0 0	0 0	0 0	0 0	111 1	0 0	14 5	0 0	16 8	78 0
ROCK SOLE	632 8	0 7	34 5	164 2	99 3	27 0	227 2	147 9	122 0	2 5	30 8	30 8
BUTTER SOLE	0 0	0 0	0 0	0 0	0 0	0 0	18 1	128 4	6 8	0 0	0 0	0 0
ALASKA PLAICE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	9 1	0 0	20 1	0 0	0 0
PAC OC PERCH	0 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ROUGH EYE RKFH	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
THORNYHEADS	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
NORTHERN RKFH	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
DUSKY RCKFISH	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SHORTRAKER RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
HARLEQUIN RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
RED STRIPE RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SHARP CHIN RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ATKA MACKEREL	0 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
GRENAIDIERS	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SCULPINS	46 8	0 7	5 7	3 2	0 5	1 4	21 3	0 5	38 2	24 0	0 7	0 7
SKATES	0 0	0 0	0 0	0 0	0 0	0 0	16 4	7 3	0 0	0 0	0 0	0 0
SPINY DOGFISH	0 0	0 0	0 0	0 0	0 0	0 0	15 9	0 0	1 8	0 0	0 0	0 0
SALMON SHARK	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SLEEPER SHARK	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
TANNER CRAB	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
KING CRAB	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	10 1	0 0
DUNGENESS CRAB	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
PINK SHRIMP	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SIDE STRIPE SHRIMP	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SCALLOP	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

Haul #	Month/Day/Year	24	25	26	27	28	29	30	31	32
MONTH/DAY/YEAR	6/ 9/87	6/ 9/87	6/ 9/87	6/ 9/87	6/ 9/87	6/ 10/87	6/ 10/87	6/ 12/87	6/ 13/87	6/ 13/87
LATITUDE START	55 12 2	55 4 0	54 0	53 58.0	53 18.8	53 17.2	53 27.7	53 18.9	53 38.1	53 39.9
LONGITUDE START	162 33 9	162 33 3	162 9.1	161 46.8	161 47.8	161 31.2	161 34.8	161 20.8	160 43.6	159 4.4
LATITUDE END	55 11 0	55 2 4	54 57.5	53 17.1	55 19.0	55 31.4	53 26.1	53 18.9	53 36.3	55 40.3
LONGITUDE END	162 32 2	162 32 3	162 7.5	161 47.9	161 46.6	161 32.6	161 37.3	161 17.9	160 40.7	158 25.8
LORAN START	18478.90	18455.80	18449.50	18513.50	18509.20	18532.30	18538.80	18521.90	33795.30	33460.60
LORAN START	47102.70	47097.20	46944.80	46803.20	46809.80	46700.80	46725.00	46637.10	46393.60	45751.60
LORAN END	18476.10	18450.90	18448.80	18508.70	18514.00	18548.00	18534.20	18522.80	33791.10	33452.60
LORAN END	47091.30	47098.40	46934.90	46810.60	46802.20	46709.80	46741.60	46616.50	45375.40	45302.60
GEAR DEPTH	37	17	45	14	14	18	45	30	18	45
DURATION IN HOURS	0.50	0.50	0.30	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.61	1.66	1.04	1.87	1.88	1.87	2.18	1.85	1.76	1.77
PERFORMANCE / GEAR	0 / 170	0 / 170	5 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170
POLLOCK	56.2	0.0	125.2	0.0	0.0	22.5	154.2	151.0	113.6	0.0
PACIFIC COD	103.4	3.2	8.6	0.0	0.0	10.0	23.8	41.7	52.6	95.7
SABLEFISH	0.0	0.0	0.0	0.0	0.0	0.1	0.1	4.5	0.5	0.0
ARROWTOOTH FL.	0.2	1.4	10.4	0.0	0.0	1.1	24.0	11.3	17.0	0.0
HALIBUT	118.0	118.3	129.0	0.0	106.4	10.2	80.2	20.1	81.0	10.8
FLATHEAD SOLE	37.9	0.0	48.1	0.0	0.0	3.6	45.8	3.2	128.6	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
DOVER SOLE	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	1.1
YELLOWFIN SOLE	318.0	58.5	271.7	0.0	136.1	205.2	324.3	74.4	611.0	0.0
STARRY FLOUNDER	114.3	52.4	8.6	0.0	2.7	27.9	0.0	0.0	33.6	0.0
ROCK SOLE	4.1	180.5	19.1	0.0	67.6	17.0	5.4	48.5	23.8	43.5
BUTTER SOLE	0.0	0.9	0.5	0.0	0.0	0.0	0.0	26.8	11.1	0.0
ALASKA PLAICE	0.5	0.0	20.4	0.0	0.0	0.0	1.4	0.0	37.6	0.0
PAC OC PERCH	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
ROUGH EYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
DUSKY RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEGUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	3.6	3.6	10.9	0.0	10.4	0.9	0.9	11.3	3.1	0.2
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETTS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	34	35	36	37	38	39	40	41	42	43	44
MONTH/DAY/YEAR	6/13/87	6/13/87	6/14/87	6/14/87	6/14/87	6/14/87	6/14/87	6/14/87	6/20/87	6/21/87	6/21/87
LATITUDE START	55 52.2	55 53.7	56 12.8	56 23.8	56 35.7	56 40.4	58 5.2	57 51.1	58 6.6	58 4.5	58 5.0
LONGITUDE START	158 16.8	157 38.3	157 1.4	156 50.1	156 25.9	155 6.5	150 28.1	152 49.6	152 27.3	152 3.4	151 24.8
LATITUDE END	55 51.0	55 53.4	56 11.6	56 25.7	56 36.5	56 40.8	58 4.9	57 52.0	58 5.8	58 5.3	58 4.7
LONGITUDE END	158 14.3	157 41.3	157 3.8	156 51.2	156 23.3	155 5.7	150 31.5	152 49.6	152 26.5	152 5.9	151 27.6
LORAN START	33385.40	33298.80	33144.80	33074.90	329776.10	32812.30	32039.00	32279.60	32177.90	32157.40	32108.00
LORAN START	45430.50	45182.10	44917.90	44829.10	44655.60	44135.40	43090.40	43281.80	43283.80	43199.70	43134.00
LORAN END	33385.80	33306.40	33154.40	33069.00	32967.60	32809.20	32044.80	32275.60	32180.50	32157.00	32112.40
LORAN END	45417.50	45202.00	44934.90	44637.50	44129.80	43091.00	43286.90	43276.30	43210.80	43136.20	43136.20
GEAR DEPTH	44	54	50	62	114	32	99	14	26	72	71
DURATION IN HOURS	0.30	0.50	0.50	0.50	0.50	0.17	0.50	0.27	0.30	0.45	0.30
DISTANCE FISHED	1.81	1.75	1.76	1.96	1.65	0.58	1.88	0.87	0.86	1.54	1.48
PERFORMANCE / GEAR	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170
POLLOCK	0.0	0.1	0.2	0.2	0.1	364.0	550.9	37.2	0.0	1951.5	2015.3
PACIFIC COD	0.0	102.3	5.4	37.6	11.8	24.0	98.2	15.0	180.1	70.2	184.6
SABLEFISH	0.0	0.0	0.0	0.0	1.4	0.0	634.2	0.9	0.0	0.0	0.0
ARROWTOOTH FL.	0.7	172.4	16.6	284.4	135.9	34.7	1205.1	5.4	0.0	1365.4	412.9
HALIBUT	127.6	77.7	11.2	66.8	12.2	137.0	78.9	26.4	26.3	11.4	135.4
FLATHEAD SOLE	0.0	0.0	0.1	0.2	17.7	139.5	62.0	99.8	5.0	161.5	19.1
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	7.0	5.7
REX SOLE	0.0	0.0	0.0	0.1	0.0	0.2	0.7	93.0	0.0	0.0	0.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	13.8	0.0	93.4	0.7	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0
ROCK SOLE	12.7	43.1	22.0	6.6	0.0	16.8	0.0	3.6	77.6	14.1	17.1
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0
PAC. OC. PERCH	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGH-EYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RRFH	39.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RKFFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.2	0.1	0.2	0.2	0.2	6.4	5.9	0.0	1.2	3.6	0.0
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Salmon SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETTS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

Haul #	Month/Day/Year	45	46	47	48	49	50	51	52	53	54	55
Latitude Start	6/21/87	6/21/87	6/26/87	6/26/87	6/26/87	6/27/87	6/30/87	6/30/87	6/30/87	6/1/87	6/1/87	6/1/87
Longitude Start	58 11 4	58 14 4	58 7 3	58 18 3	57 58 8	57 43 8	57 7 1	57 6 1	57 6 8	57 6 6	57 6 6	57 6 7
Latitude End	151 18 0	151 31 6	152 0 8	151 55 6	152 1 6	151 11 4	152 42 0	152 42 6	152 41 6	152 42 9	152 44 0	152 44 0
Longitude End	151 20 2	151 34 5	152 2 4	151 58 3	152 4 5	151 11 2	152 41 1	152 41 8	152 40 9	152 42 3	152 43 3	152 43 3
GEAR DEPTH	84	39	30	25	97	37	82	83	80	80	80	80
DURATION IN HOURS	0.50	0.46	0.50	0.28	0.30	0.30	0.25	0.25	0.25	0.25	0.25	0.25
DISTANCE FISHED	1.70	1.56	1.63	1.41	1.64	0.87	0.82	0.73	0.79	0.78	0.76	0.76
PERFORMANCE / GEAR	0 / 170	1 / 170	0 / 170	5 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170
POLLOCK	902.7	0.0	0.0	0.0	73.0	0.0	309.8	208.2	167.4	248.1	181.9	181.9
PACIFIC COD	250.7	3099.4	3.2	0.0	59.0	384.6	25.4	36.7	46.7	34.0	23.6	23.6
SABLEFISH	0.0	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.0	1.4	1.4	1.4
ARROWTOOTH FL.	607.0	0.0	0.0	0.0	365.2	0.0	332.5	224.5	364.7	224.5	201.8	201.8
HALIBUT	133.7	7.1	37.7	11.3	13.4	104.7	0.0	16.6	3.8	36.2	3.8	3.8
FLATHEAD SOLE	72.4	0.0	0.0	0.0	44.9	0.0	75.7	93.0	74.8	93.9	69.4	69.4
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	62.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	3.9	0.0	0.0	0.0	53.5	0.0	1.8	34.0	0.1	0.1	0.7	0.5
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGH EYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
DUSKY RKFISH	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.7	0.0	1.4	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	23.5	4.4	0.3	0.0	1.5	0.5	0.0	0.0	0.0	10.9	0.0	1.3
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.2
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	56	57	58	59	60	61	62	63	64	65	66
MONTH/DAY/YEAR	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87
LATITUDE START	57 6. 1	57 6. 3	57 6. 5	57 7. 0	57 6. 5	56 47. 2	56 47. 0	56 45. 9	56 47. 5	56 48. 3	56 48. 3
LONGITUDE START	152 40. 5	152 42. 4	152 44. 5	152 44. 9	152 42. 0	152 2. 6	152 2. 2	151 59. 6	152 4. 1	152 3. 2	152 4. 7
LATITUDE END	57 6. 8	57 6. 8	57 7. 1	57 7. 7	57 7. 1	56 47. 8	56 47. 4	56 46. 3	56 47. 9	56 48. 7	56 48. 7
LONGITUDE END	152 39. 8	152 41. 7	152 43. 9	152 44. 4	152 41. 3	152 2. 0	152 1. 3	152 1. 5	152 5. 1	152 6. 5	152 6. 5
LORAN START	43186. 10	43194. 30	43204. 30	43204. 00	43191. 60	43153. 30	43153. 00	43152. 30	43155. 40	43149. 00	43153. 20
LORAN START	32468. 70	32470. 80	32473. 10	32471. 30	32469. 20	32493. 20	32493. 30	32494. 20	32494. 10	32489. 40	32491. 90
LORAN END	43179. 70	43188. 70	43198. 20	43198. 40	43185. 40	43148. 60	43155. 30	43154. 40	43157. 80	43151. 30	43155. 50
LORAN END	32464. 90	32467. 40	32469. 40	32467. 70	32465. 80	32489. 80	32494. 30	32494. 90	32495. 30	32492. 60	32492. 60
GEAR DEPTH	86	86	86	86	79	83	74	73	73	72	73
DURATION IN HOURS	0. 25	0. 25	0. 25	0. 25	0. 25	0. 25	0. 25	0. 25	0. 25	0. 25	0. 25
DISTANCE FISHED	0. 75	0. 67	0. 73	0. 72	0. 71	0. 71	1. 03	1. 15	0. 97	1. 12	1. 08
PERFORMANCE / GEAR	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170
POLLOCK	335. 2	203. 7	330. 2	143. 8	166. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
PACIFIC COD	47. 6	30. 4	48. 1	32. 7	23. 6	5. 0	7. 7	3259. 2	100. 2	81. 2	152. 9
SABLEFISH	1. 4	1. 8	0. 9	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
ARROWTOOTH FL.	584. 7	178. 3	83. 5	206. 4	128. 8	46. 3	52. 6	97. 0	58. 1	78. 9	127. 9
HALIBUT	0. 0	5. 6	34. 7	11. 8	0. 0	0. 0	90. 1	1. 1	2. 7	0. 8	7. 2
FLATHEAD SOLE	76. 7	65. 3	36. 7	49. 4	60. 3	1. 8	1. 8	1. 7	5. 0	1. 8	0. 9
ENGLISH SOLE	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
DOVER SOLE	7. 7	2. 7	2. 5	0. 5	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 5
REX SOLE	0. 1	0. 4	0. 2	2. 7	0. 2	0. 3	2. 3	5. 2	3. 0	0. 7	1. 4
YELLOWFIN SOLE	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
STARRY FLOUNDER	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
ROCK SOLE	0. 9	0. 5	0. 6	0. 1	0. 1	2. 7	7. 7	20. 8	11. 8	24. 0	20. 4
BUTTER SOLE	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
ALASKA PLAICE	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
PAC DC PERCH	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	11. 3	1. 8	0. 9	0. 1	0. 0
ROUGHEYE RFH	2. 3	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
THORNYHEADS	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
NORTHERN RFH	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	94. 3	27. 2	0. 0	13. 2	1. 0
DUSKY RCWFISH	0. 0	0. 0	0. 5	0. 0	0. 0	0. 0	3. 2	2. 7	0. 0	0. 0	0. 0
SHORTRAKER RF	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
HARLEQUIN RF	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	2. 3	0. 0	0. 0	0. 0	0. 0
REDSTRIFE RF	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SHARPCHIN RF	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
ATKA MACKEREL	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	5. 2	0. 0	0. 0
GRENAIDIERS	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SCULPINS	6. 4	0. 0	1. 4	0. 0	0. 0	0. 1	0. 1	0. 0	0. 0	0. 8	0. 0
SKATES	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SPINY DOGFISH	0. 0	0. 0	0. 0	3. 6	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SALMON SHARK	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SLEEPER SHARK	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
TANNER CRAB	1. 4	2. 3	0. 5	2. 3	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
KING CRAB	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
DUNGENESS CRAB	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
PINK SHRIMP	0. 1	0. 1	0. 5	0. 1	0. 1	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SIDE STRIPE SHRIMP	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0
SCALLOP	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0	0. 0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	67	68	69	70	71	72	73	74	75	76	77
LATITUDE START	7/ 2/87	7/ 2/87	7/ 2/87	7/ 3/87	7/ 3/87	7/ 3/87	7/ 4/87	7/ 4/87	7/ 4/87	7/ 4/87	7/ 5/87	7/ 5/87
LATITUDE END	36 47.5	36 47.4	36 48.1	36 48.1	36 48.1	37 6.4	37 22.4	37 6.3	37 17.7	37 17.6	37 18.0	37 18.0
LONGITUDE START	152 4 4	152 5 2	152 2.4	152 34.0	152 30.6	151 51.5	152 8.6	152 15.0	152 33.7	152 31.9	152 31.9	152 31.9
LONGITUDE END	152 48.0	152 47.9	152 48.6	152 48.6	152 48.6	157 7.8	157 24.3	157 6.6	157 17.3	157 18.3	0 0.0	0 0.0
DURATION IN HOURS	0.25	0.25	0.50	0.50	0.50	0.50	0.25	0.25	0.25	0.25	0.0	0.0
DISTANCE FISHED	1.04	1.10	1.16	1.88	1.39	1.60	0.87	0.92	0.82	0.54	0.54	0.54
PERFORMANCE / GEAR	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	1 / 170	1 / 170	1 / 170	1 / 170	1 / 170	1 / 170	1 / 170
POLLOCK	1.4	2.3	0.0	0.0	2078.4	0.1	0.0	0.0	0.0	847.8	3006.4	166.0
PACIFIC COD	151.3	31.8	528.9	4.1	14.6	18.1	0.0	0.0	41.7	0.0	53.5	0.0
SABLEFISH	0.0	0.0	0.0	21.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	83.5	93.4	60.3	1012.4	669.3	0.0	0.0	2.0	2.0	276.7	98.4	59.0
HALIBUT	37.2	3.8	5.7	97.2	65.5	224.6	64.9	0.0	4.5	2.5	38.7	38.7
FLATHEAD SOLE	0.9	1.6	1.4	146.3	73.0	0.0	0.0	0.0	0.0	228.2	63.6	116.1
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	5.0	12.2	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	4.1	9.5	0.0	0.0	7.3	9.8	0.0	0.0	0.0	0.0	0.0	0.1
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	19.1	75.7
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3	0.0	16.3
ROCK SOLE	9.5	9.5	12.2	0.7	12.2	135.2	30.3	97.5	3.2	8.2	19.5	19.5
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	10.4	8.2	33.1	33.1
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC PERCH	0.7	0.0	2.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGH EYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	6.8	0.7	17.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY ROCKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.3	0.0	0.0	0.3	0.0	3.6	0.3	0.0	0.1	3.6	0.0	1.4
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	78	79	80	81	82	83	84	85	86	87	88
MONTH/DAY/YEAR	7/ 5/87	7/ 5/87	7/ 5/87	7/ 5/87	7/ 6/87	7/ 6/87	7/ 6/87	7/ 6/87	7/ 6/87	7/ 6/87	7/ 6/87
LATITUDE START	57 18.0	57 18.0	57 18.0	57 18.0	57 18.0	57 18.0	57 18.0	57 18.0	57 18.0	57 18.0	57 18.0
LONGITUDE START	152 30.0	152 30.0	152 30.0	152 30.0	152 30.0	150 18.0	150 17.3	150 16.7	150 16.7	150 16.8	150 16.7
LATITUDE END	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0
LONGITUDE END	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0	0 0.0
LORAN START	42948 20	43009 00	43018 90	43021 10	43049 80	43008 30	43008 00	43008 40	43008 60	43007 90	43007 80
LORAN END	42945 60	43005 00	43014 60	43016 70	432169 50	432168 60	432168 90	432170 10	432173 00	432173 00	432173 00
GEAR DEPTH	56	56	52	54	132	140	145	123	134	145	151
DURATION IN HOURS	0.17	0.17	0.17	0.17	0.25	0.25	0.25	0.25	0.30	0.30	0.30
DISTANCE FISHED	0.54	0.54	0.54	0.54	0.75	0.70	0.72	0.76	1.49	1.52	1.55
PERFORMANCE / GEAR	1 /170	1 /170	1 /170	1 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170
POLLOCK	3473.5	4332.8	3589.4	4969.0	49.9	14.5	6.4	82.1	8.2	31.3	28.6
PACIFIC COD	13.8	37.1	40.9	0.0	5.4	0.0	0.0	0.0	24.0	5.4	5.9
SABLEFISH	0.0	0.0	5.9	0.0	140.2	110.2	68.3	2.7	49.4	124.7	103.9
ARROWTOOTH FL.	25.4	175.0	70.0	28.6	33.1	37.6	44.9	12.7	131.5	40.4	30.3
HALIBUT	4.0	53.3	0.0	21.0	0.0	0.0	54.3	0.0	20.3	0.0	6.6
FLATHEAD SOLE	142.9	318.2	119.7	104.7	3.2	1.4	4.1	3.2	0.5	0.9	0.9
ENGLISH-SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	31.3	33.6	69.9	37.6	81.2	74.8
REX SOLE	0.0	0.0	2.0	0.0	24.0	22.2	34.0	28.1	59.9	24.0	33.0
YELLOWFIN SOLE	5.3	42.4	46.7	57.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	6.9	217.5	81.7	76.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	2.3	15.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	83.0	96.6	43.1	5.0	289.8	133.8
ROUGH-EYE RKFH	0.0	0.0	0.0	0.0	0.0	40.8	49.4	44.0	6.4	2.7	6.8
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	5.4	3.2	0.0	53.1	83.5
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	2.7	0.9
DUSKY RKFISH	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	1.4	1.4
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.0	212.1	4.4	0.0	0.0	5.5	11.8	9.5	11.4	8.3	9.3
SKATES	0.0	31.8	116.7	0.0	0.9	0.0	0.0	0.0	0.1	0.5	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Hauls 99-149 were completed in the eastern Gulf of Alaska by the Auke Bay Laboratory.

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	89	90	91	92	93	94	95	96	97	98	99	100
MONTH/DAY/YEAR	7/ 6/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87	7/ 7/87
LATITUDE START	57 33 2	57 27 1	57 29 4	57 30 2	57 29 3	57 29 4	57 30 3	57 30 8	58 40 8	58 45 4	59 31 8	59 31 8
LONGITUDE START	150 17 6	150 19 0	150 18 9	150 19 0	150 21 1	150 19 5	150 17 5	150 18 5	150 18 5	149 28 3	149 28 3	149 28 3
LATITUDE END	57 32 1	57 26 5	57 28 8	57 29 7	57 28 6	57 28 7	57 29 4	57 29 8	58 39 7	58 46 7	59 32 9	59 32 9
LONGITUDE END	150 19 5	150 19 3	150 18 6	150 17 8	150 19 2	150 18 5	150 15 9	150 17 0	150 16 9	150 2 3	149 26 8	149 26 8
LORAN START	32163.40	32190.60	32180.90	32177.50	32183.30	32181.60	32175.40	32174.60	31861.50	31832.00	31319.20	31319.20
LORAN END	43008.90	43002.90	43004.80	43005.60	43004.70	43004.80	43005.70	43006.20	43223.20	43225.50	31874.00	31874.00
LORAN END	43170.60	32193.60	32182.90	32178.30	32184.10	32183.30	32177.00	32176.90	31865.00	31829.00	31316.40	31316.40
GEAR DEPTH	123	191	177	171	174	172	174	172	77	92	145	145
DURATION IN HOURS	0.50	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.36	0.64	0.59	0.84	1.48	0.88	1.26	1.38	1.41	1.78	1.39	1.39
PERFORMANCE / GEAR	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170
POLLOCK	146.1	0.0	10.4	14.5	33.1	196.4	15.4	18.1	1.8	26.4	53.8	53.8
PACIFIC COD	16.8	0.0	0.0	3.6	1.8	14.1	0.0	4.5	14.5	6.1	17.2	17.2
SABLEFISH	1.8	247.7	157.8	93.0	55.8	108.4	127.9	51.3	66.2	328.7	14.3	14.3
ARROWTOOTH FL.	38.5	7.7	19.5	43.1	51.3	98.4	21.3	37.2	129.3	390.2	16.1	16.1
HALIBUT	39.8	0.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	77.4	22.6
FLATHEAD SOLE	7.7	1.4	0.0	0.1	0.2	0.4	0.7	1.8	55.8	1.0	57.8	57.8
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	18.6	99.3	59.9	59.0	47.2	94.0	75.7	37.2	32.7	6.1	0.0	0.0
REX SOLE	40.8	13.6	23.6	22.7	33.1	42.2	27.2	34.5	27.7	23.4	5.0	5.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC OC PERCH	14.1	4.5	27.2	35.4	35.4	48.5	13.2	21.8	0.0	10.2	0.0	0.0
ROUGHEYE RKFH	0.0	15.4	18.1	24.0	57.2	31.3	55.3	27.2	1.4	29.5	6.1	6.1
THORNYHEADS	7.7	21.3	34.4	55.3	45.8	32.7	39.9	38.6	0.3	0.4	0.0	0.0
NORTHERN RKFH	4.5	0.0	0.0	0.5	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RKFISH	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTRAKER RF	0.0	22.2	12.2	3.6	0.0	13.2	26.3	3.6	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	6.4	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	54.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.0	0.1	0.7	3.5	3.3	0.0	0.1	0.2	11.8	24.4	1.4	1.4
SKATES	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	GEAR DEPTH	DURATION IN HOURS	DISTANCE FISHED	PERFORMANCE / GEAR	173	174	175	176	177	178	179	180	181	182	183
		B/ 5/87	B/ 5/87	B/ 6/87	B/ 6/87	8/ 6/87	8/ 6/87	8/ 6/87	8/ 6/87	8/ 6/87	8/ 6/87	8/ 6/87	8/ 6/87	8/ 6/87	8/ 6/87	8/ 6/87
	LATITUDE START	57 40.5	57 39.8	57 23.7	57 23.7	57 28.7	57 19.2	57 13.1	57 11.8	57 5.3	56 51.4	56 45.7	56 45.7	56 45.7	56 50.9	56 50.9
	LONGITUDE START	154 19.2	154 32.0	154 47.7	154 47.7	154 30.9	155 9.1	154 45.1	154 44.6	154 53.1	154 58.5	154 58.5	154 58.5	154 58.5	154 58.5	154 58.5
	LATITUDE END	57 39.6	57 39.3	57 24.5	57 24.5	57 28.9	57 18.4	57 12.8	57 10.5	57 4.8	56 30.7	56 45.3	56 45.3	56 45.3	56 45.3	56 45.3
	LONGITUDE END	154 21.5	154 34.6	154 47.8	154 47.8	154 53.6	155 11.6	154 44.7	154 44.2	154 54.7	154 59.6	154 59.6	154 59.6	154 59.6	154 59.6	154 59.6
	LORAN START	32457.90	32480.60	32563.50	32563.50	32638.70	32628.50	32633.80	32677.70	32749.70	32749.70	32749.70	32749.70	32749.70	32749.70	32749.70
	LORAN START	43795.60	43878.30	43969.70	43992.90	44112.20	43954.20	43951.70	44012.50	44064.90	43862.00	43763.20	43763.20	43763.20	43763.20	43763.20
	LORAN END	32465.80	32487.10	32579.00	32566.90	32629.00	32639.20	32682.60	32755.00	32716.50	32681.00	32716.50	32681.00	32716.50	32681.00	32716.50
	LORAN END	43809.10	43894.70	43970.50	44011.00	43931.40	43949.50	44023.70	44073.70	43768.70	43846.10	43768.70	43768.70	43768.70	43768.70	43768.70
	POLLOCK	9.1	168.7	0.0	0.0	324.1	77.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PACIFIC COD	0.0	35.4	94.8	96.6	22.2	1.8	1.1	1.1	1.1	439.2	116.8	116.8	116.8	116.8	116.8
	SABLEFISH	13.2	40.1	185.1	117.0	74.4	0.0	0.0	0.0	0.0	24.2	0.0	0.0	0.0	0.0	0.0
	ARROWTOOTH FL.	127.5	215.5	44.2	319.3	201.4	4.3	4.3	4.3	2040.4	1186.1	44.2	44.2	44.2	44.2	44.2
	HALIBUT	0.0	0.0	51.0	0.0	13.9	11.6	11.6	11.6	22.2	59.4	40.3	40.3	40.3	40.3	40.3
	FLATHEAD SOLE	25.9	116.1	14.5	1.4	40.4	0.0	0.0	0.0	6.8	100.9	103.4	103.4	103.4	103.4	103.4
	ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	DOVER SOLE	0.0	0.0	5.0	1.1	0.0	0.0	0.0	0.0	7.6	47.6	0.0	0.0	0.0	0.0	0.0
	REX SOLE	0.7	0.0	0.9	1.4	0.1	0.1	0.1	0.1	0.1	2.3	13.6	13.6	13.6	13.6	13.6
	YELLOWFIN SOLE	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	ROCK SOLE	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	12.7	12.7	9.1	24.9	1.6	2.3	2.3
	BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PAC DC PERCH	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	ROUGHEYE RKFH	0.7	13.6	0.0	5.9	7.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	THORNYHALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	4.5	4.5	4.5	4.5	4.5
	DUSKY RKFISH	0.0	0.0	71.5	0.0	0.0	0.0	0.0	2.7	2.7	0.0	20.4	20.4	20.4	20.4	20.4
	SHORTAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SCULPINS	0.0	1.5	3.7	4.1	0.2	0.0	0.0	0.0	0.0	0.0	2.3	19.5	19.5	19.5	19.5
	SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SPAWN SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TANNER CRAB	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAIL #	184	185	186	187	188	189	190	191	192	193
MONTH/DAY/YEAR	8/ 9/87	8/ 9/87	8/ 9/87	8/ 9/87	8/ 9/87	8/ 9/87	8/ 10/87	8/ 10/87	8/ 11/87	8/ 11/87
LATITUDE START	56 0 .6	56 11 .1	56 5 .7	56 2 .2	56 6 .4	56 19 .7	56 4 .6	56 6 .9	55 59 .7	55 45 .0
LONGITUDE START	153 44 .9	153 38 .1	154 10 .4	154 30 .4	154 50 .1	155 36 .6	155 41 .4	155 57 .0	156 30 .2	156 36 .0
LATITUDE END	56 1 .2	56 12 .6	56 4 .1	56 2 .7	56 7 .4	56 21 .2	56 4 .0	56 8 .5	55 58 .0	55 44 .7
LONGITUDE END	153 42 .5	153 37 .3	154 10 .9	154 33 .1	154 32 .4	155 35 .7	155 35 .9	155 38 .8	156 30 .9	156 33 .4
LORAN START	32839 .10	32819 .30	32861 .90	32909 .80	32927 .10	32955 .60	33027 .00	33049 .80	33138 .90	33209 .30
LORAN START	43788 .20	43814 .90	43901 .00	44022 .30	44120 .40	44368 .80	44431 .00	44533 .70	44742 .50	44808 .00
LORAN END	32832 .60	32812 .10	32868 .80	32912 .40	32927 .30	32947 .20	33034 .00	33043 .00	33147 .10	33205 .50
LORAN END	43773 .80	43803 .20	43909 .20	44035 .50	44131 .10	44358 .50	44447 .90	44529 .50	44750 .20	44792 .80
GEAR DEPTH	38	93	56	110	45	38	30	103	106	126
DURATION IN HOURS	0 .50	0 .50	0 .50	0 .50	0 .50	0 .50	0 .50	0 .50	0 .50	0 .25
DISTANCE FISHED	1 .49	1 .55	1 .55	1 .58	1 .62	1 .62	1 .54	1 .58	1 .72	1 .50
PERFORMANCE / GEAR	1 /171	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171
POLLOCK	0 .0	0 .0	0 .0	0 .0	0 .0	2 .3	0 .0	0 .0	3 .2	1 .8
PACIFIC COD	0 .0	62 .6	0 .0	45 .1	628 .0	173 .0	0 .0	157 .1	18 .1	40 .8
SABLEFISH	0 .0	127 .9	0 .0	52 .8	0 .0	0 .0	0 .0	116 .8	13 .2	77 .1
ARROWTOOTH FL.	0 .0	488 .1	7 .0	391 .7	30 .4	10 .7	0 .0	940 .7	129 .5	151 .7
HALIBUT	94 .1	12 .2	72 .7	22 .8	69 .3	39 .2	115 .8	17 .2	0 .0	16 .2
FLATHEAD SOLE	0 .0	0 .0	0 .0	0 .0	3 .2	0 .0	0 .0	1 .1	0 .9	9 .3
ENGLISH SOLE	0 .0	0 .0	0 .0	0 .0	0 .5	0 .0	0 .0	0 .0	0 .0	0 .0
DOVER SOLE	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	150 .3	21 .3	0 .9
REX SOLE	0 .0	0 .9	5 .9	9 .3	0 .7	0 .0	0 .0	104 .9	68 .9	85 .7
YELLOWFIN SOLE	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
STARRY FLOUNDER	0 .0	0 .0	0 .0	0 .0	0 .0	3 .6	0 .0	0 .0	0 .0	0 .0
ROCK SOLE	0 .0	0 .0	25 .6	0 .0	324 .3	348 .6	6 .8	1 .7	0 .0	11 .8
BUTTER SOLE	0 .0	0 .0	0 .0	0 .0	26 .8	191 .6	2 .0	0 .0	0 .0	0 .0
ALASKA PLAICE	0 .0	0 .0	0 .0	0 .0	0 .0	5 .9	0 .0	0 .0	0 .0	0 .0
PAC DC PERCH	0 .0	0 .0	0 .0	0 .0	467 .9	2 .7	0 .0	0 .0	32 .2	2 .0
ROGUEYE RKFH	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	11 .3	2 .3
THORNYHEADS	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
NORTHERN RKFH	3943 .2	0 .0	55 .1	5 .4	0 .0	1 .4	0 .0	0 .0	0 .0	0 .0
DUSKY RKFTSH	271 .7	0 .0	3 .6	3 .6	0 .0	2 .3	0 .0	17 .0	11 .1	1 .4
SHORTRAKER RF	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
HARLEQUIN RF	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
REDSTRIPE RF	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SHARPCHIN RF	0 .0	0 .0	1 .8	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
ATKA MACKEREL	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
GRENADIERS	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SCULPINS	0 .0	0 .0	0 .0	0 .0	0 .0	3 .9	0 .0	0 .0	8 .7	1 .4
SKATES	0 .0	18 .1	0 .0	10 .0	39 .3	26 .3	0 .0	0 .1	0 .0	0 .1
SPINY DOGFISH	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SALMON SHARK	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SLEEPER SHARK	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
TANNER CRAB	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
KING CRAB	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
DUNGENESS CRAB	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
PINK SHRIMP	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0
SIDE STRIPE SHRIMP	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .1	0 .2
SCALLOP	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0	0 .0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH / DAY / YEAR	195	196	197	198	199	200	201	202	203	204	205
LATITUDE START	8/11/87	8/11/87	8/12/87	8/12/87	8/13/87	8/13/87	8/13/87	8/14/87	8/14/87	8/14/87	8/14/87	8/14/87
LONGITUDE START	55 47.2	55 41.8	56 13.0	56 25.2	56 26.4	56 23.2	56 15.1	55 57.1	55 44.8	55 47.2	55 50.0	55 47.2
LATITUDE END	157 45.9	158 2.0	158 20.5	158 0.9	158 20.3	157 48.5	158 9.0	158 25.8	158 39.5	158 57.5	159 16.2	159 16.2
LONGITUDE END	55 48.2	55 40.8	56 13.5	56 25.9	56 25.2	56 37.9	56 15.1	55 55.6	55 43.5	55 48.9	55 48.9	55 48.9
LORAN START	33341.00	33349.00	33345.30	45431.40	45431.40	45417.00	45410.40	45353.70	45482.60	45464.70	33493.50	33523.90
LORAN END	33341.60	33404.50	33297.80	33212.30	33253.70	33189.20	33276.20	33392.70	33472.50	33488.40	33524.60	33524.60
GEAR DEPTH	45252.70	45364.90	45414.10	45307.20	45426.40	45400.20	45367.30	45491.00	45595.80	45700.20	45805.80	45805.80
DURATION IN HOURS	0.50	0.50	0.50	0.47	0.50	0.25	0.36	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.58	1.59	1.31	1.65	1.51	0.65	1.16	1.55	1.54	1.67	1.30	1.30
PERFORMANCE / GEAR	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171
POLLOCK	3.9	137.4	981.3	807.4	0.0	110.0	419.6	0.0	0.0	1024.7	219.1	219.1
PACIFIC COD	190.7	76.2	37.8	85.0	0.1	78.7	31.8	2.5	29.3	1.6	29.9	29.9
SABLEFISH	3.9	9.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	362.9	321.6	158.8	81.6	0.0	119.7	104.3	18.1	18.6	53.5	85.0	85.0
HALIBUT	78.7	78.7	318.1	21.9	93.4	8.3	139.3	35.2	42.0	0.0	13.1	13.1
FLATHEAD SOLE	28.1	24.9	347.8	234.7	0.0	23.6	432.0	0.0	0.0	19.5	173.5	173.5
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	29.5	12.7	0.0	17.0	0.0	0.4	1.1	0.0	0.0	0.0	0.0	0.0
YELLOWFIN SOLE	0.0	0.0	347.8	0.0	0.2	0.0	3.4	0.0	0.0	0.0	0.0	0.0
STARRY FLounder	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	1.4	0.0	8.3	0.4	28.1	1.4	0.0	78.9	0.0	33.3	2.7	28.1
BUTTER SOLE	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	19.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
ROUGHEYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.1	0.0	0.0
DUSKY RCKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.0	0.0	0.0	4.0	0.0	0.6	0.5	5.7	0.4	0.2	0.0	0.0
SKATES	0.0	0.0	0.0	0.0	120.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	23.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	206	207	208	209	210	211	212	213	214	215	216
MONTH/DAY/YEAR	8/14/87	8/15/87	8/15/87	8/15/87	8/15/87	8/15/87	8/15/87	8/15/87	8/15/87	8/15/87	8/16/87
LATITUDE START	55 46.8	55 32.8	55 32.9	55 40.8	55 39.9	55 32.7	55 28.1	55 9.9	55 3.1	54 56.5	55 16.5
LONGITUDE START	159 12.7	159 36.9	159 53.0	159 54.8	159 45.0	159 58.2	159 59.0	160 43.9	160 29.1	160 51.7	160 58.0
LATITUDE END	55 45.6	55 32.7	55 34.5	55 41.7	55 40.4	55 34.1	55 29.6	55 9.3	55 2.0	54 54.9	55 15.5
LONGITUDE END	159 10.8	159 39.8	159 53.7	159 53.8	159 46.1	159 56.8	159 58.3	160 41.7	160 30.9	160 51.6	160 58.0
LORAN START	33529.10	33638.70	33675.00	33648.50	33629.40	33687.60	33706.90	33877.40	33865.90	33940.30	33887.90
LORAN START	45796.50	45964.30	46067.90	46073.40	46010.60	46101.00	46107.40	46406.20	46316.70	46461.40	46492.90
LORAN END	33529.70	33645.60	33670.60	33642.70	33629.90	33679.20	33699.70	33873.80	33945.30	33892.30	33892.30
LORAN END	45785.50	45983.50	46071.10	46066.40	46017.30	46091.40	46103.90	46329.10	46461.80	46496.10	46496.10
GEAR DEPTH	55	32	81	69	53	96	39	30	56	51	29
DURATION IN HOURS	0.50	0.50	0.50	0.33	0.27	0.50	0.50	0.45	0.50	0.50	0.33
DISTANCE FISHED	1.59	1.70	1.60	1.06	0.81	1.58	1.54	1.36	1.51	1.59	0.99
PERFORMANCE / GEAR	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171
POLLOCK	1818.0	0.0	2282.7	4309.1	57.4	1106.8	0.0	0.0	314.6	0.9	0.0
PACIFIC COD	0.0	0.0	26.7	51.8	34.4	94.3	0.0	0.0	48.3	30.8	3.2
SABLEFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	203.2	0.0	924.5	570.2	113.2	818.3	0.1	1.4	15.9	128.8	16.3
HALIBUT	61.5	63.9	74.2	0.0	15.3	0.0	3.9	48.9	35.8	49.8	28.8
FLATHEAD SOLE	97.8	0.0	200.1	139.7	67.6	486.2	0.0	0.5	2.3	34.5	4.5
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
REX SOLE	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.4	1.8	0.0
YELLOWFIN SOLE	30.8	0.0	0.0	0.0	9.7	39.5	0.0	0.0	1.8	0.0	3.2
STARRY FLounder	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0
ROCK SOLE	0.0	75.7	5.4	0.0	0.0	3.6	0.0	25.4	274.2	40.4	60.8
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	137.4	0.0	1.4
ALASKA PLAICE	0.0	0.0	14.7	37.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.5	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
ROUGH-EYE RKFH	0.5	0.0	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.1
DUSKY RCKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.2	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPchin RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	36.3	3.4	0.0	0.0	0.0	0.0	0.0	6.4	0.7	0.0	0.7
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	16.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	102.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETTS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	217	218	219	220	221	222	223	224	225	226	227
MONTH/DAY/YEAR	8/17/87	8/17/87	8/17/87	8/17/87	8/17/87	8/17/87	8/19/87	8/19/87	8/20/87	8/20/87	8/20/87
LATITUDE START	55 25.3	55 21.6	55 19.2	55 13.6	55 0.8	54 56.8	55 1.5	55 16.9	54 38.3	54 51.8	55 7.3
LONGITUDE START	160 33.5	159 52.0	159 33.6	159 45.1	160 0.7	159 3.3	159 35.6	158 41.2	158 34.1	157 53.6	158 8.4
LATITUDE END	55 25.6	55 21.0	55 18.9	55 12.9	55 0.4	54 57.5	55 0.5	55 17.1	55 0.0	54 51.0	55 8.8
LONGITUDE END	160 30.8	159 49.6	159 32.3	159 45.8	159 38.9	159 46.0	159 34.2	158 38.3	158 34.4	157 51.2	158 10.0
LORAN START	33797.90	33715.20	33682.20	33728.40	33808.20	33782.40	33749.20	33574.60	33624.70	33561.90	33539.20
LORAN START	46332.40	46070.40	45955.80	46032.90	46141.00	46036.30	45984.80	45629.00	45610.20	45377.00	45440.60
LORAN END	33790.50	33712.10	33680.50	33732.90	33805.50	33786.20	33749.40	33567.70	33619.90	33559.40	33537.30
LORAN END	46314.70	46055.60	45948.00	46038.30	46130.10	46052.80	45976.70	45611.00	45609.40	45363.90	45448.50
GEAR DEPTH	70	38	83	40	18	27	104	102	71	64	
DURATION IN HOURS	0.50	0.50	0.25	0.25	0.33	0.50	0.47	0.50	0.50	0.50	
DISTANCE FISHED	1.38	1.53	0.80	0.80	1.12	1.76	1.32	1.64	1.53	1.60	1.81
PERFORMANCE / GEAR	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171
POLLOCK	2233.1	0.0	391.1	0.3	0.2	0.1	0.1	62.1	24.1	0.0	0.0
PACIFIC COD	62.1	0.2	20.4	6.1	2.3	0.9	15.9	0.0	32.2	39.2	70.5
SABLEFISH	0.0	0.0	9.1	0.0	0.0	0.0	0.0	3.2	48.5	0.0	0.0
ARROWTOOTH FL.	224.6	7.3	313.9	5.4	0.0	1.1	0.0	207.3	334.8	181.4	252.7
HALIBUT	1.3	49.5	20.0	7.1	13.1	16.8	11.2	0.0	39.3	14.3	282.9
FLATHEAD SOLE	268.2	0.0	36.5	0.0	0.0	0.0	0.0	77.6	35.4	0.0	22.9
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.2	5.4
REX SOLE	8.7	0.0	0.2	0.2	0.0	0.1	0.0	0.2	19.5	0.0	0.0
YELLOWFIN SOLE	87.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	41.4	27.0	1.8	13.2	27.2	74.8	105.0	0.5	0.0	7.5	7.5
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC OC PERCH	0.0	2.0	0.1	2.3	0.0	0.0	0.0	0.5	0.9	0.7	0.0
ROUGHEYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.9	1.6	0.0
DUSKY RKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	3.5	1.1	0.7	1.7	0.0	1.5	0.2	1.1	0.0	0.0	12.7
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETTS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	228	229	230	231	232	233	234	235	236	237	238
LATITUDE START	8/21/87	8/21/87	8/21/87	8/21/87	8/21/87	8/22/87	8/22/87	8/22/87	8/22/87	8/22/87	8/23/87	8/23/87
LONGITUDE START	55 47.6	55 59.8	56 11.3	56 27.4	56 36.7	56 32.4	56 34.4	56 41.9	56 38.3	56 42.4	56 42	56 42
LATITUDE END	158 10.3	157 47.1	157 22.7	157 34.9	157 48.4	157 43.2	157 33.6	157 27.6	157 27.6	157 27.6	156 51	156 51
LONGITUDE END	55 46.0	55 56.6	56 10.1	56 27.5	56 35.1	56 31.5	56 34.5	56 40.9	56 38.8	56 38.8	56 42	56 42
LORAN START	33478.70	33390.50	33291.90	33193.80	33147.10	33131.30	33141.00	33112.80	33066.10	33042.90	32993.00	32993.00
LORAN END	45446.60	45394.50	45329.90	45057.60	45117.20	45197.40	45166.60	45101.90	45055.10	44923.60	44815.50	44815.50
GEAR DEPTH	158 11.0	157 44.4	157 25.1	157 34.8	157 48.2	157 41.0	157 36.6	157 26.3	157 26.3	157 26.3	156 48	156 48
DURATION IN HOURS	0.50	0.55	0.50	0.02	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.62	1.62	1.75	1.74	0.05	1.60	1.56	1.65	1.10	1.58	1.50	1.50
PERFORMANCE / GEAR	0 /171	0 /171	0 /171	6 /171	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171
POLLOCK	17.7	0.0	0.9	1402.2	0.0	1.4	191.3	0.0	470.4	480.4	28.6	28.6
PACIFIC COD	9.1	30.8	13.2	0.0	0.0	0.2	19.3	17.2	10.9	25.4	104.3	104.3
SABLEFISH	0.0	1253.3	11.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3	22.7	22.7
ARROWTOOTH FL.	195.5	428.7	657.0	262.3	0.0	0.9	68.3	22.2	8.6	136.1	229.5	229.5
HALIBUT	0.0	11.2	15.3	208.2	0.0	106.0	94.3	111.0	4.6	44.7	25.3	25.3
FLATHEAD SOLE	24.0	13.0	9.5	40.8	0.0	0.0	142.0	0.0	26.8	38.1	8.6	8.6
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.2	0.2	0.9	0.0	0.0
REX SOLE	1.1	11.3	3.6	3.3	0.0	0.0	0.5	0.0	0.0	0.2	0.0	0.9
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	28.1	18.8	0.0	21.3	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	29.2	5.9	0.0	0.0	0.0	0.0	45.8	4.1	72.8	6.4	0.0	2.7
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0	1.8	1.8
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE RKFH	3.6	0.0	0.0	11.8	0.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
DUSKY RCKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.3	2.0	0.2	1.4	0.0
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	1.1	2.4	0.0	0.0	1.1	0.0	0.0	7.7	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	239	240	241	242	243	244	245	246	247	248	249
MONTH/ DAY/ YEAR	8/23/87	8/23/87	8/25/87	8/25/87	8/26/87	8/26/87	8/26/87	8/26/87	8/27/87	8/27/87	8/27/87
LATITUDE START	56 36.7	57 16.2	57 17.2	57 23.2	57 23.2	57 23.9	57 30.9	57 32.9	57 49.4	57 53.4	57 53.4
LONGITUDE START	156 54.2	156 12.0	155 44.0	156 2.6	156 2.6	156 8.6	155 34.3	155 35.1	155 41.4	154 43.2	154 54.0
LATITUDE END	56 55.3	57 16.4	57 16.9	0 0.0	57 23.8	57 23.9	57 31.4	57 42.8	57 53.2	57 53.4	57 53.4
LONGITUDE END	156 53.0	156 10.2	155 47.0	0 0.0	156 0.7	156 5.6	155 31.9	155 35.5	155 41.4	154 41.0	154 54.1
LORAN START	322931.50	322759.40	322706.80	322708.40	322716.10	322636.60	322556.60	322624.30	322450.50	322447.20	
LORAN END	448236.20	44532.30	44345.50	44469.60	44416.30	44309.90	44300.10	44300.20	43967.70	44048.50	
LORAN END	44815.20	44521.00	44365.60	4437.00	44490.20	44400.80	44301.00	44331.90	43953.50	44046.30	
GEAR DEPTH	54	120	140	25	27	16	17	11	16	137	42
DURATION IN HOURS	0.50	0.33	0.50	0.35	0.38	0.52	0.45	0.50	0.03	0.50	0.10
DISTANCE FISHED	1.58	0.94	1.66	1.20	1.17	1.60	1.40	1.58	0.22	1.66	0.19
PERFORMANCE / GEAR	0 / 171	1 / 171	0 / 171	5 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	6 / 171	6 / 171
POLLOCK	822.4	57.6	210.0	0.0	0.1	0.1	0.0	0.0	1.1	0.0	88.0
PACIFIC COD	62.6	23.1	177.4	0.0	0.7	0.0	0.0	0.0	4.1	0.0	72.6
SABLEFISH	0.0	4.1	114.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	129.7
ARROWTOOTH FL.											
HALIBUT	2.7	14.3	18.2	0.0	40.3	111.0	0.0	0.0	96.9	0.0	18.7
FLATHEAD SOLE	50.3	14.1	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.4
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	2.7	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	5.9	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
YELLOWFIN SOLE	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	123.4	16.8	0.0	3.2
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.6	0.0	0.9
ALASKA FLAICE	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGH-EYE RKFH	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.9
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
DUSKY RKFTSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPchin RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADEERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	4.1	6.4	5.0	0.0	0.1	0.0	0.0	0.0	11.9	0.0	3.8
SKATES	36.3	0.0	11.8	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	103.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.7	1.4	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.1	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	250	251	252	253	254	255	256	257	258	259	260
MONTH, DAY / YEAR	8/27/87	8/27/87	8/28/87	8/28/87	8/28/87	8/28/87	8/29/87	8/29/87	8/29/87	8/29/87	8/29/87
LATITUDE START	57 53.4	57 54.4	58 3.2	58 15.2	58 17.1	58 19.1	58 26.8	58 30.7	58 32.4	58 39.2	58 36.3
LONGITUDE START	154 53.8	154 36.6	154 17.7	153 49.0	153 36.5	153 42.2	153 30.0	153 25.4	153 25.4	153 6.7	153 6.7
LATITUDE END	57 54.1	57 55.6	58 6.2	58 16.6	58 18.5	58 19.0	58 25.9	58 29.6	58 31.6	58 37.9	58 57.5
LONGITUDE END	154 51.4	154 54.6	154 15.4	153 48.1	153 35.2	154 4.6	153 53.1	153 44.3	153 32.7	153 27.2	153 4.6
LORAN START	32446.30	32445.40	32332.70	32243.40	32243.70	32247.90	32192.80	32155.50	32131.30	32090.70	31980.30
LORAN START	44044.40	44064.10	43847.80	43719.10	43770.20	43837.90	43807.00	43756.20	43705.00	43733.00	43711.80
LORAN END	32439.00	32436.40	32334.40	32235.00	32234.40	32244.90	32194.00	32163.90	32099.40	31971.80	31951.00
LORAN END	44030.30	44053.60	43837.30	43720.40	43767.90	43823.00	43790.00	43762.80	43720.90	43731.10	43731.10
GEAR DEPTH	77	21	17	109	145	35	45	39	71	23	89
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.48	1.62	1.60	1.51	1.64	1.36	1.56	1.61	1.61	1.58	1.61
PERFORMANCE / GEAR	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171
POLLOCK	137.9	0.0	0.2	576.3	134.7	250.8	450.0	241.3	84.8	0.4	90.3
PACIFIC COD	144.7	0.0	8.2	19.7	14.5	26.3	7.7	21.3	35.8	0.5	26.8
SABLEFISH	1.4	0.0	0.0	85.7	9.1	0.4	0.0	0.9	5.4	0.0	1.9
ARROWTOOTH FL.	619.2	0.5	11.3	396.0	131.1	35.3	125.6	104.8	91.6	22.2	62.1
HALIBUT	117.2	0.5	80.9	21.0	11.1	56.1	30.8	51.7	13.1	80.2	12.2
FLATHEAD SOLE	5.9	0.0	6.8	68.3	27.7	73.9	60.3	47.4	18.1	25.4	7.3
ENGLISH SOLE	0.0	0.0	2.7	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	24.9	0.0	0.5	0.0	3.4	0.0	0.0	0.0	0.0	0.0	3.2
REX SOLE	1.4	0.0	0.1	2.3	0.1	2.4	2.7	5.0	0.8	0.4	0.3
YELLOWFIN SOLE	0.0	0.0	48.1	0.0	0.0	39.0	20.0	33.1	0.5	83.0	0.7
STARRY FLOUNDER	0.0	0.0	3.6	0.0	0.0	1.5	2.3	0.0	0.0	4.0	0.0
ROCK SOLE	3.6	1.2	8.2	0.0	0.0	0.5	5.9	44.5	0.0	5.4	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	10.0	0.0	57.9	43.1	56.2	1.1	33.6	0.0	0.0
PAC DC PERCH	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE RKFH	2.7	0.0	0.0	8.4	8.8	0.2	0.7	0.0	0.0	0.0	0.0
THORNHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY ROCKFISH	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPFIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	36.4	0.0	1.3	0.0	0.0	6.0	0.2	8.0	0.4	1.8	0.8
SKATES	0.0	0.0	0.0	34.5	0.0	0.0	110.9	0.0	3.4	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	113.4	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.3	3.2	0.3	0.0	0.2	0.4	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE LETS GO DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	261	262	263	264	265	266	267	268	269	270	271
MONTH/ DAY/ YEAR	8/30/87	8/30/87	8/30/87	8/30/87	8/30/87	8/30/87	8/31/87	8/31/87	8/31/87	8/31/87	9/ 2/87
LATITUDE START	59 13. 9	59 12. 6	59 3. 7	59 7. 9	59 16. 6	59 25. 4	59 42. 8	59 40. 2	59 31. 6	59 30. 1	59 4. 3
LONGITUDE START	153 41. 9	153 18. 5	152 54. 3	152 45. 8	152 40. 7	152 41. 6	152 53. 7	152 26. 2	152 10. 2	151 45. 8	152 24. 6
LATITUDE END	59 12. 5	59 11. 2	59 3. 5	59 6. 4	59 17. 3	59 29. 9	59 41. 5	59 38. 7	59 30. 0	59 30. 1	59 3. 5
LONGITUDE END	153 40. 3	153 17. 4	152 51. 3	152 46. 8	152 37. 8	152 39. 1	152 55. 4	152 27. 7	152 10. 6	151 42. 9	152 27. 4
LORAN START	31926. 60	31908. 30	31928. 10	31897. 20	31846. 80	31780. 80	31780. 70	31450. 40	12397. 70	12397. 70	12073. 30
LORAN END	43974. 50	43869. 10	43726. 30	43718. 60	43749. 60	43824. 40	31995. 00	31960. 40	31871. 30	31764. 60	31763. 30
GEAR DEPTH	1.6	0.50	0.50	0.50	0.50	0.50	0.50	0.45	0.50	0.50	0.50
DURATION IN HOURS	0.50	1.50	1.57	1.60	1.65	1.46	1.57	1.61	1.55	1.48	1.66
DISTANCE FISHED	1.64	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171	0 /171
PERFORMANCE / GEAR	0	0 /171									
POLLOCK	6.8	2.2	368.3	137.4	0.4	2.3	0.0	0.1	0.0	837.8	492.1
PACIFIC COD	9.8	1.2	63.0	137.4	17.7	30.8	0.2	9.5	0.0	31.8	51.3
SABLEFISH	1.2	0.0	1.5	13.6	0.0	0.0	0.0	0.0	0.0	0.0	34.0
ARROWTOOTH FL.	4.5	0.5	91.2	212.3	0.1	4.5	0.0	4.1	0.1	29.5	405.1
HALIBUT	124.2	130.2	0.5	25.3	52.3	73.4	34.4	22.2	104.7	20.0	50.8
FLATHEAD SOLE	3.2	0.0	2.7	0.8	0.0	0.0	0.0	0.0	0.0	6.4	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0
DOVER SOLE	0.5	0.0	0.1	2.3	1.4	0.0	0.0	0.0	0.0	0.5	0.0
REX SOLE	0.0	0.1	0.9	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0
YELLOWFIN SOLE	55.3	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.6	0.0
STARRY FLOUNDER	19.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	5.0	10.2	0.0	0.0	0.0	11.8	7.3	4.5	1.8	32.7	1.7
BUTTER SOLE	0.0	0.3	0.0	0.0	0.0	6.8	89.4	0.0	4.5	0.2	6.4
ALASKA PLAICE	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGH-EYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
DUSKY RKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	4.3	0.0	5.0	17.2	0.0	5.4	0.0	0.3	29.7	11.7	2.7
SKATES	0.0	5.0	0.0	1.7	0.0	19.1	0.0	0.0	40.4	0.0	0.0
SPINY DOGFISH	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dungeness CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	1.5	3.3	0.0	0.0	0.0	0.0	0.1	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	274	275	276	277	278	279
272	9/ 3/87	9/ 3/87	9/ 3/87	9/ 3/87	9/ 3/87	9/ 3/87	9/ 6/87
LATITUDE START	58 38 2	58 30.0	58 8.3	58 5.2	58 2.7	57 59.3	57 44.7
LONGITUDE START	152 30.5	152 34.5	152 12.1	152 16.2	152 37.8	152 40.3	152 1.2
LATITUDE END	58 38.8	58 31.6	58 6.8	58 6.6	58 1.6	57 58.2	57 43.3
LONGITUDE END	152 33.2	152 34.4	152 11.1	152 12.3	152 32.2	152 39.4	152 3.1
LORAN START	111997.60	111902.00	321150.90	321170.30	321199.90	322225.50	11294.10
LORAN START	31137.40	31167.50	43246.50	43238.70	43270.00	43277.50	31306.90
LORAN END	111999.00	111918.80	321156.20	321159.30	322071.80	322322.90	311300.70
LORAN END	311743.60	311705.80	432334.30	432336.70	432669.70	43277.50	31303.00
GEAR DEPTH	84 107	84 107	101	105	110	55	51
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.47	0.50	0.50
DISTANCE FISHED	1.57	1.56	1.55	1.67	1.54	1.43	1.52
PERFORMANCE / GEAR	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171	0 / 171
POLLOCK	469.0	132.4	194.6	360.2	876.4	222.3	19.3
PACIFIC COD	19.1	14.5	68.2	55.3	62.7	5.4	39.9
SABLEFISH	5.4	31.3	10.1	6.4	12.5	2.7	59.9
ARROWTOOTH FL.							59.9
HALIBUT	18.1	24.6	242.6	17.2	18.4	35.5	40.2
FLATHEAD SOLE	0.0	15.4	669.6	331.3	194.9	38.1	166.0
ENGLISH SOLE	15.0	4.5	0.0	0.0	0.0	0.5	0.9
DOVER SOLE	15.4	1.3	0.0	0.0	1.3	9.5	0.0
REX SOLE	0.0	0.0	0.0	0.0	0.0	6.2	24.5
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	26.8	0.5
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	3.6	0.0	0.0	0.0	0.0	44.3	14.1
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	10.4
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGH EYE RKFH	0.0	0.0	0.5	3.8	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEGUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPchin RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	1.1	3.5	0.0	0.4	0.0	2.4	14.6
SCULPINS							16.2
SKATES	1.4	0.0	75.8	15.4	0.0	0.0	51.8
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SALEMER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	3.2	0.5	2.3	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dungeness CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.1	0.3	13.2	4.6	3.7	0.4	4.4
SIDE STRIPE SHRIMP	0.0	0.1	3.3	0.8	0.2	0.1	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Section 3 (continued)

Fishing log for the Lets GoSummary listings of catch rates in descending order of magnitude for selected species of commercial interest

- Catch rates (kg/nm) are standardized to a trawl width of approximately 15 meters. The fishing efficiency adjustments between vessels, used in the distribution and abundance plots in Section 1, are not used.

Note: Hauls 99-149 were completed in the eastern Gulf of Alaska by the Auke Bay Laboratory.

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
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KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ARROWTOOTH FLOUNDER

HAUL	CATCH KG/1.0 NM	AV WGT (KG)	SPECIES ARROWTOOTH FLOUNDER			HAUL	CATCH KG/1.0 NM	AV WGT (KG)	SPECIES ARROWTOOTH FLOUNDER			HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FMI)	GEAR DEPTH (FMI)	GEAR DEPTH (FMI)
			CATCH	GEAR DEPTH (FMI)	AV WGT (KG)				CATCH	GEAR DEPTH (FMI)	AV WGT (KG)						
180	2020.2	1.0	55	156	153.4	0.8	70	67	81.7	0.4	.34						
181	1232.1	0.7	41	238	153.0	0.6	57	38	78.6	0.8	114						
43	886.6	0.5	72	231	150.8	1.0	84	254	76.3	1.8	145						
56	779.6	1.1	86	167	149.1	1.8	73	192	75.3	1.3	106						
154	754.3	1.0	79	37	145.1	0.3	62	65	71.7	0.3	52						
40	641.0	1.0	99	157	143.0	0.7	80	61	66.3	0.4	54						
274	613.8	1.5	101	210	142.2	0.2	53	257	66.3	0.2	39						
191	595.4	1.4	103	217	142.2	0.9	70	166	62.2	0.8	106						
208	577.8	1.1	81	227	139.6	0.3	64	64	60.9	0.4	53						
70	538.5	0.7	86	174	138.1	1.2	118	84	59.6	2.2	145						
209	537.9	1.2	67	153	134.9	1.0	78	263	58.1	1.3	82						
211	517.9	1.1	96	200	134.6	0.7	154	205	57.7	0.2	42						
151	499.2	2.0	112	264	132.7	1.2	83	169	57.1	0.6	55						
53	461.6	0.9	83	80	132.0	0.4	52	258	56.9	0.8	71						
71	420.9	0.7	63	206	127.8	0.7	55	172	55.0	0.5	77						
250	418.3	1.1	77	224	126.4	1.1	104	175	54.2	0.3	39						
51	405.5	0.7	82	168	126.3	1.4	94	81	53.9	0.3	54						
219	392.4	1.1	83	272	124.2	1.0	84	69	52.9	0.4	53						
230	373.3	0.4	67	33	123.8	0.4	71	62	52.0	0.4	54						
45	357.1	1.7	84	228	120.7	0.5	74	239	51.4	0.0	54						
49	344.6	1.1	97	66	120.6	0.4	53	83	51.4	1.9	140						
75	337.4	1.1	57	177	119.5	1.2	131	198	49.5	0.6	96						
98	331.6	0.9	92	18	115.6	0.5	42	92	49.0	1.9	171						
79	324.1	0.9	56	273	115.4	1.4	107	78	47.0	0.4	56						
185	314.9	0.7	93	58	114.3	0.7	80	170	46.6	0.7	112						
52	307.4	1.0	83	226	113.4	0.5	71	234	44.5	0.5	50						
54	287.9	0.8	80	77	111.2	0.6	51	82	42.2	1.9	132						
59	286.6	0.8	79	197	107.0	0.3	40	255	41.4	0.5	35						
44	279.0	0.8	71	94	106.8	1.9	172	163	40.0	0.7	75						
158	272.3	0.9	85	276	106.0	1.1	110	159	39.7	0.7	98						
57	266.1	0.7	83	2	104.1	0.2	54	260	38.6	1.4	89						
55	265.6	0.9	80	35	100.3	0.2	54	89	35.8	2.2	123						
229	264.7	0.4	64	240	97.7	2.0	120	152	35.7	0.4	159						
160	250.5	1.4	109	164	97.2	1.1	88	277	33.6	0.4	72						
271	244.0	1.0	75	165	97.2	0.9	98	93	33.1	1.9	174						
187	236.8	2.0	110	193	96.6	1.9	126	204	32.1	0.6	71						
195	229.7	1.0	69	39	95.9	0.3	32	91	31.6	1.8	177						
225	218.8	1.2	102	241	95.5	1.9	140	183	31.4	0.1	29						
161	210.8	1.3	86	275	95.3	1.2	105	88	31.0	1.7	151						
176	207.5	1.3	115	97	91.7	0.7	77	182	29.2	0.2	33						
196	202.3	0.7	68	201	89.7	0.9	59	4	25.9	0.2	47						
162	199.0	1.2	113	63	85.8	0.3	53	279	25.7	1.3	172						
3	186.3	0.8	75	68	84.9	0.4	55	87	23.4	1.6	145						
76	185.5	1.0	53	86	84.3	2.3	134	270	20.3	0.2	44						
60	181.4	0.5	83	173	83.3	1.0	84	188	19.1	0.4	45						
280	157.9	1.0	61	215	82.5	0.3	51	15	17.8	0.3	49						
248	153.3	1.0	137	256	82.0	0.4	45	216	16.8	0.2	29						

KG FOR NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ARROWTOOTH FLOUNDER

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
95	16.2	1.6	174	251	0.3	0.5	21
278	16.0	0.2	55	23	0.1	0.0	37
85	16.0	1.8	123	243	0.1	0.1	27
6	15.7	0.2	48	212	0.1	0.1	39
259	14.3	0.1	23	269	0.1	0.0	22
235	13.7	0.3	26	265	0.1	0.0	40
178	12.5	0.2	38				
203	12.3	0.3	46				
202	11.9	0.4	41				
90	11.5	1.5	191				
31	11.2	0.1	45				
29	11.1	0.1	45				
150	11.1	1.2	145				
214	10.5	0.1	56				
25	10.2	0.1	45				
31	9.8	0.1	18				
36	9.6	0.1	50				
171	9.1	0.3	31				
16	8.4	0.2	41				
236	8.0	0.3	32				
252	7.2	0.2	17				
9	6.9	0.3	52				
220	6.9	0.1	40				
189	6.7	0.7	38				
41	6.4	0.5	14				
30	6.2	0.1	30				
218	4.8	0.2	38				
14	4.6	0.5	47				
186	4.5	0.4	56				
12	4.3	0.2	35				
19	4.1	0.1	33				
179	3.2	0.2	39				
266	3.2	0.1	35				
261	2.8	0.1	16				
268	2.6	0.1	42				
10	2.5	0.2	44				
74	2.3	0.1	39				
7	1.3	0.1	28				
1	1.2	0.1	37				
213	1.0	0.1	30				
11	1.0	0.3	44				
24	0.8	0.1	17				
222	0.7	0.1	27				
28	0.6	0.1	18				
233	0.6	0.2	16				
21	0.5	0.1	43				
8	0.4	0.1	35				
34	0.4	0.1	44				
262	0.4	0.1	23				

KG PER NAUTICAL MILE FOR ALL
SURVEY TONS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TONS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TONS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC HALIBUT

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FIM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FIM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FIM)
154	339.9	10.2	79	58	47.5	17.3	80	214	23.7	2.8	56
171	251.8	1.8	31	186	46.9	5.6	36	47	23.6	0.8	30
39	243.9	10.7	32	31	46.9	8.1	18	6	23.3	2.1	48
197	214.5	1.6	40	208	46.4	12.4	81	139	23.0	12.3	98
3	212.7	1.9	75	54	46.3	12.1	80	52	22.8	16.6	83
274	156.5	4.2	101	35	45.2	6.5	54	267	22.3	3.8	16
227	156.3	10.9	64	21	43.5	7.1	43	180	22.0	3.2	55
72	142.9	2.3	37	188	43.5	4.3	45	91	21.1	13.0	177
25	126.3	21.5	45	98	43.5	12.9	92	194	20.8	2.8	49
50	122.6	6.2	37	255	42.0	5.1	35	256	20.1	2.1	45
201	120.0	27.9	59	40	42.0	11.3	99	210	19.2	2.2	53
231	119.7	17.4	84	15	41.9	8.9	49	168	18.8	14.8	74
77	110.7	4.5	51	71	41.2	9.4	63	272	17.4	3.0	84
79	99.1	26.8	56	81	39.5	1.0	54	238	16.8	3.2	57
44	91.5	9.0	71	206	38.7	3.8	38	9	16.7	1.8	52
62	89.1	22.5	54	207	38.2	63.9	32	59	16.4	3.9	79
262	88.3	2.6	23	18	38.2	3.3	42	160	16.1	8.0	86
250	79.2	14.7	77	17	37.6	0.9	19	264	15.8	25.3	83
45	78.7	7.4	84	29	37.5	16.0	45	273	15.8	8.2	107
261	77.1	3.5	16	213	36.6	3.8	30	150	15.5	11.3	145
190	76.6	2.3	30	67	36.5	12.4	34	158	15.1	4.5	85
73	75.9	1.1	43	202	36.3	2.1	41	240	14.6	14.3	120
23	74.6	7.4	37	279	35.6	6.4	31	20	14.4	0.7	24
24	72.5	1.4	17	11	35.5	4.9	44	33	14.2	12.6	71
84	72.3	27.2	145	243	35.0	0.6	27	268	14.0	3.2	42
34	71.8	10.6	44	37	34.1	7.4	62	187	13.8	22.8	110
244	70.6	1.6	16	178	33.6	2.9	38	270	13.8	0.8	44
269	68.8	3.1	22	218	33.0	2.5	38	198	13.3	4.4	96
235	68.5	3.0	26	257	32.7	2.3	39	4	13.3	2.6	47
233	67.5	1.0	16	265	32.2	1.2	40	253	13.3	21.0	109
199	64.3	19.1	17	215	31.9	3.6	51	86	13.2	10.3	134
184	64.3	10.5	38	14	31.8	1.6	47	221	11.9	0.7	18
183	63.1	6.0	29	31.6	3.0	4.5	276	11.4	9.2	110	
157	62.8	48.0	80	42	31.1	0.6	26	30	11.1	1.5	30
175	62.9	8.5	39	41	30.8	1.8	14	191	10.9	5.7	103
246	62.2	1.4	11	271	30.6	7.3	75	248	10.8	18.7	137
181	61.7	3.0	41	216	29.6	2.1	29	241	10.5	18.2	140
234	61.6	8.6	50	151	28.6	22.8	112	193	10.3	16.2	126
153	60.8	10.2	78	237	28.3	14.9	95	275	10.3	17.2	105
27	57.6	0.9	14	203	27.8	2.2	46	22	10.2	1.2	19
70	51.7	24.3	86	161	27.5	8.9	106	222	9.7	1.3	27
259	51.7	2.8	23	182	26.7	4.0	33	200	9.4	8.3	154
252	51.5	1.0	17	280	26.5	2.5	61	220	9.1	2.4	40
266	51.2	7.3	35	225	25.7	39.3	102	162	9.0	3.6	113
1	50.1	34.5	37	219	25.1	6.7	83	226	8.9	7.1	71
195	49.8	8.7	69	277	24.8	2.4	72	205	8.9	3.3	42
196	49.5	8.7	68	189	24.6	2.6	38	8	8.8	0.8	35
7	47.8	2.6	28	89	24.4	9.9	123	179	8.7	2.9	39

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES FLATHEAD SOLE

H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	
79	589 2	0. 4	56	58	0. 3	80	273	9. 9	0. 6	107					
274	432 0	0. 4	101	224	0. 3	104	229	8. 0	0. 2	64					
201	372 5	0. 4	59	25	0. 2	45	3	7. 0	0. 7	75					
211	307. 8	0. 4	96	71	0. 3	63	180	6. 7	0. 3	55					
172	295 2	0. 3	77	219	0. 2	83	193	6. 1	0. 7	126					
75	278 2	0. 5	57	253	0. 4	109	42	5. 9	0. 3	26					
264	264 7	0. 4	56	45	0. 3	84	238	5. 7	0. 2	57					
78	252 5	0. 3	51	152	0. 0	159	230	5. 4	0. 3	67					
279	244. 8	0. 4	32	150	0. 4	145	64	5. 2	0. 3	53					
39	234. 5	0. 0	40	97	0. 3	77	85	5. 1	0. 2	123					
197	225 6	0. 4	52	256	0. 2	45	89	4. 7	0. 2	123					
80	218. 9	0. 2	51	165	0. 3	98	216	4. 7	0. 2	29					
77	198 4	0. 4	105	40	0. 0	159	260	4. 5	0. 3	89					
275	197. 4	0. 4	54	239	0. 3	54	270	4. 4	0. 3	44					
81	169 8	0. 3	70	257	0. 2	39	252	4. 3	0. 2	17					
217	164. 2	0. 2	43	49	0. 3	97	82	4. 0	0. 2	132					
21	142. 3	0. 4	96	277	0. 2	72	250	4. 0	0. 5	77					
198	141 1	0. 2	73	200	0. 5	154	33	3. 8	0. 2	71					
167	131. 8	0. 3	69	23	0. 2	37	1	3. 8	0. 2	37					
209	127. 4	0. 3	83	236	0. 4	32	169	3. 1	0. 3	35					
52	126. 3	0. 3	112	237	0. 4	95	61	2. 4	0. 5	54					
151	125. 1	0. 3	81	177	0. 4	131	157	2. 2	0. 5	80					
208	123. 6	0. 2	53	231	0. 3	84	86	2. 0	0. 2	134					
76	120. 9	0. 3	110	225	0. 2	37	90	2. 0	0. 2	191					
276	120. 4	0. 3	80	215	0. 2	51	188	2. 0	0. 8	45					
54	117. 7	0. 3	42	29	0. 2	45	28	2. 0	0. 1	18					
205	116. 8	0. 3	14	162	0. 6	113	261	2. 0	0. 1	16					
41	109. 2	0. 3	61	248	0. 4	137	15	1. 9	0. 6	49					
280	104. 9	0. 3	72	278	0. 2	55	83	1. 7	0. 2	140					
43	104. 8	0. 3	41	175	0. 4	39	241	1. 8	0. 4	140					
181	102. 2	0. 4	86	195	0. 3	69	84	1. 8	0. 3	145					
56	97. 5	0. 3	83	170	0. 3	112	62	1. 8	0. 2	54					
57	94. 7	0. 3	83	173	0. 3	84	30	1. 7	0. 3	30					
53	92. 6	0. 4	50	164	0. 3	88	263	1. 7	0. 3	82					
234	92. 4	0. 3	82	259	0. 2	23	65	1. 6	0. 4	53					
51	91. 3	0. 3	80	254	0. 1	45	63	1. 5	0. 4	53					
55	85. 0	0. 3	83	196	0. 2	68	214	1. 5	0. 2	56					
60	84. 9	0. 3	53	228	0. 2	74	68	1. 4	0. 3	55					
210	77. 9	0. 2	86	161	0. 4	105	96	1. 3	0. 1	172					
70	74. 4	0. 4	118	240	0. 3	120	69	1. 2	0. 5	53					
174	74. 4	0. 2	18	166	0. 3	106	16	0. 9	0. 7	41					
31	74. 4	0. 2	18	129	0. 3	71	67	0. 9	0. 3	54					
59	68. 7	0. 3	79	44	0. 2	68	30	1. 4	0. 3	55					
212	68. 4	0. 2	33	227	0. 6	64	176	0. 9	0. 3	115					
70	62. 8	0. 3	55	204	0. 5	106	96	1. 3	0. 1	172					
206	61. 4	0. 2	94	272	0. 3	71	65	0. 9	0. 2	53					
168	60. 1	0. 3	42	258	0. 3	84	191	0. 7	0. 0	103					
18	55. 7	0. 2	29	10	0. 2	44	160	0. 6	0. 5	86					
183	55. 3	0. 3	35	38	0. 3	114	159	0. 6	0. 2	92					
255							98								

SPECIES FLATHEAD SOLE

SPECIES FLATHEAD SOLE

SPECIES FLATHEAD SOLE

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES DOVER SOLE

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH
ON 15 M NET WIDTH

SPECIES DOVER SOLE

	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
90	148.3	0.4	191	153	2.9	0.6	78
40	120.9	0.8	99	240	2.8	1.4	120
91	96.9	0.5	177	70	2.7	1.7	86
191	95.1	1.2	103	260	2.0	0.8	89
84	92.7	0.5	145	38	1.8	0.8	114
85	72.4	0.4	123	227	1.6	0.5	64
92	67.0	0.5	171	52	1.6	1.1	83
94	58.6	0.5	172	200	1.5	1.4	154
95	57.4	0.4	174	167	1.5	0.2	73
161	57.4	0.7	106	263	1.4	0.5	82
87	51.0	0.5	145	151	1.4	0.8	112
181	49.5	0.6	41	165	1.4	0.8	98
88	46.1	0.5	151	163	1.2	0.3	75
83	45.8	0.5	140	275	1.0	0.9	103
82	39.9	0.5	132	231	0.9	0.5	84
45	36.9	0.7	84	192	0.9	0.3	159
86	36.6	0.5	134	264	0.9	0.5	83
93	30.4	0.4	174	176	0.7	1.1	115
96	25.7	0.5	172	59	0.6	0.5	79
97	23.2	0.8	77	166	0.6	0.9	106
157	17.5	0.8	80	193	0.6	0.1	126
250	16.9	0.8	77	237	0.6	0.9	95
154	16.0	0.6	79	278	0.5	0.2	55
162	14.3	0.7	113	66	0.4	0.5	53
192	12.4	0.6	106	261	0.3	0.3	16
159	12.2	0.7	98	270	0.3	0.2	44
89	11.4	0.4	123	258	0.3	0.5	71
56	10.3	1.5	86	252	0.3	0.2	17
272	9.5	0.4	84	169	0.2	0.3	55
71	7.6	0.8	63	236	0.2	0.2	32
180	7.5	1.1	55	214	0.2	0.2	56
158	7.0	0.9	85	226	0.1	0.2	71
175	6.1	0.6	39	235	0.1	0.2	26
51	6.1	1.0	82	25	0.1	0.1	45
225	5.9	1.3	102	195	0.1	0.1	69
241	5.5	1.6	140	12	0.1	0.1	35
280	4.9	0.4	61				
43	4.6	0.2	72				
164	4.1	0.8	88				
57	4.1	1.4	83				
53	4.0	1.1	83				
160	4.0	0.8	86				
44	3.9	0.4	71				
98	3.4	0.7	92				
58	3.4	0.6	80				
254	3.2	1.1	145				
55	3.0	2.3	80				
273			107				

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES REX SOLE

H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
191	66. 4	0. 5	103	163	4. 3	0. 5	75	0. 4	0. 7
193	54. 6	0. 5	126	278	4. 2	0. 3	55	0. 4	0. 7
40	49. 5	0. 5	99	67	4. 0	0. 4	54	0. 4	0. 2
94	45. 8	0. 3	172	70	3. 7	0. 2	234	0. 3	0. 2
84	45. 1	0. 3	145	80	3. 8	0. 3	32	0. 3	0. 2
192	40. 1	0. 9	106	186	3. 8	0. 4	205	0. 3	0. 2
86	38. 4	0. 3	134	239	3. 8	0. 2	183	0. 3	0. 2
91	38. 2	0. 3	177	59	3. 8	0. 3	178	0. 3	0. 1
85	35. 3	0. 3	123	272	3. 5	0. 3	220	0. 3	0. 1
82	30. 6	0. 3	132	150	3. 4	0. 1	219	0. 3	0. 1
83	30. 3	0. 3	140	257	3. 2	0. 2	164	0. 3	0. 2
92	25. 8	0. 3	171	227	3. 0	0. 5	214	0. 3	0. 2
88	25. 0	0. 3	123	152	2. 9	0. 3	77	0. 3	0. 1
96	23. 9	0. 3	172	153	2. 4	0. 4	60	0. 3	0. 2
93	21. 4	0. 3	174	55	2. 4	0. 4	84	0. 2	0. 1
95	20. 6	0. 3	174	94	2. 3	0. 5	80	0. 2	0. 2
88	20. 4	0. 3	151	180	2. 2	0. 2	248	0. 2	0. 2
90	20. 3	0. 3	191	62	2. 2	0. 4	56	0. 2	0. 1
97	19. 6	0. 5	77	230	2. 1	0. 3	78	0. 2	0. 1
195	18. 7	0. 3	69	231	1. 9	0. 2	239	0. 2	0. 1
161	17. 1	0. 3	106	255	1. 8	0. 3	260	0. 2	0. 2
280	16. 1	0. 5	61	256	1. 8	0. 5	224	0. 1	0. 2
87	15. 1	0. 3	145	51	1. 7	0. 7	38	0. 1	0. 1
181	14. 1	0. 2	41	253	1. 4	0. 1	109	0. 1	0. 2
159	13. 9	0. 6	98	66	1. 3	0. 3	53	0. 1	0. 1
154	13. 4	0. 4	79	169	1. 2	0. 1	55	0. 1	0. 1
98	13. 1	0. 3	92	39	1. 2	0. 2	32	0. 1	0. 1
44	12. 9	0. 2	71	215	1. 2	0. 9	51	0. 1	0. 1
225	12. 7	0. 7	102	175	1. 1	0. 3	39	0. 1	0. 1
162	11. 4	0. 6	113	201	1. 0	0. 2	59	0. 1	0. 1
198	0. 4	0. 1	96	250	0. 9	0. 2	77	0. 1	0. 1
45	9. 2	0. 4	84	10	0. 9	0. 1	44	0. 1	0. 1
270	9. 0	0. 2	44	176	0. 9	0. 2	115	0. 1	0. 1
68	8. 7	0. 4	55	273	0. 8	0. 3	107	0. 1	0. 1
196	8. 0	0. 3	68	276	0. 8	0. 3	110	0. 1	0. 1
157	7. 6	0. 4	80	228	0. 7	0. 2	74	0. 0	0. 0
229	7. 0	0. 3	64	33	0. 6	0. 1	71	0. 0	0. 0
277	6. 7	0. 2	72	65	0. 6	0. 3	52	0. 0	0. 0
71	6. 1	0. 3	63	57	0. 6	0. 4	83	0. 0	0. 0
160	6. 1	1. 0	86	3	0. 6	0. 3	75	0. 0	0. 0
210	6. 0	0. 2	53	238	0. 6	0. 1	57	0. 0	0. 0
158	5. 9	0. 0	85	185	0. 6	0. 5	93	0. 0	0. 0
43	5. 7	0. 1	72	263	0. 6	0. 4	82	0. 0	0. 0
187	5. 6	0. 5	110	170	0. 6	0. 2	112	0. 0	0. 0
217	5. 5	0. 2	70	241	0. 5	0. 2	140	0. 0	0. 0
64	5. 2	0. 4	53	258	0. 5	0. 2	71	0. 0	0. 0
63	4. 6	0. 7	53	200	0. 5	0. 4	154	0. 0	0. 0
151	4. 3	0. 1	112	61	0. 5	0. 3	54	0. 0	0. 0

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES YELLOWFIN SOLE

H A U L	C A T C H K G / 1 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
21	453.2	0.4	43	215	2.0	0.6	31
31	353.4	0.5	18	213	1.4	0.2	30
25	266.0	0.4	45	1	0.8	0.3	37
197	234.5	0.4	40	42	0.8	0.3	26
23	201.1	0.3	37	16	0.8	0.6	41
29	151.4	0.3	45	260	0.4	0.1	87
77	142.8	0.6	51	15	0.4	0.7	49
28	111.7	0.2	18	258	0.3	0.3	71
41	109.3	0.2	14	280	0.3	0.2	61
81	107.7	0.7	54	20	0.3	0.2	24
80	88.0	0.4	52	197	0.2	0.2	17
79	78.5	0.6	56				
18	77.4	0.3	42				
27	73.7	0.5	14				
205	69.1	0.6	42				
183	62.3	0.3	29				
217	55.2	0.5	70				
259	53.5	0.2	23				
210	49.6	0.4	53				
30	40.9	0.2	30				
76	36.1	0.4	53				
24	35.9	0.3	17				
261	34.4	0.2	16				
252	30.6	0.4	17				
255	29.2	0.4	35				
39	24.3	0.7	32				
270	23.1	0.4	44				
257	20.9	0.5	39				
236	19.7	0.5	32				
206	19.4	1.0	55				
279	18.6	0.5	51				
278	18.2	0.3	55				
233	17.9	0.3	16				
182	15.3	0.2	33				
256	13.0	0.5	45				
234	12.3	0.5	50				
277	10.5	0.4	72				
246	9.9	0.2	11				
78	9.8	1.1	56				
216	9.6	0.2	29				
209	9.2	0.7	69				
239	7.9	0.4	54				
175	7.8	0.6	39				
262	7.2	0.2	23				
10	3.4	0.7	44				
201	2.9	0.7	59				
75	2.8	0.5	57				
19	2.3	0.5	33				

SPECIES	ROCK SOLE	GEAR DEPTH (FM)	AV WGT (KG)	CATCH KG/1.0 NM	HAUL	GEAR DEPTH (FM)	AV WGT (KG)	CATCH KG/1.0 NM	HAUL	GEAR DEPTH (FM)	AV WGT (KG)	CATCH KG/1.0 NM	HAUL
73	58.9	0.4	43	78	12.8	0.3	56	11.6	71	204	1.6	56	71
202	51.8	0.3	41	36	12.7	0.4	50	11.4	47	200	1.5	50	71
171	46.4	0.5	31	64	12.4	0.4	53	12.2	53	183	1.5	53	71
207	45.4	0.6	32	175	12.2	0.8	39	10.7	53	238	1.8	0.0	71
235	44.9	0.3	26	246	12.0	0.3	11	0.7	51	272	2.3	0.7	84
27	36.6	0.3	14	179	9.6	0.5	53	15.4	75	23	2.4	0.5	84
47	33.4	0.4	30	67	9.3	0.4	54	11.6	71	219	2.3	0.5	83
215	38.9	0.5	51	4	11.4	0.4	47	10.7	53	250	2.5	0.5	77
178	36.9	0.5	38	69	10.7	0.3	53	10.7	53	153	2.4	0.9	78
77	36.8	0.5	51	244	10.7	0.4	16	9.6	51	272	2.3	0.7	84
222	43.3	0.4	27	44	11.6	0.4	56	11.6	56	45	2.3	0.4	84
215	30.7	0.4	61	28	9.3	0.5	50	11.4	47	200	1.5	0.3	154
178	30.2	0.5	55	43	9.1	0.6	53	10.7	53	183	2.1	0.2	71
39	29.5	0.4	32	180	9.0	0.7	55	10.7	53	238	1.8	0.0	71
233	29.1	0.4	16	68	8.7	0.4	53	9.6	53	169	1.8	0.4	55
217	26.2	0.5	70	34	7.1	0.5	44	8.7	53	182	1.2	0.6	33
257	28.1	0.5	39	67	9.3	0.4	54	9.3	42	204	1.6	0.5	80
2	27.0	0.5	45	71	7.6	0.8	63	11.4	47	162	1.1	0.5	113
214	26.7	0.4	56	62	7.6	0.4	54	7.6	53	149	1.1	0.4	97
30	26.7	0.2	30	265	7.3	0.2	40	7.3	53	191	1.1	0.6	103
221	24.7	0.6	18	197	5.6	0.8	40	5.6	53	156	1.1	0.6	70
14	24.0	0.7	47	252	7.1	0.5	44	7.1	53	251	0.7	0.3	21
270	22.5	0.3	44	266	6.9	0.2	23	6.9	53	167	0.7	0.6	73
32	25.9	0.5	45	262	6.0	0.7	71	6.0	53	57	0.7	0.5	83
181	25.9	0.6	41	226	5.9	0.5	32	5.9	53	55	0.6	0.2	80
35	25.1	0.5	54	236	5.6	0.8	40	5.6	53	248	0.5	0.9	137
221	24.7	0.6	18	197	5.6	0.3	35	5.6	53	70	0.5	0.5	86
14	24.0	0.7	47	252	5.2	0.3	35	5.2	53	13	0.5	0.3	74

KG PER NAUTICAL MILE FOR ALL SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ROCK SOLE

KG PER NAUTICAL MILE FOR ALL SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ROCK SOLE

KG PER NAUTICAL MILE FOR ALL SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES SABLEFISH

H A U L	C A T C H K G / 1 , 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 , 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
229	773.7	1.6	64	150	9.8	2.4	145
169	617.1	1.6	55	173	8.6	2.2	84
90	369.6	2.6	191	264	8.5	2.3	83
40	348.0	2.4	99	276	7.8	4.2	110
91	255.5	2.6	177	192	7.6	2.2	106
175	227.0	1.5	39	274	6.5	3.4	101
98	184.6	2.5	92	230	6.4	1.6	67
82	178.5	2.3	132	196	5.7	1.5	68
162	178.4	2.1	113	164	5.5	1.5	88
158	173.8	2.3	85	254	5.3	1.8	145
83	150.4	2.3	140	163	4.7	1.4	75
94	117.7	2.1	172	49	4.4	2.4	97
92	105.7	2.4	171	240	4.1	4.1	120
95	97.0	2.6	174	275	3.8	3.2	103
84	90.9	2.2	145	195	3.7	1.5	69
185	82.5	2.3	93	272	3.5	1.8	84
87	78.4	2.4	145	85	3.4	1.4	123
176	76.0	3.3	115	258	3.4	1.4	71
154	75.6	1.5	79	57	2.7	1.8	83
248	74.6	3.2	137	30	2.5	0.2	30
191	73.9	1.8	103	224	1.9	3.2	104
241	66.0	2.7	140	277	1.7	0.9	72
88	64.0	2.4	151	36	1.8	1.4	86
253	54.2	2.1	109	55	1.8	1.4	80
161	51.1	2.8	106	54	1.7	1.4	80
160	50.4	2.1	86	237	1.4	2.3	95
193	49.1	2.7	126	33	1.4	1.2	71
97	47.0	2.3	77	166	1.3	2.0	106
177	44.1	3.4	131	58	1.2	0.5	80
93	36.0	2.1	174	89	1.1	1.8	123
96	35.5	2.3	172	197	1.0	0.5	40
157	34.4	1.4	80	280	1.0	1.5	61
187	31.7	2.1	110	260	0.9	1.5	87
225	31.7	2.9	102	263	0.9	1.5	82
86	31.7	2.1	134	250	0.9	1.4	77
174	25.7	2.7	118	38	0.8	1.4	114
180	23.9	1.4	55	261	0.8	0.6	16
159	22.0	2.7	98	18	0.7	0.5	42
271	20.5	1.7	75	257	0.6	0.9	39
170	20.3	2.1	112	41	0.5	0.5	14
273	20.1	2.4	107	255	0.3	0.4	35
238	19.1	1.5	57	31	0.3	0.1	18
153	13.5	1.5	78	28	0.1	0.1	18
165	12.5	1.7	98	29	0.1	0.1	45
70	11.6	2.4	86				
219	11.3	1.8	83				
152	11.3	2.0	159				
80			11.0				

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC COD

	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FIM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FIM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FIM)
H A U L			H A U L			H A U L			H A U L
63	2885	1	2.1	53	51.0	49	270	21.8	4.4
46	2022	.6	1.0	39	50.9	57	266	21.5	3.1
69	464	1	2.1	53	50.3	2.8	225	21.0	2.7
50	450	1	1.8	37	209	48.9	2.8	20.3	3.3
180	434	.9	1.8	55	169	48.9	2.1	20.1	1.3
188	394	.6	2.4	45	196	47.9	2.8	163	35
42	213	.2	0.4	26	167	47.7	2.9	163	98
11	197	.6	1.1	44	6	46.5	2.5	253	19.7
21	164	.2	1.7	43	43	45.6	4.7	203	1.9
154	154	.6	1.6	79	59	45.4	2.7	29	42
67	148	.3	1.8	54	57	45.4	3.0	37	1.3
45	147	.4	2.2	84	274	44.0	2.7	229	35
66	144	.1	1.5	53	54	43.6	2.8	161	106
18	125	.0	2.7	42	39	42.2	2.2	168	1.9
44	124	.7	1.9	71	248	41.8	3.3	41	45
181	121	.3	2.1	41	185	40.4	2.5	17.5	1.5
195	120	.7	2.6	69	239	40.3	2.8	19	62
2	119	.7	2.6	45	263	40.2	2.2	229	0.9
175	116	.3	1.8	39	172	39.9	2.4	17.2	64
189	108	.7	3.0	38	280	39.4	2.0	229	1.3
64	105	.2	1.3	53	217	39.3	1.6	16.7	1.3
241	102	.0	3.1	140	227	39.0	1.7	17.2	33
77	100	.9	2.4	51	158	39.0	1.4	208	1.7
191	99	.4	2.5	103	276	38.9	3.1	16.7	33
250	97	.8	2.1	77	4	38.7	2.5	278	1.1
200	88	.4	2.6	154	160	37.7	1.9	86	134
264	85	.9	1.8	83	49	36.0	2.3	94	2.0
80	77	0	1.6	52	258	34.7	2.1	26.0	1.6
171	76	.1	1.1	31	151	34.5	2.4	237	2.5
65	73	.8	1.0	52	60	33.2	2.6	177	1.2
236	69	.6	1.1	57	275	33.1	3.2	28	13.0
79	68	.7	3.1	56	215	32.5	1.2	234	0.8
210	68	.4	3.6	53	214	32.0	0.9	94	1.7
58	65	.9	2.8	80	55	31.0	2.6	272	52
23	65	.4	2.2	37	51	31.0	2.5	223	1.9
12	64	.8	0.6	35	271	30.9	1.8	26.5	1.2
33	64	.7	1.8	71	30	29.0	0.4	105	1.2
56	63	.5	2.8	86	68	28.9	1.3	23.5	1.2
176	62	.8	2.6	115	153	27.5	1.6	159	1.1
211	59	.7	2.4	96	201	27.4	3.2	99	1.1
35	59	.5	0.9	54	187	27.3	2.7	236	1.1
53	59	.1	2.5	83	193	26.0	3.4	16.6	1.1
3	58	.7	3.5	75	78	25.6	2.8	192	1.1
162	56	0	2.4	113	219	25.5	2.0	72	1.1
31	55	.4	1.5	18	197	25.5	0.0	10	1.1
157	52	.3	1.1	80	226	24.3	2.2	254	1.1
40	52	.2	2.1	97	240	23.5	2.6	25	1.1
198	51	.5	2.8	96	118	22.7	2.2	183	2.1

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC COD

	CATCH KG/1.0 NM	AV WGT (KG)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	GEAR DEPTH (FM)
279	8.0	2.9	32	0.1	0.1	45	
220	7.8	0.4					
1	7.8	0.2					
62	7.6	1.0					
230	7.5	1.9					
61	7.2	1.2					
82	6.9	1.8					
38	6.8	2.4					
261	6.1	2.0					
268	6.0	0.7					
228	5.6	2.3					
27	5.4	0.3					
178	5.3	0.9					
252	5.2	4.1					
256	5.0	1.9					
92	4.1	1.8					
277	3.8	2.7					
88	3.6	2.0					
98	3.4	0.9					
87	3.4	1.8					
216	3.3	1.6					
36	3.1	0.8					
96	3.1	2.3					
20	3.1	0.4					
164	3.0	2.4					
246	2.6	0.0					
182	2.4	3.6					
70	2.2	4.1					
221	2.1	0.6					
47	2.0	0.8					
24	1.9	0.1					
202	1.6	0.8					
156	1.3	0.6					
93	1.2	1.8					
170	1.1	1.8					
7	1.0	0.5					
204	1.0	1.6					
179	0.9	0.6					
262	0.8	0.2					
243	0.6	0.2					
222	0.5	0.1					
163	0.3	0.5					
259	0.3	0.2					
218	0.2	0.2					
267	0.1	0.2					
233	0.1	0.1					
14	0.1	0.1					
199	0.1	0.0					

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES WALLEYE POLLOCK

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	
81	13137.9	0.6	54	223.2	0.8	48	166	41.6	1.1	106						
79	8023.8	0.6	56	220.8	0.7	61	224	37.9	1.1	104						
80	6766.8	0.4	52	213.2	1.1	172	279	37.3	0.7	31						
78	6432.4	0.4	56	211.9	1.3	83	150	36.9	0.4	145						
76	5667.6	0.6	53	210.6	0.6	115	23	35.6	0.1	37						
209	4065.2	0.3	69	208.3	0.4	56	87	32.2	1.1	145						
208	1426.7	1.1	81	199.7	0.8	79	10	29.4	0.3	44						
217	1413.3	1.1	70	197.5	0.8	42	165	25.9	0.9	98						
44	1361.7	0.9	71	187.8	0.2	35	93	21.4	1.0	174						
71	1307.1	0.4	63	170	0.7	112	83	19.8	1.0	140						
43	1267.2	0.9	72	157.2	0.7	72	238	19.1	1.0	97						
206	1143.4	0.9	55	155.4	0.7	72	88	17.6	1.2	151						
75	1033.9	1.0	57	205	1.1	42	91	16.9	0.7	177						
181	1007.2	1.2	41	148.7	1.1	42	161	16.5	1.0	106						
231	805.9	1.1	B4	125.5	0.6	101	274	12.5	0.6	171						
211	700.5	0.8	96	124.8	0.8	50	92	16.5	1.1	171						
197	661.5	0.8	40	168	1.1	94	225	15.7	0.9	102						
154	651.8	0.6	79	152.6	0.9	39	88	15.6	1.0	88						
39	638.9	1.0	32	148.7	0.2	45	91	14.9	0.9	92						
204	613.6	1.0	71	120.8	0.5	140	278	14.9	0.9	55						
270	576.3	0.3	44	153	116.6	0.6	78	96	12.6	1.0	172					
171	555.8	0.8	31	151	114.6	0.8	112	28	12.2	0.2	18					
276	543.6	0.7	110	123.6	0.7	154	164	11.7	1.2	174						
45	531.0	0.9	B4	25	122.9	0.2	45	98	14.9	0.9	92					
239	529.9	0.9	54	241	120.8	0.5	140	278	13.3	0.6	55					
198	489.3	0.4	96	124.8	0.8	50	92	12.6	1.0	172						
219	488.9	1.1	83	151	114.6	0.8	112	28	12.2	0.2	18					
51	377.8	1.0	82	167	111.1	0.7	73	95	11.7	1.2	174					
58	452.3	0.8	80	250	110.6	0.8	35	98	11.9	0.9	92					
96	446.9	1.1	86	174	108.2	0.9	118	228	10.9	1.1	74					
236	435.3	1.1	32	103.2	1.0	123	183	10.3	0.3	29						
21	415.6	0.1	43	172	102.4	0.9	77	84	8.4	0.9	145					
77	313.0	0.5	51	250	93.2	1.5	77	11	8.0	0.0	44					
253	364.5	0.3	109	254	90.1	0.3	145	158	6.4	0.8	85					
201	361.7	0.9	59	89	89.4	1.1	123	157	6.4	0.9	80					
275	335.4	0.6	105	196	86.4	1.1	68	159	6.2	0.5	78					
54	318.1	1.2	80	264	85.9	0.9	83	173	5.9	0.3	84					
237	304.0	0.7	95	273	84.9	0.8	107	14	5.5	0.0	47					
57	304.0	1.0	83	30	83.1	0.1	30	182	5.4	1.0	33					
272	298.7	0.9	B4	74.7	74.7	0.9	47	86	5.2	0.9	134					
271	296.5	1.0	75	210	72.1	0.9	53	261	4.2	0.1	16					
256	293.6	0.5	45	29	72.0	0.1	45	195	3.7	1.0	69					
40	293.0	1.2	99	31	65.7	1.2	1B2	162	3.7	0.6	113					
52	285.2	1.2	83	240	58.5	0.6	120	38	3.5	0.5	114					
55	239.3	1.1	80	7	57.9	0.8	28	20	3.1	0.8	24					
9	236.2	0.8	52	260	56.1	0.6	B7	1	3.0	0.0	37					
263	234.6	1.0	82	160	54.2	1.1	B6	163	2.4	0.6	75					
60	233.8	1.2	83	249	52.7	0.8	71	17	2.3	1.3	95					
				191	52.0	1.2	103	68	2.1	1.1	55					
				248	50.6	0.6	137	192	1.8	0.6	106					
				7	46.0	0.7	131	266	1.6	0.1	35					
				49	44.5	0.8	97	262	1.5	0.2	23					
				41	43.5	1.0	14	188	1.4	0.2	2.3					

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH
SPECIES SHORTSPINE THORNYHEAD

H A U L	C A T C H K G / 1 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
91	88 1	0 . 3	177
83	67 5	0 . 3	140
92	62 9	0 . 3	171
84	58 4	0 . 3	145
82	52 0	0 . 3	132
88	51 4	0 . 3	151
87	36 5	0 . 3	145
94	35 4	0 . 3	172
86	34 0	0 . 3	134
90	31 8	0 . 3	191
95	30 3	0 . 3	174
93	29 6	0 . 3	174
96	26 7	0 . 3	172
85	8 0	0 . 3	123
89	4 7	0 . 3	123
97	0 4	0 . 1	77
98	0 2	0 . 2	92

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ROUGHYEYE ROCKFISH

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
95	41.9	1.8	174	167	0.4	0.7	73
93	36.9	1.8	174	206	0.3	0.1	55
94	34.0	1.6	172	274	0.3	0.2	101
70	30.9	0.7	86	159	0.3	0.5	98
91	29.4	1.6	177	255	0.1	0.1	35
92	27.3	1.6	171				
248	25.8	1.2	137				
90	23.0	1.7	191				
96	18.8	1.5	172				
98	16.6	0.3	92				
49	12.2	0.8	97				
152	9.5	0.6	159				
174	8.7	0.9	118				
151	8.0	0.7	112				
231	6.8	0.5	84				
208	6.7	0.9	81				
192	6.6	0.5	106				
241	5.7	1.4	140				
211	5.7	0.8	96				
237	5.7	1.8	95				
83	5.6	1.4	140				
253	5.5	1.0	109				
254	5.2	1.5	145				
170	4.4	0.6	112				
177	4.3	1.0	131				
224	4.3	0.5	104				
87	4.3	1.1	145				
150	4.2	0.6	145				
176	3.8	1.0	115				
84	3.6	1.4	145				
56	3.0	1.1	86				
275	2.3	0.6	105				
228	2.2	0.5	74				
250	1.8	0.4	77				
86	1.7	1.4	134				
53	1.7	0.7	83				
165	1.7	0.9	98				
88	1.7	1.4	151				
171	1.7	2.5	31				
75	1.7	0.7	57				
193	1.4	1.1	126				
166	1.3	1.0	106				
97	1.0	0.7	77				
161	0.8	0.7	106				
160	0.8	0.6	86				
51	0.6	0.5	82				
173	0.4	0.7	84				
256	0.4	0.1	45				

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ROUGHEYE ROCKFISH

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
95	41.9	1.8	174	167	0.4	0.7	73
93	36.9	1.8	174	206	0.3	0.1	55
94	34.0	1.6	172	274	0.3	0.2	101
70	30.9	0.7	86	159	0.3	0.5	98
91	29.4	1.6	177	255	0.1	0.1	35
92	27.3	1.6	171				
248	25.8	1.2	137				
90	23.0	1.7	191				
96	18.8	1.5	172				
98	16.6	0.3	92				
49	12.2	0.8	97				
152	9.5	0.6	159				
174	8.7	0.9	118				
151	8.0	0.7	112				
231	6.8	0.5	84				
208	6.7	0.9	81				
192	6.6	0.5	106				
241	5.7	1.4	140				
211	5.7	0.8	96				
237	5.7	1.8	95				
83	5.6	1.4	140				
253	5.5	1.0	109				
254	5.2	1.5	145				
170	4.4	0.6	112				
177	4.3	1.0	131				
224	4.3	0.5	104				
87	4.3	1.1	145				
150	4.2	0.6	145				
176	3.8	1.0	115				
84	3.6	1.4	145				
56	3.0	1.1	86				
275	2.3	0.6	105				
228	2.2	0.5	74				
250	1.8	0.4	77				
86	1.7	1.4	134				
53	1.7	0.7	83				
165	1.7	0.9	98				
88	1.7	1.4	151				
171	1.7	2.5	31				
75	1.7	0.7	57				
193	1.4	1.1	126				
166	1.3	1.0	106				
97	1.0	0.7	77				
161	0.8	0.7	106				
160	0.8	0.6	86				
51	0.6	0.5	82				
173	0.4	0.7	84				
256	0.4	0.1	45				

KG FOR NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC OCEAN PERCH

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
187	282.8	0.9	110	4	0.1	0.1	47
86	185.8	0.6	134	203	0.1	0.1	46
83	131.8	0.6	140	23	0.1	0.1	37
82	103.7	0.4	132	12	0.1	0.1	35
87	84.1	0.6	145	70	0.1	0.1	86
88	67.1	0.6	151				
84	57.2	0.6	145				
94	52.7	0.6	172				
91	44.1	0.6	177				
92	40.2	0.6	171				
191	33.0	1.0	103				
93	22.8	0.6	174				
61	16.3	0.2	54				
96	15.1	0.7	172				
95	10.0	0.6	174				
B9	8.6	0.7	123				
90	6.8	0.6	191				
B5	6.3	0.7	123				
98	5.7	0.3	92				
192	5.0	0.7	106				
156	3.4	0.3	70				
158	3.0	0.5	B5				
220	2.9	0.1	40				
69	2.4	0.1	53				
62	1.8	0.1	54				
188	1.7	0.9	45				
157	1.5	1.1	80				
218	1.4	0.1	38				
193	1.3	1.0	126				
11	1.2	0.1	44				
250	1.2	0.9	77				
64	1.0	0.2	53				
.2	0.9	0.1	45				
32	0.9	0.1	45				
212	0.9	0.1	39				
159	0.9	0.3	98				
173	0.7	1.1	84				
67	0.7	0.1	54				
34	0.6	0.1	44				
225	0.6	0.3	102				
226	0.6	0.2	71				
160	0.5	0.3	86				
208	0.3	0.1	81				
161	0.3	0.5	106				
224	0.3	0.5	104				
219	0.1	0.1	83				
65	0.1	0.1	52				
269	0.1	0.1	22				

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC OCEAN PERCH

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
187	282.8	0.9	110	4	0.1	0.1	47
86	185.8	0.6	134	203	0.1	0.1	46
83	131.8	0.6	140	23	0.1	0.1	37
82	103.7	0.4	132	12	0.1	0.1	35
87	84.1	0.6	145	70	0.1	0.1	86
88	67.1	0.6	151				
84	57.2	0.6	145				
94	52.7	0.6	172				
91	44.1	0.6	177				
92	40.2	0.6	171				
191	33.0	1.0	103				
93	22.8	0.6	174				
61	16.3	0.2	54				
96	15.1	0.7	172				
95	10.0	0.6	174				
B9	8.6	0.7	123				
90	6.8	0.6	191				
B5	6.3	0.7	123				
98	5.7	0.3	92				
192	5.0	0.7	106				
156	3.4	0.3	70				
158	3.0	0.5	B5				
220	2.9	0.1	40				
69	2.4	0.1	53				
62	1.8	0.1	54				
188	1.7	0.9	45				
157	1.5	1.1	80				
218	1.4	0.1	38				
193	1.3	1.0	126				
11	1.2	0.1	44				
250	1.2	0.9	77				
64	1.0	0.2	53				
.2	0.9	0.1	45				
32	0.9	0.1	45				
212	0.9	0.1	39				
159	0.9	0.3	98				
173	0.7	1.1	84				
67	0.7	0.1	54				
34	0.6	0.1	44				
225	0.6	0.3	102				
226	0.6	0.2	71				
160	0.5	0.3	86				
208	0.3	0.1	81				
161	0.3	0.5	106				
224	0.3	0.5	104				
219	0.1	0.1	83				
65	0.1	0.1	52				
269	0.1	0.1	22				

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES DUSKY ROCKFISH

H A U L	C A T C H K G / 1 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
184	185.7	1.2	38
175	67.7	0.9	39
181	21.2	1.0	41
191	10.8	1.3	103
178	7.9	2.7	38
250	7.0	0.9	77
192	6.5	1.0	106
270	5.3	0.4	44
156	5.3	1.0	70
280	5.1	1.1	61
61	4.6	0.8	54
82	3.5	0.9	132
42	3.0	0.6	26
46	2.9	1.1	39
62	2.7	1.4	54
220	2.6	0.1	40
186	2.3	1.2	56
187	2.2	1.8	110
179	2.1	2.7	39
86	1.7	1.4	134
53	1.7	1.4	83
189	1.4	1.1	38
157	1.2	0.9	80
166	1.2	1.8	106
264	1.1	1.7	83
193	0.9	1.4	126
87	0.9	1.4	145
161	0.8	1.4	106
88	0.8	1.4	151
89	0.8	1.4	123
51	0.8	0.7	82
171	0.8	0.4	31
227	0.8	1.4	64
58	0.6	0.5	80
160	0.6	0.9	86
235	0.5	0.9	26

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES NORTHERN ROCKFISH

HAIL.	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
184	2694.1	0.8	38
61	135.3	0.5	54
220	48.8	0.2	40
186	35.6	0.5	56
62	26.9	0.4	54
34	22.5	0.3	44
69	15.1	0.3	53
64	13.8	0.4	53
82	6.9	0.5	132
67	6.7	0.4	54
212	6.6	0.4	39
1	5.6	0.1	37
2	5.1	0.3	45
181	4.7	0.3	41
83	4.3	0.5	140
187	3.3	0.7	110
89	2.8	0.6	123
84	2.4	0.6	145
32	2.2	0.2	45
86	1.7	0.5	134
270	1.5	0.2	44
201	1.5	0.2	59
94	1.5	0.5	172
179	1.4	0.9	39
226	1.0	0.5	71
65	0.9	1.0	52
189	0.9	0.7	38
235	0.8	0.1	26
68	0.6	0.7	55
225	0.6	0.9	102
87	0.6	0.5	145
92	0.5	0.5	171
66	0.4	0.5	53
6	0.4	0.7	48
243	0.3	0.1	27
218	0.2	0.2	38
171	0.2	0.0	31
219	0.2	0.1	83
11	0.1	0.1	44
52	0.1	0.1	83
269	0.1	0.1	22
216	0.1	0.1	29
203	0.1	0.1	46

SECTION 4

Fishing log for the Nore-Dick

Station charts of haul numbers plotted adjacent to their
respective geographical locations

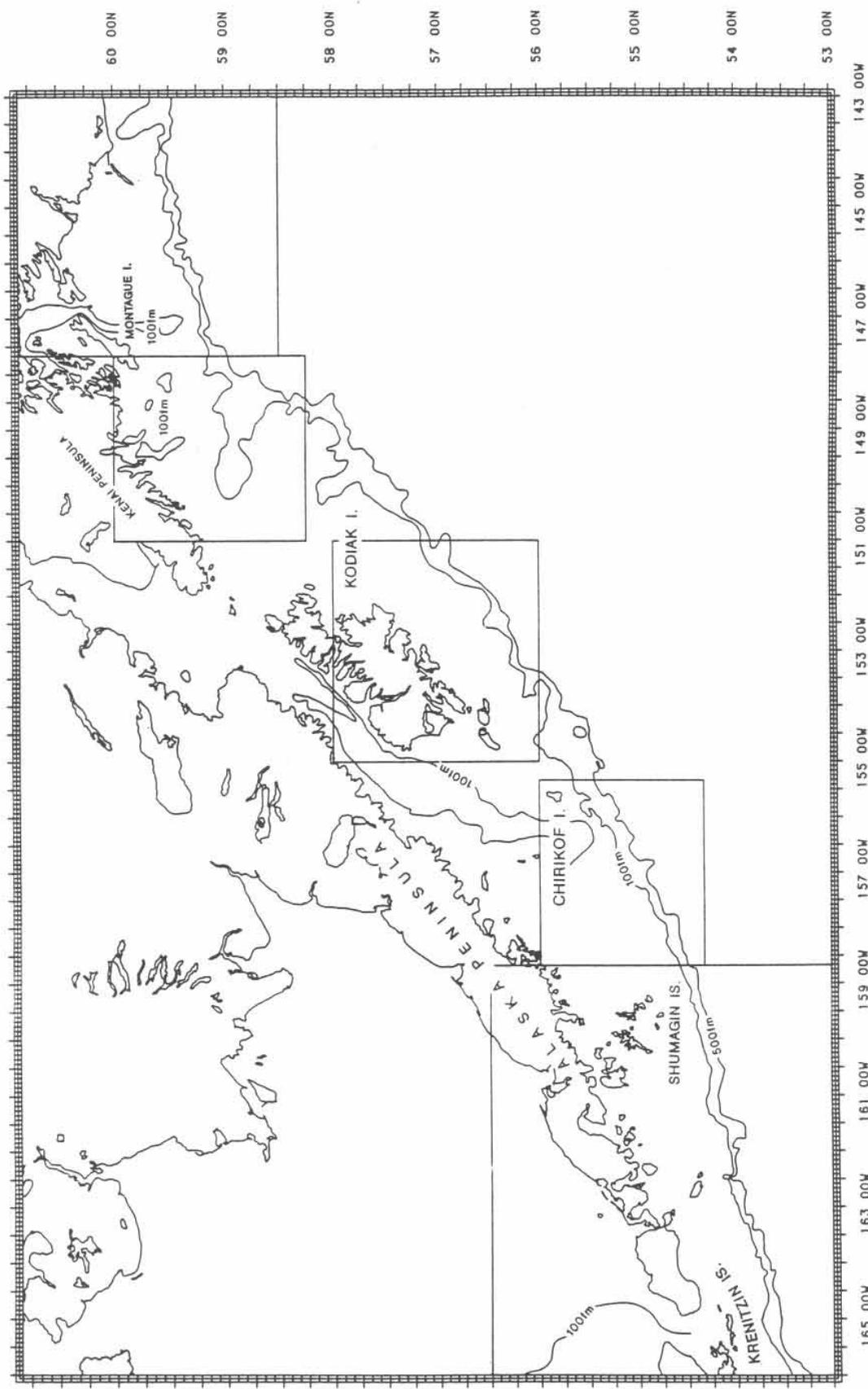


Figure 46.--Areas surveyed from May 31-July 25, 1987 by the U.S. Chartered trawler Nore-Dick (hauls 1-145) and cited in Figures 47-51.

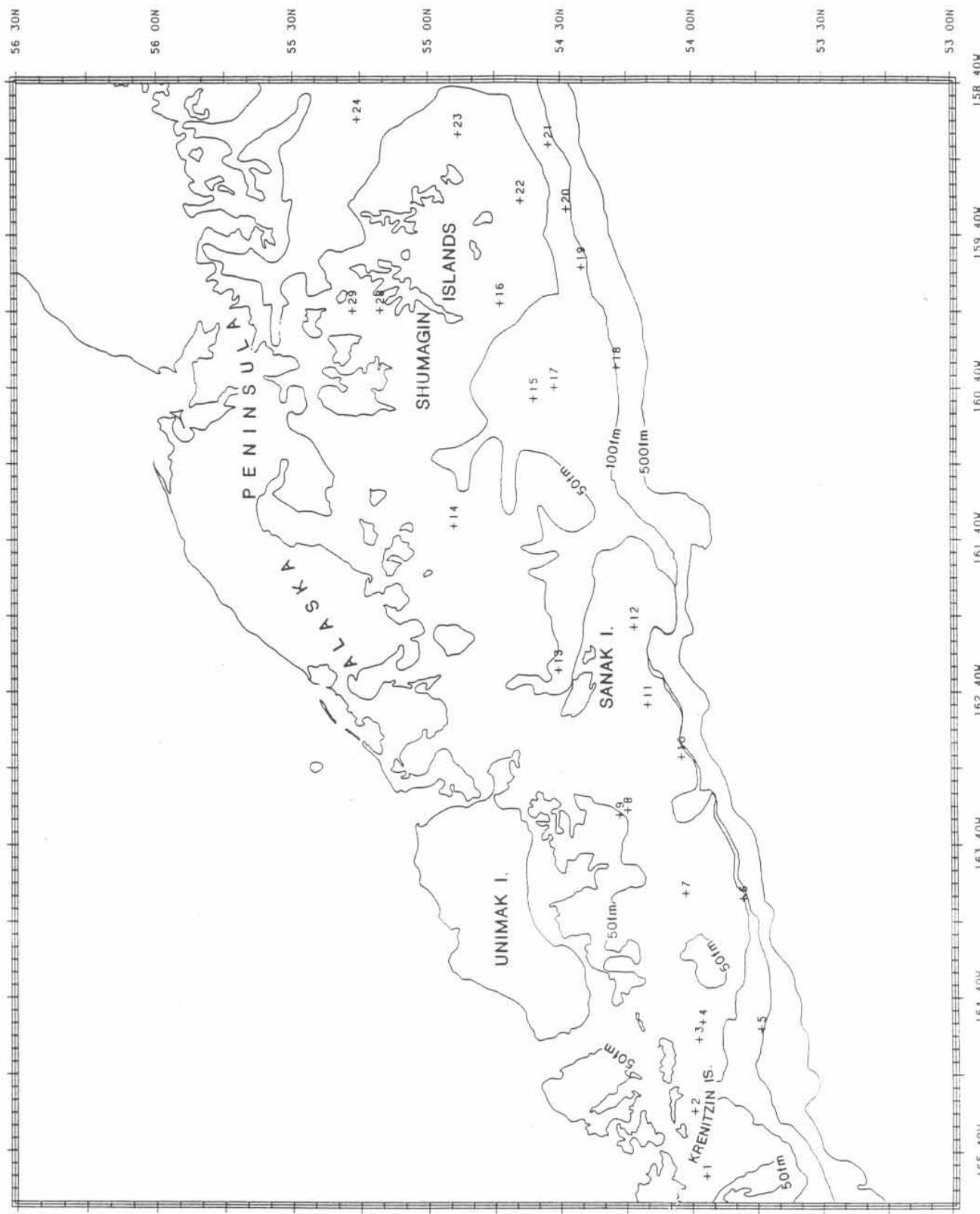


Figure 47.--Stations surveyed by the U.S. chartered trawler Nore-Dick in the Krenitzin Islands and Shumagin Islands areas (hauls 1-24, 28 and 29).

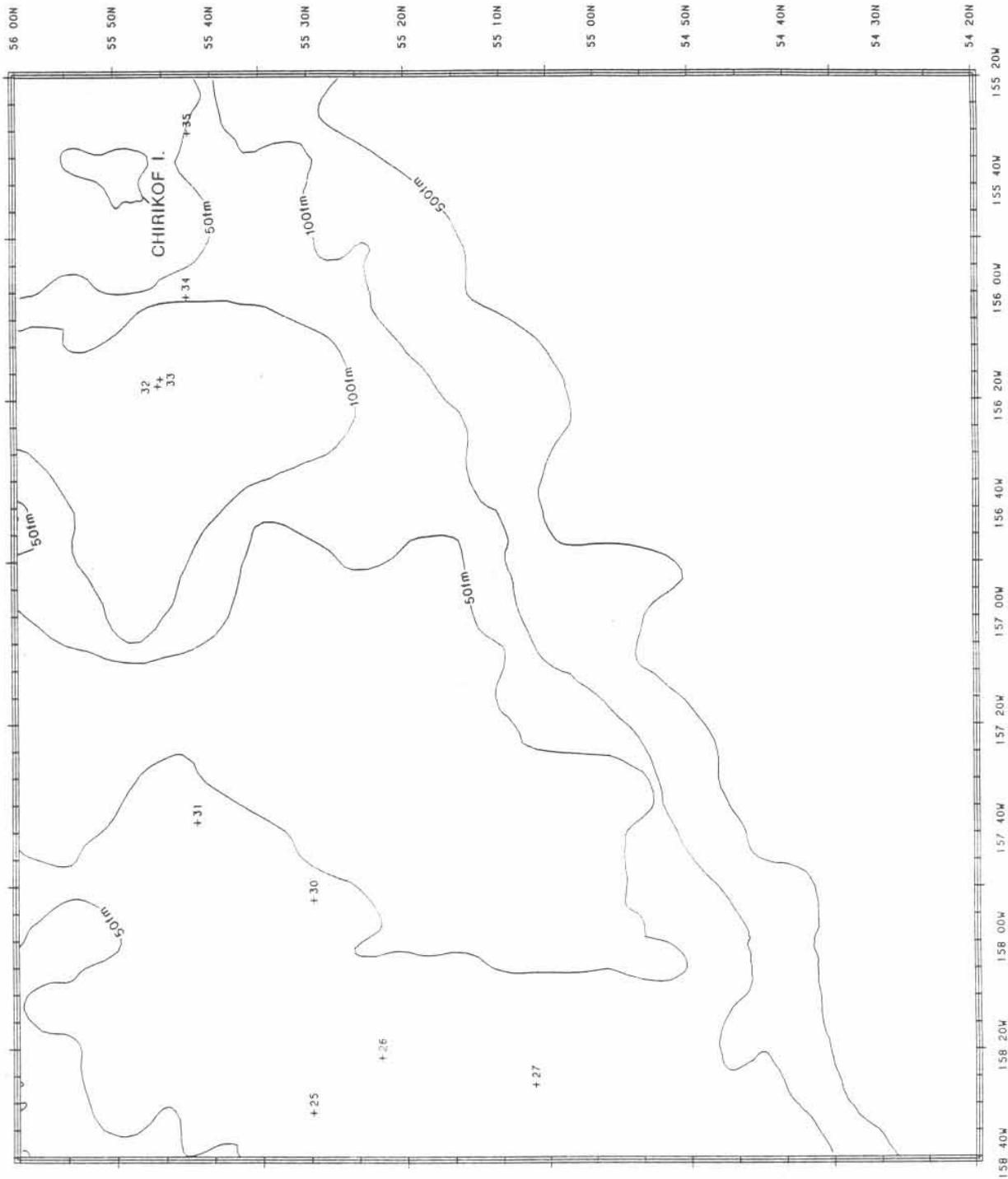


Figure 48.--Stations surveyed by the U.S. chartered trawler
Nore-Dick in the Chirikof Island area (hauls 25-27
and 30-35).

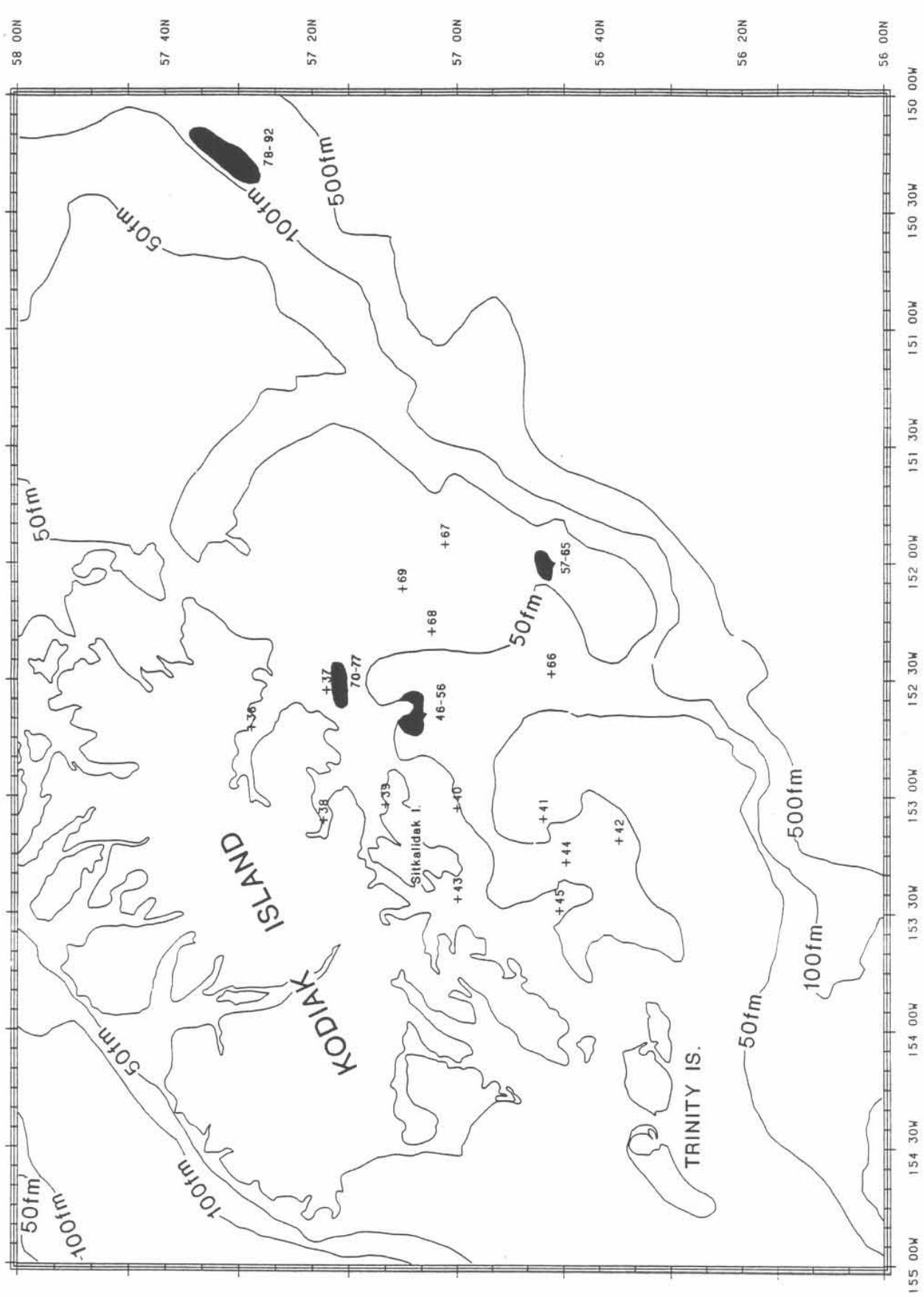


Figure 49.—Stations surveyed by the U.S. chartered trawler Nore-Dick in the Kodiak Island area (hauls 36-92).

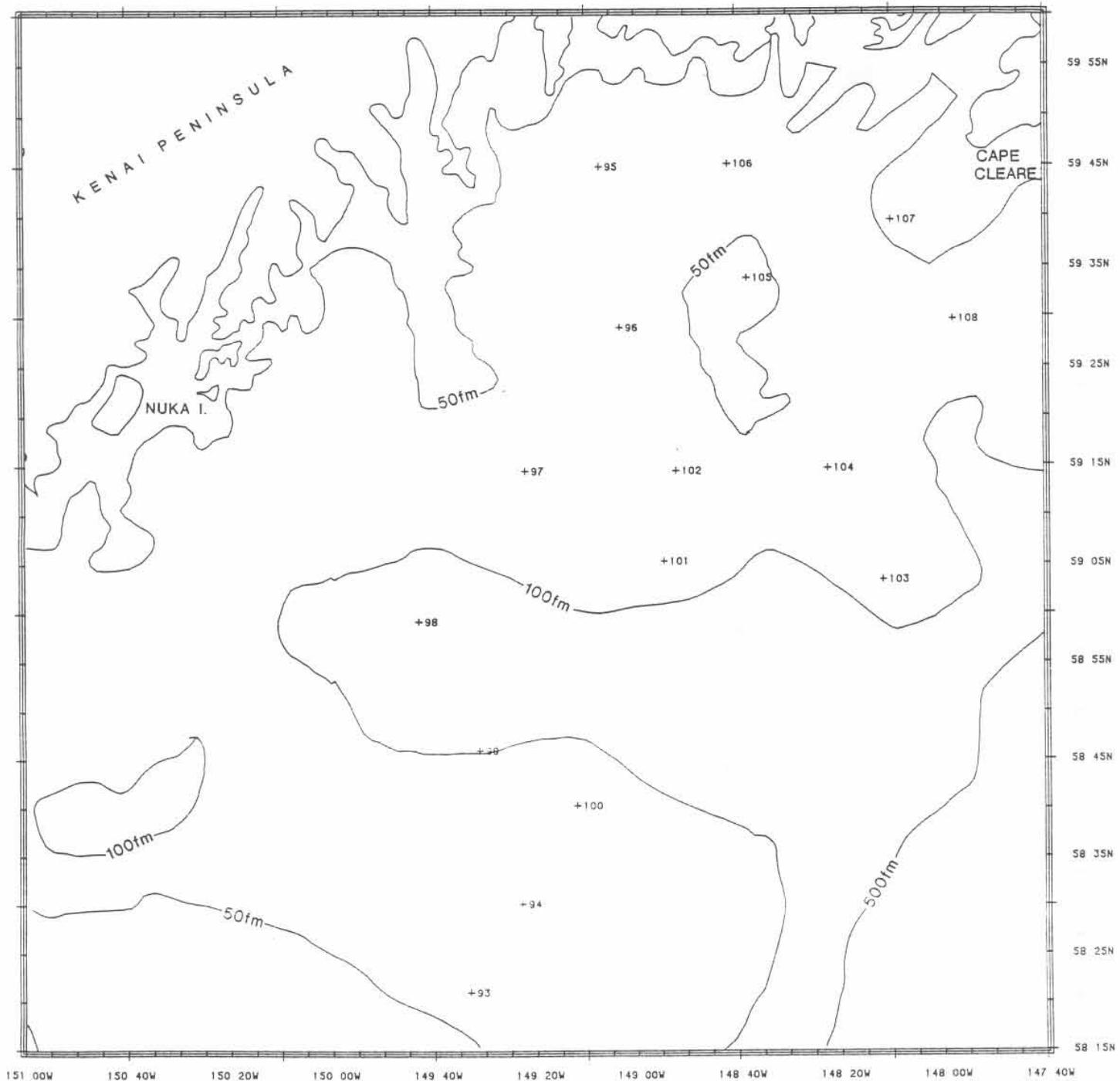


Figure 50.--Stations surveyed by the U.S. chartered trawler Nore-Dick in the Kenai Peninsula area (hauls 93-108).

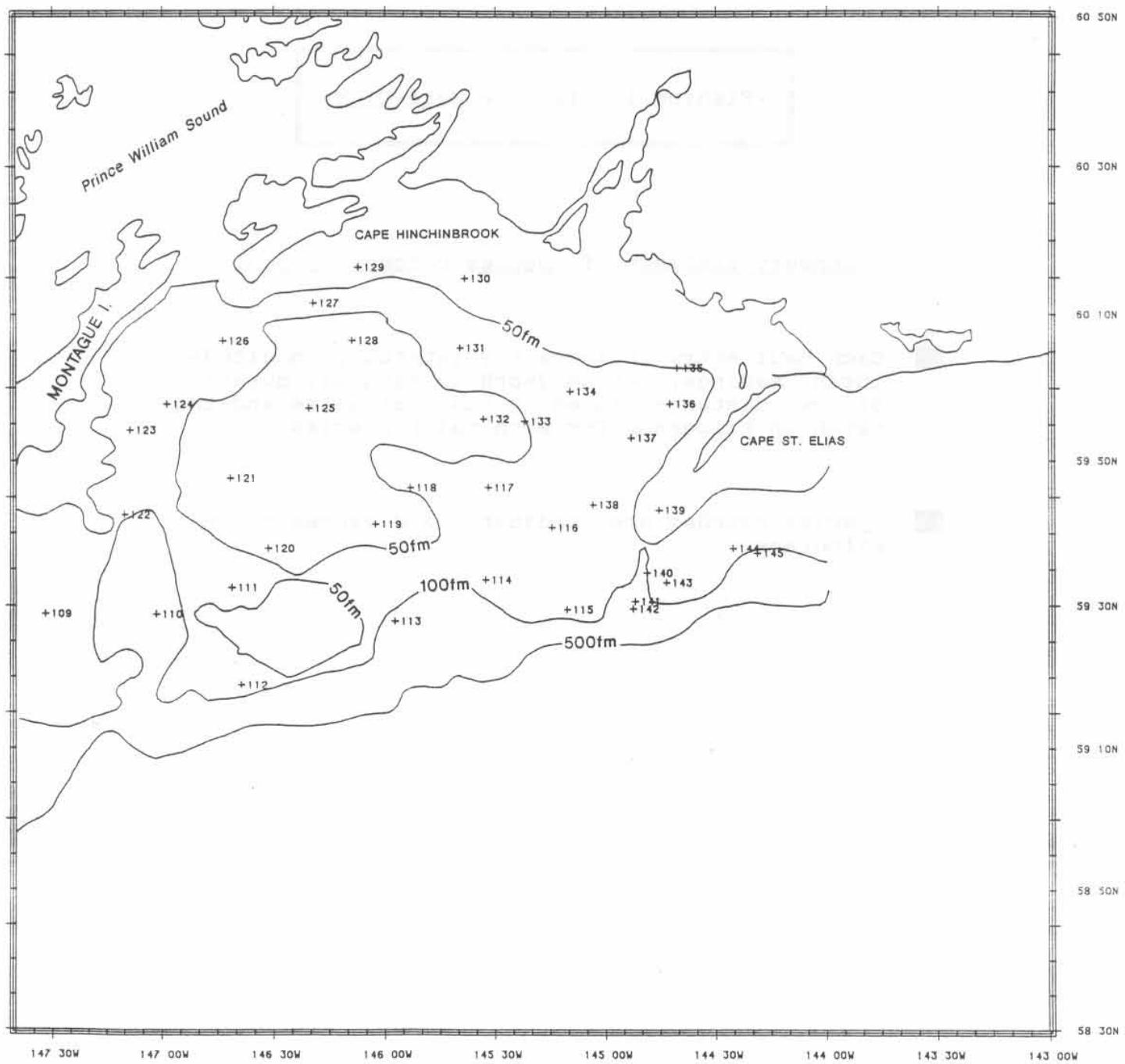


Figure 51.--Stations surveyed by the U.S. chartered trawler
Nore-Dick in the Montague Island area (hauls 109-
145).

Section 4 (continued)

Fishing log for the Nore-Dick

Summary listings of species catches by haul

- Each haul entry includes the latitude, longitude, loran readings, bottom depth in fathoms, duration of tow, distance fished in nautical miles and the catch in kilograms for each major species.

- Species catches are unadjusted and expressed in kilograms.

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRawl SURVEY

HAUL #	MONTH/DAY/YEAR	1	2	3	4	5	6	7	8	9	10	11
LATITUDE START	5/31/87	5/31/87	6/ 1/87	6/ 1/87	6/ 1/87	6/ 1/87	6/ 1/87	6/ 1/87	6/ 1/87	6/ 1/87	6/ 1/87	6/ 1/87
LONGITUDE START	53 56.9	53 59.5	53 58.5	53 57.7	53 44.1	53 48.3	54 1.5	54 14.9	54 16.7	54 2.5	54 10.2	54 10.2
LATITUDE END	165 49.4	165 24.1	164 56.2	164 49.3	164 52.0	164 0.7	163 58.6	163 26.0	163 28.0	163 5.3	162 44.7	162 44.7
LONGITUDE END	53 55.9	53 58.8	53 57.9	53 56.5	53 43.8	53 48.7	54 2.0	54 14.9	54 17.4	54 2.8	54 9.7	54 9.7
LORAN START	165 48.2	165 22.7	164 54.4	164 49.4	164 50.3	163 59.4	163 37.1	163 25.8	163 25.6	163 3.6	162 43.2	162 43.2
LORAN END	34763.30	18051.70	18112.30	18107.50	18051.90	18130.60	18183.80	18266.20	18236.30	18268.20	18237.20	18230.00
GEAR DEPTH	48179.30	48048.80	47893.00	47785.30	47849.40	47771.50	47752.70	47395.00	47266.20	47149.50	47149.50	47149.50
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.48	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	1.17	1.11	1.17	1.21	1.21	1.02	0.86	1.01	0.98	1.11	1.02	1.00
PERFORMANCE / GEAR	0 /170	0 /170	0 /170	0 /170	0 /170	1 /170	0 /170	1 /170	0 /170	0 /170	0 /170	0 /170
POLLOCK	2.0	11.8	237.2	1.4	1.8	0.0	0.0	0.0	140.6	0.0	0.0	0.0
PACIFIC COD	90.3	31.8	44.9	17.2	43.1	45.8	148.1	0.0	102.5	54.9	0.5	0.0
SABLEFISH	0.0	0.0	0.0	0.0	26.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	0.0	12.2	27.7	4.1	61.2	3.2	0.0	0.9	71.2	5.9	0.0	0.0
HALIBUT	43.7	9.2	13.2	26.6	0.0	3.1	0.7	0.0	49.8	22.4	3.1	3.1
FLATHEAD SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	2.0	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	0.0	0.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	7.7	59.0	64.4	59.9	0.1	10.0	0.0	0.0	0.0	53.1	20.7	3.4
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.0	3.6	0.2	0.0
ROUGH-EYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	211.4	1.8	0.0	0.0
DUSKY RKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPchin RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	2.7	0.5	0.0	0.0	0.0	0.0	0.7	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	24.6	0.9	1.8	7.8	0.5	10.0	13.2	0.0	9.0	2.9	2.5	2.5
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.6	18.6	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	1.4	4.1	3.4	0.0	0.0	1.8	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	12	13	14	15	16	17	18	19	20	21	22
MONTH/DAY/YEAR	6/ 2/87	6/ 3/87	6/ 3/87	6/ 5/87	6/ 5/87	6/ 6/87	6/ 6/87	6/ 6/87	6/ 6/87	6/ 7/87	6/ 7/87
LATITUDE START	54 13.3	54 30.5	54 54.4	54 36.1	54 43.8	54 31.5	54 17.3	54 25.3	54 28.7	54 32.7	54 39.1
LONGITUDE START	162 14.2	162 31.3	161 34.5	160 44.3	160 7.0	160 40.0	160 32.2	159 32.9	159 29.7	159 4.4	159 26.4
LATITUDE END	54 13.0	54 30.5	54 54.6	54 35.4	54 43.7	54 30.4	54 18.1	54 25.2	54 28.2	54 32.5	54 39.5
LONGITUDE END	162 12.9	162 29.5	161 32.6	160 43.1	160 5.2	160 40.0	160 33.3	159 35.0	159 31.7	159 6.5	159 28.3
LORAN START	18312 30	18355.50	18454.60	33878.60	33878.00	33990.50	34013.30	33903.00	33842.30	33774.50	33802.50
LORAN END	46970.30	47076.40	46728.80	46425.40	46192.50	46401.40	46362.00	46122.10	45981.80	45825.60	45950.30
LORAN END	18312.40	18356.00	33986.00	33874.30	33993.70	34013.90	33908.00	33847.60	33779.30	33805.30	33805.30
GEAR DEPTH	42	82	62	71	44	80	72	89	76	79	41
DURATION IN HOURS	0.10	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	0.82	0.99	1.10	1.04	1.04	1.06	0.99	1.24	1.14	1.19	1.21
PERFORMANCE / GEAR	7 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170
POLLOCK	0.0	31.3	358.8	5.9	0.1	38.6	0.0	0.0	0.0	0.0	1.4
PACIFIC COD	0.0	30.2	23.6	89.4	0.0	57.2	0.0	96.4	45.8	282.8	0.0
SABLEFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0
ARROWTOOTH FL.	0.0	165.6	122.0	76.2	0.0	211.6	78.7	154.2	66.2	239.9	4.1
HALIBUT	0.0	4.0	7.2	33.4	0.0	16.7	8.0	11.2	90.5	7.1	103.9
FLATHEAD SOLE	0.0	108.0	182.8	34.9	0.0	114.3	0.0	0.0	0.0	0.5	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.7	0.0	1.1	0.0	0.0	0.0	3.2	1.4	0.9	0.0
REX SOLE	0.0	7.3	0.2	24.0	0.0	18.1	0.0	32.7	0.0	0.0	1.4
YELLOWFIN SOLE	0.0	0.0	23.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.5	2.0	26.3	0.0	12.2	0.7	0.0	0.0	2.7	0.0	6.8
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC PERCH	0.0	0.0	0.0	0.0	0.0	0.7	0.2	1120.3	12.7	16.8	0.9
ROUGH EYE RKFH	0.0	0.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	1.4	0.0	961.7	6.4	212.7	4.4
DUSKY RCKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	159.7	2.7	27.7	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	606.6	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	152.5	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	412.4	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	4.5	1.5	29.9	0.3	5.7	5.4	2.4	20.4	8.2	1.4	5.0
SKATES	0.0	0.0	27.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	2.7	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	1.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIFE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILLOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRawl SURVEY

HAUL #	MONTH/DAY/YEAR	34	35	36	37	38	39	40	41	42	43	44
LATITUDE START	6/14/87	6/14/87	6/18/87	6/19/87	6/19/87	6/19/87	6/20/87	6/20/87	6/20/87	6/21/87	6/21/87	6/21/87
LONGITUDE START	35 42 5	35 42 3	35 28 3	37 18 1	37 16 5	37 10 0	37 0 0	36 47 9	36 37 3	36 39 9	36 44 7	36 44 7
LATITUDE END	156 0 8	155 30 5	152 42 2	152 32 4	153 6 1	153 1 9	153 2 9	153 5 6	153 11 2	153 26 2	153 16 7	153 16 7
LONGITUDE END	55 41 7	55 42 1	57 28 9	57 19 0	57 17 8	57 10 1	57 0 2	56 47 3	56 38 6	56 59 3	56 43 9	56 43 9
LORAN START	33 151 30	33 095 50	32 405 30	32 452 70	43 090 50	43 275 00	43 288 90	43 393 60	43 393 60	43 464 70	43 464 70	43 464 70
LORAN END	44 600 60	44 493 60	31 277 70	32 401 20	32 454 60	32 480 20	32 524 40	32 586 50	32 632 50	32 668 90	32 620 40	32 620 40
GEAR DEPTH	117	42	45	47	47	45	40	41	85	69	71	71
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.60	0.50	0.50	0.50
DISTANCE FISHED	0.90	0.94	0.74	0.90	0.72	0.86	0.97	0.94	1.37	1.04	1.23	1.23
PERFORMANCE / GEAR	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170
POLLOCK	5 0	1 4	666.8	2446.5	106.1	57.6	0.1	0.0	82.1	277.1	381.0	381.0
PACIFIC COD	27 4	25 6	139.7	60.1	47.2	171.5	16.8	0.5	47.6	563.6	72.6	72.6
SABLEFISH	11 3	0.0	1.4	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	319 3	14 1	20.9	68.9	15.9	23.1	8.8	0.1	279.4	389.8	54.0	54.0
HALIBUT	0 0	38 8	9.0	18.0	1.6	77.6	14.7	1.5	1.5	37.5	15.2	15.2
FLATHEAD SOLE	4 1	0 0	196.4	115.3	75.3	38.0	7.3	0.0	184.2	526.9	54.4	54.4
ENGLISH SOLE	0 0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	82 3	0 0	0.2	1.9	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	101 6	0 0	0.0	3.1	0.0	6.4	0.5	0.0	9.1	2.7	4.1	4.1
YELLOWFIN SOLE	0 0	0.0	254.9	65.1	43.8	52.7	0.0	0.0	0.0	0.0	13.6	0.0
STARRY FLOUNDER	0 0	0 0	3.6	18.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	63 7	40.8	159.1	0.0	9.6	218.6	11.3	0.7	50.3	50.3	3.4	3.4
BUTTER SOLE	0 0	0.0	235.4	7.5	1.6	15.0	0.0	0.0	0.0	6.8	0.0	0.0
ALASKA PLAICE	0 0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	17 9	0 0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
ROUGH EYE RKFH	1 1	0 0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	0.0	0.0	0.0
THORNYHEADS	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0 5	0 5	0.0	0.6	0.0	6.4	1.8	9.1	1.8	0.0	0.0	0.0
DUSKY RKFH	0 9	0 0	0.0	0.0	0.0	1.4	0.5	8.4	0.9	0.0	0.0	0.0
SHORTRAKER RF	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEGUIN RF	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
RED STRIPE RF	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0 0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPTINS	0 9	0 0	27.8	110.3	16.2	145.2	3.0	0.1	4.1	46.2	1.8	1.8
SKATES	6 8	37 4	0.0	0.0	0.0	90.7	0.0	0.0	0.0	0.0	149.4	0.0
SPINY DOGFISH	0 0	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0 0	0 0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
KING CRAB	9 7	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	0.0
DUNGENESS CRAB	0 0	0 0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0 0	0 0	0.2	0.0	0.0	50.8	47.9	0.0	0.0	0.0	35.3	0.9
SIDE STRIPE SHRIMP	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAIL #	45	46	47	48	49	50	51	52	53	54	55
MONT/H/DAY/YEAR	6/21/87	6/30/87	6/30/87	6/30/87	6/30/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87	7/ 1/87
LATITUDE START	56 45 6	57 5 0	57 6 6	57 7 0	57 6 3	57 6 6	57 6 0	57 6 2	57 6 3	57 6 2	57 6 3
LONGITUDE START	153 29 3	152 42 9	152 44 3	152 43 3	152 43 0	152 42 3	152 42 4	152 41 8	152 43 4	152 43 0	152 42 4
LATITUDE END	56 45 4	57 5 6	57 7 1	57 7 4	57 6 8	57 6 6	57 6 6	57 6 8	57 6 8	57 6 6	57 6 6
LONGITUDE END	153 29 4	152 42 5	152 43 7	152 42 7	152 42 7	152 42 2	152 41 9	152 41 5	152 43 1	152 42 7	152 42 2
LORAN START	32630.10	32477.00	32469.10	32471.50	32469.10	32472.00	32472.00	32472.00	32472.00	32472.10	32470.80
LORAN END	43529.90	43203.00	43196.00	43197.40	43192.30	43196.00	43192.10	43199.30	43198.10	43194.30	43194.30
GEAR DEPTH	0	0	0	0	0	0	0	0	0	0	0
DURATION IN HOURS	0.20	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
DISTANCE FISHED	0.19	0.61	0.57	0.49	0.50	0.46	0.63	0.48	0.49	0.50	0.39
PERFORMANCE / GEAR	6 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	1 /170
POLLOCK	0 0	95 3	329 3	144 7	146 1	192 8	106 6	191 9	70 8	59 0	106 6
PACIFIC COD	0 0	29 0	27 2	26 3	49 9	50 3	90 7	29 5	9 5	25 9	24 9
SABLEFISH	0 0	0 0	2 3	0 0	0 9	0 0	0 0	0 0	1 8	3 0	2 7
ARRONTOOTH FL.	0 0	131 1	181 0	182 3	176 4	138 8	185 1	232 7	137 4	139 3	119 7
HALIBUT	0 0	0 0	0 0	32 5	0 0	0 0	0 0	0 0	0 0	0 0	0 0
FLATHEAD SOLE	0 0	40 8	63 0	81 6	97 5	64 8	66 5	97 1	83 5	101 6	69 4
ENGLISH SOLE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
DOVER SOLE	0 0	3 9	0 0	0 0	0 0	0 7	2 5	0 5	2 7	0 2	0 0
REX SOLE	0 0	0 5	0 2	0 9	0 7	0 9	0 5	0 1	0 7	0 4	1 4
YELLOWFIN SOLE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
STARRY FLUNDER	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ROCK SOLE	0 0	0 5	0 2	0 2	0 7	0 5	0 0	0 5	0 1	0 1	0 2
BUTTER SOLE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ALASKA PLAICE	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
PAC DC PERCH	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ROUGH-EYE RKFH	0 0	0 5	0 7	0 0	0 0	0 0	0 0	0 0	2 3	0 7	1 4
THORNYHEADS	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
NORTHERN RKFH	0 0	0 1	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
DUSKY RCKFTSH	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SHORTTAKE RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
HARLEQUIN RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
REDSTRIPE RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SHARPCHIN RF	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
ATKA MACKEREL	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
GRENADEERS	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SCULPINS	0 0	7 7	0 0	0 0	0 0	3 2	5 4	0 0	1 8	2 2	2 2
SKATES	0 0	0 0	0 0	0 0	0 0	10 2	0 0	0 0	1 8	0 0	2 3
SPINY DOGFISH	0 0	0 0	3 4	0 0	0 0	0 0	0 0	0 0	2 3	0 0	0 0
SAFETY SHARK	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
SLEEPER SHARK	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
TANNER CRAB	0 0	3 4	4 1	4 3	3 4	5 4	32 7	4 5	23 6	3 2	141 3
KING CRAB	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
DUNGENESS CRAB	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
PINK SHRIMP	0 0	0 1	0 0	0 1	0 0	0 1	0 2	0 1	0 1	0 1	0 0
SIDE STRIPE SHRIMP	0 0	0 0	0 0	0 0	0 0	0 1	0 0	0 0	0 0	0 0	0 0
SCALLOP	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	56	57	58	59	60	61	62	63	64	65
LATITUDE START	7 / 1/87	7 / 2/87	7 / 2/87	7 / 2/87	7 / 2/87	7 / 2/87	7 / 2/87	7 / 2/87	7 / 2/87	7 / 2/87	7 / 3/87
LATITUDE END	57 6. 4	56 46. 8	56 46. 9	56 46. 6	56 47. 9	56 47. 3	56 48. 0	56 47. 7	56 47. 9	56 47. 2	56 46. 8
LONGITUDE START	152 43. 8	152 3. 2	152 0. 8	151 37. 5	151 1. 7	152 3. 2	152 4. 7	152 3. 7	152 2. 6	152 2. 7	152 26. 4
LONGITUDE END	57 6. 9	56 47. 4	56 47. 3	56 46. 9	56 48. 2	56 47. 8	56 48. 4	56 48. 1	56 48. 3	56 47. 6	56 47. 0
LONGITUDE END	152 43. 9	152 3. 3	152 2. 1	151 58. 5	152 2. 9	152 4. 5	152 5. 9	152 4. 8	152 3. 9	152 3. 8	152 30. 8
LORAN START	324742. 40	32495. 50	32491. 60	32488. 30	32489. 10	32493. 40	32492. 90	32492. 50	32490. 40	32493. 10	11029. 80
LORAN END	43201. 10	43156. 40	43150. 00	43144. 00	43147. 60	43153. 60	43154. 40	43153. 10	43149. 80	43153. 10	31048. 10
LORAN END	432470. 30	43159. 10	43152. 10	432489. 50	432489. 40	432493. 30	432493. 10	432492. 70	432490. 60	32493. 40	11026. 10
LORAN END	43159. 10	43153. 40	43151. 50	43144. 80	43148. 80	43154. 70	43155. 60	43154. 20	43151. 00	43154. 30	31053. 10
GEAR DEPTH	81	55	54	53	52	52	54	52	52	54	53
DURATION IN HOURS	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
DISTANCE FISHED	0.51	0.63	0.80	0.61	0.75	0.89	0.75	0.70	0.83	0.70	1.32
PERFORMANCE / GEAR	5 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170
POLLOCK	0.0	1.4	0.9	0.0	0.0	2.3	0.0	0.0	0.0	0.0	22.2
PACIFIC COD	0.0	40.4	18.1	825.1	44.0	62.6	133.8	566.1	1783.5	246.3	36.3
SABLEFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3
ARROWTOOTH FL.	0.0	21.3	31.8	62.6	55.8	60.8	68.9	105.7	90.3	58.1	507.6
HALIBUT	0.0	0.0	3.1	5.4	0.6	8.2	31.7	22.0	8.3	0.0	0.0
FLATHEAD SOLE	0.0	0.2	0.9	4.5	3.6	2.3	1.8	0.9	3.2	2.7	105.2
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
REX SOLE	0.0	4.8	0.9	1.8	0.5	1.4	0.5	0.1	0.9	1.4	7.3
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	8.4	9.5	35.8	17.2	21.3	12.7	9.1	27.2	12.2	0.2
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC OC PERCH	0.0	0.0	2.3	0.1	0.9	0.9	3.2	0.5	2.7	2.7	0.0
ROUGH EYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	2.7	350.9	14.1	17.2	11.8	13.2	6.4	11.3	28.6	0.0
DUSKY RKFISH	0.0	0.0	35.8	2.3	0.0	0.0	0.7	0.0	0.0	2.7	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	1.4	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENAIDIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.0	2.3	0.3	0.0	0.1	0.1	0.5	0.5	0.0	0.1	4.6
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALEM SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	67	68	69	70	71	72	73	74	75	76	77	
LATITUDE START	57 1.7	57	3.6	57	6.9	57	18.6	57	17.8	57	19.7	57	5/87
LONGITUDE START	151 55.1	152	17.4	152	6.0	152	14.8	152	31.8	152	30.9	152	17.8
LATITUDE END	57 2.1	57	4.1	57	7.2	57	18.5	57	18.2	57	20.0	57	19.5
LONGITUDE END	151 57.3	152	19.8	152	7.0	152	16.2	152	32.0	152	30.0	152	29.8
LORAN START	111000.00	11033.40	11061.80	11028.00	31114.80	31189.70	43088.30	43075.30	43059.40	43085.40	43045.40	43092.10	32400.00
LORAN END	31071.00	31115.80	31028.00	31058.40	31023.70	32403.90	32397.80	32391.10	32403.70	32391.10	32403.70	32409.30	43091.20
GEAR DEPTH	45	43	45	34	30	54	50	57	56	58	58	45	0/170
DURATION IN HOURS	0.50	0.50	0.25	0.25	0.25	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0/170
DISTANCE FISHED	1.26	1.36	0.63	0.81	0.47	0.30	0.35	0.34	0.34	0.15	0.15	0.40	0/170
PERFORMANCE / GEAR	0 /170	0 /170	1 /170	1 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170
POLLOCK	0.2	0.0	0.0	0.0	0.0	1643.8	776.8	5.9	1731.4	1363.0	205.9	4688.4	0.0
PACIFIC COD	155.6	0.7	15.9	1.1	2.3	20.4	44.5	1.8	11.3	11.3	20.9	20.9	0.0
SABLEFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ARROWTOOTH FL	0.5	1.1	0.7	0.5	0.5	80.7	74.8	82.6	100.2	92.1	89.4	94.0	0.0
HALIBUT	95.8	39.4	65.4	4.8	7.0	2.0	7.3	0.0	0.0	0.0	0.0	21.1	0.0
FLATEHEAD SOLE	0.0	0.0	0.0	0.0	0.0	116.1	102.9	31.3	138.3	242.2	164.2	54.3	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.5	0.0	58.5	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REX SOLE	0.0	0.0	0.0	0.0	0.0	5.9	0.0	3.6	0.0	0.0	0.0	0.0	0.0
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	82.1	7.3	40.4	4.1	0.0	0.2	20.9	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	2.9	9.1	7.5	5.9	2.7	4.5	0.0	0.0
ROCK SOLE	34.0	51.7	76.2	39.7	73.0	3.2	14.3	31.8	5.4	5.4	4.5	62.6	0.0
BUTTER SOLE	0.2	0.0	0.9	0.9	14.1	16.3	5.4	2.3	2.3	2.7	6.3	0.0	0.0
ALASKA FLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	35.5	0.0
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.4	0.3	0.0	0.0	7.7	5.4	0.7	3.2	1.4	5.4	0.0	6.3	0.0
SKATES	0.0	0.0	11.3	0.0	27.7	130.6	0.0	0.0	0.0	0.0	0.0	33.6	0.0
SPINY DINGISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Salmon SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	181.4	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	78	79	80	81	82	B3	84	85	86	87	7/ 6/87	7/ 6/87	7/ 6/87	7/ 6/87	7/ 6/87	7/ 6/87	
MONTH/DAY/YEAR	7/ 6/87	7/ 6/87	7/ 6/87	7/ 6/87	7/ 6/87	57	57	57	57	57	57	57	57	57	57	57	57
LATITUDE START	57 32.3	57 32.8	57 33.3	57 32.7	57 32.7	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6	32.6
LONGITUDE START	150 17.0	150 15.8	150 18.3	150 16.0	150 16.3	150	150	150	150	150	150	150	150	150	150	150	150
LATITUDE END	57 31.8	57 32.3	57 33.0	57 32.3	57 31.8	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7
LONGITUDE END	150 17.9	150 16.6	150 19.1	150 16.5	150 17.6	150	150	150	150	150	150	150	150	150	150	150	150
LORAN START	31072.20	32163.00	43009.00	31077.30	31077.40	11678.00	11678.00	11678.00	11678.00	11678.00	11677.10	11677.10	11677.10	11677.10	11677.10	11677.10	11677.10
LORAN START	31076.60	32166.30	43008.60	31074.60	31076.00	11666.00	11666.00	11659.50	11659.50	11659.50	11689.00	11689.00	11689.00	11689.00	11689.00	11689.00	11689.00
LORAN END	31075.20	31075.20	31075.20	31075.20	31075.20	1170	1170	1170	1170	1170	1170	1170	1170	1170	1170	1170	1170
GEAR DEPTH	140	131	119	142	138	132	132	122	122	122	143	143	143	143	143	143	143
DURATION IN HOURS	0.25	0.25	0.25	0.25	0.25	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	0.68	0.50	0.50	0.56	0.56	1.16	1.16	1.23	1.23	1.23	1.03	1.03	1.03	1.03	1.03	1.03	1.03
PERFORMANCE / GEAR	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170
POLLOCK	23.6	11.8	24.9	5.0	11.3	132	132	122	122	122	143	143	143	143	143	143	143
PACIFIC COD	0.0	1.8	9.1	8.6	26.3	59.0	59.0	12.2	12.2	12.2	13.6	13.6	13.6	13.6	13.6	13.6	13.6
SABLEFISH	73.0	48.5	8.6								52.2	52.2	52.2	52.2	52.2	52.2	52.2
ARROWTOOTH FL.																	
HALIBUT	0.0	0.0	0.0	0.0	13.0	0.0	0.0	17.7	17.7	17.7	12.3	12.3	12.3	12.3	12.3	12.3	12.3
FLATHEAD SOLE	0.0	2.7	4.5	0.0	0.0	0.0	0.0	2.3	2.3	2.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
DOVER SOLE	36.7	30.4	34.9	77.1	34.9	90.3	90.3	15.4	15.4	15.4	30.4	30.4	30.4	30.4	30.4	30.4	30.4
REX SOLE	26.8	29.9	31.8	21.8	34.9	21.3	34.9	21.3	34.5	34.5	27.7	27.7	27.7	27.7	27.7	27.7	27.7
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC PERCH	84.8	37.6	7.7	64.4	187.3	70.8	70.8	11.3	89.8	89.8	7.7	7.7	49.9	49.9	37.6	37.6	37.6
ROUGH EYE RKFH	0.0	0.0	0.2	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	23.4	20.9	5.9	22.2	37.6	35.4	8.6	3.4	35.8	35.8	17.2	17.2	29.0	29.0	34.0	34.0	34.0
NORTHERN RKFH	3.6	7	0.4	0.0	0.0	3.6	9.1	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.4
DUSKY RKFISH	0.0	1.4	0.0	0.0	0.0	1.4	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
SHORTTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	3.6	3.6
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPchin RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	6.9	3.3	0.0	4.5	13.7	5.5	0.0	0.0	14.6	14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
SIDE STRIPE SHRIMP	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	89	90	91	92	93	94	95	96	97	98
LATITUDE START	7/ 7/87	7 / 7/87	7 / 7/87	7 / 7/87	7 / 7/87	7 / 8/87	7 / 8/87	7 / 11/87	7 / 11/87	7 / 12/87	7 / 12/87
LONGITUDE START	57 30 0	57 29 9	57 30 2	57 30 1	58 21 1	58 30 2	59 45 0	59 28 9	59 14 5	58 59 3	58 46 0
LATITUDE END	150 18 7	150 18 3	150 18 3	150 19 8	149 32 9	149 22 7	149 7 0	149 3 0	149 21 9	149 42 8	149 31 0
LONGITUDE END	57 29 5	57 29 1	57 29 3	57 29 4	58 21 2	58 30 9	59 44 9	59 28 4	59 15 0	58 59 1	58 46 1
LORAN START	11650 .60	11645 .80	11653 .70	11646 .10	12241 .20	12364 .30	13132 .00	12980 .20	12776 .70	12546 .60	12470 .30
LORAN END	31066 .10	31067 .00	31066 .90	31068 .90	31297 .20	31338 .70	31806 .70	31694 .40	31622 .90	31551 .80	31451 .50
GEAR DEPTH	150 17 6	150 18 8	150 17 9	150 19 6	149 33 2	149 25 1	149 5 1	149 5 6	149 24 2	149 44 9	149 28 9
DURATION IN HOURS	0 .33	0 .33	0 .33	0 .33	0 .20	0 .50	0 .50	0 .50	0 .50	0 .50	0 .50
DISTANCE FISHED	0 .73	0 .84	0 .78	0 .77	0 .17	1 .41	0 .98	1 .41	1 .28	1 .11	1 .07
PERFORMANCE / GEAR	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170	0 /170
POLLOCK	24.0	37.6	26.3	49.4	0.0	0.0	30.5	186.2	245.6	146.7	177.8
PACIFIC COD	0.0	1.8	0.0	5.9	0.0	0.0	34.0	1.8	1.1	9.3	22.7
SABLEFISH	81.2	33.1	46.7	27.2	0.0	107.5	4.1	35.2	0.0	111.1	27.7
ARROWTOOTH FL.	42.6	90.3	32.2	64.0	0.0	0.0	30.5	186.2	245.6	146.7	365.1
HALIBUT	0.0	0.0	0.0	0.0	0.0	0.0	100.7	19.3	16.2	0.0	52.9
FLATHEAD SOLE	0.5	0.5	0.5	0.5	0.0	0.0	122.5	136.5	85.7	44.9	24.5
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	27.2	73.0	36.3	50.8	0.0	0.0	11.8	7.5	11.6	9.3	3.6
REX SOLE	11.3	22.7	20.4	27.7	0.0	0.0	11.3	4.3	7.7	7.3	3.2
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	0.0	0.0	43.1	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	39.9	23.6	15.9	40.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE RKFH	28.6	11.3	11.3	29.5	0.0	0.0	0.0	0.0	0.0	22.7	25.9
THORNHEADS	39.5	31.3	49.4	20.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RKCFISH	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTRAKER RF	14.5	5.4	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEQUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.2	0.0	0.1	2.4	0.0	0.0	0.0	0.9	0.1	1.7	4.1
SKATES	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	2.3	0.0	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	3.7	4.4	0.9
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.9	0.5

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH / DAY / YEAR	111	112	113	114	115	116	117	118	119	120	121
LATITUDE / DAY / START	7/14/87	7/15/87	7/15/87	7/15/87	7/15/87	7/15/87	7/15/87	7/15/87	7/15/87	7/15/87	7/17/87	7/17/87
LONGITUDE / DAY / START	59 32.5	59 18.9	59 27.9	59 33.6	59 29.5	59 40.5	59 46.4	59 46.4	59 41.3	59 37.9	59 47.6	59 47.6
LATITUDE / END	146 41.2	146 38.8	145 57.3	145 32.6	145 10.5	145 14.6	145 53.0	145 31.8	145 2.6	146 31.4	146 41.6	146 41.6
LONGITUDE / END	59 32.3	59 18.4	59 27.4	59 34.4	59 30.0	59 41.8	59 47.6	59 47.6	59 41.9	59 38.5	59 47.6	59 47.6
LORAN START	146 38.7	146 36.5	145 59.4	145 30.9	145 10.1	145 16.3	145 33.3	145 34.0	146 4.6	146 31.9	146 41.8	146 41.8
LORAN START	13589.80	13478.40	13720.50	13864.70	13911.50	13995.30	13981.20	13901.60	13819.10	13677.30	13726.10	13726.10
LORAN START	31517.20	31408.30	31403.60	31402.70	31324.50	31427.60	31507.20	31543.10	31520.80	31635.50	31635.50	31635.50
LORAN END	13598.00	13483.90	13708.50	13877.40	13917.10	13997.60	13986.40	13909.00	13816.90	13648.70	13725.50	13725.50
LORAN END	31511.80	31401.20	31404.10	31405.70	31327.80	31439.10	31519.70	31557.10	31529.30	31548.70	31636.10	31636.10
GEAR DEPTH	67	98	80	74	83	60	63	54	45	53	42	42
DURATION IN HOURS	0.50	0.30	0.50	0.30	0.30	0.50	0.50	0.50	0.30	0.30	0.10	0.10
DISTANCE FISHED	1.26	1.23	1.17	1.12	0.53	1.30	1.39	1.33	1.20	0.68	0.12	0.12
PERFORMANCE / GEAR	0 / 170	0 / 170	0 / 170	0 / 170	1 / 170	0 / 170	0 / 170	0 / 170	1 / 170	1 / 170	5 / 170	5 / 170
POLLOCK	3.6	4.5	1.6	1.8	0.3	5.0	5.0	5.0	31.3	0.0	4.1	0.0
PACIFIC COD	0.0	4.3	89.6	1.4	8.2	2.3	2.3	0.0	0.0	0.0	4.5	0.0
SABLEFISH	4.3	23.1	32.7	15.6	1.4	9.5	3.2	0.9	0.0	0.0	0.0	0.0
ARROWTOOTH FL.	48.3	154.9	228.4	105.2	3.8	18.6	86.2	47.6	0.1	5.4	0.0	0.0
HALIBUT	0.0	42.5	158.2	6.8	0.0	5.8	0.0	0.0	13.3	0.0	4.4	4.4
FLATHEAD SOLE	2.9	2.3	265.6	158.1	0.0	11.6	59.9	43.1	0.2	3.2	0.7	0.7
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	1.1	60.8	26.1	22.2	4.5	11.6	19.7	9.5	1.1	1.6	1.1	1.1
REX SOLE	0.1	1.4	17.7	3.2	0.5	1.6	0.4	0.5	0.1	0.9	0.1	0.1
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	6.1	29.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGH EYE RKFH	14.7	1.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THORNYHEADS	0.0	9.8	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.1	0.1	1.4	4.3	0.0	0.0	141.3	0.0	0.0	0.0	0.0	0.0
DUSKY RKFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEGUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIFE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.1	0.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.7	0.1	6.2	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0
SKATES	35.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	2.3	4.8	2.7	0.0	0.0	0.7	3.0	0.0	0.0	0.0
Salmon SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SIDE STRIPE SHRIMP	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	122	123	124	125	126	127	128	129	130	131	132
MONTH/DAY/YEAR	7/17/87	7/21/87	7/21/87	7/21/87	7/21/87	7/22/87	7/22/87	7/22/87	7/22/87	7/22/87	7/22/87
LATITUDE START	59 42 .3	59 34 .1	59 37 .8	59 37 .2	60 6 .5	60 11 .5	60 16 .5	60 14 .9	60 5 .5	59 5 .8	59 5 .8
LONGITUDE START	147 10 .3	147 8 .7	146 58 .7	146 20 .4	146 43 .7	146 19 .4	146 7 .2	145 38 .3	145 33 .1	145 33 .1	145 33 .1
LATITUDE END	59 41 .5	59 55 .3	59 57 .4	59 58 .4	60 6 .1	60 11 .3	60 17 .3	60 14 .1	60 4 .2	59 57 .1	59 57 .1
LONGITUDE END	147 10 .8	147 7 .8	146 56 .6	146 19 .4	146 41 .3	146 16 .8	146 6 .4	145 36 .1	145 39 .2	145 33 .7	145 33 .7
LORAN START	13566.50	13671.20	13734.10	13897.10	13894.00	14035.40	14027.40	14127.00	14219.70	14126.90	14061.50
LORAN START	31639.70	31725.60	31739.30	31678.60	31786.10	31792.80	31735.90	31814.80	31757.50	31587.70	31587.70
LORAN END	13554.90	13685.30	13758.60	13911.40	13899.70	14044.00	14032.40	14143.40	14220.10	14116.10	14071.80
LORAN END	31632.90	31732.90	31733.40	31686.10	31780.00	31787.90	31728.40	31817.70	31747.30	31668.60	31600.30
GEAR DEPTH	119	120	83	36	60	46	28	26	59	43	
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	
DISTANCE FISHED	1.05	1.22	1.14	1.24	1.24	1.31	1.43	1.34	1.31	1.41	
PERFORMANCE / GEAR	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	0 / 170	
POLLOCK	42.4	99.1	84	0.0	36.7	17.7	0.0	61.3	60.8	77.8	0.0
PACIFIC COD	7.7	7.3	0.0	0.1	3.2	0.0	282.6	58.5	34.9	0.0	0.0
SABLEFISH	55.3	34.0	8.6	0.0	5.4	6.6	1.7	14.7	7.0	0.0	0.0
ARROWTOOTH FL.	147.4	34.0	145.8	0.0	78.9	69.2	2.9	11.3	15.9	39.0	1.6
HALIBUT	18.2	0.0	21.8	34.4	2.8	14.3	87.0	17.4	182.2	14.1	0.0
FLATHEAD SOLE	7.9	0.9	72.8	0.0	18.1	29.5	5.7	6.4	106.4	27.9	0.0
ENGLISH SOLE	0.0	0.0	0.0	0.0	0.1	20.4	0.0	29.5	113.7	0.0	0.0
DOVER SOLE	18.4	43.5	22.2	0.0	6.8	17.2	0.4	12.7	33.1	2.0	0.1
REX SOLE	34.9	36.5	8.6	0.0	3.4	4.5	2.0	4.8	12.2	3.2	0.9
YELLOWFIN SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STARRY FLOUNDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	8.8	0.0	0.0
ROCK SOLE	0.0	0.0	0.0	0.0	6.4	0.9	0.0	7.7	2.3	0.0	1.1
BUTTER SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ALASKA PLAICE	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
PAC DC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGH EYE RKFH	1.4	2.0	3.3	0.0	0.1	2.9	0.0	0.0	0.0	1.4	0.0
THORNYHEADS	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTHERN RKFH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUSKY RKFFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHOR TRAKER RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HARLEGUIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED STRIPE RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHARPCHIN RF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ATKA MACKEREL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRENADIERS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCULPINS	0.0	10.4	0.2	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.0
SKATES	0.0	1.6	0.0	0.0	0.0	0.0	0.0	69.2	13.6	0.0	0.0
SPINY DOGFISH	0.0	1.4	0.0	0.0	2.9	0.0	5.9	0.0	6.4	1.6	0.0
SALMON SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SLEEPER SHARK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TANNER CRAB	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KING CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PINK SHRIMP	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
SIDE STRIPE SHRIMP	0.9	2.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SCALLOP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

KILOGRAMS OF CATCH TAKEN BY THE NORE DICK DURING THE 1987 GULF OF ALASKA BOTTOM TRAWL SURVEY

HAUL #	MONTH/DAY/YEAR	144	145
LATITUDE START	7/25/87	7/25/87	
LONGITUDE START	59 37 9	59 37 3	
LATITUDE END	144 25 3	144 18 8	
LONGITUDE END	144 24 0	144 20 9	
LORAN START	14145.60	14162.40	
LORAN START	31298.80	31278.10	
LORAN END	14159.80	14150.80	
LORAN END	31305.20	31278.40	
GEAR DEPTH	86	141	
DURATION IN HOURS	0.50	0.50	
DISTANCE FISHED	1.30	1.18	
PERFORMANCE / GEAR	0 /170	0 /170	
POLLOCK	1.8	98.4	
PACIFIC COD	0.0	0.0	
SABLEFISH	5.4	24.5	
ARROWTOOTH FL	130 6	243 4	
HALIBUT	0 0	26.0	
FLATHEAD SOLE	90.7	0.0	
ENGLISH SOLE	0.0	0.0	
DOVER SOLE	15.4	31.3	
REX SOLE	2.7	21.8	
YELLOWFIN SOLE	0.0	0.0	
STARRY FLOUNDER	0.0	0.0	
ROCK SOLE	0.0	0.0	
BUTTER SOLE	0.0	0.0	
ALASKA PLAICE	0.0	0.0	
PAC OC PERCH	0.7	82.8	
ROUGH EYE RKFH	5.0	95.7	
THORNYHEADS	0.0	98.7	
NORTHERN RKFH	0.0	0.0	
DUSKY RKFH	0.0	0.0	
SHORTTRAKER RF	0.0	0.0	
HARLEQUIN RF	0.0	0.0	
REDSTRIPE RF	0.0	0.0	
SHARPCHIN RF	0.0	0.0	
ATKA MACKEREL	0.0	0.0	
GRENADIERS	0.0	0.0	
SCULPINS	0.0	6.6	
SKATES	0.0	3.4	
SPINY DOGFISH	1.8	0.0	
SALMON SHARK	0.0	0.0	
SLEEPER SHARK	0.0	0.0	
TANNER CRAB	0.0	2.0	
KING CRAB	0.0	0.0	
DUNGENESS CRAB	0.0	0.0	
PINK SHRIMP	0.1	0.0	
SIDE STRIPE SHRIMP	0.0	0.9	
SCALLOP	0.0	0.0	

Section 4 (continued)

Fishing log for the Nore-Dick

Summary listings of catch rates in descending order of magnitude for selected species of commercial interest

- Catch rates (kg/nm) are standardized to a trawl width of approximately 15 meters. The fishing efficiency adjustments between vessels, used in the distribution and abundance plots in Section 1, are not used.

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ARROWTOOTH FLOUNDER

	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)										
140	1994.5	1.7	109	64	114.2	0.8	52	134	28.4	0.9	69	69	28.4	0.4	45
76	594.0	1.3	58	14	110.6	0.5	62	39	28.2	0.4	120	27.7	1.3	1.3	120
27	537.6	1.0	100	59	107.7	0.4	53	123	27.4	0.3	135	27.4	1.3	1.3	135
52	463.4	0.9	82	90	106.8	1.0	170	33	27.3	1.3	105	135	27.3	0.8	105
66	363.4	1.2	93	84	105.3	2.4	122	142	26.8	0.8	189	142	26.8	0.3	189
43	373.7	0.6	69	144	100.2	0.4	86	3	24.8	0.3	48	3	24.8	0.2	48
48	371.0	1.1	62	62	96.5	0.4	94	111	38	0.2	47	38	23.1	0.2	47
34	352.6	1.4	117	82	95.6	1.8	138	111	35	0.2	42	35	15.7	0.9	42
49	351.9	0.7	79	26	95.5	0.6	79	116	14.3	0.3	60	14.3	14.3	0.3	60
99	339.2	0.9	152	114	93.7	0.6	74	108	92.4	0.8	98	130	12.4	0.4	26
47	316.6	1.1	81	108	92.4	0.4	86	141	89.4	1.4	143	8	11.9	0.5	40
55	306.2	0.9	83	141	89.4	1.4	143	87.1	0.5	54	2	11.6	0.4	49	2
31	302.0	0.6	73	65	87.1	0.5	54	86.1	2.0	132	133	10.5	0.3	51	10.5
50	300.9	0.8	81	83	86.1	2.0	132	136	86.1	1.4	40	40	9.6	0.3	40
74	294.0	1.6	57	136	86.1	1.4	125	120	8.4	0.3	53	120	8.4	0.4	53
51	292.9	0.9	83	88	83.3	1.8	167	129	8.3	0.8	28	129	8.3	0.6	28
53	279.7	0.9	82	92	82.6	1.9	159	115	7.1	0.6	63	115	7.1	0.5	63
54	277.7	0.7	82	37	80.4	0.3	47	71	6.1	0.5	51	71	6.1	0.5	51
75	270.0	1.1	56	18	79.2	0.3	72	10	6.1	0.5	56	10	6.1	0.4	56
73	247.6	0.4	50	60	78.1	0.3	52	131	4.0	0.4	40	40	3.7	0.3	40
77	246.7	0.6	45	79	76.6	2.3	131	4	3.5	0.2	47	4	3.5	0.2	47
24	227.2	0.7	111	15	73.1	0.3	71	22	3.5	0.4	41	22	3.5	0.4	41
138	216.3	1.4	83	61	71.7	0.5	52	128	2.4	0.4	46	128	2.4	0.4	46
94	215.9	0.4	68	137	66.5	1.3	119	104	2.3	0.8	56	104	2.3	0.8	56
46	214.3	1.0	85	91	66.5	1.7	175	105	2.2	0.9	47	105	2.2	0.9	47
30	207.8	0.3	60	9	64.0	0.6	61	86	1.8	1.4	43	86	1.8	0.1	43
145	205.0	1.3	141	126	63.5	1.0	60	132	1.2	0.1	43	132	1.2	0.1	43
42	203.4	1.2	85	103	63.2	0.8	73	69	1.1	0.1	45	69	1.1	0.1	45
21	201.1	0.5	79	117	61.8	0.8	63	68	0.9	0.1	43	68	0.9	0.1	43
17	199.0	1.6	80	5	59.9	0.5	96	139	0.8	0.1	43	139	0.8	0.1	43
113	194.6	1.1	80	89	58.0	1.9	175	70	0.6	0.2	34	70	0.6	0.2	34
95	189.4	0.9	94	20	57.9	0.3	76	67	0.4	0.1	45	67	0.4	0.1	45
71	180.4	0.8	50	127	52.7	1.2	60	41	0.3	0.1	41	41	0.3	0.1	41
96	173.7	1.1	107	85	47.2	1.8	143	119	0.1	0.0	45	119	0.1	0.0	45
13	166.7	0.5	82	87	46.8	1.8	163	143	0.7	0.7	81	143	0.7	0.7	81
98	159.2	1.2	163	78	45.7	1.7	140	39	1.1	1.1	120	39	1.1	1.1	120
72	157.2	1.0	54	44	43.8	0.4	71	38	0.6	0.6	64	38	0.6	0.6	64
63	150.5	0.7	56	25	43.3	0.6	80	111	38.2	0.7	67	38.2	0.7	0.7	67
102	145.8	0.6	88	58	41.7	0.4	54	163	37.6	0.5	54	163	37.6	0.5	54
101	139.5	0.9	80	143	41.5	0.7	81	110	39.5	1.1	120	39.5	1.1	1.1	120
122	139.5	0.9	119	110	39.5	1.1	120	120	39.5	1.1	120	120	39.5	1.1	120
100	138.9	0.5	72	109	38.5	0.6	80	111	38.2	0.7	67	38.2	0.7	0.7	67
106	128.0	0.9	151	111	38.2	0.6	80	118	37.6	0.5	54	118	37.6	0.5	54
124	127.5	0.8	83	143	41.5	0.7	81	125	35.6	2.0	119	125	35.6	2.0	119
112	125.6	1.3	98	80	35.6	2.0	119	124	33.7	0.5	55	124	33.7	0.5	55
19	124.0	0.7	89	57	33.7	0.7	55	121	29.7	0.7	59	121	29.7	0.7	59
81	121.6	1.7	142	131	29.7	0.6	36	114.3	29.6	0.3	45	114.3	29.6	0.3	45
97															

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC HALIBUT

H A U L	C A T C H K G / T O N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / T O N M	G E A R D E P T H (F M)	A V W G T (K G)
130	142.8	6.3	26	83	14.3	8.8	132
113	134.8	12.2	80	129	12.8	1.9	28
101	134.1	16.5	80	36	12.7	1.8	45
67	109.3	1.3	45	44	12.4	15.2	71
39	94.7	4.3	45	3	11.9	1.3	48
22	90.1	26.0	41	85	11.8	4.1	143
141	82.7	32.2	143	119	11.6	3.3	45
67	79.9	10.6	45	96	11.5	16.2	107
140	79.6	13.4	109	127	10.9	3.6	60
20	79.2	15.1	76	131	10.7	3.5	59
94	71.2	6.3	68	64	10.6	8.3	92
23	70.8	2.5	42	100	10.0	11.8	72
128	69.7	2.8	46	61	9.6	4.1	52
48	66.2	32.5	82	27	9.5	3.4	100
99	57.9	20.8	152	59	9.4	2.7	53
77	55.5	2.1	45	19	9.0	5.6	89
107	52.4	2.2	45	2	8.7	1.5	49
98	47.4	26.4	163	134	8.2	11.8	69
9	44.7	2.4	61	18	8.0	4.0	72
62	44.3	15.8	54	108	6.5	3.4	98
35	43.4	3.0	42	14	6.5	2.4	62
1	39.2	1.8	43	70	6.2	0.5	34
121	38.9	2.2	42	114	6.0	3.4	74
43	36.0	37.5	69	21	6.0	3.6	79
112	34.5	14.2	98	139	5.4	1.3	43
15	32.1	4.8	71	84	5.0	5.2	122
63	31.4	4.4	56	116	4.5	1.9	60
68	30.4	1.8	43	72	4.3	2.0	54
125	29.1	1.7	36	58	4.1	3.1	54
105	23.5	2.1	49	13	4.0	4.0	82
10	23.3	3.2	51	103	3.8	5.4	73
81	23.1	13.0	142	6	3.6	1.6	56
4	23.1	4.4	47	11	3.3	3.1	41
73	21.9	3.7	50	41	2.8	0.7	41
145	21.9	26.0	141	109	2.5	3.1	64
133	21.0	3.9	51	38	2.4	1.6	47
37	21.0	9.0	47	126	2.3	1.4	60
104	20.7	3.4	56	28	1.8	0.5	27
31	20.1	4.4	73	42	0.9	1.3	85
95	19.6	9.6	94	24	0.9	0.8	111
124	19.1	10.9	83	60	0.8	0.6	92
138	18.5	7.0	83	102	0.8	1.0	88
30	17.8	5.9	60	7	0.7	0.3	41
122	17.2	18.2	119	106	0.5	0.5	151
40	15.9	0.8	40				
17	15.7	8.3	80				
71	15.6	1.7	50				
	15.2	14.8	135				
	33						

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES FLATHEAD SOLE

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
76	1091	0.4	58	15	33	71	85	0.4	0.2	143
75	710	0.5	56	108	30	98	21	0.4	0.3	79
43	505	0.2	69	100	29	72	57	0.4	0.1	55
74	405	0.5	57	133	28	51	119	0.2	0.2	45
36	278	0.3	45	27	28	0	100	0.3	120	
71	259	0.3	50	136	23	5	125			
113	226	0.8	80	26	23	4	79			
72	215	0.6	34	134	23	1	69			
54	202	0.5	82	127	22	4	69			
52	201	0.3	82	98	21	9	60			
49	194	0.3	79	131	21	2	60			
50	183	0.3	81	30	18	1	60			
52	177	0.3	83	126	14	6	60			
53	169	0.3	82	9	12	2	61			
48	166	0.3	82	137	10	7	61			
14	165	0.3	62	116	9	0	60			
24	156	0.3	111	135	9	0	60			
77	142	0.4	45	80	7	9	60			
114	140	0.6	74	40	7	9	61			
51	140	0	83	59	7	8	53			
95	138	0.2	94	122	7	5	53			
37	134	0.2	47	121	6	0	42			
42	134	0	85	79	5	4	42			
33	129	2	14	135	60	5	42			
138	116	0.4	83	120	4	9	53			
99	113	0.2	152	140	4	7	53			
47	110	0.3	81	129	4	7	53			
38	109	0.2	47	101	4	6	54			
13	108	0.2	82	128	4	5	54			
17	107	0.4	80	34	4	5	54			
106	102	0.3	151	84	4	4	54			
73	93	0.3	50	65	4	1	54			
94	86	0.9	68	64	4	0	52			
130	83	0.3	26	109	2	7	52			
31	82	0.3	73	61	2	7	52			
66	79	0.3	93	62	2	5	54			
144	69	0.7	86	111	2	3	54			
44	66	0.3	85	10	2	1	51			
46	66	0.2	83	82	1	9	51			
124	63	0.2	83	107	0	2	51			
96	60	0.2	43	83	1	8	51			
139	55	0.4	43	83	1	8	51			
39	46	0.3	45	63	1	3	51			
117	44	0.3	71	58	1	2	51			
102	42	0.4	63	123	0	7	51			
25	39	0.3	88	92	0	7	51			
97	35	0.2	80	89	0	6	51			
118	35	0.3	87	91	0	6	51			
	34	0	54	90	0	5	51			

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES DOVER SOLE

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
81	136.9	0.6	142	94	8.3	0.6	68
136	133.6	0.6	125	96	8.2	0.7	107
86	124.0	0.4	187	95	7.6	0.6	94
88	107.7	0.5	167	118	7.5	0.5	54
34	90.9	0.8	117	97	7.2	0.6	87
90	86.4	0.5	170	141	6.8	0.5	143
78	82.9	0.6	140	52	5.7	0.5	82
138	73.8	0.6	83	126	5.5	0.6	60
83	72.9	0.4	132	50	5.4	1.2	81
137	67.4	0.6	119	98	3.2	0.7	163
92	65.6	0.5	159	133	2.6	0.4	51
87	64.4	0.5	163	19	2.4	0.6	89
80	60.9	0.5	119	120	2.5	0.3	53
79	60.4	0.5	131	66	2.4	0.5	93
112	49.3	0.6	98	37	2.2	0.2	47
91	46.2	0.5	175	139	1.9	0.3	43
27	43.3	0.7	100	131	1.6	0.5	59
142	41.3	0.6	189	44	1.5	0.6	71
99	38.1	0.8	152	109	1.4	0.5	64
89	37.1	0.5	175	103	1.4	0.4	73
123	35.5	0.6	120	49	1.4	0.7	79
82	29.9	0.6	138	20	1.2	0.5	76
83	29.0	0.5	143	39	1.1	0.2	45
100	27.6	0.7	72	15	1.1	0.4	71
149	26.4	0.6	141	119	1.0	0.6	45
130	25.9	0.6	26	111	0.9	0.3	67
33	25.6	1.0	135	21	0.8	0.5	79
113	22.2	0.5	80	51	0.7	0.5	83
102	21.0	0.6	88	13	0.7	0.2	82
114	19.8	0.5	74	24	0.5	0.5	111
124	19.4	0.4	83	53	0.5	0.2	82
135	18.7	0.4	105	101	0.4	0.5	80
122	17.4	0.5	119	128	0.3	0.2	46
84	14.9	0.6	122	36	0.3	0.2	45
117	14.2	0.6	63	57	0.2	0.1	55
108	13.6	0.5	98	107	0.1	0.1	45
110	13.4	0.6	120	132	0.1	0.1	43
127	13.1	0.6	60				
144	11.8	0.6	86				
140	10.7	0.4	109				
134	10.5	0.3	69				
121	9.9	0.2	42				
46	9.6	1.0	85				
129	9.3	0.4	28				
106	9.3	0.6	151				
143	8.9	0.3	81				
116	8.9	0.4	60				
115	8.5	0.6	83				

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TONS- BASED ON 15 M NET WIDTH

SPECIES REX SOLE	HAUL	CATCH KG/1. 0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1. 0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1. 0 NM	AV WGT (KG)	SPECIES REX SOLE	HAUL	CATCH KG/1. 0 NM	AV WGT (KG)	GEAR DEPTH (FM)	
5	119.7	0.5	96	1.3	7.3	0.2	82	75	0.7	0.2	56	112.2	0.4	117	42
34	112.2	0.4	117	42	6.6	0.1	89	60	0.6	0.2	52	81.8	0.3	72	30
100	89.3	0.3	125	143	6.6	0.3	60	62	0.6	0.5	54	59.5	0.3	131	97
136	59.5	0.3	131	97	5.7	0.3	87	40	0.5	0.2	40	55.4	0.3	119	66
79	55.4	0.3	119	66	5.5	0.6	93	47	0.4	0.1	B1	47.2	0.3	119	96
80	47.2	0.3	105	95	5.5	0.1	107	25	0.4	0.2	B0	40.9	0.2	105	4.4
137	40.9	0.2	73	106	4.0	0.1	151	52	0.3	0.1	B2	40.9	0.2	73	37
135	39.1	0.3	140	129	3.7	0.2	47	117	0.3	0.2	63	38.6	0.3	142	129
81	35.7	0.3	159	55	3.5	0.1	28	14	0.2	0.0	62	33.3	0.3	122	127
92	33.3	0.3	119	141	3.4	0.2	60	63	0.1	0.1	56	33.1	0.3	119	119
84	33.1	0.3	100	44	3.3	0.3	143	107	0.1	0.1	45	31.9	0.5	100	59
122	31.9	0.5	138	59	3.1	0.4	71	111	0.1	0.1	45	29.9	0.3	120	98
27	29.9	0.3	120	61	114	0.2	163	163	0.1	0.1	67	27.3	0.2	61	114
82	27.3	0.3	170	126	2.7	0.2	60	98	0.2	0.2	60	26.4	0.3	143	108
123	26.4	0.3	89	43	2.6	0.1	69	2.6	0.1	0.1	64	26.0	0.3	175	109
9	26.0	0.3	135	131	2.5	0.1	64	2.5	0.1	0.1	59	25.1	0.8	135	124
90	25.0	0.3	167	104	2.4	0.2	59	2.3	0.3	0.3	56	25.0	0.3	167	104
85	23.0	0.2	71	144	2.3	0.2	86	2.1	0.2	0.2	86	20.8	0.2	83	65
19	20.8	0.2	83	54	2.0	0.5	54	2.0	0.5	0.5	54	20.6	0.4	73	50
91	20.6	0.4	73	77	1.7	0.1	45	1.7	0.1	0.1	45	18.3	0.2	141	48
31	18.3	0.2	141	48	1.8	0.9	82	1.8	0.9	0.9	82	17.2	0.2	132	53
145	17.2	0.2	109	61	1.6	0.3	52	1.6	0.3	0.2	52	17.1	0.4	80	54
83	17.1	0.4	80	54	1.8	0.2	82	1.8	0.2	0.2	82	15.8	0.2	163	77
87	15.8	0.2	175	128	1.7	0.1	45	1.7	0.1	0.1	45	15.4	0.1	175	128
89	15.4	0.1	80	61	1.6	0.2	46	1.6	0.2	0.2	46	15.1	0.2	80	61
113	15.1	0.2	50	133	1.4	0.2	51	1.4	0.2	0.2	51	13.2	0.5	50	133
71	13.2	0.5	187	120	1.4	0.1	53	1.4	0.1	0.1	53	13.0	0.3	69	120
86	13.0	0.3	69	49	1.4	0.7	79	1.4	0.7	0.7	79	12.9	0.1	26	112
134	12.9	0.1	152	116	1.2	0.3	60	1.2	0.3	0.2	60	12.6	0.4	80	58
99	12.6	0.4	109	64	1.2	0.2	54	1.2	0.2	0.2	54	12.0	0.2	43	64
140	12.0	0.2	43	64	1.1	0.3	52	1.1	0.3	0.2	52	11.1	0.2	120	121
139	11.1	0.2	50	21	1.1	0.3	53	1.1	0.3	0.1	53	10.9	0.1	26	21
73	10.9	0.1	69	49	1.1	0.2	98	1.1	0.2	0.2	98	10.7	0.1	26	112
130	10.7	0.1	26	112	1.0	0.2	189	1.0	0.2	0.2	189	9.6	0.3	80	24
101	9.6	0.3	80	24	1.0	0.2	42	1.0	0.2	0.1	42	9.0	0.4	68	142
94	8.0	0.4	68	142	0.9	0.1	42	0.9	0.1	0.1	42	7.9	0.2	120	121
110	7.9	0.2	120	115	0.9	0.2	33	0.9	0.2	0.2	33	7.8	0.1	45	115
39	7.8	0.1	45	46	0.7	0.2	85	0.7	0.2	0.2	85	7.7	0.2	88	46
102	7.7	0.2	88	51	0.7	0.2	83	0.7	0.2	0.1	83	7.5	0.2	83	51
57	7.5	0.2	83	132	0.7	0.1	43	0.7	0.1	0.1	43	7.5	0.2	83	132

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES YELLOWFIN SOLE

HAUL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
36	361.7	0.4	45
71	163.4	0.5	50
73	121.1	0.5	50
37	76.0	0.4	47
38	66.8	0.4	47
39	64.3	0.4	45
77	54.8	0.4	45
14	21.4	0.6	62
72	15.2	0.8	54
43	13.0	0.6	69
74	12.0	0.7	57
76	1.5	0.1	58
28	0.7	0.5	27

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ROCK SOLE

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
40	236.6	0.3	40	20	2.4	76
37	185.6	0.3	47	13	2.1	82
77	164.4	0.4	45	129	1.7	28
71	163.1	0.4	50	49	1.4	79
69	127.0	0.4	45	23	1.3	42
35	71.2	0.6	42	119	1.2	45
59	61.7	0.3	53	104	1.2	56
8	59.5	0.4	40	50	1.0	81
36	57.9	0.5	45	52	0.9	82
3	57.8	0.4	48	132	0.8	43
2	55.8	0.4	49	46	0.7	85
4	52.0	0.5	47	126	0.7	60
70	51.7	0.5	34	17	0.6	0.7
43	48.2	0.4	69	12	0.6	42
9	47.7	0.5	61	55	0.6	83
28	43.8	0.4	27	42	0.5	85
73	43.5	0.5	50	48	0.5	82
68	39.9	0.3	43	47	0.4	81
64	34.4	0.3	52	109	0.4	64
94	30.5	0.2	68	53	0.3	82
76	30.2	0.4	58	54	0.2	82
67	28.3	0.3	49	66	0.2	93
61	25.1	0.4	52	5	0.1	96
60	24.1	0.3	52	106	0.1	151
14	23.8	0.4	62	118	0.1	54
41	22.0	0.5	41			
10	21.5	0.5	51			
30	21.2	0.5	60			
65	18.4	0.4	54			
7	17.9	0.4	41			
62	17.8	0.4	54			
75	16.0	0.7	56			
57	13.6	0.3	55			
63	12.9	0.3	56			
58	12.5	0.3	54			
16	12.4	0.3	44			
39	11.7	0.6	45			
6	11.6	0.5	56			
107	10.5	0.4	45			
74	9.3	0.6	37			
1	6.9	0.4	43			
128	6.2	0.8	46			
22	5.9	0.2	41			
11	5.7	0.4	41			
125	5.4	0.5	36			
44	4.4	0.7	71			
105	3.8	0.4	49			

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH
ON 15 M NET WIDTH

SPECIES SABLEFISH

SPECIES SABLEFISH

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	G E A R D E P T H (F M)
27	762.5	1.2	100	55	7.0	1.4
101	251.7	2.0	80	130	5.5	0.3
95	194.6	2.6	152	127	5.0	0.7
89	110.5	2.3	175	126	4.4	1.1
78	106.7	2.3	140	144	4.2	1.1
98	99.5	1.6	163	95	4.2	1.0
79	96.5	2.2	131	47	4.0	1.1
87	87.2	2.3	163	142	3.8	1.7
94	76.0	2.0	68	53	3.7	1.8
86	66.4	2.4	187	111	3.4	1.1
33	63.2	2.6	135	115	2.6	1.4
91	59.5	2.6	175	117	2.3	0.8
140	58.9	2.0	109	39	2.2	0.9
141	55.9	2.0	143	36	1.9	0.7
122	52.4	2.0	119	19	1.8	1.1
136	51.0	2.2	125	49	1.8	0.9
82	50.9	2.2	138	128	1.3	0.3
88	50.1	2.0	167	134	1.3	0.9
85	49.8	2.1	143	109	1.1	1.4
81	46.7	2.2	142	26	1.0	1.1
90	39.2	2.4	170	118	0.7	0.9
92	35.1	2.5	159	133	0.7	0.9
137	31.3	2.3	119	31	0.6	0.7
138	31.2	1.5	83	139	0.4	0.5
102	29.6	1.9	88			
113	27.8	1.6	80			
123	27.7	2.4	120			
108	26.7	2.2	98			
135	26.3	1.6	105			
5	25.7	1.3	96			
96	24.9	2.3	107			
80	15.0	1.7	119			
110	21.4	3.1	120			
145	20.6	1.6	141			
143	20.0	1.2	81			
112	18.8	1.7	98			
100	15.3	2.3	72			
83	9.9	2.4	117			
124	7.5	1.1	83			
116	7.3	1.1	60			

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC COD

H A U L	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1. 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	C A T C H K G / 1. 0 N M	A V W G T (K G)
64	2256.0	1.8	52	20	40.1	76	2.1	76	126	2.4	3.2
59	1420.0	1.8	53	121	39.7	1.5	42	90	2.1	1.8	170
63	806.3	1.4	56	42	34.7	2.6	85	28	1.9	0.9	27
140	762.8	2.6	109	75	33.3	2.8	56	95	1.8	1.8	94
43	540.3	2.9	69	135	30.8	3.3	105	110	1.8	2.0	120
65	369.4	1.9	54	13	30.4	2.3	82	116	1.7	2.3	60
21	237.0	1.9	79	34	30.3	2.5	117	117	1.6	2.3	63
128	226.5	1.8	46	2	30.0	2.4	49	70	1.5	1.1	34
101	217.9	1.8	80	35	28.6	3.1	42	114	1.2	1.4	74
39	209.3	2.1	45	66	27.4	2.4	93	41	0.9	0.9	41
36	198.2	2.9	45	130	27.4	2.7	26	96	0.8	1.1	107
62	187.3	1.5	54	69	26.5	2.0	45	68	0.5	0.7	43
7	153.9	2.2	41	99	25.7	2.0	152	11	0.5	0.5	41
51	143.6	2.6	83	94	24.1	1.2	68	125	0.1	0.1	36
73	133.3	2.1	50	58	23.8	1.2	54				
67	129.6	1.2	45	98	21.9	2.2	163				
50	109.1	2.8	81	106	21.6	2.9	151				
100	101.2	1.7	72	138	21.4	2.4	83				
31	99.7	2.3	73	14	21.4	1.2	62				
49	99.9	2.5	79	53	19.4	1.9	82				
9	92.1	1.2	61	143	19.3	2.0	81				
103	89.0	1.2	73	40	18.2	1.1	40				
15	85.7	2.2	71	80	15.8	2.3	119				
1	81.0	1.0	43	85	15.6	2.7	143				
19	77.5	2.1	89	115	15.4	4.1	83				
113	76.3	2.9	80	81	15.3	2.2	142				
76	75.4	2.3	58	4	15.0	1.3	47				
61	73.8	1.7	52	82	14.8	4.3	138				
37	70.2	1.5	47	137	8.2	2.4	119				
27	70.1	2.8	100	104	7.7	1.1	56				
38	68.8	1.6	47	92	7.6	2.0	159				
57	63.9	1.2	55	97	7.4	1.6	87				
10	56.5	2.4	51	74	5.3	1.8	57				
77	54.8	4.2	45	84	5.3	2.7	122				
60	61.6	1.0	52	23	6.4	0.4	42				
52	61.2	2.7	82	123	5.9	2.4	120				
44	58.8	2.0	71	33	5.3	2.6	135				
17	53.8	2.3	80	71	5.1	2.3	50				
48	53.5	2.0	82	139	4.6	1.4	43				
6	53.1	3.8	56	136	4.5	5.4	125				
54	51.6	2.6	82	102	4.2	2.7	88				
47	47.6	2.5	81	108	4.1	1.4	98				
46	47.5	2.9	85	88	3.8	2.7	167				
129	43.0	2.5	28	107	3.7	0.5	45				
72	42.9	2.0	54	83	3.7	2.3	132				
5	42.1	2.9	96	79	3.6	1.8	131				
40.3	40.3	3.0	48	112	3.5	4.3					

SPECIES	WALLEYE POLLOCK	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
77	12305.4	0.5	45	89	32.7	1.3	175	22	1.2	41
74	5077.4	0.3	57	95	32.3	0.7	94	115	0.9	83
75	3997.3	0.5	56	13	31.5	1.0	82	25	0.8	80
71	3671.9	0.6	50	33	31.1	0.7	135	23	0.2	42
37	2853.9	0.6	47	126	29.5	0.4	60	30	0.2	60
72	1635.3	0.6	54	142	26.8	0.9	189	67	0.2	45
76	1368.9	0.5	58	118	24.7	0.3	54	40	0.1	40
36	946.0	0.7	45	79	23.4	1.1	131	16	0.1	44
47	576.1	0.8	81	96	22.5	0.2	107	103	0.1	73
50	417.9	1.1	81	87	22.2	1.1	163			
52	398.6	1.2	82	98	20.3	0.9	163			
14	325.2	0.4	62	134	18.2	0.4	69			
44	308.9	1.1	71	73	17.7	0.2	50			
48	294.4	0.9	82	66	16.8	0.3	93			
49	291.3	1.0	79	24	15.1	0.9	111			
55	272.5	1.1	83	97	15.0	0.8	87			
43	265.6	0.9	69	127	13.5	0.5	60			
135	214.4	0.3	105	99	13.3	1.0	152			
3	212.9	0.9	48	109	11.4	0.5	64			
51	168.7	1.2	83	2	11.2	0.5	49			
46	155.7	1.2	85	82	9.7	0.9	138			
38	154.8	1.2	47	81	8.9	1.2	142			
53	144.0	0.0	82	124	7.3	0.4	83			
9	126.3	0.3	61	100	6.9	0.2	72			
54	117.6	1.1	82	106	6.4	0.8	151			
83	107.0	1.1	132	120	6.3	0.2	53			
84	87.1	1.1	122	110	5.9	0.4	120			
82	82.9	0.8	141	133	5.8	0.2	51			
123	80.7	0.5	120	15	5.7	0.7	71			
137	74.8	0.3	119	34	5.5	0.7	117			
39	70.3	0.7	45	116	3.8	0.4	60			
92	63.8	1.1	159	112	3.7	0.5	98			
42	59.8	1.3	85	117	3.6	0.4	63			
131	59.2	0.1	59	111	2.9	0.7	67			
136	74.2	0.3	125	61	2.7	0.8	52			
130	47.6	0.6	26	57	2.2	0.7	55			
129	45.1	0.3	28	1	1.8	0.0	43			
140	40.1	1.4	109	144	1.4	0.5	86			
85	44.6	1.1	143	5	1.8	0.9	96			
90	44.5	0.8	170	114	1.6	0.3	74			
80	43.5	1.0	119	139	1.5	0.5	43			
88	40.7	1.0	167	35	1.5	0.7	42			
122	40.1	0.5	119	141	1.5	0.6	143			
140	36.3	0.8	80	27	1.4	0.2	100			
17	35.8	0.1	BB	113	1.4	0.3	80			
102	35.8	0.1	BB	126	1.2	1.4	79			
138	35.4	0.4	83	140	58	0.9	54			
78	34.5	1.1	140	175	4	1.2	47			
91	33.5	1.1								

KG PER NAUTICAL MILE FOR ALL SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES WALLEYE POLLOCK

SPECIES WALLEYE POLLOCK

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES SHORTSPINE THORNYHEAD

H A U L	C A T C H KG / 1.0 NM	A V W G T (KG)	G E A R D E P T H (F M)
141	122.9	0.4	143
145	83.1	0.2	141
142	72.2	0.4	189
91	63.0	0.3	175
89	53.7	0.3	175
88	47.0	0.3	167
79	41.5	0.3	131
81	39.4	0.3	142
87	37.5	0.3	163
90	37.0	0.2	170
78	34.5	0.3	140
85	34.2	0.3	143
82	32.3	0.3	138
83	28.6	0.3	132
92	26.3	0.3	159
86	22.5	0.3	187
80	10.3	0.5	119
84	8.3	0.4	122
112	7.9	0.4	98
98	7.3	0.4	163
110	5.5	0.2	120
122	3.4	0.7	119
137	1.4	0.9	119
99	1.3	0.7	152
140	0.5	0.2	109

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES ROGHEYE ROCKFISH

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
141	145.7	0.8	143	80	0.4	0.2	119
142	80.9	1.2	189	102	0.3	0.2	88
145	80.6	0.7	141	113	0.3	0.1	80
66	48.3	1.2	93	6	0.2	0.1	56
89	38.9	1.9	175	17	0.1	0.1	80
92	38.1	2.3	159	126	0.1	0.1	60
88	36.3	1.6	167	0.1	0.1	0.1	51
87	30.4	1.2	163				
135	25.5	0.3	105				
106	22.5	0.6	151				
97	20.1	0.3	87				
96	16.0	0.6	107				
91	14.4	1.4	175				
90	13.4	1.4	170				
111	11.7	0.3	67				
98	10.6	0.5	163				
97	9.7	0.5	152				
108	9.0	0.6	98				
95	8.5	0.4	94				
86	7.7	2.0	187				
140	7.0	0.4	109				
42	6.9	0.9	85				
136	6.3	0.3	125				
52	4.7	0.4	82				
26	4.4	0.4	79				
144	3.8	0.3	86				
25	3.7	0.5	80				
110	3.2	0.5	120				
100	3.1	0.3	72				
124	2.9	0.3	83				
54	2.7	1.4	82				
109	2.7	0.4	64				
137	2.3	0.3	83				
127	2.2	0.2	60				
134	2.0	0.2	69				
75	2.0	0.7	56				
55	1.7	0.3	83				
123	1.7	0.4	120				
24	1.5	1.4	111				
53	1.5	0.7	82				
122	1.3	0.7	119				
34	1.3	1.1	117				
47	1.2	0.7	81				
112	1.1	0.3	98				
131	1.0	0.2	59				
46	0.9	0.3	85				
13	0.8	0.2	82				
83	0.7	0.9	132				

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWNS- BASED ON 15 M NET WIDTH

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWNS- BASED ON 15 M NET WIDTH

SPECIES PACIFIC OCEAN PERCH

H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)	H A U L	C A T C H K G / 1 . 0 N M	A V W G T (K G)	G E A R D E P T H (F M)
18	1128	.3	.3	72	17	.2	.1
141	228	.3	.6	143	9	.2	.0
82	160	.5	.7	138	59	.2	.1
78	124	.0	.7	140	24	.1	.1
81	114	.3	.7	142			
65	85	.8	.6	143			
79	74	.8	.7	131			
145	69	.7	.6	141			
87	64	.4	.6	163			
83	57	.2	.6	132			
89	54	.3	.7	175			
92	52	.7	.7	159			
88	52	.0	.7	167			
140	50	.2	.5	109			
6	37	.1	.2	56			
90	27	.9	.7	170			
113	24	.7	.4	80			
91	20	.2	.5	175			
34	19	.8	.1	117			
20	14	.7	.2	76			
80	13	.4	.9	119			
102	11	.8	.5	88			
84	10	.9	.7	122			
99	10	.7	.8	152			
19	10	.2	.6	89			
86	10	.1	.6	187			
8	8	.9	.0	40			
105	8	.4	.2	49			
27	7	.0	.3	100			
112	5	.0	.7	98			
62	4	.4	.2	54			
65	4	.1	.1	54			
7	3	.8	.0	41			
64	3	.4	.2	52			
58	3	.0	.1	54			
103	2	.5	.2	73			
39	1	.4	.3	45			
60	1	.3	.3	52			
61	1	.1	.1	52			
101	1	0	.2	80			
21	0	.8	.3	79			
106	0	.8	.1	151			
143	0	.7	.1	81			
104	0	.7	.2	56			
16	0	.7	.0	44			
63	0	.6	.1	56			
144	0	.5	.1	86			
108	0	.2	.1	98			

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES DUSKY ROCKFISH

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FATH)
115	265.8	1.2	83
18	160.9	1.1	72
143	51.2	1.3	81
58	47.0	0.8	54
20	24.2	1.2	76
41	16.8	0.7	41
104	5.8	1.1	56
65	4.1	0.9	54
59	3.9	0.8	53
113	3.7	0.9	80
102	3.1	1.4	88
79	2.7	1.4	131
6	2.6	0.8	56
140	2.4	1.0	109
87	2.3	0.9	163
19	2.2	1.4	89
27	1.9	0.7	100
39	1.7	0.7	45
90	1.6	1.4	170
100	1.5	1.8	72
99	1.3	1.4	152
82	1.2	1.4	138
112	1.1	1.4	98
34	1.0	0.9	117
62	1.0	0.7	54
42	0.7	0.5	85
83	0.5	0.3	132
40	0.5	0.5	40

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWS- BASED ON 15 M NET WIDTH

SPECIES NORTHERN ROCKFISH

HAIL	CATCH KG/1.0 NM	AV WGT (KG)	GEAR DEPTH (FM)
18	968.6	0.7	72
58	460.4	0.5	54
6	245.1	0.7	56
20	186.1	0.7	76
65	42.9	0.6	54
104	32.2	0.6	56
59	24.2	0.5	53
60	24.1	0.6	52
62	18.4	0.5	54
41	17.6	0.2	41
64	14.3	0.5	52
61	13.9	0.6	52
105	10.5	0.4	49
63	9.0	0.7	56
39	7.8	0.1	45
83	7.3	0.9	132
21	5.5	0.7	79
78	5.3	0.7	140
19	5.1	0.6	89
57	4.3	0.3	55
103	4.3	0.7	73
100	4.0	0.8	72
27	3.4	0.6	100
82	3.1	0.9	138
23	2.3	0.4	42
24	2.3	0.3	111
40	2.0	0.2	40
7	1.9	0.5	41
88	1.9	0.7	167
79	1.8	0.9	131
16	1.4	0.2	44
42	1.3	0.3	85
89	1.2	0.5	175
22	1.2	0.1	41
37	0.7	0.1	47
101	0.7	0.5	80
84	0.7	0.7	122
80	0.6	0.2	119
87	0.6	0.5	163
35	0.5	0.5	42
34	0.5	0.2	117
113	0.4	0.5	80
106	0.2	0.3	151
46	0.2	0.1	85
5	0.1	0.1	96
4	0.1	0.1	47
111	0.1	0.1	67

KG PER NAUTICAL MILE FOR ALL
SURVEY TOWNS- BASED ON 15 M NET WIDTH

SPECIES HARLEQUIN ROCKFISH

	HAUL	CATCH KG/10 NM	AV WGT (KG)	GEAR DEPTH (FMT)
	18	611.0	0.5	72
	115	123.3	0.4	83
	105	114.4	0.1	49
	132	17.6	0.0	43
	100	15.5	0.3	72
	104	5.6	0.2	56
	143	3.3	0.3	81
	58	1.8	0.2	54
	119	1.0	0.0	45
	41	0.9	0.1	41
	101	0.7	0.2	80
	65	0.3	0.1	54
	59	0.2	0.1	53
	99	0.2	0.2	152
	62	0.1	0.1	54

APPENDIX

Trawl specifications and diagrams

Table A.--Specifications^a of the roller gear, otter door and accessory gear used by the U.S. chartered trawlers Lets Go and Nore-Dick during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

<u>Equipment</u>	<u>Specifications</u>
Netting -	Polyethylene, 12.7 cm (5 inch), 4 & 5 mm twine.
Headrope -	27.2 m (89'-1"), 1.3 cm (1/2") 6 x 19 galvanized wire rope, wrapped with 1 cm (3/8") 3-strand polypropylene rope.
Footrope -	24.9 m (81'-7"), 1 cm (3/8") 6 x 19 galvanized wire rope wrapped with polypropylene rope.
Fishing line -	24.3 m (79'-7"), shot peened long link chain. Safe working load 5.1 metric ton (t).
Roller gear -	24.2 m (79'-6") long, 1.9 cm (3/4") diameter, 6 x 19 galvanized wire rope strung through 10.2 cm (4") diameter rubber disks, 16 rubber wing bobbins 35.6 cm (14") in diameter and 34 galvanized rings hung with 30.5 cm (12") long dropper chain.
Breastlines -	1 cm (3/8") 6 x 19 galvanized wire rope wrapped with 1 cm polypropylene. Top corner 5.9 m (19'-6"); bottom corner 2.6 m (8'-8"); top side panel 5.9 m; bottom side panel 9.3 m (30'-6").
Riblines -	1.9 cm (3/4") Sampson ^a 2 & 1 Duralon ^a . Top two 34.8 m (114.17') and bottom two 31.8 m (104.45'), hung 98% of stretched seam length.
Floatation -	Cycolac ^a trawl floats, 30.5 cm (12") diameter, 21 pieces. Buoyancy 10.2 kg (22.4 lbs.) each and rated for 800 m (400 fm) depth.

^aReference to trade names or commercial firms does not imply endorsement by the National Marine Fisheries Service, NOAA.

Table A --continued

<u>Equipment</u>	<u>Specifications</u>
Codend liner -	Nylon, no. 18, 3.8 cm (1-1/2") stretched mesh, 315 meshes circumference and 200 meshes deep, laced to inner bag. When stretched the liner protrudes 61-91 cm (2 to 3') beyond codend.
Restrictors -	Polypropylene rope, 2.5 cm (1") diameter, 4.3 m (14') circumference and secured loosely to codend at each ribline, 1.2 m (4') apart, 5 pieces.
Splitting gear -	1.3 cm (1/2") diameter 6.4 m (21') long galvanized wire rope is passed through 4 galvanized steel rings which are secured to the codend with 1.3 cm diameter braided nylon "spiders".
Side seams -	Panels are joined to each other gathering 3 meshes (4 knots) from each panel. Panels which are secured to framing lines have a selvaged edge created by gathering 3 meshes.
Rigging -	3 dandylines each side, 1.6 cm (5/8") diameter galvanized wire rope, 54.9 m (30 fm) long.
Doors -	1.8 m x 2.7 m (6 x 9'), steel V-doors, approximately 0.7 t (1500 pounds) each.
Chafing gear-	Polypropylene 10" meshes, 1 cm (3/8") polyrope hog-ringed (or interwoven) together, 46 meshes circumference and 21 1/2 meshes deep, laced to outer bag 68.5 meshes up from the pucker rings.

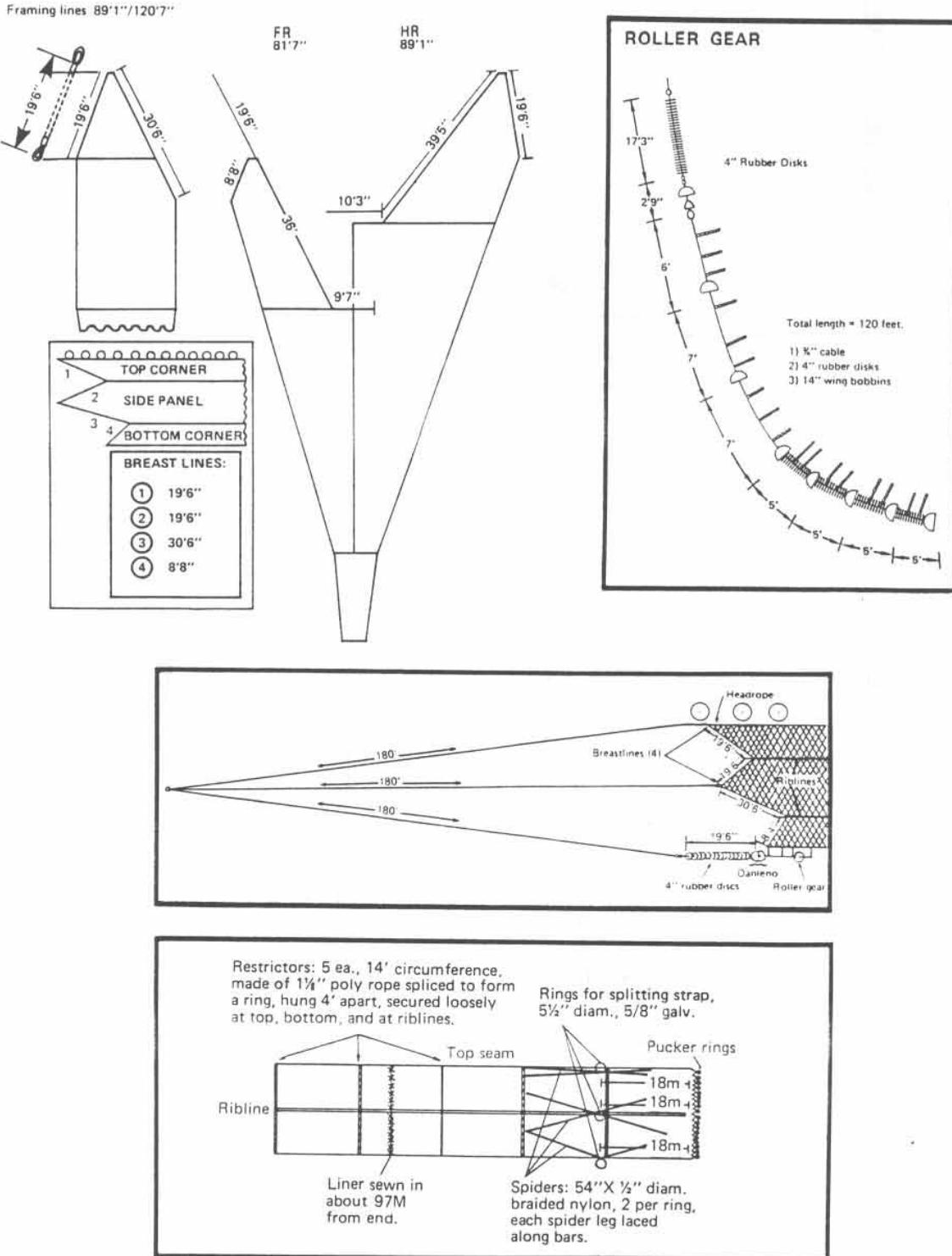


Figure A1.--Schematic diagram of the bottom trawl, roller gear and accessory gear used by the U.S. chartered trawlers Lets Go and Nore-Dick during the 1987 U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

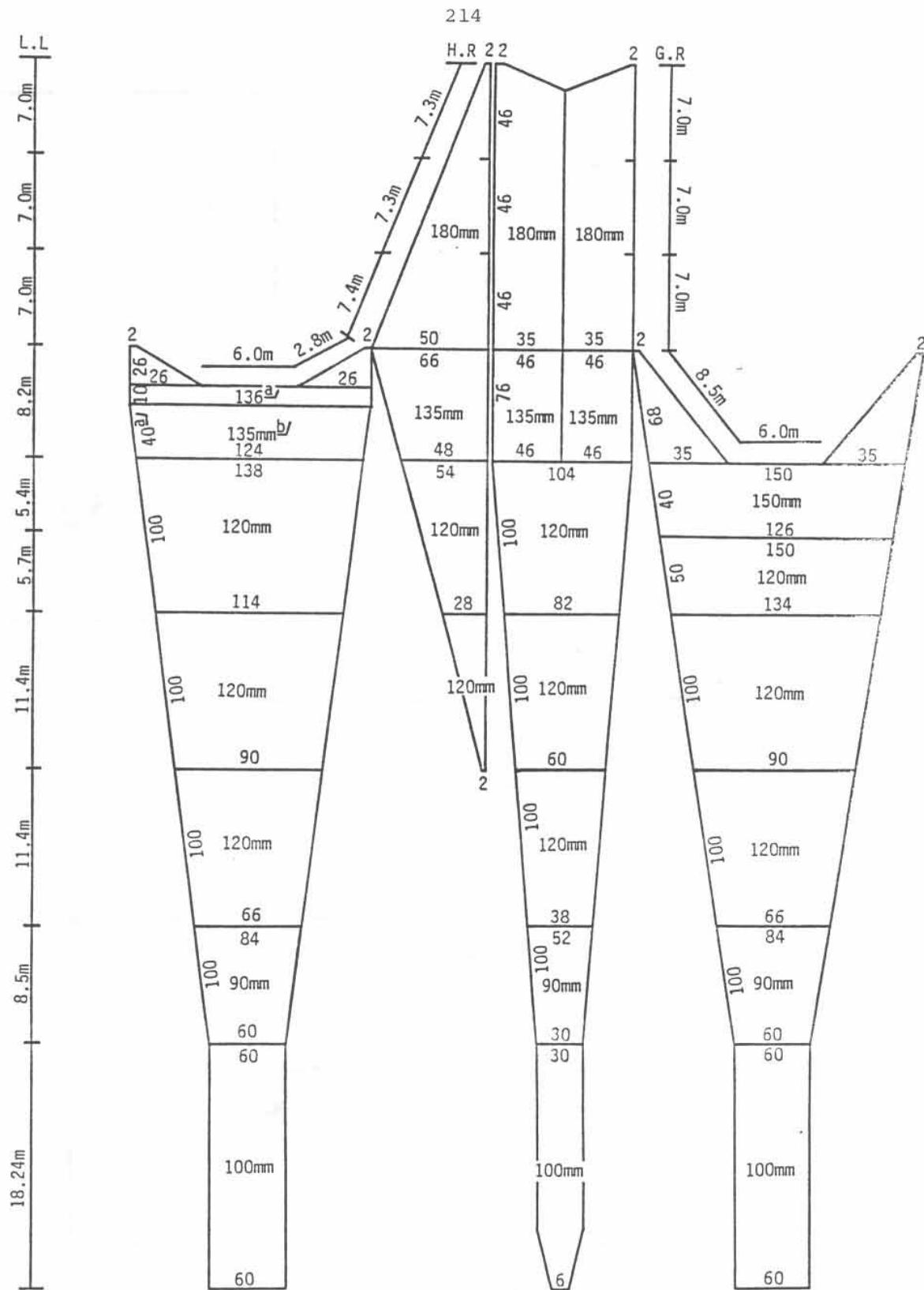


Figure A2.--Schematic diagram of the bottom trawl used by the Japanese chartered trawler Taisei Maru No. 35 during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.

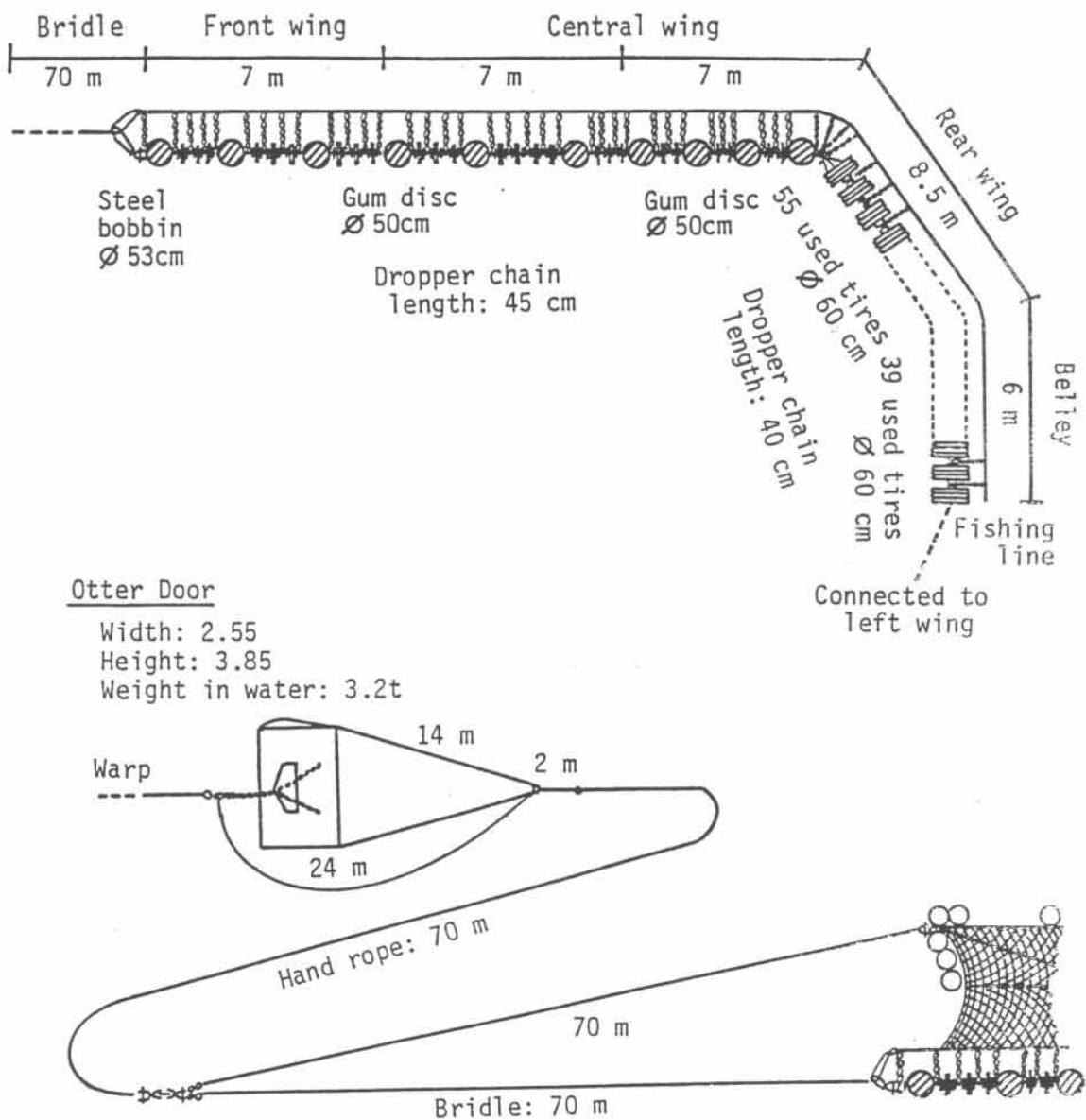


Figure A3.--Schematic diagram of the roller gear, otter door and accessory gear used by the Japanese chartered trawler Taisei Maru No. 35 during the 1987 triennial U.S.-Japan cooperative bottom trawl survey of the central and western Gulf of Alaska.