THE 1986 PACIFIC WEST COAST BOTTOM TRAWL SURVEY OF GROUNDFISH RESOURCES: ESTIMATES OF DISTRIBUTION, ABUNDANCE, LENGTH, AND AGE COMPOSITION

by

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October 1988

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ABSTRACT

The 1986 Northwest and Alaska Fisheries Center west coast triennial bottom trawl survey emphasized the collection of information on the distribution and abundance of rockfish species inhabiting waters above the continental shelf. This survey was the fourth in a series to monitor long-term trends in groundfish populations off the coasts of California, Oregon, and Washington.

The 1986 survey design was based on previous surveys and commercial fishery data in an attempt to improve precision of biomass estimates for yellowtail (*Sebastes flavidus*) and canary (S. *pinniger*) rockfishes. The survey encompassed the coastal waters from Monterey Bay, California (36°48') to the United States-Canada border between the depths of 55 and 366 m with the most intense sampling effort occurring off Oregon and Washington. A total of 569 bottom trawl stations were attempted of which 507 were successfully completed.

Summaries of the methods used, the data collected, and the results of routine analyses are provided herein. Included are temperature data, catch composition, relative abundance, and distribution. Estimates of biomass, population numbers, size composition, and age composition are also provided.

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INTRODUCTION

In 1986, a comprehensive bottom trawl survey of the groundfish resources in the coastal waters off California, Oregon, and Washington was conducted. It was the fourth in a series of triennial investigations initiated in 1977, to determine the distribution, abundance, and biological characteristics of commercially important groundfish species. These surveys are a part of a long-term program to provide a comprehensive data base for monitoring population trends to improve our understanding of population dynamics and assist with management of groundfish fisheries. The results of previous surveys are presented by Gunderson and Sample (1980), Weinberg et al. (1984), and Coleman (1986).

The primary objective of the 1986 survey was to assess the distribution, abundance, and biological characteristics of yellowtail (*Sebastes flavidus*) and canary (S. *pinniger*) rockfishes and that portion of the Pacific hake (also known as Pacific whiting, *Merluccius productus*) population subject to capture by bottom trawl. A concurrent acoustic/midwater trawl survey assessed the off-bottom component of the hake population (Hollowed et al. 1988). Sample allocation was aimed at increasing the precision of abundance estimates for yellowtail and canary rockfish populations. Other objectives included the determination of biological characteristics of key groundfish species, the collection of sea temperature profiles for relating population changes in relative distribution and abundance to environmental factors, and the comparison of overall performance

between nylon and polyethylene Noreastern bottom trawls.

The purpose of this report is to present detailed survey data and results of standard analyses. Discussion is focused on the three species of primary concern, but summaries for other commercially important species are also provided. Summaries of station and catch data (Tables 27 and 28), relative abundance and distribution, and estimates of biomass population numbers and length compositions for the more commercially important species are found herein. Estimated age composition is only available for Pacific hake at the present time. Computer listings of detailed length composition, biomass, and population estimates are available upon request.

SURVEY METHODS

Survey Period and Sampling Area

The 1986 survey period was from 9 July to 30 September and, in that respect, was comparable with previous triennial surveys. The area surveyed included waters from Monterey Bay, California, to Cape Flattery, Washington (36°48'N-48°30'N), between the depths of 55 and 366 m (30-200 fathoms). As in previous surveys, this region was chosen for the study because it included the ‘range in which Pacific hake normally occur in commercial concentrations (Dark et al. 1980) and contained the rockfish resources of major concern.

Vessels and Sampling Gear

Two trawlers were chartered by the Northwest and Alaska Fisheries Center (NWAFC) to conduct the bottom trawl sampling.

The research vessel Alaska, operated by the University of Washington, is 30.5-m in length and powered by a 600 horse-power main engine. The commercial fishing vessel Pat San Marie is 30.8-m in length and powered by an 865 horsepower main engine. Both vessels were equipped with hydraulically powered split trawl winches.

Bottom trawling was conducted with standard nylon and modified polyethylene Noreastern high-opening trawls (Figs. 39 and 40). The use of two different trawls during the 1986 survey was an attempt to upgrade the standard nylon survey trawl to a sampling gear of like design yet more durable over hard bottom and easier to repair. The nylon trawl had a 27.43-m headrope and a 32-m footrope whereas the modified trawl had a 28.04-m headrope and 25.15-m footrope with "flying wings" replacing the outer ends of the footrope and lower wings. Both trawls were equipped with 35.6- and 45.7-cm roller gear, rigged with three 55-m dandylines made of 1.59-cm steel cable, and were fished with 1.5 x 2.1-m steel V-doors.

The two trawl types were fished at alternate stations on board the Alaska to compare trawl behavior, durability, and catching efficiency. The nylon Noreastern was fished exclusively by the Pat San Marie, Mean headrope height and mean wing spread were determined on both vessels with a Scanmarl[1/] net measurement system. Mean trawl measurements for both bottom trawls are presented by vessel in Table 1. The horizontal fishing

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[1/] Reference to trade names does not imply endorsement by the National Marine Fisheries Service, NOAA.

dimensions, mean path width in particular, were larger for the polyethylene trawl. In order to compensate for the differences in area-swept between trawl types, the catch rates of the polyethylene Noreastern were corrected to that of the nylon trawl of the Alaska. Similarly, the catch rates of the nylon trawl used by the Pat San Marie were arbitrarily corrected to that of the nylon trawl fished by the Alaska.

Trawl hauls were made at a speed of 3 knots and were 30 minutes in duration. Standard Resource Assessment and Conservation Engineering (RACE) Division sampling procedures were utilized in processing trawl catches and are those presented by Gunderson and Sample (1980). Sampling was conducted only during daylight hours. The manner in which biological data were collected and analyzed are described by Weinberg et al. (1984).

Trawl Station Allocation

Past estimates of canary and yellowtail rockfish abundance have been relatively imprecise due largely to the contagious distribution of those species and the lack of information about their range. In preparation for the 1986 survey, survey information and commercial catch data from the previous 5 years were reviewed to provide a more current characterization of distribution. The survey area was then stratified on the basis of this characterization and samples allocated to strata using a compromise Neyman (Sukhatme et al. 1984: section 4.4, equation 9) allocation procedure aimed at simultaneously minimizing the variance associated with mean catch rates for both rockfish

species (Knechtel 1986).

There were six latitudinal strata as well as four depth strata. Strata boundaries and areas (square nautical miles) are presented in Table 2 and Figure 1. Sampling was concentrated in the 92- to 219-m depth stratum north of 42°35'N lat., defining the region where the target rockfish species were thought to be most abundant. Sampling effort was minimal in the 55- to 91-m and 220- to 366-m strata but maintained at a level established to provide acceptable precision in estimates of biomass for Pacific hake. Tracklines were drawn approximately parallel to the seabed slope at intervals of two minutes of latitude for each depth stratum. Stations allocated to a depth stratum were then randomly assigned to trackline segments in proportion to their lengths and were located randomly along the segment. The two vessels usually sampled along alternate tracklines to minimize the effects of any between-vessel differences in fishing power.

RESULTS

Haul, Catch, and Biological Data

Of the 542 trawl hauls scheduled, 507 were successfully completed during the survey. The Alaska successfully occupied 196 survey stations and the Pat San Marie successfully completed 311. The total number of allocated and successfully completed stations for the survey area are presented by depth stratum in Figure 1.

A total of 108 fish species belonging to 34 families were encountered during the course of the survey. Table 3 lists these

species in taxonomic order according to Robins (1980). Biological data were collected from target species and other-dominant catch components and are summarized in Table 4 by International North Pacific Fisheries Commission (INPFC) statistical area and depth strata. The number of fish tagged (sablefish, Anoplopoma fimbria; lingcod, Ophiodon elongatus) during the survey is also presented therein. Girth (roundfish) and width (flatfish) measurements (given in Table 4) were collected for future mesh selectivity studies.

Temperature Data

Sea surface temperatures which were collected by bucket thermometer at 527 stations ranged from a high of 18.1°C in the northern Columbia area to a low of 8.6°C in the northern Eureka area (Fig. 2). Bottom temperatures were obtained by expendable bathythermograph (XBT) equipment at 202 sites and ranged from a high of 9.4°C in the southern Monterey area to a low of 6.0°C in the central Columbia area (Fig. 3).

Relative Population Densities

As a measure of relative abundance, species were ranked by mean catch per unit effort (CPUE = kg/km trawled). The 20 most predominant fish species observed are presented by INPFC area and depth stratum in Tables 5-9. Pacific hake was the most abundant species overall with a mean CPUE value which accounted for 37% of total average CPUE for all groundfish encountered. Average CPUE for Pacific hake was highest in the Eureka area where it accounted for 48% of the average groundfish CPUE, and

lowest in the Columbia area where it comprised 29% of the average groundfish CPUE. Canary and yellowtail rockfishes ranked 11th and 13th, respectively, with mean CPUE values for each species accounting for only 2% of the average groundfish CPUE for the entire survey area. The highest average CPUE for canary was in the U.S. portion of the Vancouver area, comprising 3% of the total mean groundfish CPUE. The lowest average density occurred in the Monterey and Eureka areas where the species ranked 22nd and 21st, respectively, each area accounting for less than 1% of the total mean groundfish CPUE. Yellowtail was most abundant in the Columbia area and the U.S. portion of the Vancouver area, accounting for 2% of the total groundfish CPUE in each area. Yellowtail rockfish was least abundant in the Eureka area where it ranked 20th and comprised less than 1% of the total mean CPUE for groundfish.

After Pacific hake, darkblotched rockfish (S. crameri), spiny dogfish (Squalus acanthias), sablefish, and Pacific ocean. perch (Sebastes alutus) showed the highest relative densities in the survey area, respectively. The cumulative mean CPUE for these top five species comprised 62% of the mean CPUE for all groundfish. The CPUE values for flatfish are less likely to reflect density accurately because the sampling gear employed was not designed for the efficient capture of flatfish.

For various species, CPUE varied by depth. In the shallow stratum (55 to 183 m), Pacific hake was the most abundant species, accounting for 55% of the total mean shallow stratum CPUE: whereas, in the deep stratum (184 to 366 m) hake ranked

third overall, comprising only 9% of the total mean CPUE. Yellowtail rockfish ranked fifth and canary rockfish ranked seventh in relative abundance in the shallow stratum, but 18th and 27th, respectively, in the deep stratum. Sablefish ranked third and fifth, respectively, in the shallow and deep strata. This difference may be the result of gear selectivity for small sablefish known to primarily inhabit depths less than 183 m. The mean CPUE for darkblotched rockfish and Pacific ocean perch ranked first and second, respectively, in the deep stratum, but in the shallow stratum they did not occur among the top 20 species.

Relative abundance also varied latitudinally. Moving from south to north, the five most abundant species were Pacific hake, Dover sole (Microstomus pacificus), sablefish, chilipepper (S. goodei), and stripetail rockfish (S. saxicola) in the Monterey area; Pacific hake, Dover sole, darkblotched rockfish, shortbelly rockfish (S. jordani), and sablefish in the Eureka area: Pacific hake, darkblotched rockfish, sablefish, Dover sole, and Pacific ocean perch in the Columbia area; and Pacific hake, spiny dogfish, arrowtooth flounder (Atheresthes stomias), walleye pollock (Theragra chalcogramma), and sablefish in the U.S. portion of the Vancouver area.

The relative abundance and geographic distribution of the commercially important groundfish species based on CPUE values are presented in Figures 4-25. All CPUE values for each species were listed in decreasing order and grouped as the top 10%, middle 30%, and lowest 60% of the values. Stations with CPUE

values of zero were grouped in a fourth category. To highlight the occurrence of an exceptionally large catch, a fifth category was assigned when the largest CPUE value for a given species exceeded the next largest value for that species by a factor of two or more. Such larger values were excluded from the top 10% category. Increased sampling effort in the northern portion of the survey area may give the impression of high densities when, in fact, CPUE was only low or moderate. The distribution of sampling effort should be considered when interpreting Figures 4-25.

Biomass and Population Estimates

Estimates of population biomass numbers (with 90% confidence limits) and mean lengths and weights are presented by species, INPFC area, and depth in Tables 10-21. Estimates of abundance are likely to be conservatively biased because only a portion of the stock may be in the areas trawled and not all fish in the path of the trawl are captured. Abundance estimates are based upon the assumption that all fish in front of the trawl are captured. The degree to which such an assumption is true will vary among species.

The total biomass of Pacific hake as derived from bottom trawl data was estimated at 239,153 metric tons (t)[2/]. The Monterey area accounted for 40% of the hake biomass; the Eureka

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[2/] This estimate represents only 13% of the total estimated biomass for Pacific hake. An additional 1,603,513 t were accounted for in midwater by a hydroacoustic survey conducted concurrently with the bottom trawl survey (Hollowed et al. 1988).

area, 19%; the Columbia area, 33%: and the U.S. portion of the Vancouver area, 8%. The total estimated biomass for yellowtail rockfish was 11,655 t. The Monterey area accounted for 20% of this estimate; the Eureka area, 10%; the Columbia area, 47%; and in the U.S. portion of the Vancouver area, 23%. The total estimated biomass for canary rockfish was 10,998 t. The Monterey area contained 12% of the total estimate: the Eureka area, 7%; the Columbia area, 50%; and the U.S. portion of the Vancouver area, 31%.

Pacific hake, sablefish, and Dover sole were the most abundant species in the Monterey, Eureka, and Columbia areas. Respective biomass by area for these three species was estimated at 95,953 t, 45,228 t, and 78,568 t for Pacific hake; 10,463 t, 4,905 t, and 9,944 t for sablefish; and 8,694 t, 4,677 t, and 10,332 t for Dover sole. Pacific hake (19,404 t), arrowtooth flounder (4,761 t), and canary rockfish (3,367 t) were most abundant in the U.S. portion of the Vancouver area.

Length Composition

Estimated length compositions for all species for which there were at least 100 lengths per INPFC area are presented by INPFC area and depth stratum in Figures 26-36. In cases where an inadequate number of samples precluded derivation of length composition by area or depth, estimates were only made for the entire survey area.

The Pacific hake length distribution for the whole area was bimodal with modes occurring within the length intervals of 30-39 cm and 40-55 cm. The smaller modal group was comprised

almost entirely of 2-year-olds of the 1984 year class, whereas the larger modal group was comprised of 3- to 16-year-olds with 6-year-olds of the 1980 year class dominating. Length composition was different among INPFC areas with evidence of latitudinal stratification. Size increased from south to north with mean lengths of 39.0 cm, 39.2 cm, 45.9 cm, and 48.0 cm observed in the Monterey, Eureka, Columbia, and Vancouver (U.S. portion) areas, respectively. The overall mean length for Pacific hake was 41.2 cm. There was little difference in size compositions between the two depth strata for any given INPFC area.

The overall size composition for yellowtail rockfish was trimodal with modes occurring within the length intervals of 22-27 cm, 28-36 cm, and 37-55 cm. The smaller modal group was present throughout the survey area, suggesting rather widely occurring recruitment of young fish. The presence of the middle, and larger modal groups were also evident throughout the survey area with the exception of the U.S. portion of the Vancouver area where the presence of the 28- to 36-cm modal group was questionable. Yellowtail rockfish appeared to be stratified latitudinally by size with larger fish occurring in the northern portion of the survey area. Yellowtail rockfish averaged 37.3 cm, 37.2 cm, 39.0 cm, and 43.7 cm in the Monterey, Eureka, Columbia, and the Vancouver (U.S. portion) areas, respectively. The overall mean length for yellowtail rockfish was 39.2 cm.

The overall size composition for canary rockfish was bimodal with modes occurring between the length intervals of 18-27 cm and

28-62 cm. The smaller modal group was present in all areas, suggesting recruitment throughout the survey area. Size distributions for the Monterey and Eureka areas were quite variable due to small sample sizes. Length samples for canary rockfish were not collected from the deep stratum. There was little variability in mean lengths among INPFC areas. The overall mean length for canary rockfish was 44.8 cm.

Age Composition

Although otoliths were collected from several commercially important groundfish species, only those for Pacific hake have been read for age determination at the present time. Population age composition is given by INPFC area and depth stratum in Tables 22-26 and Figure 37.

Ages ranged from 2 to 16 years. The 2-, 6-, and 9-year-olds (1984, 1980, and 1977 year classes) were the most abundant, accounting for 39%, 40%, and 12%, respectively, of the total estimated population. From observing the latitudinal stratification of sizes, the 1984 year class was most abundant in the southern areas, accounting for 56% and 51%, respectively, of the population age estimates in the Monterey and Eureka areas. With increasing latitude, the abundance of older (>5 years) fish increased. The 1980 year class prevailed in the Columbia and Vancouver (U.S. portion) areas, comprising 71% and 64%, respectively, of the population age estimates in those areas. The 1977 year class was an important population component throughout the survey area, accounting for 13% of the total population age estimate in the Monterey area; 9% in the Eureka

area: 14% in the Columbia area; and 20% in the U.S. portion of the Vancouver area. Individuals averaged 4.2 years of age in the Monterey and Eureka areas; 6.6 years in the Columbia area; and 7.0 years in the U.S. portion of the Vancouver area. The estimated mean age for the total Pacific hake population was 4.9 years. Differences in mean ages between depth strata within INPFC areas were minimal with the exception of the Columbia area where fish less than or equal to 5 years of age were more abundant in the deep stratum than in the shallow stratum. In the Columbia area, only 5% of the estimated population in the shallow stratum was composed of individuals ≤ 5 years of age as compared to 24% in the deep stratum. The mean age for Pacific hake in the shallow and deep strata of the Columbia area was 6.6 years and and 5.5 years, respectively.

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Table 1 .--Mean fishing dimensions of the nylon and polyethylene Noreastern bottom trawls used during the 1986 west coast groundfish survey.

Vessel and gear type	Number of hauls measured	Mean headrope height (m)	Mean wing spread(m)
Alaska			
Nylon	25	7.21	12.78
Polyethylene	22	7.50	13.82
Pat San Marie			
Nylon	86	6.83	12.69

Table 2. --The 1986 sampling strata boundaries and areas (square nautical miles).

Latitude bounds	Stratum			
	55-91 m	92-183 m	184-219 m	220-366 m
36°48'-42°50'	1,447.7	2,099.3	209.5	537.5
42°50'-45°00'	732.4	1,508.4	146.1	465.1
45°00'-46°10'	308.2	885.1	146.7	244.6
46°10'-47°00'	301.4	488.0	50.0	65.2
47°00'-47°50'	297.1	453.8	32.9	40.8
47°50'-U.S./Can. border	102.0	631.0	113.9	199.7

Table 3.-- Fish species caught during the 1986 west coast groundfish survey.

Family and Species[a]	Common Name[a]
Myxinidae	
Myxinidae unidentified	Hagfish unidentified
Eptatretus stouti	Pacific hagfish
Hexanchidae	
Hexanchus griseus	Sixgill shark
Scyliorhinidae	
Apristurus brunneus	Brown cat shark
Carcharhinidae	
Galeorhinus zyopterus	Soupfin shark
Squalidae	
Squalus acanthias	Spiny dogfish
Torpedinidae	
Torpedo californica	Pacific electric ray
Rajidae	
Rajidae unidentified	Skate unidentified
Raja binoculata	Big skate
Raja inornata	California skate
Raja kincaidi	Sandpaper skate
Raja rhina	Longnose skate
Chimaeridae	
Hydrolagus colliei	Spotted ratfish
Clupeidae	
Alosa sapidissima	American shad
Clupea harengus pallasi	Pacific herring
Engraulidae	
Engraulis mordax	Northern anchovy
Salmonidae	
Oncorhynchus kisutch	Coho salmon
Oncorhynchus tshawytscha	Chinook salmon
Osmeridae	
Allosmerus elongatus	Whitebait smelt
Thaleichthys pacificus	Eulachon
Argentinidae	
Argentinidae unidentified	Argentine unidentified

Table 3 .--Continued.

Family and Species[a]	Common Name[a]
Myctophidae	
Myctophidae unidentified	Lanternfish unidentified
Diaphus theta	California headlightfish
Stenobrachius leucopsarus	Northern lampfish
Batrachoididae	
Porichthys notatus	Plainfin midshipman
Gadidae	
Gadus macrocephalus	Pacific cod
Microgadus proximus	Pacific tomcod
Theragra chalcogramma	Walleye pollock
Merlucciidae[b]	
Merluccius productus	Pacific hake
Ophidiidae	
Chilara taylori	Spotted tusk-eel
Zoarcidae	
Zoarcidae unidentified	Eelpout unidentified
Aprodon cortezianus	Bigfin eelpout
Lycodes diapterus	Black eelpout
Lycodopsis pacifica	Blackbelly eelpout
Lycodes palearis	Wattled eelpout
Lycodes brevipes	Shortfin eelpout
Carangidae	
Trachurus symmetricus	Jack mackerel
Sciaenidae	
Genyonemus lineatus	White croaker
Embiotocidae	
Zalembius rosaceus	Pink seaperch
Stichaeidae	
Poroclinus rothrocki	Whitebarred prickleback
Anarchichadidae	
Anarrhichthys ocellatus	Wolf-eel
Cryptacanthodidae	
Delolepis gigantea	Giant wrymouth
Scombridae	
Scomber japonicus	Chub mackerel

Table 3 .--Continued.

Family and Species[a]	Common Name[a]
Scorpaenidae	
Scorpaenidae unidentified	Rockfish unidentified
Sebastes aleutianus	Rougheye rockfish
Sebastes alutus	Pacific ocean perch
Sebastes auriculatus	Brown rockfish
Sebastes aurora	Aurora rockfish
Sebastes babcocki	Redbanded rockfish
Sebastes borealis	Shortraker rockfish
Sebastes brevispinis	Silvergray rockfish
Sebastes caurinus	Copper rockfish
Sebastes chlorostictus	Greenspotted rockfish
Sebastes crameri	Darkblotched rockfish
Sebastes diploproa	Splitnose rockfish
Sebastes elongatus	Greenstriped rockfish
Sebastes entomelas	Widow rockfish
Sebastes flavidus	Yellowtail rockfish
Sebastes goodei	Chilipepper
Sebastes helvomaculatus	Rosethorn rockfish
Sebastes jordani	Shortbelly rockfish
Sebastes maliger	Quillback rockfish
Sebastes melanops	Black rockfish
Sebastes melanostomus	Blackgill rockfish
Sebastes nigrocinctus	Tiger rockfish
Sebastes ovalis	Speckled rockfish
Sebastes paucispinis	Bocaccio
Sebastes pinniger	Canary rockfish
Sebastes proriger	Redstripe rockfish
Sebastes reedi	Yellowmouth rockfish
Sebastes ruberrimus	Yelloweye rockfish
Sebastes rubrivinctus	Flag rockfish
Sebastes rufus	Bank rockfish
Sebastes saxicola	Stripetail rockfish
Sebastes wilsoni	Pygmy rockfish
Sebastes zacentrus	Sharpchin rockfish
Sebastolobus alascanus	Shortspine thornyhead
Anoplopomatidae	
Anoplooma fimbria	Sablefish
Hexagrammidae	
Hexagrammidae unidentified	Greenling unidentified
Hexagrammos decagrammus	Kelp greenling
Ophiodon elongatus	Lingcod
Zaniolepis latipinnis	Longspine combfish
Zaniolepis frenata	Shortspine combfish

Table 3.--Continued.

Family and Species[a]	Common Name[a]
Cottidae	
Cottidae unidentified	Sculpin unidentified
Icelinus filamentosus	Threadfin sculpin
Leptocottus armatus	Pacific staghorn sculpin
Hemilepidotus hemilepidotus	Red Irish lord
Agonidae	
Agonidae unidentified	Poacher unidentified
Sarritor frenatus	Sawback poacher
Xeneretmus latifrons	Blacktip poacher
Agonus acipenserinus	Sturgeon poacher
Bathyagonus alascanus	Gray starsnout
Cyclopteridae	
Careproctus melanurus	Blacktail snailfish
Bothidae	
Bothidae unidentified	Lefteye flounder unidentified
Citharichthys sordidus	Pacific sanddab
Pleuronectidae	
Atheresthes stomias	Arrowtooth flounder
Eopsetta jordani	Petrale sole
Glyptocephalus zachirus	Rex sole
Hippoglossoides elassodon	Flathead sole
Hippoglossus stenolepis	Pacific halibut
Isopsetta isolepis	Butter sole
Lepidopsetta bilineata	Rock sole
Lyopsetta exilis	Slender sole
Microstomus pacificus	Dover sole
Parophrys vetulus	English sole
Platichthys stellatus	Starry flounder
Pleuronichthys decurrens	Curlfin sole
Psettichthys melanostictus	Sand sole

a Nomenclature from Robins (1980) unless otherwise noted.
[b] Nomenclature from Eschmeyer and Herald (1983)

Table 4.--Inventory of biological data by species and depth stratum collected during the 1986 west coast groundfish survey (A = otoliths, W = individual weight, G = girth or width, M = maturity, S = stomach observations, T = tagged fish, L = length).

Species name	Monterey area		Eureka area		Columbia area		U.S.-Vancouver area	
	55-183m	184-366m	55-183m	184-366m	55-183m	184-366m	55-183m	184-366m
Pacific hake	359A;10,399L	260A;924L	252A;2,977L	173A;539L	669A,M;553W; 10,843L	169A,M;118W; 663L	73A,M;18S; 7,425L	120A;1,096L
Sablefish	90G;51T; 570L	--	39G;40L	--	68A,W;301G; 369M;154T; 1,820L	106G,M;13T; 694L	70W;11G;83M; 38T;1,721L	18G,M;155L
Lingcod	--	--	--	--	177G;169M; 2T;186L	5G;6M,L	24G;16M;11T; 36L	1T,L
Yellowtail rockfish	158G;271L	--	178L	--	197A;380W; 340G;604M; 1,585L	42L	135A;421W; 246G;538M; 1,318L	--
Canary rockfish	19G;67L	--	24G;25L	--	365A,M;219W; 355G;1,344L	--	234A;330W; 59G;451M; 1,676L	--
Shortbelly rockfish	130A;355L	--	339L	--	24L	--	--	--
Widow rockfish	6G,L	--	86G;154L	--	28G,M;106L	6G,M,L	45L	--
Silvergray rockfish	--	--	--	--	4A,L;2W;3G,M	9A,W,M,L	133A;73W; 135G;162M;201L	3A;5W,G,M,L
Yelloweye rockfish	--	--	--	--	16A,W,M,L;1G	--	36A,M;34W; 2G;37L	--
Stripetail rockfish	203L	213L	--	--	5A,W,M,L	51A,W,M; 356L	7A,W,M	--
Greenstriped rockfish	--	--	--	--	147A;234W; 119M;823L	--	15A;202W; 223G;253M;415L	2W,G,M;60L
Redstripe rockfish	--	--	--	--	79A,128W; 195M;494L	--	2A;48W,M; 187G;656L	--
Darkblotched rockfish	--	81L	--	225L	50A;89W,M; 424L	130A;48W; 179M;506L	51A;169W; 24G;192M;384L	120W;103G; 45M;299L
Rougheye rockfish	--	--	--	--	--	--	5W;14G,M;33L	38W;32G;34M; 72L
Rosethorn rockfish	--	--	--	--	35L	--	78A;148W,M; 45G;174L	30W;12G;42L
Redbanded rockfish	--	--	--	--	--	18A,M;12W; 19L	2A,G;3W;4M; 11L	7A;18W;8G; 15M;34L
Sharpchin rockfish	--	168L	--	--	83L	259L	165A;247W; 92G;435M;645L	33L
Yellowmouth rockfish	--	--	--	--	--	--	28A,G,M,L	2A,W,G,L
Splitnose rockfish	--	--	--	189L	--	33W;65M; 455L	--	22W,M;17G; 56L

Table 4. --Continued.

Species name	Monterey area		Eureka area		Columbia area		U.S.-Vancouver area	
	55-183m	184-366m	55-183m	184-366m	55-183m	184-366m	55-183m	184-366m
Shortraker rockfish	--	--	--	--	--	--	--	4W;3M
Chilipepper	195G;1,720L	129G;127L	--	--	--	--	--	--
Bocaccio	80G;149L	19G,L	41G;42L	--	4A,W,L;2G	35L	66A,L;53W; 45G;54M	--
Shortspine thornyhead	--	--	--	--	89G;90L	58G;67L	14L	31W;23G;143L
Pacific ocean perch	--	--	--	36G;37L	224G;196M	257L	122W;134G; 131M;212L	340W;262G; 345M;732L
Arrowtooth flounder	--	--	19L	--	265A;140W; 482G,M;1,048L	79A;41W; 102G,M;125L	59A;335W;561G; 624M;190S; 5,287L	20A;98W;145G; 144M;30S;739L
Dover sole	176G;1,038L	49G;701L	250L	377L	381G;363M; 2,962L	430G;394M; 882L	55W;245G; 190M;1,927L	55W;79G;19M; 740L
English sole	126G	--	--	--	391G,M	38G,M	397G;356M	--
Petrale sole	--	--	8L	--	140G;141M; 193L	--	235G;159M; 457L	--
Rex sole	--	61G;275L	39L	--	204G,M; 3,080L	222G;99M; 346L	93G;3,076L	564L
Pygmy rockfish	--	--	--	--	262L	--	--	--
Bank rockfish	--	77L	--	144L	--	--	--	--
Spiny dogfish	--	--	--	--	--	--	85L	--
Pacific cod	--	--	--	--	--	--	453L	--
Walleye pollock	--	--	--	--	--	--	466L	--
Pacific sanddab	--	--	--	--	94L	--	927L	--
Pacific halibut	--	--	17L	--	171L	20L	310L	10L
Flathead sole	--	--	--	--	--	--	247L	294L
Sand sole	--	--	--	--	--	--	92	--
Curlfin sole	--	--	--	--	--	--	34	--
Rock sole	--	--	--	--	--	--	79	--

Table 5.--Dominant fish species caught during the 1986 west coast groundfish survey, ranked by CPUE (kg/km trawled).

Total survey area 55-183 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	95.70	55.2
2	Spiny dogfish	15.87	64.4
3	Sablefish	6.96	68.4
4	Pacific sanddab	5.97	71.8
5	Yellowtail rockfish	4.58	74.5
6	Dover sole	4.29	76.9
7	Canary rockfish	4.10	79.3
8	English sole	3.77	81.5
9	Rex sole	3.73	83.6
10	Arrowtooth flounder	3.31	85.5
11	Pacific halibut	1.90	86.6
12	Shortbelly rockfish	1.86	87.7
13	Lingcod	1.67	88.7
14	Pacific herring	1.66	89.6
15	Chilipepper	1.60	90.6
16	Redstripe rockfish	1.39	91.4
17	Jack mackerel	1.22	92.1
18	Bocaccio	1.13	92.7
19	Stripetail rockfish	0.90	93.2
20	Greenstriped rockfish	0.88	93.7

[a]Total effort 1,217.4 km
Total mean CPUE for fish 173.31 kg/km

Total survey area 184-366 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Darkblotched rockfish	31.54	22.1
2	Pacific ocean perch	16.89	33.9
3	Pacific hake	13.41	43.4
4	Dover sole	11.61	51.5
5	Sablefish	11.19	59.3
6	Splitnose rockfish	10.02	66.4
7	Arrowtooth flounder	9.79	73.2
8	Sharpchin rockfish	4.79	76.6
9	Rex sole	3.92	79.3
10	Shortspine thornyhead	3.14	81.6
11	Stripetail rockfish	2.89	83.6
12	Walleye pollock	2.83	85.6
13	Bank rockfish	2.45	87.3
14	Pacific halibut	1.89	88.6
15	Bocaccio	1.83	89.9
16	Pacific cod	1.55	91.0
17	Greenstriped rockfish	1.48	92.0
18	Yellowtail rockfish	1.35	93.0
19	Spiny dogfish	1.11	93.7
20	Chilipepper	1.03	94.5

[a]Total effort 162.7 km
Total mean CPUE for fish 142.60 kg/km

Total survey area 55-366 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	58.30	36.6
2	Darkblotched rockfish	14.52	45.7
3	Spiny dogfish	9.16	51.4
4	Sablefish	8.88	57.0
5	Pacific ocean perch	7.70	61.8
6	Dover sole	7.62	66.6
7	Arrowtooth flounder	6.25	70.6
8	Splitnose rockfish	4.56	73.4
9	Rex sole	3.81	75.8
10	Pacific sanddab	3.26	77.8
11	Yellowtail rockfish	3.11	79.8
12	Sharpchin rockfish	2.62	81.4
13	Canary rockfish	2.41	83.0
14	English sole	2.35	84.4
15	Pacific halibut	1.90	85.6
16	Stripetail rockfish	1.81	86.8
17	Shortspine thornyhead	1.49	87.7
18	Bocaccio	1.45	88.6
19	Walleye pollock	1.41	89.5
20	Chilipepper	1.34	90.3

[a]Total effort 1,380.2 km
Total mean CPUE for fish 159.35 kg/km

Table 6.--Dominant fish species caught during the 1986 west coast groundfish survey, ranked by CPUE (kg/km trawled) in the International North Pacific Fisheries Commission Monterey area.

Monterey area 55-183 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	118.62	57.5
2	Spiny dogfish	14.59	64.5
3	Chilipepper	12.42	70.5
4	Sablefish	8.90	74.9
5	Dover sole	7.63	78.5
6	White croaker	6.04	81.5
7	Stripetail rockfish	5.78	84.3
8	Pacific sanddab	5.47	86.9
9	Rex sole	4.37	89.0
10	English sole	4.31	91.1
11	Plainfin midshipman	4.18	93.2
12	Yellowtail rockfish	2.84	94.5
13	Greenstriped rockfish	1.41	95.2
14	Bocaccio	1.28	95.8
15	Canary rockfish	1.22	96.4
16	Shortbelly rockfish	1.13	97.0
17	Lingcod	0.60	97.3
18	Pacific herring	0.59	97.6
19	Spotted ratfish	0.55	97.8
20	Soupfin shark	0.53	98.1

[a]Total effort 160.6 km
Total mean CPUE for fish 206.44 kg/km

Monterey area 184-366 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	24.55	20.2
2	Dover sole	23.52	39.5
3	Sablefish	11.56	49.0
4	Stripetail rockfish	9.90	57.2
5	Bank rockfish	8.78	64.4
6	Darkblotched rockfish	6.72	70.0
7	Rex sole	6.48	75.2
8	Splitnose rockfish	6.41	80.5
9	Chilipepper	5.97	85.4
10	Sharpchin rockfish	4.51	89.1
11	Bocaccio	3.82	92.3
12	Redbanded rockfish	2.43	94.3
13	Lingcod	2.11	96.0
14	Shortspine thornyhead	0.95	96.8
15	Slender sole	0.73	97.4
16	Bigfin eelpout	0.42	97.7
17	Greenspotted rockfish	0.32	98.0
18	Shortbelly rockfish	0.30	98.2
19	Spotted ratfish	0.29	98.5
20	Bering skate	0.27	98.7

[a]Total effort 31.0 km
Total mean CPUE for fish 121.60 kg/km

Monterey area 55-366 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	71.58	43.6
2	Dover sole	15.58	53.1
3	Sablefish	10.22	59.4
4	Chilipepper	9.20	65.0
5	Stripetail rockfish	7.84	69.8
6	Spiny dogfish	7.34	74.2
7	Rex sole	5.43	77.5
8	Bank rockfish	4.39	80.2
9	Darkblotched rockfish	3.39	82.3
10	Splitnose rockfish	3.20	84.2
11	White croaker	3.02	86.1
12	Pacific sanddab	2.74	87.8
13	Bocaccio	2.55	89.3
14	Sharpchin rockfish	2.31	90.7
15	English sole	2.27	92.1
16	Plainfin midshipman	2.10	93.4
17	Yellowtail rockfish	1.44	94.3
18	Lingcod	1.35	95.1
19	Redbanded rockfish	1.21	95.8
20	Greenstriped rockfish	0.84	96.3

[a]Total effort 191.6 km
Total mean CPUE for fish 164.02 kg/km

Table 7.--Dominant fish species caught during the 1986 west coast groundfish survey, ranked by CPUE (kg/km trawled) in the International North Pacific Fisheries Commission Eureka area.

Eureka area 55-183 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	224.83	60.0
2	Shortbelly rockfish	32.16	68.6
3	Sablefish	21.15	74.3
4	Bocaccio	15.97	78.5
5	Redstripe rockfish	13.53	82.2
6	Widow rockfish	9.29	84.6
7	Sharpchin rockfish	8.78	87.0
8	Pygmy rockfish	6.28	88.7
9	Dover sole	5.98	90.3
10	Jack mackerel	3.45	91.2
11	Stripetail rockfish	3.42	92.1
12	Pacific halibut	3.04	92.9
13	Spiny dogfish	3.02	93.7
14	Yellowtail rockfish	2.86	94.5
15	Canary rockfish	2.56	95.2
16	Pacific sanddab	2.10	95.7
17	English sole	1.97	96.3
18	Chilipepper	1.73	96.7
19	Rex sole	1.68	97.2
20	Big skate	1.07	97.5

[a]Total effort 70.4 km
Total mean CPUE for fish 374.38 kg/km

Eureka area 184-366 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	57.24	27.4
2	Darkblotched rockfish	34.42	43.9
3	Dover sole	33.55	60.0
4	Bank rockfish	21.54	70.3
5	Splitnose rockfish	15.04	77.6
6	Rex sole	10.94	82.8
7	Pacific ocean perch	9.21	87.2
8	Big skate	6.21	90.2
9	Sablefish	4.84	92.5
10	Stripetail rockfish	4.12	94.5
11	Sharpchin rockfish	2.83	95.9
12	Bocaccio	2.77	97.2
13	Shortspine thornyhead	1.59	98.0
14	Greenstriped rockfish	0.78	98.3
15	Widow rockfish	0.65	98.6
16	Spiny dogfish	0.53	98.9
17	Bigfin eelpout	0.46	99.1
18	Arrowtooth flounder	0.34	99.3
19	English sole	0.31	99.4
20	Yellowmouth rockfish	0.27	99.6

[a]Total effort 8.6 km
Total mean CPUE for fish 208.60 kg/km

Eureka area 55-366 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	141.04	48.4
2	Dover sole	19.76	55.2
3	Darkblotched rockfish	17.41	61.1
4	Shortbelly rockfish	16.08	66.6
5	Sablefish	12.99	71.1
6	Bank rockfish	10.77	74.8
7	Bocaccio	9.37	78.0
8	Splitnose rockfish	7.52	80.6
9	Redstripe rockfish	6.77	82.9
10	Rex sole	6.31	85.1
11	Sharpchin rockfish	5.80	87.1
12	Widow rockfish	4.97	88.8
13	Pacific ocean perch	4.61	90.4
14	Stripetail rockfish	3.79	91.7
15	Big skate	3.64	92.9
16	Pygmy rockfish	3.14	94.0
17	Spiny dogfish	1.78	94.6
18	Jack mackerel	1.72	95.2
19	Pacific halibut	1.52	95.7
20	Yellowtail rockfish	1.43	96.2

[a]Total effort 79.0 km
Total mean CPUE for fish 291.49 kg/km

Table 8.--Dominant fish species caught during the 1986 west coast groundfish survey, ranked by CPUE (kg/km trawled) in the International North Pacific Fisheries Commission Columbia area.

Columbia area 55-183 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	62.04	53.3
2	Dover sole	5.92	58.4
3	Canary rockfish	5.79	63.4
4	Pacific sanddab	5.51	68.1
5	Sablefish	4.71	72.2
6	Rex sole	4.37	75.9
7	Yellowtail rockfish	4.33	79.6
8	English sole	3.33	82.5
9	Lingcod	2.42	84.6
10	Arrowtooth flounder	2.36	86.6
11	Pacific halibut	1.90	88.2
12	Spiny dogfish	1.34	89.4
13	Greenstriped rockfish	1.27	90.5
14	Pacific herring	0.98	91.3
15	Sixgill shark	0.90	92.1
16	Widow rockfish	0.88	92.9
17	Redstripe rockfish	0.87	93.6
18	Pygmy rockfish	0.79	94.3
19	Jack mackerel	0.77	94.9
20	Petrale sole	0.63	95.5

[a]Total effort 518.9 km
Total mean CPUE for fish 116.36 kg/km

Columbia area 184-366 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Darkblotched rockfish	27.82	23.3
2	Pacific ocean perch	13.08	34.2
3	Splitnose rockfish	13.03	45.1
4	Sablefish	12.68	55.7
5	Dover sole	9.24	63.4
6	Arrowtooth flounder	6.31	68.7
7	Sharpchin rockfish	6.28	74.0
8	Pacific hake	5.65	78.7
9	Shortspine thornyhead	4.51	82.5
10	Rex sole	3.95	85.8
11	Pacific halibut	2.68	88.0
12	Bocaccio	1.83	89.6
13	Greenstriped rockfish	1.80	91.1
14	Widow rockfish	1.67	92.5
15	Stripetail rockfish	1.59	93.8
16	Yellowtail rockfish	1.20	94.8
17	Lingcod	0.68	95.4
18	English sole	0.68	95.9
19	Rosethorn rockfish	0.63	96.5
20	Longnose skate	0.51	96.9

[a]Total effort 75.7 km
Total mean CPUE for fish 119.55 kg/km

Columbia area 55-366 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	33.85	28.7
2	Darkblotched rockfish	14.07	40.6
3	Sablefish	8.69	48.0
4	Dover sole	7.58	54.4
5	Pacific ocean perch	6.55	60.0
6	Splitnose rockfish	6.52	65.5
7	Arrowtooth flounder	4.33	69.2
8	Rex sole	4.16	72.7
9	Sharpchin rockfish	3.28	75.5
10	Canary rockfish	3.07	78.1
11	Yellowtail rockfish	2.76	80.4
12	Pacific sanddab	2.76	82.8
13	Shortspine thornyhead	2.34	84.8
14	Pacific halibut	2.29	86.7
15	English sole	2.00	88.4
16	Lingcod	1.55	89.7
17	Greenstriped rockfish	1.53	91.0
18	Widow rockfish	1.28	92.1
19	Bocaccio	0.99	92.9
20	Stripetail rockfish	0.81	93.6

[a]Total effort 594.6 km
Total mean CPUE for fish 117.96 kg/km

Table 9.--Dominant fish species caught during the 1986 west coast groundfish survey, ranked by CPUE (kg/km trawled) in the U.S. portion of the International North Pacific Fisheries Commission Vancouver area.

U.S. Vancouver area
55-183 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	84.16	41.1
2	Spiny dogfish	48.98	65.1
3	Canary rockfish	9.48	69.7
4	Pacific sanddab	8.62	73.9
5	English sole	7.49	77.6
6	Arrowtooth flounder	6.89	80.9
7	Yellowtail rockfish	5.91	83.8
8	Pacific halibut	4.23	85.9
9	Sablefish	3.72	87.7
10	Pacific cod	3.25	89.3
11	Rex sole	3.17	90.8
12	Dover sole	2.73	92.2
13	Lingcod	2.36	93.3
14	American shad	1.59	94.1
15	Redstripe rockfish	1.37	94.8
16	Walleye pollock	1.19	95.4
17	Longnose skate	1.15	95.9
18	Pacific herring	1.06	96.4
19	Petrale sole	0.81	96.8
20	Sand sole	0.61	97.1

[a]Total effort 467.5 km
Total mean CPUE for fish 204.62 kg/km

U.S. Vancouver area
184-366 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Arrowtooth flounder	20.43	20.5
2	Pacific hake	15.59	36.1
3	Walleye pollock	12.54	48.6
4	Pacific ocean perch	11.43	60.1
5	Dover sole	9.23	69.3
6	Sablefish	8.95	78.3
7	Spiny dogfish	4.88	83.2
8	Pacific cod	3.61	86.8
9	Flathead sole	2.54	89.3
10	Shortspine thornyhead	2.05	91.4
11	Darkblotched rockfish	1.59	93.0
12	Rex sole	1.37	94.4
13	Rougheye rockfish	1.33	95.7
14	Spotted rockfish	0.57	96.3
15	Pacific halibut	0.41	96.7
16	Lingcod	0.41	97.1
17	Greenstriped rockfish	0.40	97.5
18	Longnose skate	0.37	97.9
19	Yelloweye rockfish	0.28	98.1
20	Slender sole	0.20	98.3

[a]Total effort 47.4 km
Total mean CPUE for fish 99.82 kg/km

U.S. Vancouver area
55-366 m

Rank	Species	Mean CPUE[a] (kg/km)	Cumulative %
1	Pacific hake	49.87	32.8
2	Spiny dogfish	26.93	50.4
3	Arrowtooth flounder	13.66	59.4
4	Walleye pollock	6.86	63.9
5	Sablefish	6.33	68.1
6	Dover sole	5.98	72.0
7	Pacific ocean perch	5.82	75.8
8	Canary rockfish	4.80	79.0
9	Pacific sanddab	4.32	81.8
10	English sole	3.84	84.3
11	Pacific cod	3.43	86.6
12	Yellowtail rockfish	3.04	88.6
13	Pacific halibut	2.32	90.1
14	Rex sole	2.27	91.6
15	Lingcod	1.38	92.5
16	Flathead sole	1.38	93.4
17	Shortspine thornyhead	1.04	94.1
18	American shad	0.87	94.7
19	Darkblotched rockfish	0.85	95.3
20	Longnose skate	0.76	95.8

[a]Total effort 515.0 km
Total mean CPUE for fish 152.22 kg/km

Table 10.--Estimates of 1986 biomass, 90% confidence limits, population numbers, mean lengths, and mean weight for Pacific hake by International North Pacific Fisheries Commission (INPFC) area and all areas combined.

Depth (m)	Biomass[a] (t)	90% Confidence interval	Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey					
55-183	91,128	63,619 - 118,637 (± 30%)	224,863	38.9	0.41
184-366	4,829	828 - 8,830 (± 83%)	11,419	39.2	0.42
55-366	95,957	68,218 - 123,696 (± 29%)	236,283	39.0	0.41
INPFC Eureka					
55-183	42,321	29,682 - 54,959 (± 30%)	102,741	39.1	0.41
184-366	2,903	550 - 5,256 (± 81%)	6,839	39.3	0.42
55-366	45,224	32,416 - 58,032 (± 28%)	109,580	39.2	0.41
INPFC Columbia					
55-183	77,147	50,585 - 103,710 (± 34%)	118,041	45.9	0.65
184-366	1,421	957 - 1,885 (± 33%)	2,628	43.3	0.54
55-366	78,568	52,002 - 105,134 (± 31%)	120,668	45.9	0.65
U.S. portion of INPFC Vancouver					
55-183	18,068	8,155 - 27,982 (± 55%)	23,582	47.9	0.77
184-366	1,335	750 - 1,919 (± 44%)	1,621	48.7	0.82
55-366	19,403	9,559 - 29,247 (± 41%)	25,203	48.0	0.77
Total survey area					
55-183	228,666	179,217 - 278,115 (± 22%)	469,230	41.2	0.49
184-366	10,487	4,140 - 16,834 (± 61%)	22,510	40.4	0.47
55-366	239,153	189,367 - 288,940 (± 21%)	491,737	41.2	0.49

[a]Differences in totals may exist due to rounding.

Table 11. --Estimates of 1986 biomass, 90% confidence limits, population numbers mean lengths, and mean weights for yellowtail rockfish by International North Pacific Fisheries Commission (INPFC) area and all areas combined.

Depth (m)	Biomass[a] (t)	90% Confidence interval	Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey					
55-183	2,326	121 - 4,531 (± 95%)	2,606	37.3	0.89
184-219	0	-- - --	0	---	--
55-219	2,326	121 - 4,531 (± 95%)	2,606	37.3	0.89
220-366	6	0 - 17 (±183%)	4	---	1.59
55-366	2,332	127 - 4,537 (± 95%)	2,610	37.3	0.89
INPFC Eureka					
55-183	1,128	178 - 2,077 (± 84%)	1,267	37.2	0.89
184-219	0	-- - --	0	---	--
55-219	1,128	178 - 2,077 (± 84%)	1,267	37.2	0.89
220-366	3	0 - 10 (±233%)	2	---	1.59
55-366	1,131	182 - 2,081 (± 84%)	1,270	37.2	0.89
INPFC Columbia					
55-183	5,312	2,478 - 8,146 (± 53%)	5,132	38.8	1.03
184-219	178	0 - 1,280 (±619%)	104	47.6	1.72
55-219	5,490	2,643 - 8,337 (± 52%)	5,236	43.2	1.05
220-366	0	-- - --	0	---	--
55-366	5,490	2,643 - 8,337 (± 52%)	5,236	39.0	1.05
U.S. portion of INPFC Vancouver					
55-183	2,689	1,079 - 4,299 (± 60%)	1,920	43.7	1.40
184-219	12	0 - 34 (±183%)	8	---	1.49
55-219	2,701	1,091 - 4,311 (± 60%)	1,928	43.7	1.40
220-366	0	-- - --	0	---	--
55-366	2,701	1,091 - 4,311 (± 60%)	1,928	43.7	1.40
Total survey area					
55-183	11,455	6,718 - 16,192 (± 41%)	10,925	39.1	1.05
184-219	191	0 - 1,299 (±580%)	112	47.6	1.71
55-219	11,645	6,900 - 16,391 (± 41%)	11,037	43.4	1.05
220-366	9	0 - 27 (±200%)	6	---	1.59
55-366	11,655	6,909 - 16,400 (± 41%)	11,043	39.2	1.05

[a]Differences in totals may exist due to rounding.

Table. 12--Estimates of 1986 biomass, 90% confidence limits, population numbers, mean lengths, and mean weight for canary rockfish by International North Pacific Fisheries Commission (INPFC) area and all areas combined.

Depths (m)	Biomass[a] (t)	90% Confidence interval		Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey						
55-183	1,326	62 - 2,591	(± 95%)	885	44.4	1.50
184-219	9	0 - 29	(±222%)	3	---	2.49
55-219	1,335	70 - 2,599	(± 95%)	889	44.4	1.50
220-366	0	-- --		0	---	--
55-366	1,335	70 - 2,599	(± 95%)	889	44.4	1.50
INPFC Eureka						
55-183	784	197 - 1,371	(± 75%)	484	45.4	1.62
184-219	6	0 - 16	(±167%)	2	---	2.39
55-219	790	203 - 1,377	(± 74%)	486	45.4	1.62
220-366	2	0 - 4	(±100%)	1	---	2.52
55-366	792	204 - 1,379	(± 74%)	486	45.4	1.62
INPFC Columbia						
55-183	5,432	992 - 9,873	(± 82%)	3,103	44.8	1.75
184-219	40	0 - 91	(±128%)	24	---	1.70
55-219	5,473	1,032 - 9,913	(± 81%)	3,127	44.8	1.75
220-366	32	0 - 73	(±128%)	13	---	2.52
55-366	5,504	1,064 - 9,945	(± 81%)	3,139	44.8	1.75
U.S. porton of INPFC Vancouver						
55-183	3,356	1,218 - 5,495	(± 64%)	2,005	44.6	1.67
184-219	11	2 - 20	(± 82%)	8	---	1.35
55-219	3,367	1,229 - 5,506	(± 64%)	2,013	44.6	1.67
220-366	0	-- - --		0	---	--
55-366	3,367	1,229 - 5,506	(± 64%)	2,013	44.6	1.67
Total survey area						
55-183	10,899	5,477 - 16,322	(± 50%)	6,478	44.8	1.68
184-219	65	17 - 114	(± 75%)	37	---	1.76
55-219	10,964	5,542 - 16,387	(± 49%)	6,515	44.8	1.68
220-366	33	0 - 77	(±133%)	13	---	2.52
55-366	10,998	5,575 - 16,421	(± 49%)	6,528	44.8	1.68

[a]Differences in totals may exist due to rounding.

Table 13.--Estimates of 1986 biomass, 90% confidence limits, population numbers, mean lengths, and mean weight for chilipepper by International North Pacific Fisheries Commission (INPFC) area and all areas combined.

Depth (m)	Biomass[a] (t)	90% Confidence interval		Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey						
55-183	7,126	3,262 - 10,990	(± 54%)	15,431	29.2	0.46
184-366	441	0 - 989	(±124%)	570	34.9	0.77
55-366	7,567	3,675 - 11,459	(± 51%)	16,001	29.4	0.47
INPFC Eureka						
55-183	3,083	1,408 - 4,758	(± 54%)	6,708	29.1	0.46
184-366	261	0 - 580	(±122%)	335	34.9	0.78
55-366	3,344	1,647 - 5,041	(± 51%)	7,043	29.3	0.47
INPFC Columbia						
55-183	0	--- - ---	---	0	---	---
184-366	34	0 - 135	(±297%)	28	---	1.25
55-366	34	0 - 135	(±297%)	28	---	1.25
U.S. portion of INPFC Vancouver						
55-183	0	--- - ---	---	0	---	---
184-366	0	--- - ---	---	0	---	---
55-366	0	--- - ---	---	0	---	---
Total survey area						
55-183	10,210	4,671 - 15,748	(± 54%)	22,139	29.2	0.46
184-366	736	0 - 1,605	(±118%)	932	34.9	0.79
55-366	10,945	5,358 - 16,533	(± 51%)	23,071	29.4	0.47

[a]Differences in totals may exist due to rounding.

Table 14.--Estimates of 1986 biomass, 90% confidence limits, population numbers, mean lengths, and mean weight for bocaccio by International North Pacific Fisheries Commission (INPFC) area and all areas combined.

Depth (m)	Biomass[a] (t)	90% Confidence interval		Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey						
55-183	4,756	0 - 11,517	(±142%)	2,247	54.0	2.12
184-366	371	0 - 780	(±110%)	155	58.8	2.39
55-366	5,127	0 - 11,898	(±132%)	2,402	54.2	2.13
INPFC Eureka						
55-183	2,049	0 - 4,944	(±141%)	971	53.9	2.11
184-366	250	8 - 492	(± 97%)	103	58.7	2.42
55-366	2,299	0 - 5,202	(±126%)	1,074	54.2	2.14
INPFC Columbia						
55-183	240	64 - 416	(± 73%)	84	51.4	2.87
184-366	367	0 - 1,113	(±203%)	141	58.5	2.61
55-366	607	0 - 1,393	(±129%)	224	58.1	2.71
U.S. portion of INPFC Vancouver						
55-183	121	45 - 198	(± 64%)	34	62.6	3.56
184-366	9	0 - 24	(±178%)	1	---	6.58
55-366	130	52 - 208	(± 60%)	35	62.6	3.68
Total survey area						
55-183	7,166	0 - 16,825	(±135%)	3,336	54.1	2.15
184-366	995	80 - 1,910	(± 92%)	400	58.7	2.49
55-366	8,162	0 - 17,856	(±119%)	3,736	54.4	2.19

[a]Differences in totals may exist due to rounding.

Table 15.--Estimates of 1986 biomass, 90% confidence limits, populations numbers, mean lengths, and mean weight for Pacific ocean perch by International North Pacific Fisheries Commission (INPFC) area and all areas combined.

Depth (m)	Biomass[a] (t)	90% Confidence interval			Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey							
55-183	0.27	0 -	1	(±270%)	3	---	0.09
184-366	230	0 -	497	(±116%)	232	37.6	0.99
55-366	232	0 -	497	(±114%)	235	37.6	0.98
INPFC Eureka							
55-183	1	0 -	1	(± 0%)	3	---	0.25
184-366	141	0 -	297	(±111%)	143	37.6	0.99
55-366	141	0 -	298	(±111%)	145	37.6	0.97
INPFC Columbia							
55-183	24	10 -	37	(± 54%)	84	---	0.28
184-366	1,559	0 -	8,534	(±447%)	2,945	31.5	0.53
55-366	1,583	0 -	8,558	(±440%)	3,028	31.5	0.52
U.S. portion of INPFC Vancouver							
55-183	73	30 -	117	(± 60%)	162	29.3	0.45
184-366	1,141	314 -	1,968	(± 72%)	1,396	36.3	0.82
55-366	1,214	386 -	2,043	(± 68%)	1,558	35.6	0.78
Total survey area							
55-183	98	52 -	144	(± 47%)	251	29.3	0.39
184-366	3,072	0 -	11,058	(±260%)	4,717	33.3	0.65
55-366	3,169	0 -	11,149	(±252%)	4,966	33.2	0.64

[a]Differences in totals may exist due to rounding.

Table 16. --Estimates of 1986 biomass, 90% confidence limits, population numbers, mean lengths, and mean weight for widow rockfish by International North Pacific Fisheries Commission (INPFC) area and all areas combined.

Depth (m)	Biomass[a] (t)	90% Confidence interval		Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey						
55-183	2,420	0 - 5,860	(±142%)	2,090	41.3	1.16
184-366	32	0 - 91	(±184%)	26	---	1.25
55-366	2,452	0 - 5,893	(±140%)	2,116	41.3	1.16
INPFC Eureka						
55-183	1,111	0 - 2,589	(±133%)	941	41.4	1.18
184-366	49	0 - 111	(±127%)	36	41.7	1.34
55-366	1,160	0 - 2,639	(±128%)	977	41.4	1.19
INPFC Columbia						
55-183	1,422	0 - 3,721	(±162%)	879	44.8	1.62
184-366	332	0 - 976	(±194%)	243	41.7	1.37
55-366	1,754	0 - 4,097	(±134%)	1,122	44.1	1.56
U.S. portion of INPFC Vancouver						
55-183	39	1 - 77	(± 97%)	45	37.1	0.88
184-366	4	0 - 10	(±150%)	2	---	1.59
55-366	43	4 - 82	(± 91%)	47	37.1	0.91
Total survey area						
55-183	4,993	0 - 10,443	(±109%)	3,955	42.0	1.26
184-366	416	0 - 1,132	(±172%)	307	41.7	1.36
55-366	5,409	0 - 10,883	(±101%)	4,262	42.0	1.27

[a]Differences in totals may exist due to rounding.

Table 17.--Estimates of 1986 biomass, 90% confidence limits, population numbers, mean lengths, and mean weight for sablefish by International North Pacific Fisheries Commission (INPFC) area and all areas combined.

Depth (m)	Biomass[a] (t)	90% Confidence interval		Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey						
55-183	9,515	899 - 18,132	(± 91%)	8,809	44.0	1.08
184-366	948	7 - 1,890	(± 99%)	849	---	1.12
55-366	10,464	1,819 - 19,108	(± 83%)	9,658	44.0	1.08
INPFC Eureka						
55-183	4,211	507 - 7,916	(± 88%)	3,958	43.8	1.06
184-366	693	140 - 1,246	(± 80%)	590	49.6	1.17
55-366	4,904	1,178 - 8,631	(± 76%)	4,548	44.0	1.08
INPFC Columbia						
55-183	6,269	3,529 - 9,009	(± 44%)	9,344	39.5	0.67
184-366	3,675	2,478 - 4,873	(± 33%)	2,916	48.9	1.26
55-366	9,944	7,009 - 12,879	(± 30%)	12,261	41.6	0.81
U.S. portion of INPFC Vancouver						
55-183	1,740	934 - 2,547	(± 46%)	2,090	42.4	0.83
184-366	873	87 - 1,658	(± 90%)	417	56.5	2.09
55-366	2,613	1,542 - 3,684	(± 41%)	2,507	44.7	1.04
Total survey area						
55-183	21,736	9,124 - 34,348	(± 58%)	24,201	42.1	0.90
184-366	6,189	4,317 - 8,061	(± 30%)	4,772	49.8	1.30
55-366	27,925	15,190 - 40,660	(± 46%)	28,973	43.0	0.96

[a]Differences in totals may exist due to rounding.

Table 18.--Estimates of 1986 biomass, 90% confidence limits, population numbers, mean lengths, and mean weight for lingcod by International North Pacific Fisheries Commission (INPFC) area and all areas combined.

Depth (m)	Biomass[a] (t)	90% Confidence interval			Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey							
55-183	516	245 -	787	(± 53%)	376	---	1.37
184-366	124	0 -	349	(±181%)	19	---	6.47
55-366	641	313 -	968	(± 51%)	395	---	1.62
INPFC Eureka							
55-183	253	136 -	371	(± 47%)	173	64.7	1.47
184-366	79	0 -	210	(±166%)	12	93.0	6.46
55-366	332	170 -	494	(± 49%)	185	67.9	1.80
INPFC Columbia							
55-183	1,698	1,227 -	2,169	(± 28%)	483	67.3	3.52
184-366	151	0 -	334	(±121%)	27	85.5	5.62
55-366	1,849	1,355 -	2,343	(± 27%)	510	68.2	3.63
U.S. portion of INPFC Vancouver							
55-183	974	735 -	1,213	(± 25%)	230	73.8	4.23
184-366	31	0 -	64	(±106%)	7	82.0	4.22
55-366	1,005	764 -	1,246	(± 24%)	238	73.9	4.23
Total survey area							
55-183	3,441	2,772 -	4,110	(± 19%)	1,261	69.4	2.73
184-366	385	10 -	761	(± 98%)	66	85.3	5.87
55-366	3,826	3,083 -	4,569	(± 19%)	1,327	70.0	2.88

[a]Differences in totals may exist due to rounding.

Table 19.--Estimates of 1986 biomass, 90% confidence limits, population numbers, mean lengths, and mean weight for arrowtooth flounder by International North Pacific Fisheries Commission (INPFC) area and all areas combined

Depth (m)	Biomass[a] (t)	90% Confidence interval	Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey					
55-183	88	29 - 148 (± 68%)	251	---	0.35
184-366	10	0 - 21 (±110%)	20	---	0.51
55-366	98	38 - 159 (± 62%)	272	---	0.36
INPFC Eureka					
55-183	80	48 - 112 (± 40%)	168	36.6	0.48
184-366	31	12 - 49 (± 58%)	32	50.1	0.97
55-366	111	74 - 147 (± 32%)	199	39.9	0.56
INPFC Columbia					
55-183	3,445	2,807 - 4,083 (± 19%)	6,239	32.0	0.55
184-366	1,396	1,026 - 1,766 (± 27%)	1,194	47.0	1.17
55-366	4,841	4,118 - 5,564 (± 15%)	7,433	34.4	0.65
U.S. portion of INPFC Vancouver					
55-183	3,050	2,492 - 3,608 (± 18%)	5,428	33.9	0.56
184-366	1,711	1,199 - 2,224 (± 30%)	1,350	46.1	1.27
55-366	4,761	4,024 - 5,498 (± 15%)	6,778	36.3	0.70
Total survey area					
55-183	6,663	5,652 - 7,675 (± 15%)	12,086	32.9	0.55
184-366	3,148	2,536 - 3,760 (± 19%)	2,596	46.6	1.21
55-366	9,812	8,645 - 10,978 (± 12%)	14,682	35.3	0.67

[a]Differences in totals may exist due to rounding.

Table 20.--Estimates of 1986 biomass, 90% confidence limits, population numbers, mean lengths, and mean weight for Dover sole by International North Pacific Fisheries Commission (INPFC) area and all areas combined.

Depth (m)	Biomass[a] (t)	90% Confidence interval		Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey						
55-183	5,054	3,812 - 6,295	(± 25%)	17,788	30.7	0.28
184-366	3,641	2,178 - 5,104	(± 40%)	11,589	31.9	0.31
55-366	8,695	6,829 - 10,560	(± 21%)	29,377	31.2	0.30
INPFC Eureka						
55-183	2,433	1,896 - 2,970	(± 22%)	8,564	30.7	0.28
184-366	2,244	1,383 - 3,106	(± 38%)	7,140	32.0	0.31
55-366	4,677	3,687 - 5,667	(± 21%)	15,703	31.3	0.30
INPFC Columbia						
55-183	7,616	6,347 - 8,885	(± 17%)	24,765	31.6	0.31
184-366	2,716	1,753 - 3,679	(± 35%)	7,471	33.2	0.36
55-366	10,332	8,772 - 11,892	(± 15%)	32,236	32.0	0.32
U.S. portion of INPFC Vancouver						
55-183	650	509 - 791	(± 22%)	1,948	33.5	0.33
184-366	768	227 - 1,308	(± 70%)	1,550	35.9	0.50
55-366	1,418	864 - 1,971	(± 39%)	3,498	34.6	0.41
Total survey area						
55-183	15,752	13,536 - 17,968	(± 14%)	53,065	31.2	0.30
184-366	9,370	6,855 - 11,886	(± 27%)	27,754	32.5	0.34
55-366	25,121	21,824 - 28,448	(± 13%)	80,814	31.7	0.31

[a]Differences in totals may exist due to rounding.

Table 21.--Estimates of 1986 biomass, 90% confidence limits, population numbers, mean lengths, and mean weight for English sole by International North Pacific Fisheries Commission (INPFC) area and all areas combined.

Depth (m)	Biomass[a] (t)	90% Confidence interval		Population numbers[a] (x 1000)	Mean length (cm)	Mean weight (kg)
INPFC Monterey						
55-183	2,285	1,824 - 2,746	(± 20%)	11,068	27.1	0.21
184-366	23	3 - 42	(± 83%)	80	---	0.28
55-366	2,308	1,846 - 2,769	(± 20%)	11,149	27.1	0.21
INPFC Eureka						
55-183	1,078	871 - 1,285	(± 19%)	5,304	27.0	0.20
184-366	18	6 - 29	(± 61%)	58	34.8	0.30
55-366	1,096	888 - 1,303	(± 19%)	5,362	27.0	0.20
INPFC Columbia						
55-183	2,733	2,235 - 3,232	(± 18%)	15,221	26.4	0.18
184-366	134	33 - 235	(± 75%)	332	35.7	0.40
55-366	2,867	2,360 - 3,374	(± 18%)	15,553	26.4	0.18
U.S. portion of INPFC Vancouver						
55-183	1,022	808 - 1,235	(± 21%)	4,584	27.9	0.22
184-366	21	3 - 39	(± 86%)	53	---	0.39
55-366	1,043	828 - 1,257	(± 21%)	4,637	27.9	0.22
Total survey area						
55-183	7,118	6,250 - 7,987	(± 12%)	36,178	26.9	0.20
184-366	195	87 - 303	(± 55%)	524	35.7	0.37
55-366	7,313	6,439 - 8,188	(± 12%)	36,701	26.9	0.20

[a]Differences in totals may exist due to rounding.

Table 22.--Population estimates for Pacific hake by age group and mean length at age for the entire survey area.

Age	Year class	Population number (x100)	Cumulative %	Mean length (cm)
2	1984	1,917,195	39.2	34.3
3	1983	129,668	41.8	37.0
4	1982	24,757	42.3	42.1
5	1981	13,001	42.6	42.9
6	1980	1,943,901	82.2	44.8
7	1979	95,208	84.1	46.1
8	1978	53,181	85.2	47.7
9	1977	578,065	97.0	48.7
10	1976	17,771	97.3	50.2
11	1975	21,010	97.8	52.7
12	1974	8,646	97.9	50.1
13	1973	82,751	99.6	52.4
14	1972	2,391	99.7	53.0
16	1970	8,218	99.8	54.9
Above, below, or between key lengths		16,185	100.0	--
Total[a]		4,911,947	100.0	41.2

[a]Differences in totals may exist due to rounding.

Table 23.--Population estimates for Pacific hake by age group and mean length at age in the International North Pacific Fisheries Commission Monterey area.

Age	Year class	Population number (x100)	Cumulative %	Mean length (cm)
2	1984	1,314,262	55.9	34.2
3	1983	63,669	58.6	40.7
4	1982	15,807	59.3	41.0
5	1981	10,764	59.7	42.4
6	1980	499,963	80.9	43.9
7	1979	44,369	82.8	44.7
8	1978	26,838	84.0	47.0
9	1977	304,224	96.8	47.6
10	1976	5,208	97.1	50.6
11	1975	8,195	97.4	49.8
12	1974	5,431	97.6	49.4
13	1973	28,608	98.9	50.4
16	1970	1,479	98.9	55.0
Above, below, or between key lengths		30,799	100.0	--
	Total[a]	2,359,616	100.0	39.0

[a]Differences in totals may exist due to rounding.

Table 24.--Population estimates for Pacific hake by age group and mean length at age in the International North Pacific Fisheries Commission Eureka area.

Age	Year class	Population number (x100)	Cumulative %	Mean length (cm)
2	1984	550,654	50.8	34.3
3	1983	48,317	55.2	34.6
4	1982	1,679	55.3	45.0
5	1981	1,291	55.5	41.0
6	1980	331,558	85.7	44.0
7	1979	11,495	86.8	45.5
8	1978	5,552	87.3	47.2
9	1977	100,655	96.5	48.3
10	1976	2,484	96.7	48.9
11	1975	3,496	97.0	53.5
13	1973	13,017	98.2	50.5
16	1970	182	98.2	67.0
Above, below, or between key lengths		24,189	100.0	--
	Total[a]	1,094,569	100.0	39.2

[a]Differences in totals may exist due to rounding.

Table 25.--Population estimates for Pacific hake by age group and mean length at age in the International North Pacific Fisheries Commission Columbia area.

Age	Year class	Population number (x100)	Cumulative %	Mean length (cm)
2	1984	46,314	3.9	35.8
3	1983	11,218	4.8	40.0
4	1982	6,539	5.4	43.7
5	1981	1,171	5.5	43.0
6	1980	853,087	76.2	45.2
7	1979	33,703	79.0	47.0
8	1978	17,566	80.4	47.2
9	1977	168,553	94.4	49.3
10	1976	5,824	94.9	48.1
11	1975	10,133	95.7	53.1
12	1974	4,704	96.1	50.1
13	1973	34,211	99.0	53.3
14	1972	1,879	99.1	53.0
16	1970	3,601	99.4	52.5
Above, below, or between key lengths		7,635	100.0	--
Total[a]		1,206,138	100.0	45.9

[a]Differences in totals may exist due to rounding.

Table 26.--Population estimates for Pacific hake by age group and mean length at age in the U.S. portion of the International North Pacific Fisheries Commission Vancouver area.

Age	Year class	Population number (x100)	Cumulative %	Mean length (cm)
5	1981	1,436	1.8	46.0
6	1980	160,121	65.4	46.7
7	1979	15,169	71.4	46.5
8	1978	6,832	74.1	47.7
9	1977	51,132	94.5	50.8
10	1976	2,664	95.5	54.3
11	1975	903	95.9	51.4
13	1973	5,920	98.2	54.0
16	1970	638	98.5	54.2
Above, below, or between key lengths		6,810	100.0	--
	Total[a]	251,625	100.0	48.0

[a]Differences in totals may exist due to rounding.

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Table 27.--Station and catch data for the fishing vessel Alaska (catch in kilograms, depth in meters, and distance fished in kilometers).

HAUL #	1	2	3	4	5	6	7	8	9	10	11
MONTH/DAY/YEAR	8/ 2/86	8/ 2/86	8/ 6/86	8/ 6/86	8/ 7/86	8/ 7/86	8/ 7/86	8/ 7/86	8/ 8/86	8/ 8/86	8/ 8/86
LATITUDE START	42 46.7	42 36.0	43 22.3	43 22.7	43 8.0	43 11.2	43 14.2	43 25.8	43 26.5	43 29.5	43 34.5
LONGITUDE START	124 41.1	124 35.2	124 30.9	124 32.5	124 44.2	124 38.6	124 33.5	124 40.3	124 25.1	124 29.9	124 22.1
LATITUDE END	42 46.4	42 34.4	43 20.8	43 21.2	43 6.8	43 12.0	43 13.4	43 27.2	43 28.1	43 30.4	43 34.4
LONGITUDE END	124 41.1	124 35.3	124 31.1	124 33.4	124 45.1	124 37.7	124 33.8	124 39.9	124 25.0	124 28.5	124 21.8
LORAN START	13822.40	13918.00	13526.20	13522.60	13640.50	13617.10	13595.20	13491.90	13493.10	13464.40	13424.40
LORAN START	27670.00	27657.70	27762.90	27760.40	27709.00	27726.20	27742.20	27751.10	27782.20	27778.20	27802.70
LORAN END	13824.10	13931.00	13539.40	13534.50	13650.20	13610.70	13601.70	13479.80	13479.40	13457.30	
LORAN END	27659.40	27653.70	27759.60	27755.80	27704.80	27729.70	27740.00	27754.50	27785.30	27782.60	
GEAR DEPTH	128	99	108	119	241	128	80	326	99	126	106
DURATION IN HOURS	0.08	0.50	0.50	0.50	0.50	0.37	0.32	0.50	0.50	0.53	0.10
DISTANCE FISHED	0.41	2.93	2.87	2.96	2.57	2.00	1.52	2.70	2.93	2.52	0.43
PERFORMANCE / GEAR	6 /170	1 /162	0 /162	0 /162	0 /170	0 /162	7 /170	0 /162	0 /162	1 /170	5 /162
PAC WHITING	0.0	3.1	8.6	1.4	26.5	53.8	0.0	1.4	2.3	5.7	0.0
PACIFIC COD	0.0	0.0	1.6	4.3	0.0	0.0	0.0	0.0	0.7	1.1	0.0
SABLEFISH	0.0	0.6	2.5	2.8	22.0	1.6	0.0	122.7	17.0	22.9	0.0
LINGCOD	0.0	0.9	4.6	0.0	0.0	1.4	0.5	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	1.1	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.1	0.2	0.0	0.0	2.0	0.0	0.7	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	74.3	0.0	0.0	2.6	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	65.5	2.3	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	1.5	0.0	21.1	1.7	0.0	99.3	0.0	0.0	1.4	1.8	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	0.1	7.5	3.8	5.3	5.2	4.0	4.8	11.3	2.7	18.5	0.0
TOT RNDFISH	1.6	12.1	42.2	15.6	129.8	226.1	7.5	142.5	24.0	50.8	0.0
ARROWTOOTH FL	0.0	0.8	0.7	0.7	0.5	0.0	0.0	3.6	0.0	7.5	0.0
DOVER SOLE	6.4	17.3	2.3	7.9	28.3	103.2	0.0	31.5	4.8	73.7	0.0
REX SOLE	0.5	3.3	2.4	13.4	6.9	3.9	0.0	10.8	3.5	16.4	0.0
ENGLISH SOLE	0.0	7.0	25.4	32.7	0.0	0.0	0.0	0.0	10.4	14.1	0.0
PETRALE SOLE	0.0	3.5	4.5	0.9	0.0	0.0	0.0	0.0	4.5	0.5	0.0
PAC SANDDAB	0.0	1.0	8.9	15.9	0.0	0.0	0.0	0.0	12.2	26.1	0.0
OTHER FLTFISH	0.0	0.4	0.4	8.6	6.4	5.3	0.5	0.2	0.0	0.5	0.0
TOT FLTFISH	7.0	33.3	44.5	80.0	42.1	112.3	0.5	45.1	35.5	138.7	0.0
SKATES	0.0	0.0	7.3	0.0	1.1	4.6	0.0	0.6	9.2	0.0	0.0
SPINY DOGFISH	0.0	0.4	0.9	3.6	0.7	0.9	0.0	0.0	0.7	0.0	0.0
RATFISH	0.0	1.8	0.0	1.4	0.0	0.5	0.0	0.5	0.0	2.5	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.0	2.2	8.2	5.0	1.8	6.0	0.0	1.0	9.8	2.5	0.0
DUNGENESS CRAB	0.0	0.0	1.6	1.6	0.0	0.0	0.0	0.7	2.3	1.1	0.0
SQUID	0.0	0.2	0.7	0.0	0.4	0.1	0.7	0.0	0.9	0.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8	0.0	0.0	0.0
OTHER INVERTS	2.8	5.6	16.3	13.7	0.1	4.4	28.1	12.3	14.4	1.8	0.0
TOT INVERTS	2.8	5.8	18.6	15.3	0.5	4.5	28.8	34.7	17.6	2.9	0.0
TOTAL CATCH	11.4	53.4	113.6	115.9	174.2	348.9	36.7	224.4	86.9	195.0	0.0

Table 27.--Continued.

HAUL #	12	13	14	15	16	17	18	19	20	21	22
MONTH/DAY/YEAR	8/ 8/86	8/ 8/86	8/ 8/86	8/ 8/86	8/ 9/86	8/ 9/86	8/ 9/86	8/ 9/86	8/ 9/86	8/ 9/86	8/10/86
LATITUDE START	43 34.6	43 34.8	43 37.8	43 38.2	43 42.8	43 46.6	43 50.9	43 52.4	43 55.5	43 58.2	43 59.8
LONGITUDE START	124 24.9	124 33.5	124 37.0	124 22.0	124 17.1	124 30.2	124 44.5	124 47.9	124 30.6	124 26.5	124 21.6
LATITUDE END	43 33.1	43 33.3	43 39.3	43 39.7	43 44.2	43 48.0	43 50.7	43 52.2	43 57.0	43 59.6	44 1.0
LONGITUDE END	124 25.2	124 33.9	124 36.8	124 21.8	124 17.8	124 30.2	124 46.5	124 46.0	124 30.3	124 25.6	124 20.5
LORAN START	13422.60	13417.60	13390.60	13391.80	13352.30	13316.10	13277.80	13264.80	13239.30	13215.60	13201.80
LORAN START	27797.10	27780.60	27779.30	27809.20	27827.00	27807.60	27787.70	27784.10	27821.50	27833.70	27845.60
LORAN END	13435.30	13430.00	13377.80	13378.50	13339.40	13304.20	13279.20	13266.30	13226.60	13204.20	13191.10
LORAN END	27794.00	27777.20	27782.20	27812.30	27828.30	27809.80	27783.80	27787.30	27824.50	27837.60	27849.70
GEAR DEPTH	117	198	298	110	95	137	329	282	137	123	109
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	2.72	2.74	2.78	2.83	2.83	2.54	2.63	2.56	2.76	2.74	2.72
PERFORMANCE / GEAR	0 /162	0 /170	0 /162	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170
PAC WHITING	34.0	44.7	6.1	29.3	783.3	39.5	4.6	5.4	37.9	16.3	21.8
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	0.0	11.1	116.1	3.3	6.9	2.3	3.6	89.8	12.9	9.3	1.1
LINGCOD	20.0	0.0	0.0	2.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0
PAC OC PERCH	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0
ROUGHEYE	0.0	1.8	0.9	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.1	2.9	19.5	2.9	0.2	0.0	1.4	35.2	0.2	0.0	0.0
SPLITNOSE	0.0	2.7	2.7	0.0	0.0	0.0	2.5	39.5	0.0	0.1	0.0
YELLOWTAIL	0.0	0.0	0.0	9.5	0.0	32.4	0.0	0.0	1.8	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	3.6	37.4	0.0	4.5	0.0	0.0	0.0
CANARY	0.0	0.0	0.0	1.1	0.0	26.5	0.0	2.4	4.5	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	100.9	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	2.1	8.5	13.2	6.2	4.5	555.7	0.8	10.2	24.0	2.0	1.4
TOT RNDFISH	56.2	71.8	159.3	54.6	799.1	799.1	12.9	187.7	81.4	27.8	24.3
ARROWTOOTH FL	2.6	6.6	13.4	1.5	1.1	0.1	0.0	3.2	0.3	0.0	0.0
DOVER SOLE	41.0	23.6	22.2	59.9	17.7	10.7	3.5	65.1	7.9	10.6	18.1
REX SOLE	2.3	3.2	24.4	5.7	10.1	2.6	2.7	17.0	2.5	1.9	3.9
ENGLISH SOLE	0.0	0.0	0.0	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.2
PETRALE SOLE	2.3	0.0	0.0	3.9	6.4	0.5	0.0	0.0	0.9	0.0	0.0
PAC SANDDAB	2.8	0.0	0.0	11.1	7.5	0.0	0.0	0.0	8.4	8.0	8.2
OTHER FLTFISH	3.9	4.7	0.9	0.5	8.8	0.1	0.0	1.0	31.1	0.7	0.3
TOT FLTFISH	54.9	38.0	60.8	82.6	62.8	13.9	6.3	86.3	51.1	21.2	30.7
SKATES	4.8	0.0	9.4	11.6	8.2	0.0	0.3	8.6	4.8	0.0	0.0
SPINY DOGFISH	0.0	1.8	1.8	0.8	0.0	0.0	0.0	0.0	0.0	2.4	0.2
RATFISH	0.0	2.0	0.0	2.6	1.7	10.0	0.0	1.4	0.9	1.0	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	4.8	3.9	11.2	15.5	9.9	10.0	0.3	10.0	5.7	3.4	0.2
DUNGENESS CRAB	0.7	0.0	0.0	3.6	1.9	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	0.0	50.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	3.7	0.0	1.3	4.0	1.4	4.0	0.0	4.0	0.0	1.8	0.0
TOT INVERTS	4.4	0.0	51.4	7.7	3.4	4.0	0.0	4.0	0.0	1.8	0.0
TOTAL CATCH	120.3	113.6	282.8	160.3	875.2	827.0	19.5	287.9	138.2	54.2	55.2

Table 27.--Continued.

HAUL #	23	24	25	26	27	28	29	30	31	32	33
MONTH/DAY/YEAR	8/10/86	8/10/86	8/10/86	8/10/86	8/10/86	8/10/86	8/10/86	8/11/86	8/11/86	8/11/86	8/12/86
LATITUDE START	44 2.0	44 8.0	44 8.1	44 9.3	44 4.6	44 6.7	44 5.9	44 9.6	44 12.4	44 21.1	44 36.6
LONGITUDE START	124 17.7	124 16.6	124 33.3	124 39.4	124 44.0	124 48.3	124 54.4	124 58.3	124 52.4	124 31.0	124 14.1
LATITUDE END	44 3.6	44 9.6	44 9.1	44 7.8	44 4.2	44 5.5	44 4.3	44 10.9	44 12.7	44 22.6	44 35.0
LONGITUDE END	124 17.6	124 16.6	124 35.0	124 40.2	124 46.0	124 50.0	124 54.8	124 58.5	124 52.5	124 30.0	124 14.5
LORAN START	13182.40	13129.60	13130.80	13121.20	13161.60	13144.90	13152.10	13121.80	13098.00	13018.90	12879.00
LORAN START	27856.70	27868.00	27836.40	27827.00	27811.30	27806.70	27794.70	27793.80	27808.50	27860.20	27912.70
LORAN END	13168.00	13115.60	13122.20	13134.10	13165.30	13155.10	13165.00	13111.30	13095.10	13006.30	12892.80
LORAN END	27859.40	27870.30	27834.90	27823.20	27806.90	27801.70	27791.40	27795.50	27808.90	27864.10	27909.80
GEAR DEPTH	84	73	112	121	115	102	146	307	123	91	68
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.13	0.50	0.50
DISTANCE FISHED	3.04	2.94	2.94	2.98	2.85	3.20	2.94	2.39	0.67	2.98	2.96
PERFORMANCE / GEAR	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	7 /162	0 /170	0 /162
PAC WHITING	313.0	45.4	78.5	28.8	24.9	89.8	0.0	42.0	0.0	58.2	0.0
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	2.3	1.4	0.0	0.0	7.5	0.0	0.0	45.4	0.0	10.4	0.5
LINGCOD	0.0	0.7	0.0	0.0	2.0	0.0	12.0	0.0	0.0	1.4	0.0
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.2	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	4.5	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.9	0.0	0.0	0.0
SPINYNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.8	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	1.4	70.8	0.0	0.0	405.1	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	1.1	0.7	0.3	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	5.7	7.5	2.5	0.0	0.0	0.0	0.0
CANARY	0.5	0.0	0.0	1.8	7.7	136.5	1106.5	5.2	0.0	14.3	0.1
REDSTRIPE	0.0	0.0	0.0	0.0	50.3	14.5	73.0	0.0	0.0	5.9	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	3.3	28.9	14.9	20.9	36.2	1.3	12.3	11.9	0.0	13.0	1.1
TOT RNDFISH	319.0	76.3	93.4	51.5	136.7	251.7	1278.4	146.3	0.0	512.8	1.7
ARROWTOOTH FL	0.0	0.0	0.0	0.9	0.0	0.0	0.0	1.8	0.0	0.0	0.0
DOVER SOLE	2.0	3.9	37.6	37.4	5.8	0.9	0.7	126.3	0.0	11.6	0.5
REX SOLE	8.6	10.9	9.8	29.3	3.4	0.4	1.4	18.1	0.0	5.0	8.4
ENGLISH SOLE	9.1	17.2	5.7	1.1	1.8	0.0	0.9	7.5	0.0	1.4	21.8
PETRALE SOLE	0.0	0.5	0.0	1.4	0.0	0.1	1.6	0.0	0.0	0.7	1.6
PAC SANDDAB	43.1	283.5	4.5	9.8	1.4	0.0	0.0	0.0	0.0	4.5	25.9
OTHER FLTFISH	0.0	12.3	0.5	9.3	3.6	1.0	52.4	0.1	0.0	29.8	14.3
TOT FLTFISH	62.8	328.2	58.1	89.1	16.0	2.4	57.0	153.9	0.0	52.9	72.4
SKATES	0.0	0.0	0.1	0.1	3.4	10.9	20.2	0.0	0.0	0.0	0.0
SPINY DOGFISH	1.1	10.1	4.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0	2.3
RATFISH	1.3	2.3	1.6	0.2	1.6	0.0	0.0	1.6	0.0	1.6	0.7
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0
TOT ELASMOBRH	2.4	12.3	6.0	1.6	5.0	10.9	22.7	1.6	0.0	1.6	2.9
DUNGENESS CRAB	0.7	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
SEA URCHINS	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.9	0.0	0.0	0.0
OTHER INVERTS	2.3	0.2	0.6	0.0	1.8	0.0	8.6	1.1	0.0	10.2	0.1
TOT INVERTS	3.1	0.7	1.9	0.0	2.7	0.0	8.6	2.0	0.0	10.2	0.7
TOTAL CATCH	387.3	417.6	159.4	142.3	160.4	265.0	1366.7	303.6	0.0	577.5	77.8

Table 27. --Continued.

HAUL #	34	35	36	37	38	39	40	41	42	43	44
MONTH/DAY/YEAR	8/12/86	8/12/86	8/12/86	8/12/86	8/13/86	8/13/86	8/13/86	8/13/86	8/13/86	8/13/86	8/13/86
LATITUDE START	44 33.8	44 37.3	44 36.2	44 40.8	44 40.8	44 44.5	44 47.5	44 51.4	44 53.4	44 58.1	45 1.9
LONGITUDE START	124 19.7	124 33.0	124 44.2	124 39.8	124 33.6	124 31.4	124 21.2	124 14.5	124 7.2	124 16.0	124 7.1
LATITUDE END	44 32.2	44 35.9	44 34.8	44 42.3	44 41.6	44 46.1	44 48.9	44 52.7	44 54.7	44 59.6	45 3.2
LONGITUDE END	124 20.3	124 34.0	124 44.1	124 39.6	124 33.4	124 31.5	124 20.2	124 13.6	124 7.5	124 16.1	124 6.4
LORAN START	12906.20	12883.60	12898.50	12857.80	12854.50	12822.00	12790.20	12752.30	12729.20	12696.70	12657.80
LORAN START	27898.50	27879.30	27858.10	27872.20	27883.00	27891.80	27913.80	27930.70	27946.40	27936.20	27956.30
LORAN END	12919.90	12895.60	12909.70	12845.80	12847.80	12809.00	12777.60	12740.00	12718.20	12684.60	12645.00
LORAN END	27895.40	27875.60	27856.40	27874.40	27834.40	27893.70	27917.40	27934.00	27947.30	27937.70	27959.20
GEAR DEPTH	79	146	322	311	166	165	126	113	66	152	85
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.27	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.98	2.91	2.54	2.69	1.48	2.91	2.93	2.80	2.48	2.70	2.82
PERFORMANCE / GEAR	0 /170	0 /162	0 /170	0 /162	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162
PAC WHITING	0.0	17.5	3.4	6.8	0.0	0.0	117.5	894.0	0.0	4.3	96.6
PACIFIC COD	0.5	0.0	0.0	0.0	0.0	0.4	1.0	1.0	0.0	0.0	0.0
SABLEFISH	0.0	21.3	11.8	22.7	0.0	20.4	10.9	16.1	0.9	12.5	0.0
LINGCOD	0.0	10.9	0.0	0.0	10.4	10.4	0.0	0.0	0.5	0.0	0.0
PAC OC PERCH	0.0	0.0	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.2	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	2.3	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	15.2	5.9	0.0	0.0	0.0	0.0	0.0	0.8	0.0
SPLITNOSE	0.0	0.0	6.1	18.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	25.2	0.0	0.0	5.4	0.0	8.6	0.0	0.0	41.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.1	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.7	0.0	0.0	0.0	1.6	1.8	0.0	0.0	0.0	0.9
REDSTRIPE	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	11.7	29.2	47.4	31.2	7.3	34.8	5.1	5.5	1.1	6.4	30.3
TOT RNDFISH	12.2	107.2	84.8	85.3	23.1	74.6	144.9	916.6	2.4	65.3	127.8
ARROWTOOTH FL	0.0	3.9	5.4	7.7	3.6	50.6	5.2	1.4	0.0	16.8	0.1
DOVER SOLE	1.4	35.4	24.5	39.2	13.6	11.8	10.0	0.5	0.0	8.4	0.5
REX SOLE	2.5	13.6	5.7	19.4	7.3	5.9	2.4	1.4	4.5	6.1	22.9
ENGLISH SOLE	5.0	3.2	0.0	0.0	0.0	0.0	6.9	7.3	9.8	0.0	18.1
PETRALE SOLE	15.4	0.5	0.0	0.0	0.0	0.0	0.7	0.7	7.0	0.0	2.9
PAC SANDDAB	97.5	0.0	0.0	0.0	0.0	0.0	0.5	0.4	15.9	0.0	9.8
OTHER FLTFISH	8.5	9.3	2.7	3.4	1.6	21.3	3.5	0.1	1.8	5.9	3.1
TOT FLTFISH	130.3	65.9	38.3	69.8	26.1	89.6	29.1	11.6	39.0	37.1	57.4
SKATES	19.7	0.0	1.6	2.7	0.0	0.0	0.0	0.1	0.0	0.9	0.0
SPINY DOGFISH	2.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	3.9
RATFISH	1.6	0.0	1.1	1.4	0.0	0.0	1.1	0.0	0.0	0.9	2.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	23.8	0.5	2.7	4.2	0.0	0.0	1.1	0.1	1.6	1.8	5.9
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0
SQUID	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.5	0.1
SEA URCHINS	0.0	0.0	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	4.8	0.0	0.2	26.0	0.1	0.5	2.4	0.0	0.5	1.1	0.0
TOT INVERTS	5.0	0.0	0.4	26.5	0.1	0.7	2.6	0.2	0.5	2.9	0.1
TOTAL CATCH	171.3	173.6	126.2	185.8	49.3	164.9	177.8	928.5	43.5	107.2	191.2

Table 27. --continued.

HAUL #	45	46	47	48	49	50	51	52	53	54	55
MONTH/DAY/YEAR	8/14/86	8/14/86	8/14/86	8/14/86	8/14/86	8/15/86	8/15/86	8/15/86	8/15/86	8/15/86	8/15/86
LATITUDE START	45 5.9	45 5.9	45 12.4	45 15.9	45 19.3	45 24.3	45 28.2	45 31.8	45 36.4	45 38.3	45 41.6
LONGITUDE START	124 18.7	124 20.3	124 20.8	124 10.8	124 7.2	124 13.1	124 2.0	124 9.2	124 13.3	124 7.4	124 9.9
LATITUDE END	45 7.3	45 4.3	45 10.9	45 17.4	45 20.8	45 26.0	45 29.7	45 33.3	45 37.9	45 39.7	45 40.2
LONGITUDE END	124 18.9	124 20.7	124 20.9	124 9.9	124 7.0	124 13.1	124 2.2	124 9.0	124 13.5	124 7.0	124 10.6
LORAN START	12634.40	12635.70	12583.00	12543.20	12511.40	12477.90	12432.20	12412.90	12382.00	12358.50	12336.20
LORAN START	27940.50	27937.80	27944.50	27965.60	27975.50	27970.70	27993.70	27985.10	27983.00	27994.70	27993.80
LORAN END	12623.00	12649.00	12594.90	12530.50	12498.60	12464.10	12420.30	12400.70	12370.30	12346.80	12348.30
LORAN END	27941.80	27935.30	27942.70	27968.90	27977.50	27972.60	27994.80	27986.90	27984.20	27996.70	27991.20
GEAR DEPTH	201	229	335	128	101	150	60	108	130	90	106
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	2.61	2.94	2.69	2.93	2.85	3.17	2.80	2.80	2.85	2.67	2.80
PERFORMANCE / GEAR	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170
PAC WHITING	1.4	6.8	48.5	32.4	1001.5	7.9	0.0	0.3	36.7	1256.0	1560.4
PACIFIC COD	0.0	0.0	0.0	0.4	3.6	0.0	0.0	15.2	0.9	0.7	0.0
SABLEFISH	63.3	55.8	32.7	0.5	6.8	0.5	0.0	2.5	3.2	319.3	9.9
LINGCOD	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.5	0.9	0.0	3.0
PAC OC PERCH	0.9	3.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	38.6	39.9	6.4	2.5	0.0	0.7	0.0	0.0	1.1	0.0	0.0
SPLITNOSE	45.8	237.7	19.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	5.9	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	0.0	0.7	0.0	0.0	0.1	2.5	3.9	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	1.4	0.0	0.0
STRIPETAIL	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER ROUNDFISH	17.9	28.4	104.2	6.9	11.2	3.0	19.5	2.7	13.6	16.9	28.3
TOT ROUNDFISH	169.7	371.8	216.8	43.4	1023.2	12.1	21.0	29.5	67.6	1592.9	1601.7
ARROWTOOTH FL	17.5	25.9	30.4	12.7	1.6	18.1	0.1	2.9	13.2	0.9	19.4
DOVER SOLE	24.3	25.2	19.7	14.5	2.0	27.2	0.7	2.5	39.9	1.8	3.8
REX SOLE	18.6	27.0	6.4	7.5	9.5	13.2	13.8	5.1	13.8	2.7	8.4
ENGLISH SOLE	0.0	0.0	0.0	1.5	24.9	0.0	14.1	26.8	0.0	31.3	22.2
PETRALE SOLE	0.0	0.0	0.0	1.4	2.9	0.0	0.2	3.6	0.0	2.3	0.0
PAC SANDDAB	0.0	0.0	0.0	4.6	25.4	0.0	41.7	5.0	2.0	23.8	33.7
OTHER FLATFISH	11.0	0.9	0.1	0.5	0.2	3.5	6.5	0.7	6.4	0.0	0.5
TOT FLATFISH	71.3	78.9	56.6	42.6	66.6	62.0	77.1	46.6	75.3	62.8	86.9
SKATES	10.4	0.0	0.0	0.0	0.0	0.0	70.3	0.5	0.2	16.5	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	3.6	0.0	3.2	0.9	0.0	0.7	10.7
RATFISH	0.0	0.0	0.0	2.0	1.1	5.9	0.0	4.5	0.7	0.9	0.0
OTHER ELASMOBRH	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	10.4	0.0	0.1	2.0	4.8	5.9	73.5	5.9	0.9	18.1	10.7
DUNGENESS CRAB	0.0	0.0	0.0	0.7	0.0	1.6	1.3	1.4	0.2	1.4	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.1	0.3
SEA URCHINS	7.7	11.3	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	0.5	3.4	14.6	1.8	2.1	6.8	10.7	4.6	2.3	0.0	1.4
TOT INVERTS	8.2	14.7	14.6	2.5	2.1	10.0	12.8	6.0	2.5	1.5	1.7
TOTAL CATCH	259.6	465.5	288.1	90.5	1096.7	90.0	184.4	88.0	146.3	1675.2	1700.9

Table 27.--Continued.

HAUL #	56	57	58	59	60	61	62	63	64	65	66
MONTH/DAY/YEAR	8/15/86	8/16/86	8/16/86	8/16/86	8/16/86	8/16/86	8/16/86	8/17/86	8/17/86	8/17/86	8/17/86
LATITUDE START	45 46.0	45 51.1	45 49.0	45 47.2	45 51.0	45 55.6	45 57.9	46 11.7	46 7.6	46 3.8	46 11.2
LONGITUDE START	124 5.1	124 19.3	124 28.3	124 42.8	124 19.9	124 20.8	124 21.3	124 28.9	124 28.6	124 13.3	124 17.8
LATITUDE END	45 47.6	45 49.5	45 47.4	45 45.8	45 52.6	45 57.0	45 59.4	46 11.3	46 6.1	46 5.4	46 12.9
LONGITUDE END	124 6.0	124 19.1	124 28.8	124 43.3	124 19.9	124 21.3	124 21.0	124 26.5	124 28.9	124 12.7	124 18.5
LORAN START	12294.80	12278.40	12307.10	12341.30	12279.70	12246.70	12230.60	12145.80	12173.90	12174.80	12129.90
LORAN START	28006.00	27987.70	27971.40	27946.90	27986.70	27989.80	27991.20	27992.40	27988.90	28009.20	28008.80
LORAN END	12284.40	12289.40	12319.40	12352.00	12267.50	12237.50	12219.30	12144.20	12184.60	12162.20	12119.10
LORAN END	28005.90	27986.60	27969.10	27944.60	27988.30	27990.30	27993.10	27995.70	27987.10	28011.60	28009.30
GEAR DEPTH	80	143	163	329	144	139	135	134	134	90	102
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	3.09	2.83	2.96	2.63	3.04	2.61	2.78	3.15	2.72	3.07	3.30
PERFORMANCE / GEAR	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162
PAC WHITING	165.6	29.3	14.1	22.2	17.7	9.3	5.2	0.0	0.9	1542.7	242.4
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
SABLEFISH	2.0	2.7	10.9	68.9	15.9	15.0	25.2	771.6	9.1	9.3	1.6
LINGCOD	13.6	0.0	0.0	0.0	7.0	9.1	0.0	0.0	20.9	0.0	12.8
PAC OC PERCH	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	5.7	0.4	0.9	0.5	1.8	0.0	0.5	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	1.1	0.5	12.2	0.0	0.0	0.5	3.6	16.3	0.0	0.2
SPLITNOSE	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	2.0	0.0	0.0	14.7	7.5	5.2	10.0	2.4	0.0	6.1
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	2.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	1.7	4.3	8.5	28.8	7.6	3.6	15.4	11.0	24.4	25.9	11.5
TOT RNDFISH	182.9	39.5	41.6	148.1	64.7	44.9	53.3	796.7	74.4	1577.9	274.6
ARROWTOOTH FL	0.0	9.8	3.4	12.7	7.9	13.4	15.9	16.6	3.9	5.2	6.8
DOVER SOLE	0.5	29.7	7.5	45.1	26.8	15.2	30.4	40.8	15.2	5.2	17.7
REX SOLE	4.5	33.1	10.3	32.2	44.7	36.7	34.9	30.2	8.8	49.3	49.7
ENGLISH SOLE	12.2	0.0	1.4	7.9	0.0	0.2	0.4	10.2	0.0	16.8	0.0
PETRALE SOLE	13.6	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	8.7	0.5
PAC SANDDAB	55.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.4	0.0
OTHER FLTFISH	6.3	11.8	1.4	1.1	6.1	9.3	7.3	14.8	1.0	13.8	15.8
TOT FLTFISH	92.7	84.4	31.5	99.1	85.5	75.3	88.8	112.6	28.9	122.4	90.4
SKATES	7.5	0.0	1.4	1.1	0.0	10.9	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	5.4
RATFISH	0.9	2.7	3.4	1.5	0.0	1.8	4.1	0.0	0.0	0.0	0.7
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	8.4	2.7	4.8	2.6	0.0	12.8	4.1	0.0	0.0	0.0	7.0
DUNGENESS CRAB	1.4	1.4	0.0	0.0	0.0	0.0	2.0	0.0	0.5	0.0	1.3
SQUID	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.2
SEA URCHINS	0.0	29.0	112.0	0.0	68.9	17.2	31.3	0.9	0.0	0.0	0.0
OTHER INVERTS	0.0	6.2	2.5	2.0	2.7	5.0	1.0	0.1	4.2	5.2	0.1
TOT INVERTS	1.5	36.6	114.5	2.0	71.7	22.2	34.4	1.0	4.8	5.2	2.1
TOTAL CATCH	285.4	163.2	192.4	251.7	221.9	155.2	180.6	910.3	108.1	1705.5	374.2

Table 27.--Continued.

HAUL #	67	68	69	70	71	72	73	74	75	76	77
MONTH/DAY/YEAR	8/18/86	8/18/86	8/18/86	8/18/86	8/18/86	8/19/86	8/19/86	8/19/86	8/19/86	8/19/86	8/21/86
LATITUDE START	46 17.9	46 19.9	46 22.3	46 26.6	46 32.0	46 36.7	46 40.6	46 41.2	46 39.7	46 40.2	46 46.0
LONGITUDE START	124 21.2	124 22.1	124 30.5	124 30.2	124 26.2	124 35.6	124 41.4	124 29.2	124 21.0	124 20.4	124 22.0
LATITUDE END	46 18.0	46 20.0	46 24.0	46 28.1	46 33.6	46 38.4	46 42.2	46 39.7	46 39.6	46 41.7	46 44.5
LONGITUDE END	124 21.5	124 24.6	124 30.2	124 29.3	124 25.8	124 35.7	124 41.8	124 29.0	124 20.7	124 20.2	124 21.5
LORAN START	12084.50	12077.90	28028.70	28047.60	28060.70	28113.50	28150.90	28116.00	28081.80	28082.20	28117.60
LORAN START	28011.10	28010.03	41846.00	41848.10	41860.90	41836.90	41821.90	41856.10	41878.70	41880.60	41879.70
LORAN END	12084.50	12081.50	28035.50	28051.70	28067.00	28122.00	28160.40	28107.30	28080.40	28089.60	28108.00
LORAN END	28011.10	28006.40	41847.20	41851.00	41862.80	41837.00	41821.10	41856.30	41879.50	41881.80	41879.50
GEAR DEPTH	113	117	135	144	106	148	152	101	71	70	71
DURATION IN HOURS	0.02	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.10	0.50	0.50
DISTANCE FISHED	0.35	3.20	3.07	2.96	3.04	2.98	3.00	2.87	0.41	2.89	2.87
PERFORMANCE / GEAR	5 /170	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	5 /162	0 /162	0 /162
PAC WHITING	0.0	14.1	2.0	0.0	5.7	5.2	0.0	2.0	0.0	0.9	145.1
PACIFIC COD	0.0	14.1	0.0	0.0	0.5	0.0	15.6	4.3	0.0	0.5	0.0
SABLEFISH	0.0	36.5	194.1	5.7	1.4	13.8	14.1	0.0	0.0	0.0	100.7
LINGCOD	0.0	5.0	0.0	0.0	0.0	17.7	0.5	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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	2.0	7.3	1.5	5.4	8.4	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	76.0	12.5	4.3	0.0	2.3	12.9	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	48.1	0.0	2.4	1.0	0.0	34.9	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	111.6	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	0.0	64.7	8.3	0.1	3.5	9.5	48.2	7.5	0.0	1.5	1.1
TOT RNDFISH	0.0	260.5	224.2	13.9	17.5	57.4	238.0	13.8	0.0	2.9	247.0
ARROWTOOTH FL	0.0	16.3	5.9	24.9	21.3	30.8	12.0	10.2	0.0	0.0	0.0
DOVER SOLE	0.0	25.9	20.0	9.3	4.8	45.4	37.6	12.2	0.0	4.6	1.1
REX SOLE	0.0	24.0	12.2	14.1	8.2	17.0	17.0	5.7	0.0	14.1	2.7
ENGLISH SOLE	0.0	0.0	5.7	1.8	1.4	0.0	0.0	0.7	0.0	11.1	0.0
PETRALE SOLE	0.0	1.4	1.6	2.0	3.2	2.7	0.0	1.6	0.0	3.6	0.9
PAC SANDDAB	0.0	0.9	1.1	0.1	15.9	0.0	0.0	11.1	0.0	14.7	12.5
OTHER FLTFISH	0.0	6.2	1.1	1.8	4.5	6.8	14.6	6.2	0.0	0.0	0.0
TOT FLTFISH	0.0	74.7	47.6	54.1	59.1	102.7	81.3	47.7	0.0	48.1	17.2
SKATES	0.0	0.0	0.0	0.0	16.8	0.0	0.0	17.5	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
RATFISH	0.0	8.6	0.0	0.0	0.9	3.2	0.0	0.2	0.0	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.0	8.6	0.0	0.0	17.6	6.9	0.0	17.7	0.0	0.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	2.5	0.0	0.7	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.2	0.0	0.4	0.0
SEA URCHINS	0.0	0.0	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	0.0	2.0	0.0	1.5	28.7	13.3	2.3	5.4	0.0	24.9	0.0
TOT INVERTS	0.0	2.0	0.9	2.4	32.5	13.3	2.9	5.6	0.0	25.3	0.0
TOTAL CATCH	0.0	345.8	272.7	70.4	126.8	180.3	322.2	84.9	0.0	76.4	264.2

Table 27.--Continued.

HAUL #	78	79	80	81	82	83	84	85	86	87	88
MONTH/DAY/YEAR	8/21/86	8/21/86	8/22/86	8/22/86	8/22/86	8/22/86	8/22/86	8/22/86	8/22/86	8/22/86	8/22/86
LATITUDE START	46 45.2	46 45.5	46 47.5	46 48.8	46 47.9	46 52.1	46 53.4	46 53.3	46 55.8	46 57.4	46 59.4
LONGITUDE START	124 36.1	124 44.6	124 50.5	124 46.3	124 35.4	124 37.4	124 39.9	124 42.8	124 45.4	124 43.2	124 52.6
LATITUDE END	46 46.6	46 43.7	46 48.8	46 46.8	46 49.6	46 53.5	46 52.0	46 54.6	46 57.1	46 56.4	46 60.0
LONGITUDE END	124 37.2	124 45.2	124 51.3	124 46.3	124 35.6	124 38.5	124 40.8	124 43.9	124 46.7	124 41.7	124 54.7
LORAN START	28158.50	28186.10	28214.80	28208.80	28170.00	28199.00	28214.10	28222.10	28244.10	28246.10	28285.40
LORAN START	41838.10	41814.20	41798.00	41810.10	41841.20	41836.90	41830.10	41821.60	41814.70	41821.60	41794.80
LORAN END	28169.20	28178.70	28224.00	28198.30	28180.10	28210.20	28209.10	28232.60	28255.00	28236.00	28294.90
LORAN END	41835.60	41812.00	41796.10	41809.80	41841.10	41834.10	41827.00	41818.70	41811.30	41825.90	41788.60
GEAR DEPTH	126	163	185	155	110	112	124	134	146	128	168
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	2.94	3.41	2.61	3.61	3.26	2.98	2.91	2.80	2.87	2.67	2.93
PERFORMANCE / GEAR	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170
PAC WHITING	22.7	12.0	34.7	5.0	42.4	7.3	27.0	15.6	9.1	2.3	0.0
PACIFIC COD	0.0	0.0	4.5	1.1	0.0	0.0	0.0	0.0	1.4	0.0	0.0
SABLEFISH	5.0	0.9	50.8	1.1	5.9	0.7	0.2	7.3	5.2	1.6	2.3
LINGCOD	2.4	1.8	0.0	5.9	0.0	7.0	10.8	0.0	4.1	46.9	5.1
PAC OC PERCH	0.0	0.0	13.8	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE	0.9	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.5	0.9	18.8	0.0	0.5	1.6	0.2	5.7	0.0	1.0	0.0
SPLITNOSE	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	1.8	8.6	73.5	126.1	0.0	0.0	1.8	47.9	217.3	3.6	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROCACCIO	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
CANARY	0.0	0.0	6.1	1.4	0.0	0.0	2.0	0.0	10.4	0.0	1.6
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	30.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
OTHER RNDFISH	4.3	1.0	55.0	9.1	8.6	3.0	2.1	9.6	27.7	16.0	6.0
TOT RNDFISH	37.5	25.2	294.1	149.7	58.5	19.6	44.4	86.0	276.1	71.4	16.0
ARROWTOOTH FL	2.7	2.3	29.7	10.9	3.9	7.7	11.3	60.3	79.6	30.4	5.0
DOVER SOLE	8.6	9.5	20.0	7.7	1.4	9.3	4.1	7.7	9.3	8.2	1.1
REX SOLE	2.5	1.4	9.3	5.4	2.3	3.2	1.4	2.0	7.3	3.6	0.0
ENGLISH SOLE	0.0	0.0	2.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
PETRALE SOLE	0.5	0.5	1.4	0.5	2.5	0.7	0.0	0.7	11.0	0.0	0.0
PAC SANDDAB	0.0	0.5	0.0	0.0	7.7	12.9	0.2	0.7	0.0	0.0	0.0
OTHER FLTFISH	6.1	0.0	0.7	8.6	1.5	3.4	3.4	11.3	17.1	4.1	0.5
TOT FLTFISH	20.4	14.1	63.0	33.1	19.2	38.3	20.5	82.7	124.3	46.3	6.6
SKATES	0.0	0.0	0.2	7.5	0.0	0.0	3.9	1.1	35.8	7.3	1.1
SPINY DOGFISH	0.0	0.0	0.0	0.0	3.2	2.0	0.0	0.0	0.0	0.0	0.0
RATFISH	0.0	0.5	2.3	0.0	0.0	1.4	0.0	0.7	0.0	0.2	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.0	0.5	2.4	7.5	3.2	3.4	3.9	1.8	35.8	7.5	1.1
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.1	0.0	0.0	0.0	0.1	0.2	0.0	0.5	0.5	0.1	0.3
SEA URCHINS	9.1	1.1	53.5	0.0	0.0	3.2	0.5	0.0	0.0	0.0	2.3
OTHER INVERTS	3.4	6.4	2.3	5.0	0.7	1.1	0.9	5.4	0.7	9.5	0.5
TOT INVERTS	12.6	7.5	55.8	5.0	0.8	4.5	1.4	5.9	1.1	9.6	3.0
TOTAL CATCH	70.5	47.2	415.4	195.3	81.7	65.9	70.0	176.5	437.4	134.7	26.7

Table 27. --Continued.

HAUL #	89	90	91	92	93	94	95	96	97	98	99
MONTH/DAY/YEAR	8/23/86	8/23/86	8/23/86	8/23/86	8/23/86	8/28/86	8/28/86	8/28/86	8/28/86	8/28/86	8/28/86
LATITUDE START	46 59.8	47 1.4	46 59.9	47 1.9	47 4.0	47 33.0	47 31.2	47 35.8	47 36.8	47 36.2	47 36.0
LONGITUDE START	124 44.4	124 36.5	124 33.8	124 32.8	124 27.4	124 52.9	124 54.1	125 3.8	124 58.7	124 42.6	124 38.7
LATITUDE END	47 1.2	46 59.9	47 1.6	47 0.3	47 5.6	47 31.3	47 29.8	47 37.1	47 35.4	47 37.8	47 37.6
LONGITUDE END	124 43.5	124 36.4	124 33.2	124 32.4	124 27.6	124 52.6	124 53.0	125 4.6	124 57.7	124 43.1	124 38.6
LORAN START	28262.80	28247.90	28231.10	28239.20	28234.60	28489.10	28480.70	28536.90	28529.50	28481.00	28468.70
LORAN START	41819.00	41843.10	41850.50	41854.10	41871.50	41803.00	41798.70	41768.00	41784.90	41838.60	41851.60
LORAN END	28268.40	28238.90	28238.60	28229.10	28244.70	28477.60	28469.10	28547.60	28517.80	28493.00	28478.80
LORAN END	41822.00	41842.60	41852.90	41854.70	41871.40	41803.40	41801.60	41765.40	41788.00	41837.60	41852.70
GEAR DEPTH	123	86	77	71	57	144	172	263	170	70	57
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	2.91	2.91	3.11	2.91	2.94	3.09	2.83	2.63	2.83	3.00	2.87
PERFORMANCE / GEAR	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	7 /170	0 /162	0 /170	0 /162
PAC WHITING	132.9	102.7	31.8	2.7	2.0	0.0	0.0	0.0	0.7	177.1	2.7
PACIFIC COD	0.0	1.8	2.9	5.9	1.1	0.0	2.9	0.0	0.0	2.7	0.3
SABLEFISH	1.6	0.9	0.0	0.2	0.0	2.5	20.2	0.0	64.2	0.0	0.1
LINGCOD	0.0	0.0	26.7	32.4	0.5	0.0	0.0	0.0	16.1	11.1	1.4
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	1.4	68.0	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.9	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	3.2	0.0	0.0	0.0	0.0	0.0	1.4	22.7	0.1	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	0.1	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	378.3	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	0.0	1.1	0.0	0.0	4.5	0.0	1.8	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	2.7	18.1	9.4	75.2	4.4	4.9	5.8	0.0	27.4	2.1	27.1
TOT RNDFISH	140.4	123.6	70.8	117.6	8.0	7.5	38.0	104.3	489.7	193.0	31.3
ARROWTOOTH FL	33.1	0.2	0.9	0.2	0.0	18.1	29.0	22.7	37.9	0.0	2.7
DOVER SOLE	15.4	5.4	10.0	26.1	1.6	5.0	12.2	0.0	8.6	10.4	2.5
REX SOLE	7.7	11.3	9.1	11.8	4.8	0.1	4.3	0.0	0.9	10.0	40.4
ENGLISH SOLE	0.0	16.8	5.9	5.7	29.5	0.0	0.0	0.0	0.0	55.3	25.4
PETRALE SOLE	5.4	2.3	0.7	1.8	0.9	0.0	0.0	0.0	0.0	12.2	0.9
PAC SANDDAB	0.0	17.2	22.5	33.8	12.9	0.0	0.0	0.0	0.0	53.8	39.2
OTHER FLTFISH	4.3	6.6	3.5	0.0	0.9	4.1	1.5	0.0	0.5	47.3	13.6
TOT FLTFISH	66.0	59.9	52.5	79.4	50.6	27.4	47.1	22.7	47.9	189.0	121.7
SKATES	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
SPINY DOGFISH	0.0	3.9	0.0	2.9	1.4	3.6	0.0	0.0	3.2	77.3	7.0
RATFISH	0.9	0.0	2.3	1.1	0.9	0.0	0.0	0.0	2.9	1.4	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.9	4.1	2.3	4.1	2.3	3.6	0.0	0.0	8.2	78.7	7.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
SQUID	0.1	1.1	0.2	1.6	0.0	0.1	0.0	0.0	0.1	0.1	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
OTHER INVERTS	15.0	0.0	0.0	0.5	7.5	0.6	11.2	0.0	2.4	0.0	0.0
TOT INVERTS	15.1	1.1	0.2	2.0	7.5	0.7	11.7	0.0	2.5	0.1	0.7
TOTAL CATCH	222.4	188.7	125.8	203.1	68.3	39.2	96.7	127.0	548.2	460.9	160.8

Table 27. --Continued.

HAUL #	100	101	102	103	104	105	106	107	108	109	110
MONTH/DAY/YEAR	8/28/86	8/29/86	8/29/86	8/29/86	8/29/86	8/29/86	8/29/86	8/29/86	8/29/86	8/30/86	8/30/86
LATITUDE START	47 39.9	47 41.6	47 40.1	47 40.0	47 43.8	47 44.9	47 43.9	47 48.0	47 48.2	47 52.5	47 53.4
LONGITUDE START	124 40.2	124 41.1	124 42.8	124 57.4	124 58.5	124 48.2	124 41.9	124 43.8	124 47.3	124 54.9	124 56.6
LATITUDE END	47 41.4	47 40.1	47 41.7	47 41.4	47 45.4	47 43.5	47 45.4	47 49.5	47 49.8	47 54.1	47 51.9
LONGITUDE END	124 40.3	124 41.1	124 43.1	124 58.0	124 58.8	124 47.5	124 42.7	124 44.3	124 47.6	124 54.6	124 56.7
LORAN START	28499.60	28513.20	28508.10	28547.30	28575.90	28555.60	28531.20	28564.90	28575.60	28625.80	28636.30
LORAN START	41848.40	41846.30	41839.60	41790.30	41787.70	41823.50	41844.80	41840.30	41828.10	41803.10	41797.50
LORAN END	28510.00	28503.00	28519.50	28558.60	28587.50	28543.90	28543.70	28576.50	28587.90	28636.30	28626.50
LORAN END	41848.70	41845.40	41839.60	41788.60	41797.20	41825.10	41842.60	41839.30	41827.60	41804.80	41796.80
GEAR DEPTH	59	60	66	139	130	82	59	57	73	99	106
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	2.74	2.82	2.96	2.80	3.00	2.82	2.93	2.80	3.06	3.02	2.65
PERFORMANCE / GEAR	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /170	0 /162
PAC WHITING	16.6	16.8	18.4	1.1	4.8	0.0	16.3	110.4	5.4	4978.3	1268.7
PACIFIC COD	0.7	1.8	89.6	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0
SABLEFISH	0.2	0.2	0.7	8.6	9.6	1.1	0.2	0.5	0.9	1.7	41.3
LINGCOD	0.0	0.0	0.2	0.0	0.0	0.5	0.0	0.0	10.2	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
ROUGHEYE	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	7.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.5	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	4.2
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	1.8	0.0	0.0	1.1	0.0	0.2	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	32.0	11.1	3.0	2.0	5.9	14.7	3.5	5.0	5.6	64.4	47.7
TOT RNDFISH	49.4	30.4	113.7	22.0	19.5	23.4	20.1	116.1	22.1	5044.4	1361.9
ARROWTOOTH FL	0.0	0.0	0.0	47.6	2.9	0.0	0.0	0.0	0.0	0.0	4.6
DOVER SOLE	3.6	1.8	3.6	12.7	1.4	5.7	0.5	0.0	6.4	6.9	9.1
REX SOLE	24.9	37.2	5.4	7.0	0.1	4.8	8.6	3.6	11.8	12.2	3.5
ENGLISH SOLE	24.5	34.7	45.4	0.0	0.0	35.4	29.7	16.8	31.5	10.4	5.6
PETRALE SOLE	1.8	2.0	2.0	0.0	0.2	4.5	0.0	0.0	0.5	0.0	4.9
PAC SANDDAB	61.7	36.3	62.8	1.8	0.1	42.4	10.0	6.4	66.5	3.5	18.2
OTHER FLTFISH	7.6	15.1	39.7	5.4	0.2	14.7	4.1	0.5	14.3	0.0	10.8
TOT FLTFISH	124.2	127.1	159.0	74.6	5.0	107.5	52.8	27.2	130.9	33.0	56.7
SKATES	0.0	24.0	0.0	0.0	0.0	43.1	11.3	0.9	0.0	0.0	0.0
SPINY DOGFISH	35.4	7.7	8.8	4.1	0.0	183.3	33.3	41.0	223.4	581.0	926.5
RATFISH	0.0	1.8	8.2	2.0	0.0	0.2	0.7	1.1	0.0	5.2	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
TOT ELASMOBRH	35.4	33.6	17.0	6.1	0.0	226.6	45.4	43.1	223.4	586.9	926.5
DUNGENESS CRAB	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.7	0.0	0.0
SQUID	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	1.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	0.1	0.6	0.4	22.0	4.3	1.8	0.0	0.0	0.0	0.0	0.0
TOT INVERTS	0.6	0.6	0.5	23.0	4.7	2.0	0.3	0.2	0.8	1.0	0.0
TOTAL CATCH	209.6	191.6	290.1	125.8	29.1	359.4	118.6	186.6	377.2	5665.3	2345.0

Table 27.--Continued.

HAUL #	111	112	113	114	115	116	117	118	119	120	121
MONTH/DAY/YEAR	8/30/86	8/30/86	8/30/86	8/30/86	8/30/86	8/31/86	8/31/86	8/31/86	8/31/86	8/31/86	8/31/86
LATITUDE START	47 52.0	47 53.3	47 54.1	47 52.4	47 54.1	47 55.9	47 54.1	47 55.9	47 54.5	47 55.1	47 54.0
LONGITUDE START	124 58.3	125 0.2	125 1.1	125 7.1	125 15.2	125 7.3	125 5.4	125 4.0	125 0.2	124 56.6	124 49.7
LATITUDE END	47 53.5	47 51.9	47 52.7	47 53.8	47 55.3	47 54.4	47 55.6	47 54.4	47 56.0	47 53.5	47 55.6
LONGITUDE END	124 58.5	125 0.3	125 0.6	125 7.6	125 16.0	125 6.8	125 4.8	125 3.4	125 0.0	124 56.6	124 49.6
LORAN START	28631.00	28644.90	28653.00	28655.90	28688.00	28680.70	28663.60	28672.40	28653.10	28647.90	28622.90
LORAN START	41791.20	41784.80	41782.00	41760.20	41732.20	41760.20	41766.60	41772.20	41785.30	41798.30	41822.40
LORAN END	28642.00	28635.60	28641.90	28666.90	28698.10	28669.20	28672.90	28660.60	28663.00	28637.20	28633.80
LORAN END	41790.80	41783.90	41783.10	41759.00	41729.70	41761.70	41769.00	41773.90	41786.50	41797.40	41823.40
GEAR DEPTH	113	119	119	165	348	154	139	128	115	104	70
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	2.78	2.59	2.72	2.72	2.44	2.82	2.94	2.85	2.78	2.89	2.91
PERFORMANCE / GEAR	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170
PAC WHITING	865.6	208.4	245.4	5.7	75.7	0.9	1.6	1.6	16.1	43.3	1197.3
PACIFIC COD	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0
SABLEFISH	458.7	7.9	3.2	2.7	17.7	0.0	2.5	0.9	12.2	1.6	0.8
LINGCOD	0.0	6.6	0.0	20.2	0.0	0.0	0.0	1.5	0.0	0.0	0.0
PAC OC PERCH	0.0	0.0	0.0	0.0	56.2	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	32.7	4.5	0.5	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.9	0.1	0.1	1.8	2.0	5.2	1.8	0.2	5.2	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	5.4	2.0	0.0	2.0	1.8	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	2.3	0.0	0.0	0.0	1.1	0.0	0.0	0.0	3.9
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	11.7	3.0	2.9	22.8	34.3	7.0	3.4	4.0	5.3	47.0	16.6
TOT RNDFISH	1337.0	226.0	253.9	55.3	218.9	24.0	12.9	8.3	40.9	105.7	1219.1
ARROWTOOTH FL	34.4	15.0	10.9	119.7	10.9	110.7	58.7	28.6	10.4	8.4	0.0
DOVER SOLE	7.3	4.8	2.5	5.0	18.9	2.5	0.0	0.9	5.0	1.1	0.0
REX SOLE	4.1	2.0	0.7	0.9	3.6	2.0	0.9	0.9	3.4	0.9	10.3
ENGLISH SOLE	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	37.1
PETRALE SOLE	2.8	0.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0
PAC SANDDAB	23.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	16.8	0.7	35.9
OTHER FLTFISH	17.0	1.5	0.0	7.1	0.0	6.3	1.3	0.3	13.4	0.1	21.6
TOT FLTFISH	89.4	24.4	16.3	132.7	33.3	121.5	60.9	30.7	49.0	13.0	113.9
SKATES	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	4.6	8.2	0.0	2.3	0.0	1.6	0.0	6.8	2.3	280.1	444.5
RATFISH	0.0	0.0	0.0	1.1	0.0	0.9	0.0	0.0	0.0	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.3
TOT ELASMOBRH	4.6	8.2	0.0	3.4	0.2	2.5	0.0	6.8	2.3	280.1	470.8
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	3.9
SEA URCHINS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
OTHER INVERTS	2.4	2.7	6.1	25.9	4.5	2.3	0.2	2.7	8.4	0.0	0.0
TOT INVERTS	2.4	2.7	6.3	25.9	4.5	2.3	0.3	2.7	8.5	0.0	3.9
TOTAL CATCH	1433.4	261.3	276.5	217.3	257.0	150.3	74.1	48.5	100.7	398.9	1807.6

Table 27. --Continued.

HAUL #	122	123	124	125	126	127	128	129	130	131	132
MONTH/DAY/YEAR	8/31/86	8/31/86	8/31/86	9/ 1/86	9/ 1/86	9/ 1/86	9/ 1/86	9/ 1/86	9/ 2/86	9/ 2/86	9/ 2/86
LATITUDE START	47 56.0	47 57.4	47 55.7	47 57.0	47 55.9	47 56.5	47 58.0	47 58.6	47 59.1	47 57.5	47 58.9
LONGITUDE START	124 56.8	124 57.3	124 58.7	125 1.4	125 1.8	125 6.6	125 13.9	125 12.7	125 12.2	125 8.3	125 2.6
LATITUDE END	47 57.5	47 55.8	47 57.2	47 55.5	47 57.3	47 58.0	47 59.3	47 59.9	47 57.6	47 58.8	47 57.4
LONGITUDE END	124 56.9	124 57.7	124 59.1	125 0.8	125 0.6	125 6.7	125 14.9	125 13.9	125 11.2	125 9.4	125 1.7
LORAN START	28655.10	28666.50	28658.20	28673.70	28667.50	28683.10	28711.40	28712.70	28715.10	28694.40	28690.20
LORAN START	41797.90	41796.40	41790.80	41781.70	41779.80	41762.90	41737.50	41741.80	41743.70	41757.20	41778.10
LORAN END	28656.00	28655.90	28669.50	28661.70	28674.30	28694.20	28722.80	28724.70	28702.10	28705.90	28677.50
LORAN END	41797.90	41794.40	41790.00	41783.40	41784.60	41762.90	41734.00	41737.80	41746.80	41753.60	41780.80
GEAR DEPTH	102	104	110	115	117	143	172	165	163	152	117
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	2.76	3.09	2.78	2.87	3.02	2.89	2.72	2.85	3.09	2.72	2.98
PERFORMANCE / GEAR	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	7 /162	0 /170	0 /162	0 /170	0 /162
PAC WHITING	147.2	124.7	239.5	12.2	4.3	3.9	0.0	0.0	0.0	0.0	0.7
PACIFIC COD	17.9	4.3	1.8	0.0	0.0	0.0	0.2	0.0	2.5	0.0	0.0
SABLEFISH	1.8	0.5	1.1	12.2	0.7	2.0	8.4	4.8	23.1	2.3	9.1
LINGCOD	0.0	155.1	5.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.1	0.9	0.0	0.0	0.0	1.6	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	18.6	4.8	2.7	0.0	0.0
DARKBLOTCHED	0.0	0.0	1.1	15.4	0.1	3.9	0.1	0.1	0.2	0.2	0.5
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	0.0	46.0	0.0	10.4	0.0	1.4
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	2.5	0.0	0.0	0.0	0.0	1.1	1.4	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	21.1	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
OTHER RNDFISH	20.4	126.0	3.1	5.1	0.6	17.2	108.9	2.4	18.7	8.5	4.1
TOT RNDFISH	189.8	410.6	251.7	45.0	5.7	29.0	204.8	12.3	57.7	12.6	15.8
ARROWTOOTH FL	5.2	0.0	11.3	25.6	0.2	25.9	1.8	13.8	58.1	24.5	24.9
DOVER SOLE	3.4	0.0	16.3	8.4	4.1	0.7	2.7	3.4	3.4	0.3	8.2
REX SOLE	7.0	0.1	5.0	5.4	2.0	0.5	0.0	0.2	1.1	0.5	2.9
ENGLISH SOLE	9.8	1.1	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PETRALE SOLE	0.9	0.9	0.0	0.7	0.0	0.0	0.0	0.0	0.0	1.6	0.0
PAC SANDDAB	1.8	0.2	16.8	2.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
OTHER FLTFISH	1.3	0.0	25.0	11.7	2.3	0.6	5.2	0.0	4.5	0.6	5.9
TOT FLTFISH	29.4	2.4	76.3	54.5	17.2	27.6	9.7	17.5	67.1	27.4	42.0
SKATES	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	367.0	17.9	8.2	0.0	0.0	0.0	5.4	2.0	0.0	2.5	0.9
RATFISH	1.4	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.9	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	368.3	17.9	10.2	0.0	0.0	0.0	5.9	2.0	0.0	3.4	0.9
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.5	0.9	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1
SEA URCHINS	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0
OTHER INVERTS	1.1	1.8	1.6	0.1	3.6	0.5	0.5	1.6	0.2	0.7	5.8
TOT INVERTS	1.6	2.7	1.6	0.2	4.0	0.6	0.5	1.6	0.4	0.7	5.9
TOTAL CATCH	589.1	433.6	339.8	99.7	26.9	57.2	220.8	33.4	125.2	44.1	64.5

Table 27. --Continued.

HAUL #	133	134	135	136	137	138	139	140	141	142	143
MONTH/DAY/YEAR	9/ 2/86	9/ 2/86	9/ 2/86	9/ 2/86	9/ 2/86	9/ 2/86	9/ 3/86	9/ 3/86	9/ 4/86	9/ 4/86	9/ 4/85
LATITUDE START	47 57.5	47 57.9	48 0.4	48 0.1	47 59.8	48 1.5	48 1.0	48 0.6	48 3.2	48 2.1	48 3.2
LONGITUDE START	125 0.4	124 58.1	124 56.1	125 1.5	125 5.0	125 6.6	125 13.7	125 16.5	124 54.6	124 57.3	125 0.8
LATITUDE END	47 59.0	47 59.5	48 1.5	48 1.3	48 1.1	47 60.0	47 59.4	48 0.4	48 1.6	48 3.5	48 1.7
LONGITUDE END	125 0.5	124 58.1	124 56.1	125 2.8	125 6.0	125 5.2	125 12.7	125 16.3	124 54.2	124 58.0	125 1.1
LORAN START	28674.70	28671.80	28684.50	28695.70	28702.30	28718.30	28731.50	28735.70	28700.90	28699.80	28716.50
LORAN START	41785.40	41794.00	41802.20	41782.50	41769.60	41764.50	41738.60	41728.50	41808.80	41798.50	41785.90
LORAN END	28685.40	28683.20	28692.40	28707.90	28714.10	28704.30	28718.50	28733.60	28688.70	28711.30	28706.30
LORAN END	41785.70	41794.60	41802.60	41777.90	41766.20	41768.90	41742.00	41729.10	41809.60	41796.50	41784.40
GEAR DEPTH	113	104	93	117	132	134	157	157	75	101	117
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.08	0.50	0.50	0.50
DISTANCE FISHED	2.78	2.98	2.04	2.87	2.76	3.28	3.09	0.50	2.91	2.67	2.83
PERFORMANCE / GEAR	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	7 /162	0 /170	0 /162	0 /170
PAC WHITING	22.9	32.9	4.5	199.1	0.0	5.2	0.0	0.0	0.7	104.1	4.3
PACIFIC COD	0.0	85.7	12.5	0.0	0.0	0.0	0.0	0.0	0.0	2.7	30.4
SABLEFISH	11.6	79.8	1.6	68.5	0.0	2.0	0.0	0.0	6.8	12.0	2.3
LINGCOD	2.0	6.8	2.0	0.0	6.9	1.8	0.0	0.0	0.0	9.5	9.1
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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0
DARKBLOTCHED	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	1.6	0.0	1.4	14.7	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	1.8	233.5	108.6	19.5	3.4	14.1	0.0	38.3	43.4	7.0	10.8
TOT RNDFISH	38.6	440.8	129.3	287.1	11.9	23.5	1.4	58.1	50.8	135.4	56.9
ARROWTOOTH FL	31.5	2.0	0.0	18.1	2.7	101.6	0.0	0.0	0.0	0.1	52.4
DOVER SOLE	7.9	4.5	0.9	4.3	0.0	0.7	0.0	0.0	0.2	2.9	16.3
REX SOLE	2.5	3.9	1.4	3.9	0.1	2.5	0.0	0.0	7.7	5.0	12.2
ENGLISH SOLE	0.5	5.4	2.3	1.6	0.0	0.0	0.0	0.0	18.4	7.3	0.5
PETRALE SOLE	0.0	2.9	0.9	2.3	0.0	0.0	0.0	0.0	0.0	2.9	9.1
PAC SANDDAB	2.9	9.8	5.0	0.5	0.0	0.0	0.0	0.0	60.6	100.5	5.4
OTHER FLTFISH	14.0	14.8	0.3	7.7	11.4	13.5	0.0	0.0	11.0	10.1	30.7
TOT FLTFISH	59.3	43.3	10.8	38.5	14.3	118.3	0.0	0.0	97.8	128.8	126.6
SKATES	0.0	0.0	0.0	0.1	0.0	21.8	0.0	0.0	0.0	11.3	1.1
SPINY DOGFISH	0.9	105.7	178.5	21.3	4.8	6.8	0.0	0.0	317.3	412.1	17.7
RATFISH	0.0	0.0	0.0	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.9	105.7	178.5	23.5	5.4	28.6	0.0	0.0	317.3	423.4	18.8
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.2	0.1	0.7	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	3.0	0.3	0.5	2.7	5.7	11.8	0.0	0.1	0.5	2.3	3.2
TOT INVERTS	3.2	0.4	1.1	2.7	5.7	11.8	0.0	0.1	4.9	2.3	3.2
TOTAL CATCH	102.0	590.2	319.7	351.7	37.3	182.1	1.4	58.2	470.8	689.9	205.4

Table 27.--Continued.

HAUL #	144	145	146	147	148	149	150	151	152	153	154
MONTH/DAY/YEAR	9/ 4/86	9/ 4/86	9/ 4/86	9/ 4/86	9/ 5/86	9/ 5/86	9/ 5/86	9/ 5/86	9/ 5/86	9/ 7/86	9/ 7/86
LATITUDE START	48 1.7	48 3.5	48 2.1	48 2.8	48 1.5	47 58.4	47 59.5	47 57.8	48 1.2	48 27.1	48 26.6
LONGITUDE START	125 1.6	125 6.9	125 7.3	125 12.3	125 27.1	125 29.1	125 32.5	125 32.9	125 29.7	124 51.5	125 4.0
LATITUDE END	48 3.2	48 2.0	48 3.7	48 2.8	47 59.8	47 57.4	47 58.1	47 56.7	48 0.5	48 26.0	48 26.6
LONGITUDE END	125 1.9	125 6.3	125 6.6	125 12.1	125 27.0	125 30.8	125 31.6	125 31.3	125 29.7	124 53.2	125 1.7
LORAN START	28707.80	28733.10	28724.50	28741.00	28766.20	28750.00	28764.70	28754.60	28770.40	28872.90	28896.70
LORAN START	41782.50	41763.80	41762.10	41754.80	41690.80	41683.60	41671.70	41670.60	41681.40	41834.10	41783.10
LORAN END	28719.20	28721.30	28733.90		28754.60	28746.50	28753.10	28743.50	28765.10	28868.30	28891.60
LORAN END	41782.00	41765.40	41764.90		41691.20	41678.00	41675.20	41676.40	41681.60	41826.50	41792.40
GEAR DEPTH	123	137	137	148	154	170	176	212	159	274	179
DURATION IN HOURS	0.50	0.50	0.50	0.05	0.50	0.50	0.50	0.50	0.25	0.50	0.50
DISTANCE FISHED	2.80	2.82	2.98	0.15	3.09	2.83	2.85	2.89	1.43	2.89	2.85
PERFORMANCE / GEAR	0 /162	0 /170	0 /162	7 /170	7 /162	0 /170	0 /170	0 /170	7 /170	0 /162	0 /170
PAC WHITING	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.0	105.2
PACIFIC COD	1.4	0.5	0.5	0.0	0.0	5.7	0.0	7.7	0.0	1.6	0.0
SABLEFISH	0.0	3.2	0.0	0.0	0.0	0.0	0.0	3.4	0.0	4.2	3.2
LINGCOD	17.9	1.4	3.4	0.0	0.0	17.6	5.4	5.4	0.0	0.0	0.0
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	199.0	0.0	2.5	2.0	15.9	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.0	0.0	0.0	0.5	4.5	0.5	0.0	0.0
SPINYNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	2.5	0.0	3.9	0.0	1073.4	0.0	0.0	0.0	277.1	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	244.3	6.9	6.5	0.0	2.1	7.0	3.1	6.5	3.6	0.9	0.9
TOT RNDFISH	276.5	11.9	14.2	0.0	1274.6	30.3	11.5	30.3	297.1	40.7	109.4
ARROWTOOTH FL	133.8	194.6	190.7	0.0	0.0	3.2	0.9	52.2	0.0	71.7	5.4
DOVER SOLE	6.4	1.4	4.5	0.0	0.0	0.9	0.0	2.3	0.0	9.5	1.5
REX SOLE	3.2	0.7	1.6	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
ENGLISH SOLE	2.5	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
PETRALE SOLE	0.0	0.0	1.1	0.0	0.0	2.5	0.5	0.0	0.0	0.0	0.0
PAC SANDDAB	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER FLTFISH	5.9	7.1	8.8	0.0	0.0	83.0	13.1	0.7	0.0	3.6	0.0
TOT FLTFISH	156.3	203.8	207.0	0.0	0.0	89.5	14.5	56.9	0.0	85.4	7.9
SKATES	0.0	0.7	0.5	0.0	0.0	19.5	0.0	0.0	0.9	0.0	0.0
SPINY DOGFISH	21.1	25.4	25.4	0.0	0.0	1.1	0.0	0.0	0.0	24.9	61.7
RATFISH	0.0	0.0	0.0	0.0	0.0	0.9	1.6	0.7	0.0	1.1	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	21.1	26.1	25.9	0.0	0.0	21.5	1.6	0.7	0.9	26.1	61.7
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	0.1	0.0	0.0	0.0	0.0	0.5	4.5	0.0	2.3	0.0
OTHER INVERTS	2.7	0.5	0.7	0.0	0.0	0.0	1.6	0.2	0.1	0.0	0.0
TOT INVERTS	2.7	0.6	0.7	0.0	0.0	0.0	2.0	4.7	0.1	2.3	0.0
TOTAL CATCH	456.5	242.4	247.8	0.0	1274.6	141.4	29.5	92.6	298.1	154.5	179.0

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Table 27. --Continued.

HAUL #	155	156	157	158	159	160	161	162	163	164	165
MONTH/DAY/YEAR	9/ 7/86	9/ 7/86	9/ 7/86	9/ 8/86	9/ 8/86	9/ 8/86	9/ 8/86	9/ 8/86	9/ 8/86	9/ 8/86	9/11/86
LATITUDE START	48 27.2	48 21.4	48 22.6	48 21.5	48 24.1	48 22.3	48 21.9	48 22.1	48 23.0	48 22.4	48 7.0
LONGITUDE START	125 6.6	125 14.9	125 11.6	125 10.9	125 7.3	125 6.8	125 2.6	125 2.6	124 57.5	124 48.7	125 34.5
LATITUDE END	48 26.2	48 22.8	48 21.1	48 22.9	48 22.4	48 23.7	48 23.2	48 23.4	48 22.2	48 23.4	48 5.7
LONGITUDE END	125 8.4	125 15.0	125 11.5	125 10.1	125 6.9	125 7.2	125 2.3	125 1.9	124 58.6	124 46.7	125 33.4
LORAN START	28907.00	28880.70	28883.20	28873.30	28884.80	28870.50	28858.60	28859.30	28855.00	28830.20	28820.60
LORAN START	41773.00	41738.00	41751.10	41753.90	41768.90	41770.10	41786.50	41786.60	41807.30	41842.20	41663.80
LORAN END	28903.30	28891.80	28871.80	28882.20	28871.40	28881.60	28867.50	28867.70	28851.40	28833.70	28809.20
LORAN END	41765.10	41737.90	41751.20	41757.30	41759.70	41769.10	41788.50	41790.00	41802.80	41851.00	41667.90
GEAR DEPTH	177	181	179	181	115	113	159	159	115	112	152
DURATION IN HOURS	0.50	0.47	0.50	0.50	0.50	0.50	0.42	0.47	0.38	0.50	0.48
DISTANCE FISHED	2.96	2.72	2.78	2.78	3.15	2.57	2.41	2.59	1.93	3.17	2.79
PERFORMANCE / GEAR	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	5 /162	0 /170	0 /162	0 /170	0 /170
PAC WHITING	7.7	572.0	34.5	170.2	8.2	155.4	0.0	89.1	2.0	35.4	0.0
PACIFIC COD	0.9	0.0	5.2	0.0	5.9	29.0	0.0	6.4	2.3	10.9	7.3
SABLEFISH	120.5	3.1	14.5	0.0	3.2	2.7	0.0	42.2	0.0	0.9	73.9
LINGCOD	0.0	0.0	0.0	0.0	2.3	2.7	0.0	0.0	37.2	4.8	10.3
PAC OC PERCH	11.1	1.1	11.8	0.0	0.0	0.0	0.0	23.4	5.9	1.4	0.0
ROUGHEYE	0.5	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	7.3	1.4	7.3	0.0	0.0	0.2	0.0	2.0	0.0	0.2	0.2
SPLITNOSE	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	3.4	5.0	0.0	0.0	1.8	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0
CANARY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	16.3	48.7	41.8	16.8	0.9	3.2	0.0	2.5	0.0	67.4	4.3
TOT RNDFISH	164.3	626.3	117.5	190.4	25.4	193.2	0.0	173.0	47.4	122.2	95.9
ARROWTOOTH FL	201.4	27.9	26.8	4.1	159.4	113.9	0.0	107.3	88.9	6.4	24.9
DOVER SOLE	76.9	3.2	3.6	1.4	10.4	10.9	0.0	25.9	3.9	1.6	13.3
REX SOLE	12.7	0.9	2.5	0.5	1.3	3.2	0.0	7.3	0.0	0.7	0.8
ENGLISH SOLE	0.9	0.0	0.0	0.0	24.3	5.9	0.0	1.6	0.0	10.3	10.4
PETRALE SOLE	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.9	0.7	1.8
PAC SANDDAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
OTHER FLTFISH	18.8	0.9	5.9	2.6	0.1	0.2	0.0	1.6	0.0	0.2	3.4
TOT FLTFISH	310.7	32.9	38.8	8.5	196.1	136.1	0.0	143.6	93.7	20.0	54.7
SKATES	2.9	1.4	0.0	0.0	2.7	0.0	0.0	1.4	0.0	6.4	0.0
SPINY DOGFISH	54.2	9.5	24.9	3.9	43.5	32.2	0.0	103.2	10.1	6.6	0.0
RATFISH	0.0	1.1	0.7	0.0	0.0	0.0	0.0	0.0	2.0	0.0	4.1
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	57.2	12.0	25.6	3.9	46.3	32.2	0.0	104.6	12.1	12.9	4.1
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	1.6	1.8	0.0	0.0	0.5	0.0	0.0
OTHER INVERTS	21.3	0.0	6.1	0.1	0.7	2.6	0.0	2.4	3.5	0.0	5.2
TOT INVERTS	21.3	0.0	6.1	0.1	2.4	4.4	0.0	2.4	4.0	0.0	5.2
TOTAL CATCH	553.5	671.2	188.0	202.9	270.1	365.9	0.0	423.6	157.1	155.2	159.9

Table 27. --Continued.

HAUL #	166	167	168	169	170	171	172	173	174	175	176
MONTH/DAY/YEAR	9/11/86	9/11/86	9/11/86	9/11/86	9/12/86	9/12/86	9/12/86	9/13/86	9/13/86	9/13/86	9/13/86
LATITUDE START	48 6.9	48 5.9	48 7.5	48 7.3	48 6.6	48 10.5	48 9.2	48 10.0	48 9.4	48 11.5	48 10.5
LONGITUDE START	125 30.9	125 29.4	125 31.7	125 30.5	125 9.4	125 17.5	125 28.5	125 28.6	125 28.2	125 31.7	125 32.7
LATITUDE END	48 5.8	48 6.1	48 6.0	48 5.8	48 5.4	48 11.2	48 10.5	48 8.9	48 10.6	48 10.3	48 10.8
LONGITUDE END	125 29.1	125 30.0	125 30.6	125 30.1	125 9.3	125 15.8	125 28.3	125 28.1	125 28.3	125 31.8	125 32.7
LORAN START	28812.20	28802.00	28817.80	28814.00	28761.30	28807.80	28822.90	28828.50	28823.50	28845.70	28841.00
LORAN START	41676.80	41684.00	41674.00	41673.20	41755.20	41726.20	41685.60	41685.20	41686.50	41673.40	41669.90
LORAN END	28800.70		28805.10	28802.50	28752.50	28809.00	28831.30	28820.00	28832.00	28837.80	28842.70
LORAN END	41683.30		41677.80	41679.90	41755.50	41732.50	41686.00	41686.80	41686.10	41673.40	41669.80
GEAR DEPTH	137	134	141	139	128	188	139	137	139	144	152
DURATION IN HOURS	0.50	0.17	0.50	0.50	0.38	0.50	0.42	0.38	0.37	0.45	0.08
DISTANCE FISHED	3.00	0.76	3.07	2.87	2.20	2.43	2.30	2.07	2.19	2.11	0.44
PERFORMANCE / GEAR	0 /162	7 /170	0 /162	0 /162	1 /162	0 /170	0 /162	0 /170	0 /162	0 /170	5 /162
PAC WHITING	0.0	0.0	0.0	0.0	0.0	46.3	0.0	0.0	0.0	0.0	0.0
PACIFIC COD	0.0	0.0	0.7	0.4	0.0	5.9	0.0	0.0	0.0	0.0	0.0
SABLEFISH	0.0	0.0	1.4	0.0	0.0	14.5	0.0	0.0	0.0	0.0	0.0
LINGCOD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.0	79.8	2.5	0.0
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	253.8	0.0	0.0	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	5.8	0.0	7.3	2.0	5.0	0.0	30.4
DARKBLOTCHED	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	10.4	0.0	0.0	0.0	0.0	828.5
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	2.0	0.0	24.8	0.0	60.8	0.0	16.4	0.0	1.4
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	0.1	0.0	0.1	0.1	0.0	32.2	7.2	0.2	1.8	32.7	16.0
TOT RNDFISH	0.1	0.0	4.2	0.5	30.6	375.6	75.3	43.3	103.0	35.2	876.2
ARROWTOOTH FL	0.2	0.0	3.6	5.0	0.0	113.4	0.0	1.6	0.0	21.3	0.0
DOVER SOLE	0.0	0.0	0.0	0.0	0.0	4.5	0.6	0.9	6.1	7.1	0.0
REX SOLE	0.0	0.0	0.0	0.2	0.0	1.4	0.7	0.5	0.3	4.1	0.0
ENGLISH SOLE	5.1	0.0	22.2	19.7	1.4	0.0	10.4	9.5	27.2	3.6	1.8
PETRALE SOLE	0.7	0.0	0.5	0.3	17.7	0.0	2.9	0.7	7.7	0.0	0.0
PAC SANDDAB	1.8	0.0	1.4	3.4	0.0	0.0	1.6	1.5	1.1	0.0	0.0
OTHER FLTFISH	5.5	0.0	14.8	0.1	27.0	10.4	0.0	0.1	21.6	0.9	0.0
TOT FLTFISH	13.3	0.0	42.5	28.7	46.1	129.7	16.2	14.8	64.0	37.0	1.8
SKATES	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	7.7	0.0	31.7	22.0	1.8	0.0	14.7	20.4	0.9
RATFISH	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.5	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.0	0.0	10.6	0.0	31.7	30.8	1.8	0.0	15.2	20.4	0.9
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	0.4	0.0	3.7	2.0	0.0	2.5	0.7	0.0	0.0	1.0	0.0
TOT INVERTS	0.4	0.0	3.7	2.0	0.9	2.5	0.7	0.0	0.0	1.0	0.0
TOTAL CATCH	13.8	0.0	60.9	31.2	109.3	538.6	94.0	58.1	182.3	93.5	878.9

Table 27. --Continued.

HAUL #	177	178	179	180	181	182	183	184	185	186	187
MONTH/DAY/YEAR	9/13/86	9/13/86	9/13/86	9/15/86	9/15/86	9/15/86	9/15/86	9/15/86	9/16/86	9/16/86	9/17/86
LATITUDE START	48 11.7	48 14.2	48 15.1	48 19.1	48 16.1	48 13.6	48 14.8	48 13.8	48 18.1	48 18.4	48 28.7
LONGITUDE START	125 33.5	125 27.6	124 55.0	124 52.3	125 13.1	125 24.8	125 28.3	125 36.7	125 24.0	125 13.4	124 57.1
LATITUDE END	48 12.5	48 15.1	48 16.5	48 17.9	48 15.4	48 14.7	48 14.5	48 14.6	48 19.0	48 19.9	48 29.0
LONGITUDE END	125 33.4	125 25.5	124 54.1	124 53.5	125 12.6	125 23.9	125 30.1	125 38.5	125 24.7	125 12.9	124 59.5
LORAN START	28851.00	28856.20	28789.60	28814.00	28838.40	28845.90	28861.40	28872.50	28876.30	28856.00	28898.20
LORAN START	41657.00	41688.60	41813.20	41825.60	41743.80	41699.30	41686.20	41654.80	41702.20	41743.30	41812.00
LORAN END	28856.30	28858.10	28798.20	28806.90	28831.70	28851.40	28863.10	28881.60	28883.90	28866.00	28906.10
LORAN END	41667.20	41696.40	41817.40	41820.30	41745.60	41702.40	41679.30	41648.10	41699.80	41745.50	41802.30
GEAR DEPTH	155	126	119	148	227	115	141	177	128	187	97
DURATION IN HOURS	0.27	0.50	0.50	0.50	0.32	0.38	0.50	0.50	0.28	0.50	0.50
DISTANCE FISHED	1.44	3.06	2.85	2.80	1.56	2.13	2.35	2.63	1.80	2.83	3.06
PERFORMANCE / GEAR	1 /170	0 /162	0 /162	0 /170	1 /170	1 /162	0 /170	7 /162	1 /170	0 /162	0 /162
PAC WHITING	0.0	8.4	271.7	81.2	28.6	2.5	0.0	0.0	0.0	29.9	0.0
PACIFIC COD	0.0	1.1	23.4	2.5	2.7	0.0	2.3	0.0	1.3	24.5	0.0
SABLEFISH	0.0	0.0	7.7	5.5	11.6	0.0	0.0	11.8	2.6	26.5	0.0
LINGCOD	0.0	1.2	0.0	0.0	0.0	17.1	18.1	10.4	26.6	0.0	165.2
PAC OC PERCH	2.6	0.0	0.0	0.0	1.9	0.0	2.5	23.1	0.0	4.1	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	1.1	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	3.2	0.0	14.1	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.1	12.5	0.0	0.0	0.0	0.0	13.2	0.0
SPINOSE	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.7	0.0
YELLOWTAIL	0.0	0.0	0.0	173.7	0.0	0.0	0.0	0.0	671.9	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0
CANARY	0.0	0.0	0.0	1.8	0.0	60.8	6.1	5.2	26.4	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.4	0.0	0.0	0.0	5.0	9.7	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	5.4	0.0	370.2	14.7	81.9	0.1	2.6	41.2	20.6	46.0	0.0
TOT RNDFISH	8.0	10.7	673.0	280.0	139.9	83.7	31.6	110.8	765.4	146.1	165.2
ARROWTOOTH FL	15.4	0.9	13.4	15.4	23.4	0.0	34.0	23.1	2.6	113.9	0.0
DOVER SOLE	4.8	0.0	2.3	47.2	9.8	2.7	4.8	2.3	10.9	4.8	0.0
REX SOLE	0.9	0.0	3.2	18.1	2.0	0.0	2.0	0.9	1.3	2.6	0.0
ENGLISH SOLE	3.5	16.6	32.0	2.3	0.0	0.5	8.6	0.0	16.7	0.0	0.0
PETRALE SOLE	0.0	0.3	3.4	5.0	0.0	7.9	0.9	0.7	1.3	0.0	36.5
PAC SANDDAB	0.0	5.7	1.4	0.0	0.0	0.2	2.5	0.0	0.0	0.0	0.0
OTHER FLTFISH	0.3	2.3	3.8	4.8	0.6	33.1	2.0	0.0	6.7	13.9	173.5
TOT FLTFISH	24.9	25.7	59.4	92.8	35.8	44.5	54.9	27.0	39.5	135.2	210.0
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	2.0	0.0
SPINY DOGFISH	24.3	2.5	99.3	22.9	2.0	9.1	134.7	102.1	2343.0	19.3	1528.4
RATFISH	0.0	0.0	0.0	1.1	0.0	0.0	0.9	0.2	0.0	0.3	78.9
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	24.3	2.5	99.3	24.0	2.0	9.1	135.6	107.0	2343.0	21.6	1607.3
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	47.6
OTHER INVERTS	0.2	0.7	1.2	0.4	2.0	11.1	1.2	0.0	0.0	1.0	11.8
TOT INVERTS	0.2	0.8	1.4	0.4	2.3	11.1	1.2	0.0	0.0	1.0	59.4
TOTAL CATCH	57.4	39.7	833.1	397.2	180.0	148.3	223.3	244.8	3147.9	303.8	2042.0

Table 27.--Continued.

HAUL #	188	189	190	191	192	193	194	195	196	197	198
MONTH/DAY/YEAR	9/17/86	9/17/86	9/17/86	9/17/86	9/17/86	9/19/86	9/19/86	9/19/86	9/19/86	9/19/86	9/19/86
LATITUDE START	48 28.3	48 28.0	48 27.0	48 27.0	48 28.1	48 26.3	48 26.2	48 23.1	48 21.6	48 22.7	48 21.7
LONGITUDE START	124 58.2	125 4.9	125 0.9	125 1.6	124 51.8	124 48.8	125 2.7	125 14.0	125 13.5	125 10.8	125 5.1
LATITUDE END	48 28.7	48 28.8	48 26.0	48 27.3	48 29.0	48 25.7	48 27.4	48 21.8	48 23.0	48 21.2	48 22.9
LONGITUDE END	125 0.4	125 3.1	125 0.9	125 3.7	124 49.9	124 51.0	125 3.8	125 15.0	125 13.0	125 10.2	125 5.1
LORAN START	28897.70	28909.40	28893.30	28895.00	28881.80	28861.40	28890.90	28891.50	28879.40	28881.90	28862.00
LORAN START	41807.50	41780.20	41795.90	41793.10	41833.60	41844.30	41758.20	41742.10	41743.40	41754.40	41776.40
LORAN END	28905.50	28911.90	28885.80	28901.60	28885.00	28861.40	28902.70	28884.30	28888.60	28869.50	28871.40
LORAN END	41798.70	41787.70	41795.50	41784.50	41842.00	41835.30	41784.50	41737.60	41745.80	41756.30	41777.00
GEAR DEPTH	101	154	176	168	254	326	177	183	181	179	128
DURATION IN HOURS	0.50	0.50	0.30	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.42
DISTANCE FISHED	2.82	2.63	1.80	2.70	2.91	2.85	2.65	2.70	2.65	2.87	2.33
PERFORMANCE / GEAR	0 /170	0 /162	1 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170
PAC WHITING	0.0	0.7	1.8	1.1	1.3	67.6	15.9	280.8	164.2	18.5	0.7
PACIFIC COD	0.0	40.4	17.9	5.4	2.0	0.0	4.8	0.0	2.5	2.1	2.1
SABLEFISH	0.0	7.5	1.5	6.6	179.8	39.5	42.4	128.8	36.1	0.6	0.0
LINGCOD	83.8	110.7	11.0	23.8	6.6	0.0	20.4	0.0	0.0	0.0	0.0
PAC OC PERCH	0.0	1.1	0.1	0.3	2.9	0.0	4.3	0.5	2.8	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	1.6	0.5	0.0	2.9	1.4	0.7	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.4	2.3	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
STRIPETAIL	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	0.0	7.2	8.3	2.0	3.6	9.2	61.1	154.2	243.1	22.7	1.3
TOT RNDFISH	83.8	167.7	40.6	40.2	197.9	116.7	148.8	567.7	451.4	49.2	4.2
ARROWTOOTH FL	0.0	139.9	61.9	83.7	66.7	28.8	75.5	55.3	39.2	24.5	11.9
DOVER SOLE	0.0	2.7	9.3	5.0	18.9	35.2	30.4	2.3	2.3	2.2	1.4
REX SOLE	0.0	2.5	0.1	0.5	0.5	0.0	8.6	0.0	3.2	3.5	1.0
ENGLISH SOLE	0.0	5.9	4.8	1.8	2.9	0.0	1.8	1.5	0.0	0.3	2.7
PETRALE SOLE	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
PAC SANDDAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER FLTFISH	23.6	56.0	46.4	51.7	0.0	0.0	0.1	0.6	7.8	7.9	0.0
TOT FLTFISH	23.6	207.1	123.4	142.6	89.0	64.0	116.4	59.7	52.5	38.6	17.0
SKATES	0.0	7.3	0.0	12.0	1.2	2.1	6.6	0.7	0.0	3.3	0.0
SPINY DOGFISH	1379.6	104.3	65.1	135.6	27.4	6.1	2.7	45.1	13.4	9.2	11.6
RATFISH	14.4	2.3	2.7	1.4	9.5	5.7	2.4	2.7	0.0	0.0	2.2
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	1393.9	113.9	67.8	149.0	38.2	13.9	11.7	48.6	13.4	12.5	13.7
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	0.0	5.0	0.0	0.0	1.8	1.8	0.0	0.0	8.8	2.3
OTHER INVERTS	0.0	0.0	0.5	0.0	0.0	2.2	4.4	0.6	0.0	5.6	5.4
TOT INVERTS	0.0	0.0	5.5	0.0	0.0	4.0	6.2	0.6	0.0	14.4	7.7
TOTAL CATCH	1501.4	488.6	237.4	331.8	325.1	198.5	283.2	676.5	517.3	114.7	42.7

Table 27. --Continued.

HAUL #	199	200	201	202	203	204	205	206	207	208	209
MONTH/DAY/YEAR	9/20/86	9/20/86	9/20/86	9/20/86	9/20/86	9/20/86	9/21/86	9/21/86	9/21/86	9/21/86	9/21/86
LATITUDE START	48 19.1	48 19.2	48 14.3	48 13.8	48 18.4	48 15.9	48 12.0	48 11.2	48 11.0	48 7.5	48 5.4
LONGITUDE START	124 51.9	125 1.9	125 7.8	125 25.8	125 23.7	125 38.4	125 33.4	125 31.6	125 29.0	125 29.8	125 10.2
LATITUDE END	48 17.7	48 18.1	48 12.8	48 15.3	48 19.9	48 16.6	48 10.4	48 12.8	48 10.6	48 6.0	48 5.0
LONGITUDE END	124 52.8	125 3.2	125 8.0	125 25.3	125 23.9	125 36.4	125 33.5	125 31.6	125 28.7	125 29.3	125 9.4
LORAN START	28812.20	28836.50	28813.20	28849.50	28877.60	28890.20	28852.50	28843.60	28836.50	28813.60	28761.70
LORAN START	41827.40	41788.30	41763.50	41695.30	41703.50	41648.30	41667.40	41673.80	41683.40	41680.90	41752.50
LORAN END	28804.00	28830.70	28803.10	28858.70	28888.90	28891.40	28842.10	28854.40	28832.80	28802.50	28750.00
LORAN END	41823.00	41782.60	41762.30	41697.30	41702.80	41655.80	41667.20	41673.80	41684.70	41682.50	41754.90
GEAR DEPTH	95	190	119	123	123	144	152	148	141	137	134
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.17	0.50	0.50
DISTANCE FISHED	2.76	2.74	2.69	2.76	2.80	2.91	2.82	2.87	0.89	2.78	2.74
PERFORMANCE / GEAR	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	0 /162	0 /170	7 /162	0 /170	0 /170
PAC WHITING	384.4	18.8	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	1.1
PACIFIC COD	12.0	0.0	6.8	0.0	0.0	0.0	0.7	11.3	0.0	0.0	5.4
SABLEFISH	3.2	13.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2
LINGCOD	3.4	0.0	0.0	21.3	17.8	3.8	17.0	0.0	0.0	2.7	26.3
PAC OC PERCH	0.0	5.4	0.3	1.8	0.2	0.0	0.0	0.1	0.0	0.1	0.0
ROUGHEYE	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	1.4	0.0	0.0	5.0	0.0	0.0	18.6
DARKBLOTCHED	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	165.1	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	173.2	0.0	218.9	0.0	0.0	18.8	0.0	0.0	76.9
REDSTRIPE	0.0	0.2	680.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	176.8	14.9	0.0	1.8	4.2	3.2	5.1	26.0	1.8	0.2	30.9
TOT RNDFISH	579.8	55.8	1026.1	24.9	255.8	6.9	22.7	61.8	1.8	3.1	169.5
ARROWTOOTH FL	6.8	16.8	45.8	1.6	1.8	1.1	4.5	21.3	0.0	10.4	151.5
DOVER SOLE	5.0	11.6	7.4	0.0	2.9	0.0	12.0	24.9	0.0	0.0	10.0
REX SOLE	2.3	0.7	0.0	0.1	0.0	0.0	3.3	7.7	0.0	1.4	0.5
ENGLISH SOLE	10.0	0.7	1.4	5.9	5.9	5.7	6.3	3.4	0.0	9.5	0.8
PETRALE SOLE	2.5	0.0	3.6	7.5	3.9	6.1	0.0	0.9	0.0	4.8	19.1
PAC SANDDAB	0.0	0.0	0.0	19.5	0.0	0.0	0.0	0.0	0.0	8.6	0.5
OTHER FLTFISH	2.8	1.2	7.5	0.1	10.4	6.4	0.2	3.4	0.0	9.3	106.0
TOT FLTFISH	29.3	30.9	65.7	34.7	24.9	19.3	26.3	61.7	0.0	44.0	288.3
SKATES	29.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	12.2	13.6	5.4	188.7	199.5	169.9	2.7	0.0	0.0	0.0	239.0
RATFISH	0.0	0.5	0.5	0.1	0.5	0.0	0.0	0.5	0.0	0.0	18.1
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	0.0	0.0
TOT ELASMOBRH	41.3	14.1	5.9	190.2	200.0	169.9	2.7	0.5	10.4	0.0	257.2
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1
SEA URCHINS	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
OTHER INVERTS	0.6	1.8	0.0	1.2	0.0	0.0	0.9	1.3	0.0	0.0	1.8
TOT INVERTS	0.6	3.4	0.0	1.2	0.0	0.1	0.9	1.4	0.0	0.1	4.0
TOTAL CATCH	651.0	104.1	1097.7	251.0	480.8	196.2	52.7	125.4	12.2	47.1	719.0

Table 27. --Continued.

HAUL #	210	211	212	213	214	215	216	217	218	219	220
MONTH/DAY/YEAR	9/21/86	9/21/86	9/22/86	9/22/86	9/25/86	9/25/86	9/25/86	9/25/86	9/25/86	9/25/86	9/25/86
LATITUDE START	48 12.2	48 6.2	48 4.9	48 7.7	48 15.6	48 16.1	48 11.5	48 11.6	48 10.6	48 10.6	48 13.3
LONGITUDE START	125 8.3	124 57.6	124 57.5	124 56.0	124 51.8	124 51.7	124 53.9	124 53.7	124 55.1	124 55.4	124 55.8
LATITUDE END	48 10.7	48 7.6	48 6.4	48 9.3	48 14.4	48 14.8	48 10.1	48 10.1	48 12.2	48 12.3	48 14.8
LONGITUDE END	125 7.9	124 56.6	124 56.5	124 55.6	124 53.1	124 52.6	124 53.8	124 53.6	124 54.7	124 55.3	124 55.2
LORAN START	28799.10	28730.10	28720.50	28737.40	28785.00	28789.10	28760.10	28760.00	28756.10	28757.40	28778.30
LORAN START	41751.10	41799.10	41799.00	41805.70	41825.50	41826.40	41815.30	41816.30	41810.20	41809.30	41809.00
LORAN END	28797.10	28738.00	28728.60	28748.20	28779.50	28781.60	28749.40	28749.40	28767.30	28769.40	28787.60
LORAN END	41762.10	41803.20	41803.30	41807.90	41820.10	41822.20	41814.90	41815.70	41812.60	41810.50	41812.00
GEAR DEPTH	119	106	99	95	62	62	70	68	91	93	126
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	2.87	2.83	2.94	3.00	2.74	2.61	2.63	2.63	3.09	3.06	2.76
PERFORMANCE / GEAR	0 /170	0 /170	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	1.1	2927.7	717.5	417.3	0.0	6.4	17.0	10.7	34.5	110.2	193.2
PACIFIC COD	26.8	13.6	0.0	0.5	0.5	0.7	48.1	14.5	51.5	7.7	0.0
SABLEFISH	0.7	198.4	52.6	104.8	0.2	0.3	0.8	0.1	2.0	2.0	9.1
LINGCOD	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	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	0.1
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	0.0	0.0	0.5
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	46.3	0.0	0.0	0.0	0.0	1.1	0.0	0.0	2.5	0.0	0.6
REDSTRIPE	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	1.3	0.9	2.7	2.0	0.0	14.4	2.7	5.5	1.1	1.4	1.8
TOT RNDFISH	81.3	3140.6	772.8	524.6	0.8	22.9	69.0	31.5	97.1	121.4	205.4
ARROWTOOTH FL	10.2	12.5	3.2	9.1	0.0	0.0	1.1	0.0	6.6	14.3	15.0
DOVER SOLE	5.7	10.2	2.0	1.6	0.1	0.7	0.2	0.7	16.8	24.5	106.6
REX SOLE	3.2	5.7	3.2	4.5	0.0	0.4	14.7	4.1	48.1	66.9	70.3
ENGLISH SOLE	69.9	10.2	5.5	17.7	0.0	12.2	102.5	37.6	95.0	40.1	7.3
PETRALE SOLE	0.0	20.4	22.5	23.8	0.0	0.0	0.2	0.0	11.6	15.0	9.3
PAC SANDDAB	10.4	0.0	0.1	2.7	0.0	9.2	19.5	13.2	7.0	4.1	0.1
OTHER FLTFISH	1.0	73.4	0.0	2.7	0.5	20.2	44.2	23.2	4.6	3.7	10.1
TOT FLTFISH	100.4	132.4	36.5	62.1	0.7	41.7	182.5	78.8	189.7	168.6	219.0
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	11.1	1.6	26.8	0.0	2.5
SPINY DOGFISH	81.0	491.9	51.5	12.7	0.0	4.8	5.0	0.9	12.0	7.9	0.0
RATFISH	2.3	0.0	0.0	2.3	0.0	0.0	0.0	0.0	1.8	13.6	0.2
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	15.4	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	83.2	491.9	51.5	15.0	15.4	4.8	16.1	2.5	40.6	21.5	2.7
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.5	0.0	1.1	0.7	1.6	0.1	0.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	0.7	0.0	0.5	0.0	0.0	0.0	7.0	36.1	10.9	6.8	24.0
TOT INVERTS	0.7	0.0	0.5	0.5	0.0	1.1	7.7	37.6	11.0	6.8	24.0
TOTAL CATCH	265.6	3764.8	861.3	602.1	16.9	70.5	275.4	150.5	338.4	318.3	451.2

Table 27. --Continued.

HAUL #	221	222	223	224	225	226	227	228	229	230	231
MONTH/DAY/YEAR	9/25/86	9/26/86	9/26/86	9/26/86	9/26/86	9/27/86	9/27/86	9/27/86	9/28/86	9/28/86	9/28/86
LATITUDE START	48 13.5	48 2.3	48 2.5	47 53.8	47 53.8	47 54.6	48 13.2	48 13.3	48 16.4	48 15.1	48 14.5
LONGITUDE START	124 55.9	124 56.7	124 56.5	125 14.8	125 14.9	125 11.7	124 59.3	124 59.5	124 52.7	124 54.2	124 55.0
LATITUDE END	48 15.0	48 0.9	48 1.1	47 52.6	47 52.5	47 53.3	48 12.2	48 12.1	48 15.2	48 13.9	48 16.3
LONGITUDE END	124 55.1	124 57.0	124 56.9	125 14.0	125 14.1	125 10.7	124 58.8	124 59.0	124 53.3	124 54.5	124 54.5
LORAN START	28780.10	28699.60	28700.60	28685.00	28684.90	28682.70	28785.90	28787.10	28794.30	28787.70	28785.40
LORAN START	41808.70	41800.60	41801.60	41733.60	41733.40	41744.70	41795.60	41794.80	41822.50	41816.10	41812.70
LORAN END	28739.10	28690.10	28691.50	28674.70	28674.10	28671.50	28776.90	28777.20	28786.00	28779.10	28797.60
LORAN END	41812.70	41799.10	41799.40	41736.10	41735.80	41748.00	41797.10	41796.10	41819.80	41814.50	41815.80
GEAR DEPTH	128	93	93	315	316	181	256	258	73	91	124
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.38	0.38	0.50	0.50	0.50
DISTANCE FISHED	2.93	2.63	2.69	2.48	2.61	2.67	2.06	2.28	2.43	2.30	3.41
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	7 /162	1 /162	1 /162	0 /162	0 /162	0 /162
PAC WHITING	226.3	822.8	288.9	84.8	142.9	0.0	2.0	1.0	92.5	127.7	123.4
PACIFIC COD	0.0	5.2	3.9	0.0	0.0	4.5	0.9	0.0	16.8	5.0	0.0
SABLEFISH	4.5	2.9	2.0	20.4	32.4	43.1	3.4	0.5	2.3	2.5	2.7
LINGCOD	0.0	6.6	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	81.9	47.9	5.7	1.2	0.0	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	13.6	4.5	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.2	0.0	0.0	19.5	7.7	0.0	0.0	0.0	0.0	0.0	0.1
SPLITNOSE	0.0	0.0	0.0	2.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0	2.9
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.1
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER ROUNDFISH	0.0	7.8	101.3	58.5	62.0	57.9	14.0	1.7	5.8	2.5	15.2
TOT ROUNDFISH	231.1	845.3	396.1	281.6	299.7	150.2	22.2	3.1	117.4	137.7	144.5
ARROWTOOTH FL	11.3	3.4	0.1	65.8	74.2	10.9	28.6	7.5	15.4	10.2	40.8
DOVER SOLE	87.3	1.4	0.0	52.6	71.0	6.1	25.9	9.1	3.9	3.4	22.7
REX SOLE	61.7	9.1	1.4	7.9	23.6	0.0	0.3	0.4	10.2	4.5	20.2
ENGLISH SOLE	5.9	12.7	9.5	0.8	1.4	0.0	0.0	0.0	31.8	5.2	15.4
PETRALE SOLE	4.5	3.2	0.7	1.6	0.0	1.4	0.0	0.9	3.4	2.4	3.6
PAC SANDDAB	0.0	26.3	23.6	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0
OTHER FLTFISH	12.0	0.0	0.0	0.0	14.8	0.7	3.4	0.0	0.2	0.8	12.7
TOT FLTFISH	182.8	56.0	35.3	128.7	184.9	19.1	58.2	17.8	67.1	26.5	115.4
SKATES	2.5	0.1	0.0	28.6	3.6	25.1	42.4	10.9	0.0	0.0	15.4
SPINY DOGFISH	3.6	25.9	10.7	33.1	16.3	475.8	0.0	2.4	6.4	7.7	56.0
RATFISH	1.8	0.0	0.0	10.7	15.9	5.2	0.0	0.5	0.8	0.5	6.5
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	7.9	26.0	10.7	72.3	35.8	506.2	42.4	13.8	7.2	8.2	78.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	1.4	0.1	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
OTHER INVERTS	1.4	5.2	1.8	23.6	4.7	1.1	3.8	0.0	6.8	6.8	0.0
TOT INVERTS	1.4	5.2	1.9	23.6	4.8	1.1	4.7	0.0	8.2	6.9	0.0
TOTAL CATCH	423.2	932.5	444.0	506.3	525.2	676.6	127.5	34.8	199.8	179.3	338.0

Table 27. --Continued.

HAUL #	232	233	234
MONTH/DAY/YEAR	9/28/86	9/28/86	9/28/86
LATITUDE START	48 16.7	48 15.3	48 12.0
LONGITUDE START	124 55.4	124 57.6	124 59.2
LATITUDE END	48 15.6	48 16.2	48 13.3
LONGITUDE END	124 56.0	124 57.0	124 59.5
LORAN START	28802.90	28796.90	28776.50
LORAN START	41812.30	41803.10	41795.50
LORAN END	28795.60	28803.00	28787.00
LORAN END	41809.60	41805.70	41794.80
GEAR DEPTH	183	201	263
DURATION IN HOURS	0.50	0.33	0.42
DISTANCE FISHED	2.22	1.94	2.46
PERFORMANCE / GEAR	0 /162	0 /162	0 /162
PAC WHITING	145.8	9.3	3.2
PACIFIC COD	39.5	36.7	0.0
SABLEFISH	1.4	3.6	7.7
LINGCOD	2.5	2.5	0.0
PAC OC PERCH	0.0	7.3	0.0
ROUGHEYE	0.0	0.0	2.0
SILVERGRAY	0.0	0.0	0.0
DARKBLOTCHED	2.3	10.0	0.6
SPLITNOSE	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0
CANARY	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0
OTHER RNDFISH	41.6	52.0	16.0
TOT RNDFISH	233.0	121.4	29.5
ARROWTOOTH FL	15.2	24.5	12.0
DOVER SOLE	102.5	67.1	16.5
REX SOLE	60.3	11.6	0.0
ENGLISH SOLE	1.6	0.0	0.0
PETRALE SOLE	0.0	0.0	0.7
PAC SANDDAB	0.0	0.0	0.0
OTHER FLTFISH	9.5	2.5	11.4
TOT FLTFISH	189.1	105.7	40.9
SKATES	29.9	28.3	10.4
SPINY DOGFISH	77.8	7.7	5.4
RATFISH	36.5	12.7	0.5
OTHER ELASMOBRH	0.0	0.0	0.0
TOT ELASMOBRH	144.2	48.8	16.3
DUNGENESS CRAB	0.0	0.0	0.0
SQUID	0.0	0.0	0.0
SEA URCHINS	3.6	1.8	3.2
OTHER INVERTS	10.2	10.3	1.4
TOT INVERTS	13.8	12.1	4.5
TOTAL CATCH	580.2	287.9	91.3

Table 28.--Station and catch data for the fishing vessel Pat San Marie (catch in kilograms, depth in meters, and distance in kilometers).

HAUL #	1	2	3	4	5	6	7	8	9	10	11
MONTH/DAY/YEAR	7/16/86	7/16/86	7/16/86	7/16/86	7/16/86	7/16/86	7/16/86	7/17/86	7/17/86	7/17/86	7/17/86
LATITUDE START	36 52.5	36 54.2	37 0.8	37 0.4	37 2.0	37 3.6	37 7.1	37 9.8	37 11.9	37 15.7	37 16.1
LONGITUDE START	122 7.8	122 9.2	122 17.8	122 25.5	122 28.5	122 40.1	122 29.6	122 34.9	122 30.1	122 39.4	122 49.4
LATITUDE END	36 53.8	36 55.0	37 1.4	37 1.6	37 2.8	37 4.8	37 5.8	37 11.0	37 13.3	37 17.0	37 17.5
LONGITUDE END	122 8.8	122 10.7	122 19.3	122 24.5	122 30.0	122 41.4	122 28.5	122 35.5	122 30.8	122 40.3	122 50.0
LORAN START	16248.70	16242.20	16204.80	27342.00	27327.50	27283.10	27312.90	27287.90	27300.70	27258.80	27225.00
LORAN START	42859.60	42871.80	42921.40	42928.20	42940.70	42962.70	42970.60	42990.70	42997.70	43027.40	43038.50
LORAN END	16244.90	16236.90	16202.80	27343.50	27320.40	27276.30	27319.80	27282.80	27295.40	27252.50	27219.80
LORAN END	42868.10	42878.40	42926.40	42933.80	42947.10	42970.40	42962.00	42998.40	43005.80	43035.40	43046.20
GEAR DEPTH	95	88	77	210	117	276	95	101	80	99	199
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	2.59	2.69	2.41	2.72	2.67	2.89	2.96	2.57	2.67	2.82	3.15
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	46.5	369.0	51.7	6.6	50.3	64.9	71.7	171.9	291.0	1.8	234.1
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	0.7	1.3	4.1	0.7	3.2	5.0	0.6	391.4	365.4	0.0	201.4
LINGCOD	1.1	1.3	8.2	0.0	0.0	0.0	0.5	0.5	2.5	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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.2
YELLOWTAIL	0.0	26.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.2	0.0	0.0	0.5	0.5	0.0	0.1	16.3	0.0	0.0	112.0
SHORTBELLY	0.0	0.1	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.3	0.0
BOCACCIO	0.3	0.0	1.4	1.4	0.9	0.0	9.1	7.3	1.8	0.2	5.2
CANARY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.1	0.0	0.0	31.8	0.9	14.1	0.5	0.0	0.1	0.7	12.2
OTHER RNDFISH	60.3	59.1	55.2	0.9	10.1	2.6	76.0	99.3	35.8	24.4	2.3
TOT RNDFISH	109.3	456.9	121.2	42.0	65.8	92.1	158.5	686.7	696.6	27.5	567.5
ARROWTOOTH FL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	5.2	1.3	0.9	8.6	16.8	4.1	1.4	22.7	2.9	13.4	75.5
REX SOLE	1.4	3.9	0.2	0.1	0.8	17.7	4.5	5.0	6.4	7.0	17.2
ENGLISH SOLE	19.3	7.8	15.2	0.2	15.9	1.4	21.8	9.1	37.2	1.1	4.1
PETRALE SOLE	0.0	0.0	0.7	0.0	1.2	0.0	2.3	1.4	0.5	1.6	0.9
PAC SANDDAB	12.5	0.0	5.9	0.0	35.8	0.0	15.0	33.1	13.2	3.9	0.0
OTHER FLTFISH	0.6	0.0	0.1	0.0	0.0	2.3	1.0	0.2	0.8	0.1	0.5
TOT FLTFISH	38.9	13.0	23.0	9.0	70.5	25.4	45.9	71.4	60.9	27.2	99.2
SKATES	0.3	0.0	0.1	0.1	0.0	3.3	0.8	0.1	2.3	0.0	0.0
SPINY DOGFISH	0.0	1427.9	0.0	0.0	2.9	0.0	2.3	5.4	0.0	2.7	0.9
RATFISH	0.0	0.0	0.0	0.0	0.0	1.8	0.5	1.4	0.0	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.8	0.5	29.5	0.0
TOT ELASMOBRH	0.3	1427.9	0.1	0.1	2.9	5.1	3.5	77.7	2.8	32.2	0.9
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	19.5	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	0.0	55.3	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	3.6	6.5	0.0	0.0	4.8	2.4	0.9	5.5	6.8	3.4	0.7
TOT INVERTS	3.9	6.5	0.0	0.0	4.8	57.7	0.9	5.7	7.3	22.9	0.7
TOTAL CATCH	152.4	1904.3	144.4	51.2	144.0	180.3	208.8	841.5	767.5	109.8	667.2

Table 28.--Continued.

HAUL #	12	13	14	15	16	17	18	19	20	21	22
MONTH/DAY/YEAR	7/17/86	7/17/86	7/17/86	7/18/86	7/18/86	7/18/86	7/18/86	7/18/86	7/18/86	7/18/86	7/19/86
LATITUDE START	37 17.7	37 20.2	37 18.8	37 23.9	37 26.3	37 25.9	37 30.3	37 34.0	37 33.4	37 40.5	37 41.1
LONGITUDE START	122 52.8	122 48.4	122 37.2	122 43.0	122 42.1	122 51.0	122 40.8	122 49.5	122 57.8	122 56.5	123 5.5
LATITUDE END	37 19.0	37 21.7	37 17.8	37 25.3	37 27.7	37 27.1	37 31.7	37 35.3	37 34.7	37 41.4	37 42.1
LONGITUDE END	122 53.8	122 48.5	122 35.6	122 43.4	122 42.2	122 51.8	122 41.2	122 50.1	122 58.1	122 55.1	123 6.4
LORAN START	27210.90	27218.40	27259.10	27226.80	27224.00	27196.50	27218.30	27180.40	27157.80	16004.70	15975.20
LORAN START	43049.30	43059.20	43042.20	43074.30	43086.40	43090.80	43106.80	43131.70	43133.70	43169.20	43176.70
LORAN END	27204.70	27214.40	27267.20	27221.80	27220.00	27190.90	27213.30	27175.10	27153.70	16006.20	15969.80
LORAN END	43057.20	43066.90	43035.10	43082.40	43094.00	43097.60	43114.50	43138.80	43140.60	43173.10	43181.80
GEAR DEPTH	302	119	90	86	79	124	64	80	121	59	152
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	3.15	2.67	3.04	2.78	2.61	2.54	2.65	2.57	2.48	2.63	2.17
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	76.7	26.8	337.0	73.0	61.2	49.7	214.5	53.1	49.9	108.9	10.7
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	1.6	198.4	3.2	35.4	9.2	25.6	0.0	0.7	4.1	0.0	2.0
LINGCOD	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.5	0.0	0.1	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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	13.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	2.0	2.7	0.0	285.1	0.0	22.7	4.5	0.0	34.9	0.0	30.8
SHORTBELLY	0.0	0.1	0.0	1.7	0.1	1.0	0.7	0.5	34.7	0.5	0.5
BOCACCIO	2.0	1.8	2.0	2.9	0.7	1.9	2.3	1.8	11.1	0.2	10.9
CANARY	0.0	1.1	0.0	0.0	0.0	2.2	0.7	0.0	0.0	0.0	1.6
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	2.3	0.1	0.6	0.1	0.0	0.7	0.1	0.1	122.7	2.0	176.9
OTHER RNDFISH	0.1	9.2	59.4	84.4	6.5	6.4	24.4	27.5	10.9	12.2	5.4
TOT RNDFISH	99.0	241.1	402.3	482.6	78.7	110.1	247.3	84.2	268.3	123.9	238.8
ARROWTOOTH FL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	17.2	33.6	10.7	44.7	17.0	10.9	1.4	27.9	35.8	1.2	157.1
REX SOLE	0.5	7.7	4.5	4.3	1.6	6.6	2.3	4.3	7.0	16.8	24.3
ENGLISH SOLE	0.2	0.0	5.0	2.3	10.4	0.0	22.2	3.6	0.9	11.3	8.4
PETRALE SOLE	0.0	3.6	0.0	0.5	1.8	0.3	1.8	0.0	0.0	0.3	0.0
PAC SANDDAB	0.0	8.6	11.3	33.2	83.0	2.0	3.6	13.2	1.3	79.6	0.1
OTHER FLTFISH	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	11.6	0.7
TOT FLTFISH	18.0	53.5	31.5	84.9	113.9	19.8	31.4	49.0	45.0	120.8	200.6
SKATES	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.7
SPINY DOGFISH	0.0	0.0	2.7	6.8	1.4	2.0	0.0	9.1	2.9	2.3	0.0
RATFISH	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
OTHER ELASMOBRH	0.0	11.3	0.0	0.2	0.5	0.0	0.9	0.9	2.7	0.0	0.0
TOT ELASMOBRH	0.3	11.8	2.7	7.2	1.8	2.0	0.9	10.0	5.7	2.3	0.9
DUNGENESS CRAB	0.0	0.5	1.1	0.0	1.1	1.7	1.6	2.0	3.4	4.3	0.7
SQUID	0.0	1.4	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	0.1	4.8	14.1	19.3	9.1	0.0	11.8	10.4	1.8	138.3	2.0
TOT INVERTS	0.1	6.6	15.2	19.3	15.4	1.7	13.4	12.5	5.2	142.7	2.6
TOTAL CATCH	117.4	313.0	451.7	593.9	209.8	133.7	292.9	155.7	324.2	389.6	443.0

Table 28.--Continued.

HAUL #	23	24	25	26	27	28	29	30	31	32	33
MONTH/DAY/YEAR	7/19/86	7/19/86	7/19/86	7/19/86	7/19/86	7/19/86	7/20/86	7/20/86	7/20/86	7/20/86	7/20/86
LATITUDE START	37 47.0	37 48.3	37 50.3	37 52.8	37 54.5	37 54.4	37 57.9	37 54.1	38 0.5	38 2.4	38 5.5
LONGITUDE START	123 7.2	123 1.9	123 3.6	123 19.1	123 14.9	123 3.8	123 4.5	123 23.7	123 18.8	123 22.5	123 30.1
LATITUDE END	37 47.0	37 49.2	37 50.0	37 52.5	37 54.5	37 54.4	37 59.0	37 55.2	38 1.9	38 3.6	38 6.5
LONGITUDE END	123 7.1	123 0.6	123 5.4	123 18.1	123 13.0	123 2.0	123 4.9	123 24.7	123 19.3	123 23.1	123 29.2
LORAN START	15952.60	15965.40	15954.10	15898.10	15905.80	15940.60	15927.50	15879.30	15873.70	15855.50	15820.80
LORAN START	43206.30	43210.30	43220.90	43237.80	43244.50	43241.10	43258.00	43245.30	43273.80	43283.20	43298.40
LORAN END	15952.90	15966.90	15949.20	15902.00	15911.40	15946.30	15922.50	15872.80	15867.50	15849.60	15820.40
LORAN END	43206.40	43214.40	43220.20	43236.10	43244.40	43240.60	43263.70	43250.40	43280.10	43288.60	43302.50
GEAR DEPTH	75	77	86	108	101	86	75	146	124	121	271
DURATION IN HOURS	0.03	0.50	0.50	0.33	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	0.19	2.67	2.96	1.50	2.76	2.67	2.24	2.43	2.61	2.33	2.22
PERFORMANCE / GEAR	5 /162	0 /162	0 /162	1 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	0.0	390.1	183.7	70.1	798.3	758.6	477.6	168.1	183.3	8.0	2.0
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	0.0	1.8	5.0	5.0	7.3	10.3	5.4	15.0	7.3	0.0	0.0
LINGCOD	0.0	0.0	0.2	0.7	0.0	0.0	0.0	0.0	0.0	2.9	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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
YELLOWTAIL	0.0	0.0	0.0	1.8	13.1	0.0	0.0	0.0	5.7	336.5	1.6
CHILIPEPPER	0.0	0.0	0.9	0.9	0.1	0.0	0.0	43.8	366.5	266.7	5.0
SHORTBELLY	0.0	0.1	0.1	4.5	0.3	0.0	0.1	1.1	1.4	3.4	0.0
BOCACCIO	0.0	0.0	0.2	0.0	0.1	0.0	0.0	3.6	10.0	88.1	2.9
CANARY	0.0	0.0	0.0	1.6	1.1	0.0	0.0	0.0	1.1	188.9	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.1	0.0	0.0	41.7	3.4	0.0	0.0
OTHER RNDFISH	0.0	20.1	10.2	8.2	14.3	243.0	79.1	1.5	26.2	14.5	0.1
TOT RNDFISH	0.0	412.1	200.4	92.9	839.9	1011.9	562.3	274.7	604.8	909.0	14.2
ARROWTOOTH FL	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	3.2	2.3	23.1	35.8	7.9	11.3	49.7	19.1	6.8	3.4
REX SOLE	0.0	2.7	2.7	32.7	7.7	23.3	61.7	22.9	30.4	0.2	0.7
ENGLISH SOLE	0.0	9.5	14.1	5.7	15.4	1.4	20.4	8.4	20.0	4.6	0.5
PETRALE SOLE	0.0	1.4	2.3	1.1	3.6	2.8	1.8	1.1	0.0	2.3	0.0
PAC SANDDAB	0.0	46.3	35.4	16.8	43.1	1.9	2.7	2.5	27.9	10.3	0.0
OTHER FLTFISH	0.0	4.1	1.4	5.4	0.1	1.0	0.2	0.1	2.0	8.6	0.0
TOT FLTFISH	0.0	67.1	58.1	84.8	105.8	38.3	98.2	84.7	99.3	32.8	4.5
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	4.1	0.0	0.0	0.0	1.0	0.0	0.0	9.5	18.3	0.0
RATFISH	0.0	0.0	0.0	0.2	1.1	1.0	2.3	0.2	0.5	1.1	0.0
OTHER ELASMOBRH	0.0	0.4	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.0	4.4	0.0	0.2	1.1	1.9	6.0	0.2	10.0	19.5	0.0
DUNGENESS CRAB	0.0	0.5	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
OTHER INVERTS	0.0	0.0	2.7	9.1	0.0	14.0	12.8	0.0	0.0	0.2	0.0
TOT INVERTS	0.0	0.5	2.7	9.1	0.0	14.0	13.1	0.0	0.0	0.2	1.8
TOTAL CATCH	0.0	484.1	261.1	187.0	946.7	1066.0	679.6	359.7	714.1	961.5	20.5

Table 28. --Continued.

HAUL #	34	35	36	37	38	39	40	41	42	43	44
MONTH/DAY/YEAR	7/20/86	7/20/86	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86	7/21/86	7/22/86	7/22/86
LATITUDE START	38 4.7	38 7.6	38 11.2	38 12.3	38 14.5	38 15.8	38 20.2	38 19.4	38 15.9	38 21.6	38 22.7
LONGITUDE START	123 16.6	123 13.5	123 5.0	123 13.1	123 14.7	123 29.7	123 28.2	123 21.1	123 7.5	123 7.1	123 20.2
LATITUDE END	38 6.2	38 9.1	38 9.7	38 13.8	38 15.8	38 16.6	38 21.1	38 18.1	38 14.6	38 23.0	38 23.8
LONGITUDE END	123 16.5	123 13.0	123 4.8	123 13.4	123 15.2	123 30.6	123 29.1	123 20.0	123 6.5	123 8.2	123 21.5
LORAN START	15866.70	15866.40	15881.50	15851.20	15838.20	15785.00	15773.30	15799.20	15856.40	15837.00	15789.60
LORAN START	43292.50	43305.40	43321.20	43327.20	43336.90	43343.40	43362.40	43358.90	43343.00	43368.80	43373.30
LORAN END	15861.90	15862.80	15887.40	15844.60	15831.70	15779.30	15767.00	15807.50	15864.40	15827.70	15781.10
LORAN END	43299.30	43312.40	43314.10	43334.00	43343.10	43346.90	43366.10	43353.40	43337.10	43376.90	43378.00
GEAR DEPTH	126	113	77	104	110	362	214	130	86	64	119
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	2.74	2.94	2.82	2.82	2.63	1.93	2.09	2.83	2.80	3.52	2.78
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	278.5	799.7	1511.2	921.0	322.0	0.9	22.2	147.9	808.9	1583.7	490.2
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	3.9	25.0	2.9	17.6	10.2	14.1	27.2	21.3	26.3	0.0	1.4
LINGCOD	6.1	1.6	0.0	0.0	0.0	0.0	31.3	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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.1
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.9	2.5	0.0	0.0	0.0	0.0
YELLOWTAIL	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	1.0	23.1	0.0	0.0	60.3	0.0	0.0	2.3
SHORTBELLY	0.8	0.0	0.0	1.8	2.7	0.0	2.9	5.0	0.0	0.0	1.8
BOCACCIO	6.1	3.2	0.0	4.3	0.9	0.0	54.0	2.7	0.0	0.0	0.9
CANARY	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	2.3
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	17.9	2.1	0.0	0.1	1.8	0.0	44.5	16.6	0.0	0.0	0.2
OTHER RNDFISH	19.5	17.0	60.1	11.8	13.7	4.5	52.3	35.7	52.1	202.7	7.0
TOT RNDFISH	335.8	848.6	1574.1	957.6	374.5	20.4	239.4	292.9	887.3	1786.4	506.1
ARROWTOOTH FL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	3.6	92.2	5.2	57.2	85.7	80.7	40.8	102.7	5.3	5.3	35.4
REX SOLE	4.1	10.7	9.3	6.7	9.1	13.2	3.2	78.0	33.7	35.4	15.4
ENGLISH SOLE	4.5	3.2	18.5	9.8	2.3	0.0	0.0	3.4	48.4	43.3	10.9
PETRALE SOLE	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
PAC SANDDAB	0.1	1.6	2.3	9.8	9.2	0.0	0.0	8.6	0.5	6.9	3.9
OTHER FLTFISH	0.1	3.7	0.1	0.6	2.3	0.1	3.6	1.8	1.6	0.4	0.2
TOT FLTFISH	12.5	111.3	37.1	84.1	107.5	94.0	47.6	194.6	89.4	92.3	65.8
SKATES	0.0	3.2	5.8	0.1	0.5	1.8	2.5	0.2	8.4	5.9	1.1
SPINY DOGFISH	27.4	1.0	13.9	13.4	59.4	0.5	0.0	12.2	3.2	0.0	5.7
RATFISH	0.0	3.2	0.6	6.1	2.9	0.0	2.3	1.6	5.3	6.9	1.4
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	7.3	0.0	0.0
TOT ELASMOBRH	27.4	7.4	20.2	19.6	62.8	2.5	4.9	14.1	24.2	12.8	8.2
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.5
SQUID	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	54.7	21.3	0.0	49.9	91.6	10.0	13.6	27.0	0.0	0.0	73.5
OTHER INVERTS	2.5	0.0	17.3	0.0	2.7	0.0	13.2	5.9	24.2	19.6	0.0
TOT INVERTS	57.2	21.3	17.3	49.9	94.3	10.1	26.8	32.9	24.2	36.3	73.9
TOTAL CATCH	432.8	988.6	1648.8	1111.2	639.2	127.1	318.7	534.4	1025.1	1927.8	654.0

Table 28. --Continued.

HAUL #	45	46	47	48	49	50	51	52	53	54	55
MONTH/DAY/YEAR	7/22/86	7/22/86	7/22/86	7/22/86	7/22/86	7/22/86	7/23/86	7/23/86	7/23/86	7/23/86	7/23/86
LATITUDE START	38 24.4	38 28.0	38 28.5	38 30.2	38 32.2	38 33.9	38 36.1	38 39.8	38 44.7	38 44.0	38 50.2
LONGITUDE START	123 21.9	123 25.4	123 36.4	123 28.3	123 24.0	123 23.0	123 34.2	123 36.0	123 35.0	123 42.0	123 51.5
LATITUDE END	38 25.8	38 29.2	38 29.8	38 31.6	38 31.1	38 35.3	38 37.5	38 41.2	38 46.0	38 45.0	38 51.5
LONGITUDE END	123 22.8	123 26.5	123 36.9	123 28.8	123 23.0	123 23.7	123 34.9	123 36.8	123 36.2	123 43.2	123 52.4
LORAN START	15777.50	15751.80	15714.30	15733.60	15739.30	15735.90	15690.10	15668.50	15650.50	15631.10	15572.20
LORAN START	43380.60	43396.00	43396.80	43404.80	43413.50	43420.80	43428.00	43442.50	43462.00	43457.50	43478.60
LORAN END	15769.40	15743.40	15707.60	15726.20	15747.30	15727.80	15682.00	15660.20	15640.70	15622.70	15564.10
LORAN END	43386.50	43400.80	43402.10	43410.70	43409.10	43426.60	43433.50	43447.80	43466.90	43461.10	43483.10
GEAR DEPTH	124	134	260	137	104	86	137	124	82	132	152
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	2.83	2.72	2.50	2.74	2.48	2.80	2.76	2.76	3.02	2.57	2.57
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	326.4	65.8	5.5	59.6	485.0	544.1	66.9	165.6	535.9	19.1	97.1
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	5.0	15.4	9.6	20.9	4.1	0.0	2.5	7.3	0.7	70.2	12.2
LINGCOD	0.0	1.6	0.0	2.0	0.0	1.5	1.4	0.9	0.2	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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.2	0.0	222.2	2.3	0.0	0.0	0.5	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	137.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0
CHILIPEPPER	0.2	0.2	38.4	7.3	0.1	0.0	0.0	0.1	0.0	0.0	35.6
SHORTBELLY	2.0	18.6	2.7	4.8	0.2	0.0	2.0	3.2	0.5	0.9	38.1
BOCACCIO	0.5	3.6	0.0	0.7	0.0	0.0	0.5	0.1	0.0	0.9	10.0
CANARY	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.8	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	1.4	0.2	2.7	0.0	0.0	0.0	5.2	0.7	0.0	0.0	85.3
OTHER RNDFISH	8.4	11.3	548.1	26.8	3.0	115.5	4.0	6.5	85.7	5.1	2.5
TOT RNDFISH	344.1	118.2	966.5	124.3	492.4	661.1	89.2	185.5	623.0	97.9	280.8
ARROWTOOTH FL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DOVER SOLE	22.2	30.8	240.0	30.4	8.1	6.7	9.5	8.8	2.7	11.1	5.9
REX SOLE	10.0	11.8	57.6	18.4	10.5	22.2	7.9	5.4	0.9	3.2	0.3
ENGLISH SOLE	1.1	9.1	0.0	6.4	41.9	8.9	5.9	16.8	6.4	10.9	10.0
PETRALE SOLE	0.0	0.0	0.0	0.0	1.2	2.2	1.8	7.3	4.1	0.0	1.4
PAC SANDDAB	5.0	4.1	0.0	8.6	11.6	3.7	29.9	11.3	3.2	7.0	5.2
OTHER FLTFISH	1.1	0.9	13.7	1.6	1.2	1.5	0.7	0.5	8.5	0.2	0.4
TOT FLTFISH	39.5	56.7	311.3	65.3	74.4	45.1	55.8	50.1	25.8	32.4	23.2
SKATES	5.2	5.0	2.0	0.9	0.7	8.9	2.7	0.1	4.1	4.3	0.0
SPINY DOGFISH	3.2	2.7	0.0	3.6	5.2	8.9	0.0	0.0	1.4	4.5	1.4
RATFISH	0.5	0.9	4.1	1.3	5.8	11.8	4.3	0.7	5.9	1.4	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	8.8	8.6	6.2	5.8	11.7	29.6	7.0	0.8	11.3	10.2	1.4
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	135.2	202.3	46.6	220.4	75.6	273.5	70.8	0.0	0.0	36.7	0.0
OTHER INVERTS	16.3	7.3	7.5	2.7	3.5	0.0	11.8	45.1	46.3	1.8	2.7
TOT INVERTS	151.5	209.6	54.2	223.2	79.1	273.5	82.6	45.1	46.7	38.6	2.7
TOTAL CATCH	543.9	393.0	1338.1	418.6	657.7	1009.3	234.6	281.6	706.8	179.1	308.1

Table 28. --Continued.

HAUL #	56	57	58	59	60	61	62	63	64	65	66
MONTH/DAY/YEAR	7/23/86	7/23/86	7/23/86	7/24/86	7/24/86	7/24/86	7/24/86	7/24/86	7/24/86	7/25/86	7/25/86
LATITUDE START	38 50.7	38 53.9	39 0.2	39 0.8	39 5.6	39 9.5	39 15.9	39 24.0	39 26.9	39 26.1	39 30.0
LONGITUDE START	123 53.0	123 50.1	123 47.0	123 54.0	123 52.0	123 50.7	123 52.5	123 52.4	123 50.6	123 59.4	123 56.1
LATITUDE END	38 49.7	38 55.2	39 1.7	38 59.4	39 7.0	39 10.9	39 17.5	39 25.6	39 25.6	39 27.6	39 31.4
LONGITUDE END	123 52.2	123 51.2	123 46.9	123 54.3	123 51.4	123 49.9	123 52.4	123 52.6	123 50.9	123 59.4	123 56.1
LORAN START	15565.60	15560.30	15540.00	15515.10	15497.90	15482.50	15444.20	15401.80	15391.40	15368.50	15357.40
LORAN START	43480.10	43492.60	43516.50	27037.10	27048.70	27059.60	27077.90	27104.60	27116.10	27107.60	27123.10
LORAN END	15573.00	15550.70	15533.40	15520.70	15493.20	15478.00	15436.40	15392.20	15397.40	15360.60	15349.60
LORAN END	43476.40	43497.00	43521.80	27034.00	27052.40	27063.80	27082.90	27110.20	27111.30	27112.50	27128.00
GEAR DEPTH	247	123	82	123	110	110	119	99	66	342	165
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	2.89	2.72	2.67	2.72	2.82	2.93	3.07	2.41	2.70	2.78
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	129.0	49.9	486.3	106.1	118.8	515.2	258.1	1060.7	367.0	27.9	13.0
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	10.9	0.7	0.0	1.8	6.1	6.4	29.0	0.0	0.0	12.9	1.2
LINGCOD	0.0	0.2	1.1	3.2	0.0	0.9	0.7	38.5	5.4	0.0	0.9
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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	6.3
SPLITNOSE	27.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2	0.0
YELLOWTAIL	0.0	0.7	0.0	112.9	5.0	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	4.5	0.5	0.0	28.6	0.1	0.2	0.0	4.0	0.0	0.0	250.4
SHORTBELLY	1.4	3.6	0.0	0.8	0.1	0.1	0.0	0.0	0.0	0.0	12.4
BOCACCIO	2.7	0.0	3.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	27.1
CANARY	0.0	1.8	0.0	16.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	42.6	2.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	343.0
OTHER RNDFISH	2.6	6.4	24.3	69.8	2.3	0.3	0.0	0.0	0.4	15.2	19.2
TOT RNDFISH	239.6	65.8	515.4	341.9	132.5	523.2	287.8	1103.2	372.8	66.0	673.9
ARROWTOOTH FL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	70.5	39.5	3.9	29.7	29.0	22.7	11.8	4.0	0.3	72.1	69.9
REX SOLE	24.0	5.7	6.8	3.4	9.1	2.9	7.0	2.0	1.4	51.7	11.3
ENGLISH SOLE	0.0	5.7	0.5	5.9	4.8	14.1	1.8	37.1	12.5	0.0	0.0
PETRALE SOLE	0.0	0.5	0.5	3.7	2.3	0.0	0.0	4.0	0.1	0.0	0.7
PAC SANDDAB	0.0	14.7	5.7	1.1	31.3	4.5	1.8	6.0	10.0	0.0	0.0
OTHER FLTFISH	1.4	0.1	3.7	0.8	0.3	0.2	1.4	0.7	9.3	0.1	0.5
TOT FLTFISH	95.9	66.1	20.9	44.6	76.7	44.4	23.8	53.8	33.5	123.9	82.5
SKATES	0.9	0.0	0.2	0.0	0.0	0.0	0.7	0.0	15.2	4.1	0.0
SPINY DOGFISH	0.0	0.0	1.8	0.6	0.0	0.5	4.5	2.6	22.5	0.0	0.0
RAYFISH	0.0	0.0	0.9	1.1	0.5	2.3	4.1	0.0	0.0	0.5	0.0
OTHER ELASMOBRH	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0
TOT ELASMOBRH	0.9	0.0	4.9	1.8	0.5	2.7	9.3	2.6	37.6	9.1	0.0
DUNGENESS CRAB	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	0.5	1.1
SEA URCHINS	8.6	10.9	0.0	0.0	58.5	55.3	31.3	10.6	0.0	6.8	0.0
OTHER INVERTS	8.6	21.8	39.9	11.3	16.6	0.0	7.3	0.0	9.1	0.1	6.3
TOT INVERTS	17.2	32.7	40.3	11.3	75.2	55.3	38.6	10.8	10.0	7.4	7.9
TOTAL CATCH	353.6	164.5	581.5	399.7	284.8	625.7	359.5	1170.3	453.9	206.4	764.3

Table 28. --continued.

HAUL #	67	68	69	70	71	72	73	74	75	76	77
MONTH/DAY/YEAR	7/25/86	7/25/86	7/25/86	7/25/86	7/25/86	7/26/86	7/26/86	7/26/86	7/26/86	7/26/86	7/29/86
LATITUDE START	39 38.0	39 38.1	39 43.6	39 49.7	39 58.0	40 3.7	40 2.5	40 32.0	40 31.8	40 34.7	40 41.6
LONGITUDE START	123 54.1	123 58.2	123 59.7	123 58.5	124 7.7	124 15.0	124 15.1	124 31.9	124 38.9	124 40.3	124 29.2
LATITUDE END	39 39.6	39 39.5	39 44.9	39 51.2	39 56.6	40 2.7	40 3.7	40 30.5	40 32.0	40 35.4	40 40.1
LONGITUDE END	123 54.4	123 58.9	123 59.7	123 58.9	124 6.8	124 13.5	124 16.3	124 31.8	124 40.8	124 40.4	124 29.2
LORAN START	15318.90	15305.30	15269.10	15236.50	15159.20	15103.20	15109.60	14874.80	14858.30	14835.20	14815.80
LORAN START	27154.10	27150.70	27169.60	27194.40	27214.60	27226.40	27222.20	27303.10	27292.60	27300.60	27339.80
LORAN END	15308.50	15295.00	15261.20	15226.50	15170.50	15113.10	15099.00	14884.70	14852.10	14830.30	14826.00
LORAN END	27159.90	27155.40	27174.70	27199.60	27210.30	27224.80	27224.90	27298.10	27290.90	27302.60	27335.00
GEAR DEPTH	128	192	155	119	82	155	232	77	168	247	115
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.30	0.50
DISTANCE FISHED	3.04	2.83	2.50	2.78	2.93	2.69	2.74	2.74	2.65	1.28	2.69
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	1 /162	0 /162
PAC WHITING	437.8	43.5	31.8	124.5	0.0	43.5	184.2	0.0	0.0	7.0	558.6
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	0.0	2.7	3.9	15.6	0.0	10.0	11.8	0.0	1732.1	0.0	47.2
LINGCOD	3.4	3.6	1.5	0.1	5.7	5.4	2.7	0.0	43.0	0.0	0.0
PACIFIC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.6	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	74.2	0.0	0.0
DARKBLOTCHED	0.0	5.9	0.0	0.0	0.0	1.1	11.8	0.0	0.0	140.8	0.0
SPLITNOSE	0.0	16.1	0.0	0.0	0.0	0.0	28.6	0.0	0.0	94.3	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	2.7	443.9	3.4	0.0	323.9	3.2	0.0	148.3	0.0	0.0
SHORTBELLY	0.0	0.0	38.7	1.1	0.0	29.9	0.7	0.0	0.0	0.0	0.0
BOCACCIO	3.4	2.0	3.0	0.0	0.0	5.2	0.7	0.0	1425.9	20.0	0.0
CANARY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	162.7	0.0	18.0
REDSTRIPE	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	47.9	0.0	0.0
STRIPETAIL	13.4	72.6	123.0	2.3	0.0	179.6	19.5	0.0	2.4	0.0	0.0
OTHER RNDFISH	1.5	2.0	51.7	0.1	0.7	7.8	6.8	199.4	892.4	201.3	730.6
TOT RNDFISH	459.4	152.3	700.0	147.2	6.3	606.6	269.8	199.4	4528.8	482.0	1354.6
ARROWTOOTH FL	4.4	0.7	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0
DOVER SOLE	29.0	13.6	34.7	8.6	0.7	19.5	183.3	1.4	0.0	48.5	33.6
REX SOLE	13.4	2.7	4.9	11.8	1.1	5.0	57.2	8.2	0.0	17.2	5.0
ENGLISH SOLE	2.2	0.0	0.0	2.3	7.3	0.7	0.5	13.2	0.0	0.0	0.0
PETRALE SOLE	0.0	0.0	0.0	0.9	4.3	1.1	0.0	1.8	0.0	0.0	3.7
PAC SANDDAB	11.2	0.1	0.0	8.8	29.7	0.0	0.0	21.8	0.0	0.0	2.5
OTHER FLTFISH	0.5	0.7	3.0	1.1	1.8	0.2	0.9	0.0	0.0	0.4	0.1
TOT FLTFISH	60.7	17.8	42.6	33.6	44.9	26.7	241.8	46.4	0.0	66.2	44.9
SKATES	0.0	0.0	0.0	12.9	0.0	0.0	2.9	1.8	0.0	0.0	64.6
SPINY DOGFISH	33.5	0.9	0.0	5.7	0.0	4.1	0.0	0.0	0.0	0.0	100.7
RATFISH	0.0	0.0	3.0	2.5	3.2	0.5	0.0	0.0	0.0	0.8	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5
TOT ELASMOBRH	33.5	0.9	3.0	21.1	3.2	4.5	2.9	1.8	0.0	0.8	172.1
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
SQUID	0.0	0.0	0.0	5.4	0.1	0.0	0.0	0.9	0.0	0.0	0.0
SEA URCHINS	167.5	63.0	11.9	46.5	0.0	20.4	1.4	0.0	0.0	0.0	0.0
OTHER INVERTS	0.0	1.5	0.0	7.5	1.8	0.0	4.2	0.0	7.2	0.2	0.0
TOT INVERTS	167.5	64.5	11.9	59.4	1.9	20.4	5.6	0.9	7.2	0.2	2.5
TOTAL CATCH	721.1	235.5	757.5	261.3	56.3	658.2	520.1	248.4	4536.0	549.2	1574.1

Table 28.--Continued.

HAUL #	78	79	80	81	82	83	84	85	86	87	88
MONTH/DAY/YEAR	7/29/86	7/29/86	7/29/86	7/29/86	7/29/86	7/29/86	7/30/86	7/30/86	7/30/86	7/30/86	7/30/86
LATITUDE START	40 48.2	40 52.8	40 57.4	40 57.9	41 0.6	41 3.7	41 11.7	41 13.6	41 19.4	41 22.5	41 23.9
LONGITUDE START	124 20.7	124 22.3	124 14.3	124 23.9	124 24.1	124 21.0	124 13.8	124 19.0	124 21.0	124 12.2	124 24.8
LATITUDE END	40 49.2	40 54.1	40 58.7	40 59.2	41 2.0	41 4.9	41 13.2	41 14.7	41 20.7	41 23.9	41 25.2
LONGITUDE END	124 19.6	124 21.2	124 13.8	124 23.5	124 23.9	124 20.6	124 14.0	124 19.9	124 21.1	124 12.0	124 24.7
LORAN START	14792.00	14754.30	14740.80	14713.30	14692.70	14677.50	14634.10	14607.70	14559.50	14554.40	14517.10
LORAN START	27375.20	27389.30	27419.80	27403.90	27412.60	27428.70	27469.50	27465.10	27479.20	27507.60	27485.50
LORAN END	14787.50	14746.95	14731.90	14705.10	14683.60	14669.70	14622.10	14597.80	14549.20	14544.20	14507.30
LORAN END	27380.60	27394.70	27425.10	27408.80	27417.50	27433.50	27474.00	27466.60	27483.40	27512.20	27489.90
GEAR DEPTH	68	124	59	194	243	152	70	115	108	62	115
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	2.41	2.48	2.52	2.39	2.50	2.30	2.82	2.32	2.48	2.52	2.46
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	158.3	849.4	120.2	37.2	47.4	87.5	429.1	28.0	87.5	2938.3	9.1
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	0.0	13.5	3.2	10.4	26.3	4.1	0.0	0.0	0.9	0.9	5.9
LINGCOD	0.0	0.0	0.0	0.0	0.0	1.1	2.7	0.0	5.9	0.0	0.2
PAC OC PERCH	0.0	0.0	0.0	30.4	2.3	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	44.5	83.2	27.0	0.0	0.0	0.1	0.0	0.1
SPLITNOSE	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	236.8	0.0	0.0
CHILIPEPPER	0.0	1.1	0.0	0.0	0.0	0.2	0.0	0.0	1.1	0.0	0.0
SHORTBELLY	0.0	70.2	1.8	0.0	0.0	13.2	0.0	2306.8	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	2.3	1.6	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.9	9.3	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	137.6	2.5	19.1	0.0	121.6	0.0	0.0	0.1	0.0	0.0
OTHER RNDFISH	6.8	4.0	10.3	5.4	3.0	9.6	7.7	0.0	17.0	49.2	0.0
TOT RNDFISH	165.1	1078.6	138.0	147.0	166.1	265.9	439.5	2334.8	365.3	2997.6	15.3
ARROWTOOTH FL	0.0	0.0	0.0	1.1	0.0	4.5	0.0	7.6	3.6	0.0	5.7
DOVER SOLE	1.8	4.8	7.0	86.2	66.2	98.9	3.2	5.1	9.1	5.6	8.0
REX SOLE	1.8	7.2	5.0	22.7	57.6	13.6	6.4	0.0	4.1	9.3	0.0
ENGLISH SOLE	4.3	0.0	21.8	1.4	0.4	0.0	18.6	0.8	0.0	13.0	0.0
PETRALE SOLE	1.6	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	1.1	0.0
PAC SANDDAB	17.0	1.9	3.6	0.0	0.0	0.0	8.6	0.0	3.6	9.3	0.1
OTHER FLTFISH	0.1	11.2	2.3	0.5	0.3	1.1	4.1	0.3	78.8	55.4	0.0
TOT FLTFISH	26.7	25.1	39.7	111.8	124.5	118.2	42.6	13.7	99.3	93.7	13.8
SKATES	0.0	0.0	19.1	29.6	0.3	0.0	17.2	0.0	0.7	13.0	0.0
SPINY DOGFISH	12.2	52.9	5.4	1.8	0.0	6.8	3.2	10.2	15.0	0.0	0.7
RATFISH	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	12.2	52.9	24.5	31.4	0.8	6.8	20.4	10.2	15.9	13.0	0.7
DUNGENESS CRAB	0.9	0.0	1.1	1.4	0.4	0.0	0.0	0.0	0.0	2.8	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	29.9	4.5	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	0.0	0.0	0.0	0.0	0.0	0.3	2.3	0.0	0.0	0.0	0.2
TOT INVERTS	0.9	0.0	1.1	1.4	30.3	5.5	2.3	0.0	0.0	2.8	0.2
TOTAL CATCH	204.9	1156.6	203.3	291.5	321.7	396.4	504.9	2358.7	480.5	3107.1	30.0

HAUL #	89	90	91	92	93	94	95	96	97	98	99
MONTH/DAY/YEAR	7/31/86	7/31/86	7/31/86	7/31/86	8/ 2/86	8/ 2/86	8/ 2/86	8/ 2/86	8/ 2/86	8/ 2/86	8/ 2/86
LATITUDE START	41 38.6	41 33.9	41 32.5	41 28.4	41 40.9	41 46.3	41 55.4	41 56.1	42 1.4	42 4.0	42 4.6
LONGITUDE START	124 25.2	124 26.0	124 20.8	124 19.8	124 17.4	124 23.4	124 27.3	124 24.2	124 27.9	124 34.7	124 35.6
LATITUDE END	41 37.2	41 32.6	41 33.8	41 27.0	41 42.3	41 47.9	41 56.9	41 57.7	42 2.9	42 5.4	42 3.2
LONGITUDE END	124 25.2	124 26.5	124 20.2	124 20.0	124 18.4	124 24.3	124 27.4	124 24.3	124 28.6	124 34.9	124 35.6
LORAN START	14402.00	14437.00	14458.30	14492.30	14397.90	14343.80	14263.50	14263.50	14214.50	14182.30	14176.40
LORAN START	27526.80	27513.60	27520.10	27509.80	27552.10	27554.80	27572.10	27580.20	27586.70	27579.60	27579.40
LORAN END	14412.80	14446.00	14449.40	14502.70	14385.30	14329.90	14251.60	14249.90	14201.20	14170.90	14187.40
LORAN END	27524.90	27508.60	27525.00	27505.00	27553.80	27557.30	27575.70	27584.50	27589.40	27583.10	27575.90
GEAR DEPTH	123	124	64	84	64	101	95	77	106	168	236
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	2.52	2.52	2.46	2.61	2.83	3.09	2.67	3.06	2.93	2.56	2.52
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	0.7	0.9	361.5	108.6	1382.2	37.0	248.8	257.4	0.0	0.0	269.9
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	0.2	4.1	1.4	4.5	0.0	1.6	0.3	0.0	0.0	0.7	5.2
LINGCOD	0.4	0.0	0.0	0.0	0.0	6.1	2.7	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	1.3
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	15.1
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	1.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.9
OTHER RNDFISH	1.0	0.2	1.9	2.4	0.0	0.1	0.2	0.0	0.1	0.6	3.4
TOT RNDFISH	2.7	6.6	367.8	115.5	1382.2	44.8	252.1	257.4	0.2	5.9	301.5
ARROWTOOTH FL	0.3	0.5	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.6
DOVER SOLE	2.0	0.5	1.8	1.2	0.0	9.8	8.0	0.6	0.7	16.9	27.2
REX SOLE	0.0	0.0	0.4	0.3	1.3	7.6	2.7	0.1	0.3	0.0	0.2
ENGLISH SOLE	0.0	0.0	0.0	0.0	7.4	0.1	0.9	0.0	0.0	0.0	0.0
PETRALE SOLE	0.0	0.0	0.6	0.9	0.0	0.2	0.1	0.7	0.0	0.0	0.0
PAC SANDDAB	0.0	0.0	1.0	10.1	0.9	0.8	2.8	0.2	0.8	0.0	0.0
OTHER FLTFISH	0.0	0.0	3.1	2.5	0.9	0.2	0.2	2.8	0.2	0.3	0.1
TOT FLTFISH	2.3	1.0	6.9	15.0	10.5	18.8	14.8	4.6	2.1	17.2	28.1
SKATES	0.0	0.0	1.2	0.1	0.0	0.0	5.3	0.0	0.0	0.3	0.8
SPINY DOGFISH	0.4	0.1	0.1	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
RATFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
OTHER ELASMOBRH	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
TOT ELASMOBRH	0.4	0.1	2.4	8.1	0.0	0.0	5.3	0.0	0.0	0.4	2.7
DUNGENESS CRAB	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
SEA URCHINS	1.4	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	27.5	7.9
OTHER INVERTS	0.5	2.4	1.1	3.5	0.0	3.2	0.0	1.1	3.6	0.2	15.2
TOT INVERTS	2.0	2.5	1.4	3.5	0.0	4.9	0.0	1.1	3.6	28.2	23.9

Table 28. --Continued.

HAUL #	100	101	102	103	104	105	106	107	108	109	110
MONTH/DAY/YEAR	8/ 5/86	8/ 5/86	8/ 5/86	8/ 5/86	8/ 5/86	8/ 7/86	8/ 7/86	8/ 7/86	8/ 7/86	8/ 8/86	8/ 8/86
LATITUDE START	42 54.3	42 59.0	42 59.7	43 2.2	43 4.1	42 59.0	43 5.0	43 8.1	43 15.1	43 29.7	43 30.0
LONGITUDE START	124 44.3	124 34.9	124 39.6	124 35.7	124 41.0	124 49.9	124 49.5	124 38.9	124 34.6	124 18.6	124 22.3
LATITUDE END	42 55.4	43 0.4	43 1.0	43 3.4	43 4.9	43 0.6	43 4.8	43 9.6	43 16.2	43 31.1	43 28.6
LONGITUDE END	124 45.1	124 34.5	124 39.4	124 35.2	124 42.5	124 50.1	124 47.6	124 39.5	124 33.7	124 17.8	124 22.8
LORAN START	13755.80	13723.70	13714.00	13696.30	13676.10	13711.10	13661.50	13643.70	13586.80	13467.80	13463.20
LORAN START	27690.10	27708.70	27700.90	27713.60	27707.20	27679.70	27692.80	27719.40	27741.60	27801.10	27794.40
LORAN END	13745.20	13712.50	13703.50	13686.40	13668.30		13664.90	13629.80	13577.90	13455.50	13475.80
LORAN END	27681.20	27712.30	27703.90	27717.20	27705.80		27695.90	27721.30	27745.60	27805.30	27790.60
GEAR DEPTH	152	90	134	113	168	117	210	155	97	70	101
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	2.43	2.56	2.35	2.37	2.56	3.00	2.61	3.06	2.41	2.87	2.82
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	108.4	820.9	113.4	64.9	6.4	5.7	25.2	163.1	34.2	0.0	130.6
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	10.9	1.1	7.3	4.5	11.3	12.4	44.5	12.2	0.0	0.0	10.0
LINGCOD	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2	0.0	0.0
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
DARKBLOTCHED	0.0	0.0	1.4	0.2	5.4	0.0	0.0	0.0	0.0	0.0	0.1
SPINYNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.9	0.0	0.0	0.0	1.7	70.1	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	161.9	1.8	0.0	1.1	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	3.6	0.0	93.0	6.4	1.9	0.0	0.0
CANARY	2.9	0.0	0.0	0.0	0.0	0.0	0.0	3.6	10.9	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	1316.8	5.4	0.0	2.3	0.0	0.0
STRIPETAIL	0.1	0.0	0.0	0.0	0.7	0.0	0.7	0.0	2.8	0.0	0.0
OTHER RNDFISH	3.6	0.2	0.5	0.7	5.0	915.0	149.5	8.0	2.6	0.5	3.3
TOT RNDFISH	137.8	822.2	122.5	71.2	32.4	2411.8	337.5	195.1	137.3	0.5	144.0
ARROWTOOTH FL	1.8	0.1	4.8	2.9	2.7	0.0	0.0	12.2	0.7	0.0	0.5
DOVER SOLE	143.3	4.3	7.7	33.6	4.5	22.6	7.9	90.7	0.7	0.0	6.9
REX SOLE	11.8	0.3	0.7	12.5	0.0	11.3	5.2	0.0	0.2	0.2	4.5
ENGLISH SOLE	0.0	6.6	0.0	0.0	0.0	0.0	1.1	0.0	0.7	1.0	3.6
PETRALE SOLE	0.0	5.4	0.0	0.0	0.0	5.7	0.0	0.0	1.1	0.0	5.0
PAC SANDDAB	0.1	0.3	0.0	0.4	0.0	7.5	0.5	0.0	0.1	1.0	18.6
OTHER FLTFISH	4.3	13.4	0.1	0.5	0.0	0.0	0.0	2.2	10.7	0.1	0.0
TOT FLTFISH	161.4	30.5	13.3	49.8	7.3	47.1	14.7	105.1	14.2	2.4	39.0
SKATES	0.5	0.1	0.0	0.0	6.4	0.0	0.0	1.1	0.1	0.0	0.1
SPINY DOGFISH	1.1	0.9	0.1	0.0	4.1	0.0	0.0	5.4	0.0	0.0	0.9
RATFISH	0.7	0.7	1.4	0.7	0.0	0.0	1.0	2.3	0.0	0.0	0.5
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
TOT ELASMOBRH	2.3	1.7	1.5	0.7	10.4	0.0	1.0	8.8	0.2	0.0	1.5
DUNGENESS CRAB	0.5	0.0	0.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	2.5
SQUID	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1
SEA URCHINS	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
OTHER INVERTS	0.0	0.0	0.2	0.0	5.9	1.9	1.6	1.4	92.0	7.5	5.4
TOT INVERTS	0.5	0.0	10.7	0.7	5.9	1.9	1.6	1.6	92.0	7.6	8.0
TOTAL CATCH	301.8	854.4	147.9	122.4	56.0	2460.8	354.8	310.6	243.6	10.5	192.5

Table 28. --Continued.

HAUL #	111	112	113	114	115	116	117	118	119	120	121
MONTH/DAY/YEAR	8/ 8/86	8/ 8/86	8/ 8/86	8/ 8/86	8/ 8/86	8/ 9/86	8/ 9/86	8/ 9/86	8/ 9/86	8/ 9/86	8/ 9/86
LATITUDE START	43 31.9	43 35.9	43 39.5	43 47.5	43 51.7	43 52.7	43 50.7	43 45.5	43 54.2	43 55.1	43 56.3
LONGITUDE START	124 32.5	124 31.9	124 28.1	124 32.0	124 29.3	124 14.4	124 17.3	124 24.5	124 25.9	124 50.8	124 49.5
LATITUDE END	43 33.4	43 37.4	43 40.8	43 48.9	43 52.9	43 51.1	43 49.2	43 44.0	43 55.0	43 54.4	43 56.2
LONGITUDE END	124 32.6	124 31.8	124 28.0	124 32.5	124 29.1	124 14.3	124 17.1	124 24.3	124 26.0	124 49.0	124 51.7
LORAN START	13443.20	13408.10	13378.00	13307.80	13272.50	13264.90	13282.50	13326.90	13251.00	13241.70	13231.70
LORAN START	27777.30	27785.80	27799.50	27805.60	27817.60	27848.60	27839.60	27816.70	27828.40	27783.30	27787.80
LORAN END	13429.80	13395.60	13367.30	13296.10	13261.90	13278.80	13295.60	13340.30	13243.40	13247.30	13232.00
LORAN END	27779.90	27788.60	27801.90	27806.90	27820.00	27845.20	27837.50	27814.50	27829.50	27785.50	27783.70
GEAR DEPTH	179	177	135	175	135	77	102	117	117	207	150
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	2.87	2.69	2.30	2.57	2.28	2.89	2.74	2.83	1.63	2.72	3.00
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	24.9	20.6	75.7	24.0	59.4	350.6	115.2	59.0	16.1	24.3	21.3
PACIFIC COD	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.7	0.0	0.0
SABLEFISH	7.3	5.9	8.2	1.3	6.8	0.2	5.9	4.8	12.9	36.7	9.5
LINGCOD	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	35.2	2.3	0.0
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	2.0
ROUGHEYE	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.5	0.8	0.7	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	1.8	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.1
YELLOWTAIL	0.0	1.6	27.7	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.5	1.3
BOCACCIO	4.8	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	4.5	1.3
CANARY	0.0	1.6	1.4	0.0	14.9	0.0	0.0	0.0	9.5	0.0	99.3
REDSTRIPE	0.0	0.0	0.0	0.0	31.3	1.4	0.7	0.0	0.0	0.0	31.3
STRIPETAIL	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	45.4	1.1
OTHER RNDFISH	9.3	11.0	5.7	13.4	570.1	10.1	3.5	16.3	7.2	7.3	44.3
TOT RNDFISH	49.0	43.6	119.7	42.2	688.2	362.3	125.3	80.3	82.7	129.5	212.7
ARROWTOOTH FL	10.0	12.7	2.5	3.4	0.7	0.5	0.0	0.4	3.4	2.3	0.0
DOVER SOLE	60.8	49.0	88.2	49.2	74.8	2.7	79.8	93.9	59.2	13.8	13.8
REX SOLE	3.6	5.7	18.1	5.4	3.4	24.0	19.1	28.1	22.5	3.2	3.6
ENGLISH SOLE	0.0	0.5	0.0	0.0	0.2	11.3	0.9	7.7	0.9	6.4	13.8
PETRALE SOLE	0.2	1.4	0.0	0.0	0.0	2.7	2.3	0.9	3.2	0.0	0.7
PAC SANDDAB	0.1	0.2	5.9	0.5	4.5	20.6	15.8	24.5	11.6	0.0	1.8
OTHER FLTFISH	0.9	45.1	6.8	11.2	33.3	5.3	0.7	9.8	9.6	4.4	0.5
TOT FLTFISH	75.6	114.5	121.6	69.8	117.0	67.2	118.5	165.2	110.3	30.0	34.2
SKATES	7.0	10.0	6.6	0.9	3.6	0.0	0.1	3.7	0.0	1.0	6.8
SPINY DOGFISH	0.0	0.0	0.7	0.0	0.7	0.0	0.9	0.0	0.9	1.6	0.0
RATFISH	0.9	0.0	1.6	0.9	5.0	0.5	5.0	10.4	0.9	0.9	0.5
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	7.9	10.0	8.8	1.8	9.3	1.8	6.0	14.2	1.8	3.5	7.3
DUNGENESS CRAB	1.8	2.3	0.5	0.0	0.0	1.6	1.1	0.5	0.0	0.0	0.0
SQUID	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	8.2	0.8	0.7	30.8	0.0	0.0	0.0	6.4	0.0	0.0	0.0
OTHER INVERTS	0.9	1.5	0.3	0.1	0.9	4.5	4.0	1.3	11.5	2.9	1.5
TOT INVERTS	10.9	4.7	1.5	30.9	1.0	6.2	5.1	8.1	11.5	2.9	1.5
TOTAL CATCH	143.4	172.7	251.6	144.7	815.5	437.5	254.9	267.7	206.3	165.9	255.7

Table 28.--Continued.

HAUL #	122	123	124	125	126	127	128	129	130	131	132
MONTH/DAY/YEAR	8/10/86	8/10/86	8/10/86	8/10/86	8/10/86	8/10/86	8/10/86	8/10/86	8/10/86	8/11/86	8/11/86
LATITUDE START	43 58.1	43 59.5	44 2.4	44 2.2	44 6.2	44 9.2	44 11.8	44 13.9	44 18.0	44 20.2	44 20.8
LONGITUDE START	124 51.6	124 46.7	124 45.4	124 41.6	124 34.6	124 27.9	124 20.5	124 25.4	124 19.8	124 19.9	124 30.5
LATITUDE END	43 58.7	44 0.5	44 1.2	44 2.7	44 6.8	44 10.5	44 13.1	44 15.0	44 19.3	44 21.6	44 19.2
LONGITUDE END	124 50.1	124 45.5	124 46.4	124 39.6	124 32.6	124 28.4	124 20.9	124 26.2	124 19.5	124 20.0	124 30.7
LORAN START	13216.20	13204.60	13180.40	13181.50	13146.90	13120.50	13096.60	13079.30	13042.60	13023.60	13022.00
LORAN START	27786.90	27798.10	27805.20	27811.90	27831.10	27848.10	27866.10	27859.90	27876.40	27879.40	27860.60
LORAN END	13211.70	13196.30	13190.60	13177.70	13142.40	13109.20	13085.30	13070.00	13031.50	13011.20	13035.50
LORAN END	27790.60	27801.90	27801.40	27816.20	27835.50	27849.30	27867.30	27860.10	27878.90	27881.20	27857.90
GEAR DEPTH	112	130	121	130	121	110	88	99	79	77	101
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	2.32	2.44	2.61	2.74	2.76	2.50	2.46	2.26	2.39	2.67	2.93
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	3.9	3.4	0.0	1.4	16.3	428.0	424.6	953.9	232.7	455.9	0.7
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	3.6	27.7	6.4	12.2	13.4	10.0	0.9	2.3	1.4	3.6	14.5
LINGCOD	4.8	0.0	0.0	0.0	2.9	0.2	6.8	0.0	0.2	0.0	2.3
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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	6.4	9.5	2.3	1.6	2.3	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.1	0.1	0.0	1.8	0.1	0.1	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	4.1	0.0	0.0	2.7	0.0	0.0	0.0	0.0
CANARY	35.4	10.4	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE	7.0	21.1	25.2	4.5	1.1	0.2	0.0	0.0	0.0	0.0	5.9
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	9.8	61.9	12.4	20.5	22.2	5.5	6.9	3.5	2.5	8.6	3.9
TOT RNDFISH	70.9	134.2	51.4	46.1	58.4	444.0	441.9	959.7	236.8	468.1	27.2
ARROWTOOTH FL	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	6.6	13.4	1.6	1.4	65.1	54.0	0.9	2.7	0.1	0.0	4.5
REX SOLE	2.3	8.8	3.9	2.0	38.6	24.5	10.2	5.4	20.6	34.5	2.3
ENGLISH SOLE	2.0	1.4	2.5	0.7	1.4	4.3	30.8	18.4	7.5	12.5	2.0
PETRALE SOLE	4.3	1.4	0.5	0.2	0.9	0.0	0.0	0.2	0.2	0.9	0.0
PAC SANDDAB	0.1	2.0	2.3	0.2	3.6	6.1	79.6	7.3	76.7	22.2	1.1
OTHER FLTFISH	6.5	0.1	0.0	0.0	8.2	0.1	0.0	0.1	1.9	10.4	4.5
TOT FLTFISH	21.8	27.1	10.7	4.5	120.4	89.0	121.6	34.1	107.0	80.5	14.5
SKATES	0.0	4.5	0.0	0.1	5.2	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.5	0.0	17.2	4.5	12.7	7.3	0.0
RATFISH	0.0	0.0	0.0	0.0	4.5	0.2	0.0	0.5	0.0	0.0	1.4
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.0	4.5	0.0	0.1	10.2	0.2	17.2	5.0	12.7	7.3	1.4
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.7	0.2	0.0	0.7	0.0	0.0	0.0
SQUID	0.0	0.1	0.0	0.2	0.0	0.0	0.2	0.9	0.0	0.1	0.0
SEA URCHINS	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.7
OTHER INVERTS	1.5	2.1	0.2	0.1	1.8	4.5	1.4	1.6	6.9	0.3	14.4
TOT INVERTS	1.5	2.2	0.2	1.9	2.5	4.8	1.6	3.2	6.9	0.4	15.1
TOTAL CATCH	94.1	168.0	62.3	52.7	191.5	538.0	582.3	1002.0	363.4	556.3	58.2

Table 28.--Continued.

HAUL #	133	134	135	136	137	138	139	140	141	142	143
MONTH/DAY/YEAR	8/11/86	8/11/86	8/11/86	8/12/86	8/12/86	8/12/86	8/12/86	8/12/86	8/12/86	8/13/86	8/13/86
LATITUDE START	44 19.7	44 20.7	44 26.1	44 29.4	44 26.7	44 28.1	44 29.4	44 30.3	44 32.4	44 38.0	44 40.7
LONGITUDE START	124 46.6	124 42.1	124 35.8	124 17.4	124 22.2	124 32.8	124 43.9	124 48.4	124 36.1	124 15.6	124 19.2
LATITUDE END	44 21.1	44 21.3	44 24.9	44 28.1	44 25.8	44 29.5	44 28.2	44 29.2	44 33.6	44 39.4	44 41.9
LONGITUDE END	124 45.9	124 42.7	124 37.1	124 17.9	124 23.8	124 33.0	124 44.6	124 46.9	124 35.9	124 16.0	124 20.1
LORAN START	13036.00	13026.00	12978.40	12943.10	12968.40	12960.10	12954.00	12948.60	12925.80	12867.60	12846.50
LORAN START	27829.90	27839.40	27858.70	27896.80	27884.20	27867.00	27849.00	27842.50	27867.00	27911.70	27908.60
LORAN END	13024.10	13021.40	12989.00	12954.60	12976.20	12948.50	12964.70	12957.00	12915.50	12856.20	12836.60
LORAN END	27833.20	27839.30	27854.50	27894.10	27880.10	27868.60	27846.00	27843.40	27869.10	27912.80	27908.60
GEAR DEPTH	148	104	117	80	75	113	210	324	176	77	86
DURATION IN HOURS	0.50	0.25	0.50	0.43	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.76	1.26	2.87	2.50	2.61	2.57	2.50	2.78	2.28	2.54	2.54
PERFORMANCE / GEAR	0 /162	6 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	96.2	0.0	2.5	0.0	0.0	1.4	27.2	0.0	2.5	0.8	97.5
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
SABLEFISH	24.0	0.0	0.5	0.0	0.0	3.4	14.1	0.0	27.2	0.0	0.4
LINGCOD	3.4	1.8	0.0	0.0	4.1	1.8	16.8	0.0	0.0	0.0	3.9
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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	1.6	0.0	0.0	17.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.4	0.0
SPINOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.6	0.5	0.0
YELLOWTAIL	17.7	125.6	79.2	0.2	0.0	0.0	0.0	0.0	1.8	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.5	0.5	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	8.4	0.0	0.0	0.2	0.0	0.0	1.8	0.0	3.6	5.9	2.9
REDSTRIPE	0.1	9.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
OTHER RNDFISH	10.7	0.0	0.4	0.2	0.4	0.0	297.9	6.7	14.6	6.3	9.4
TOT RNDFISH	160.8	136.8	82.8	2.3	4.4	7.7	375.1	7.6	51.0	14.3	104.1
ARROWTOOTH FL	4.1	0.0	0.7	0.0	0.0	2.0	24.0	2.3	46.0	0.0	1.1
DOVER SOLE	56.2	1.1	0.0	0.5	0.0	8.6	20.6	7.3	24.7	0.2	0.1
REX SOLE	12.0	0.0	0.9	3.2	0.2	4.3	5.9	1.1	19.5	2.0	0.8
ENGLISH SOLE	0.7	0.0	2.9	10.4	0.7	8.2	0.5	0.0	0.0	7.0	5.4
PETRALE SOLE	1.1	0.5	7.3	3.9	0.1	7.7	0.0	0.0	0.0	1.1	4.5
PAC SANDDAB	0.0	0.0	12.7	17.4	0.4	29.9	0.4	0.0	0.0	48.3	23.6
OTHER FLTFISH	2.0	0.0	12.4	14.5	0.0	9.9	18.3	0.0	1.6	3.6	7.3
TOT FLTFISH	76.2	1.6	36.9	49.8	1.4	70.7	69.8	10.7	91.9	62.4	42.9
SKATES	0.1	0.0	0.0	0.0	0.0	0.0	8.8	0.2	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	0.5
RATFISH	0.0	0.0	1.1	0.0	0.0	0.0	5.7	0.0	0.0	0.2	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
TOT ELASMOBRH	0.1	0.0	1.1	0.0	0.0	0.0	14.5	1.2	0.0	0.2	0.5
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
SEA URCHINS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	2.1	0.0	4.5	1.0	1.7	1.1	8.5	2.4	2.7	0.1	1.6
TOT INVERTS	2.1	0.0	4.5	1.1	1.7	1.1	8.5	2.4	2.7	0.2	1.7
TOTAL CATCH	239.2	138.3	125.4	53.2	7.5	79.5	467.9	21.9	145.6	77.1	149.2

Table 28. --Continued.

HAUL #	144	145	146	147	148	149	150	151	152	153	154
MONTH/DAY/YEAR	8/13/86	8/13/86	8/13/86	8/13/86	8/13/86	8/14/86	8/14/86	8/14/86	8/14/86	8/14/86	8/14/86
LATITUDE START	44 43.9	44 45.9	44 46.2	44 49.9	44 54.6	44 55.7	44 55.8	45 0.1	45 5.0	45 9.7	45 16.0
LONGITUDE START	124 12.6	124 15.1	124 35.3	124 27.9	124 23.8	124 28.2	124 16.5	124 10.8	124 16.9	124 14.8	124 5.8
LATITUDE END	44 45.1	44 47.3	44 47.6	44 51.0	44 55.8	44 56.9	44 57.2	45 1.3	45 6.4	45 11.1	45 17.0
LONGITUDE END	124 12.4	124 15.9	124 34.6	124 26.8	124 22.7	124 27.1	124 16.2	124 9.9	124 16.1	124 14.1	124 4.4
LORAN START	12815.30	12800.00	12810.20	12774.90	12732.40	12726.80	12716.70	12675.50	12640.00	12598.90	12537.40
LORAN START	27924.80	27922.60	27887.20	27904.90	27918.00	27911.70	27932.40	27947.80	27942.70	27951.70	27974.30
LORAN END	12804.50	12788.40	12798.10	12764.40	12721.20	12715.80	12704.80	12664.20	12627.50	12586.20	12527.10
LORAN END	27926.70	27923.00	27890.30	27908.30	27921.60	27915.20	27934.70	27950.70	27945.80	27954.70	27978.00
GEAR DEPTH	73	101	249	172	131	285	150	113	177	170	80
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	2.32	2.82	2.78	2.59	2.76	2.70	2.59	2.56	2.83	2.85	2.74
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	5.2	593.1	19.1	0.5	4.5	16.8	1.4	342.7	1.6	4.8	0.0
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
SABLEFISH	0.7	29.5	22.9	33.1	49.0	5.2	3.9	0.9	14.1	3.9	0.5
LINGCOD	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	5.0
PAC OC PERCH	0.0	0.0	0.8	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
FOUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	8.8	2.5	0.7	7.9	2.3	0.0	0.2	2.0	1.4
SPLITNOSE	0.0	0.0	36.7	2.0	0.5	0.5	0.4	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	8.4	0.0	1.8	1.7	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.5	0.5	0.1	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	0.0	0.0	1.8	0.0	1.4	1.6	0.0	0.0	1.8
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	10.9	1.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	2.4	0.2	14.2	27.9	21.7	3.3	3.3	2.2	9.3	7.8	252.8
TOT RNDFISH	8.3	622.8	113.5	68.2	87.2	33.8	18.6	349.5	25.2	18.3	261.5
ARROWTOOTH FL	0.0	0.0	23.1	46.9	28.1	0.7	13.6	0.6	21.8	24.7	2.3
DOVER SOLE	0.0	0.0	22.2	20.4	4.1	2.5	10.0	0.4	10.7	18.6	0.2
REX SOLE	1.8	0.9	8.2	27.1	13.6	0.7	4.8	2.5	8.8	13.2	5.7
ENGLISH SOLE	14.1	2.0	0.0	0.2	0.0	0.0	1.1	11.3	0.8	0.0	9.5
PETRALE SOLE	1.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	1.1
PAC SANDDAB	15.4	7.7	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	24.9
OTHER FLTFISH	9.9	0.0	14.8	3.4	8.2	0.1	21.6	6.5	25.4	9.3	4.3
TOT FLTFISH	42.5	10.7	68.3	98.1	54.0	4.0	51.2	25.8	67.6	65.8	49.0
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	1.0	0.0
SPINY DOGFISH	1.8	1.4	0.0	0.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0
RATFISH	0.0	0.5	0.4	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	1.8	1.8	3.5	0.5	0.0	0.0	2.3	1.0	0.0	1.0	0.0
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
SQUID	0.1	0.1	0.0	0.1	0.3	0.0	0.1	0.0	0.0	0.0	0.1
SEA URCHINS	0.0	0.0	6.4	24.5	34.5	1.6	0.1	0.0	0.6	3.3	0.0
OTHER INVERTS	0.6	0.0	2.5	1.5	0.0	5.4	1.0	0.0	2.4	1.9	0.8
TOT INVERTS	0.7	0.1	8.9	26.1	34.7	7.0	1.2	1.1	3.0	5.2	0.9
TOTAL CATCH	53.3	635.3	194.2	192.9	175.9	44.8	73.4	377.3	95.8	90.3	311.4

Table 28. --Continued.

HAUL #	155	156	157	158	159	160	161	162	163	164	165
MONTH/DAY/YEAR	8/15/86	8/15/86	8/15/86	8/15/86	8/15/86	8/15/86	8/16/86	8/16/86	8/16/86	8/16/86	8/16/86
LATITUDE START	45 27.5	45 26.5	45 31.1	45 38.0	45 42.1	45 44.6	45 42.4	45 46.3	45 52.6	45 54.9	45 55.3
LONGITUDE START	124 15.9	124 24.5	124 25.0	124 33.1	124 32.7	124 23.9	124 17.4	124 14.7	124 8.4	124 21.3	124 38.8
LATITUDE END	45 29.1	45 27.9	45 32.7	45 39.3	45 43.4	45 46.0	45 43.9	45 47.7	45 54.0	45 56.3	45 56.6
LONGITUDE END	124 16.2	124 25.3	124 24.8	124 34.2	124 33.7	124 24.6	124 16.7	124 14.1	124 7.8	124 21.5	124 38.8
LORAN START	12455.30	12474.00	12438.50	12396.60	12365.10	12333.30	12341.10	12307.40	27835.40	27885.20	27941.20
LORAN START	27969.50	27954.00	27958.20	27952.30	27957.30	27974.00	27982.20	27990.50	41891.50	41860.50	41817.40
LORAN END	12443.40	12464.20	12426.30	12388.40	12356.30	12324.50	12328.90	12295.80	27838.70	27890.90	27946.20
LORAN END	27970.60	27954.20	27960.20	27951.90	27957.10	27974.20	27984.90	27992.80	41893.70	41860.60	41817.70
GEAR DEPTH	166	229	207	267	203	154	143	126	90	146	199
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	2.89	2.72	2.85	2.78	2.87	2.57	2.87	2.72	2.83	2.56	2.39
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	9.5	2.9	2.7	5.4	10.0	2.3	4.1	1.8	121.1	12.0	1.7
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	2.7	21.3	27.2	24.9	23.6	9.8	14.1	1.4	1.1	48.5	21.3
LINGCOD	0.0	2.0	0.0	0.0	20.0	6.1	5.9	0.0	0.0	17.5	0.0
PAC OC PERCH	0.0	0.9	0.9	7.3	7.3	0.4	0.0	0.0	0.0	0.0	1.4
ROUGHEYE	2.3	0.0	0.0	0.0	0.0	1.0	0.2	0.0	0.0	0.8	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	7.6	1.7	5.2	45.1	6.8	2.6	0.9	1.4	0.1	0.0	1.3
SPLITNOSE	0.0	91.2	65.8	30.2	3.2	0.2	0.0	0.0	0.0	0.0	107.6
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	5.7	2.5	1.8	0.0	11.8	0.9
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	2.0	0.0	1.8	0.0	1.6	0.0	0.0	2.3	80.1	5.3	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.2	2.5	0.6	1.8	0.8	0.0	0.0	0.0	0.0	2.0
OTHER RNDFISH	8.0	21.7	26.8	35.3	25.5	6.3	7.0	3.6	13.0	5.8	21.5
TOT RNDFISH	32.4	142.3	133.2	148.8	99.7	35.2	34.6	12.2	215.4	101.7	158.2
ARROWTOOTH FL	17.2	35.4	17.7	9.5	19.7	13.4	12.5	4.5	1.4	17.0	17.9
DOVER SOLE	6.8	16.1	21.8	10.0	9.3	15.4	34.9	28.6	0.7	4.1	55.8
REX SOLE	12.5	0.5	10.4	25.9	11.8	17.0	12.0	11.1	3.9	34.0	17.9
ENGLISH SOLE	0.0	0.0	0.3	0.0	0.0	0.0	0.0	2.0	5.4	0.0	0.0
PETRALE SOLE	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.6	0.0	0.0	0.5
PAC SANDDAB	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	20.4	0.0	0.0
OTHER FLTFISH	10.0	5.0	32.2	0.5	35.9	2.7	2.0	1.2	9.9	0.1	11.0
TOT FLTFISH	46.8	57.0	82.3	46.9	76.7	49.7	61.4	48.2	41.6	55.2	103.1
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	10.4	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
RATFISH	0.0	0.0	0.0	0.0	1.1	3.0	0.2	1.0	0.0	0.5	1.1
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.0	0.0	0.0	0.0	1.1	3.0	0.5	1.2	0.0	10.9	1.1
DUNGENESS CRAB	0.5	0.0	0.0	0.0	0.0	0.0	0.5	2.3	0.0	1.3	0.5
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
SEA URCHINS	10.7	22.0	40.4	2.3	32.2	63.3	28.1	0.2	0.0	140.6	42.2
OTHER INVERTS	5.4	1.5	2.9	2.1	1.0	0.2	3.5	3.0	1.5	1.7	4.3
TOT INVERTS	16.5	23.5	43.2	4.4	33.2	63.5	32.2	5.4	1.5	143.6	47.6
TOTAL CATCH	95.7	222.8	258.7	200.2	210.8	151.3	128.7	67.0	258.6	311.4	310.1

Table 28. --Continued.

HAUL #	166	167	168	169	170	171	172	173	174	175	176
MONTH/DAY/YEAR	8/16/86	8/17/86	8/17/86	8/17/86	8/17/86	8/17/86	8/17/86	8/18/86	8/18/86	8/18/86	8/18/86
LATITUDE START	46 3.5	46 0.8	46 2.8	46 4.8	46 9.5	46 11.3	46 10.1	46 14.9	46 20.0	46 20.8	46 20.9
LONGITUDE START	124 45.0	124 27.8	124 26.4	124 22.3	124 27.5	124 19.6	124 14.4	124 17.9	124 14.4	124 26.1	124 31.8
LATITUDE END	46 2.6	46 2.2	46 4.4	46 5.8	46 10.8	46 10.0	46 11.3	46 16.4	46 21.4	46 21.6	46 22.1
LONGITUDE END	124 46.8	124 27.1	124 26.0	124 23.6	124 27.9	124 19.1	124 14.3	124 17.2	124 13.9	124 28.0	124 32.7
LORAN START	27992.60	27928.30	27932.20	27926.80	27963.20	27945.60	27923.70	27955.60	27966.10	28007.70	28026.60
LORAN START	41803.70	41846.20	41850.20	41861.40	41849.60	41870.60	41883.50	41876.40	41887.80	41857.10	41841.90
LORAN END	27994.70	27932.10	27937.50	27935.20	27970.00	27938.40	27928.20	27959.70	27970.90	28017.20	28035.00
LORAN END	41799.00	41848.30	41851.80	41858.50	41849.00	41871.40	41884.40	41878.80	41889.60	41852.40	41839.90
GEAR DEPTH	329	144	135	124	137	112	84	95	55	128	141
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	2.62	2.85	3.09	2.56	2.48	2.54	2.22	2.85	2.65	2.80	2.54
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	0.5	15.6	0.7	26.3	2.6	3.6	759.5	1726.8	27.7	2.9	2.5
PACIFIC COD	0.0	0.0	0.0	9.8	0.9	0.0	0.0	0.0	0.0	0.6	0.5
SABLEFISH	0.0	22.2	0.7	11.1	7.9	0.0	3.5	5.9	0.5	152.6	28.6
LINGCOD	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	28.6	0.0
PAC OC PERCH	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE	0.0	1.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	9.5	0.7	1.6	2.3	0.8	0.4	0.0	0.0	0.0	1.6
SPLITNOSE	4.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	1.3	2.3	9.1	0.0	27.8	0.0	283.0	4.5
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	0.0	2.0	0.0	2.7	0.0	13.9	0.0	8.4	2.9
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	2.5	12.7	0.4	6.7	7.3	11.5	7.7	7.9	16.3	47.9	1.1
TOT RNDFISH	7.9	62.1	3.1	58.7	23.3	27.8	772.0	1783.4	44.5	524.3	41.5
ARROWTOOTH FL	0.0	24.9	7.3	5.0	7.0	0.4	2.2	4.2	0.0	6.8	2.0
DOVER SOLE	0.0	46.7	8.1	23.1	21.1	9.5	3.7	11.9	3.6	40.4	12.0
REX SOLE	0.3	67.1	3.9	14.3	14.3	7.0	9.2	47.6	27.7	17.5	10.2
ENGLISH SOLE	0.0	0.0	0.0	0.0	3.2	0.0	0.0	1.3	1.6	0.8	1.4
PETRALE SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.2	3.4	2.0	0.5
PAC SANDDAB	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.4	24.3	0.3	0.5
OTHER FLTFISH	0.1	22.7	0.2	6.3	1.8	4.6	1.4	9.6	7.8	71.3	6.9
TOT FLTFISH	0.4	161.5	19.4	48.7	47.4	21.5	21.4	98.2	68.4	139.1	33.5
SKATES	0.0	0.0	0.0	1.4	0.2	0.0	0.0	0.0	14.9	0.0	0.8
SPINY DOGFISH	0.0	2.9	0.0	0.0	0.0	0.0	0.0	1.3	1.1	0.0	0.0
RATFISH	0.0	8.8	0.0	8.2	1.6	0.0	2.9	1.3	0.0	0.6	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0
TOT ELASMOBRH	0.0	11.8	0.0	9.5	1.8	0.0	2.9	2.6	16.0	6.5	0.8
DUNGENESS CRAB	0.0	3.4	0.7	0.6	0.3	0.5	5.4	5.9	18.1	3.4	0.9
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.0	0.0	0.0
SEA URCHINS	0.1	80.7	0.7	2.9	0.9	0.0	0.1	0.0	0.0	0.0	0.6
OTHER INVERTS	0.5	1.8	2.1	3.0	1.7	1.4	7.9	17.9	64.7	3.4	3.6
TOT INVERTS	0.6	86.0	3.4	6.6	2.9	1.9	13.8	23.9	82.9	6.8	5.1
TOTAL CATCH	8.8	321.3	25.9	123.5	75.4	51.2	810.1	1908.3	211.8	676.7	81.0

Table 28.--Continued.

HAUL #	177	178	179	180	181	182	183	184	185	186	187
MONTH/DAY/YEAR	8/18/86	8/19/86	8/19/86	8/19/86	8/19/86	8/19/86	8/19/86	8/19/86	8/19/86	8/21/86	8/21/86
LATITUDE START	46 23.5	46 24.2	46 28.3	46 28.6	46 34.1	46 34.8	46 37.9	46 42.3	46 42.9	46 51.6	46 51.1
LONGITUDE START	124 34.3	124 28.0	124 20.7	124 27.7	124 23.9	124 26.7	124 29.5	124 39.7	124 44.2	124 22.5	124 33.0
LATITUDE END	46 24.5	46 25.6	46 29.6	46 29.9	46 35.6	46 35.6	46 39.4	46 43.4	46 44.1	46 50.3	46 49.7
LONGITUDE END	124 33.6	124 27.0	124 19.5	124 26.8	124 23.8	124 28.5	124 29.9	124 40.9	124 45.0	124 22.7	124 33.2
LORAN START	28046.40	28029.40	28025.00	28049.30	28063.50	28075.70	28100.00	28154.50	28171.60	28149.00	28179.60
LORAN START	41836.10	41853.30	41874.50	41855.60	41868.10	41860.70	41854.20	41827.20	41814.60	41879.90	41849.30
LORAN END	28048.70	28032.60	28027.30	28052.40	28070.30	28085.20	28108.90	28163.90	28180.40	28143.00	28173.00
LORAN END	41838.40	41856.30	41878.30	41858.60	41869.00	41856.10	41853.50	41824.00	41812.80	41878.70	41843.00
GEAR DEPTH	201	121	73	113	90	121	115	150	166	64	101
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	2.09	2.76	2.85	2.65	2.70	2.69	2.82	2.56	2.52	2.30	2.59
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	0.0	0.0	2932.1	0.0	2.5	10.4	21.8	1.1	9.5	4.5	27.7
PACIFIC COD	0.0	7.0	0.0	0.0	0.5	0.0	0.0	0.0	0.9	0.0	0.0
SABLEFISH	2.4	3.6	0.0	0.3	0.0	5.0	1.4	3.4	6.8	2.5	35.9
LINGCOD	0.0	0.0	0.0	0.0	39.0	18.8	4.3	0.0	0.0	0.0	5.7
PAC OC PERCH	343.2	3.4	0.0	1.1	0.0	0.0	0.0	0.0	1.1	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	253.1	2.3	0.0	0.1	0.0	1.8	1.4	0.5	12.5	0.0	0.1
SPLITNOSE	88.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
YELLOWTAIL	0.0	0.0	5.5	5.0	0.0	1.6	0.0	2.5	1.4	0.0	1.8
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	30.2	7.9	304.6	6.8	1.8	0.0	2.9	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	49.0	5.3	11.1	12.1	7.0	6.5	2.1	3.7	3.8	0.0	10.4
TOT RNDFISH	740.4	51.8	2956.6	330.0	55.8	46.4	30.9	14.2	36.1	7.0	81.7
ARROWTOOTH FL	52.5	7.3	0.8	12.5	1.4	29.0	20.0	18.6	22.9	0.0	2.3
DOVER SOLE	20.4	58.1	11.1	25.2	1.8	16.3	38.6	21.8	10.1	5.0	6.8
REX SOLE	6.2	11.3	26.2	9.5	6.4	10.2	15.9	2.3	11.3	23.4	3.9
ENGLISH SOLE	10.3	0.2	3.2	0.0	2.9	0.0	0.4	0.5	0.0	34.0	4.3
PETRALE SOLE	0.0	0.0	0.0	13.2	3.6	2.0	0.5	0.0	0.0	0.2	6.8
PAC SANDDAB	0.0	5.7	37.0	1.4	18.8	4.1	19.1	0.0	0.2	36.1	14.1
OTHER FLTFISH	3.1	8.1	2.7	6.1	0.1	2.9	5.8	2.3	2.1	0.1	8.1
TOT FLTFISH	92.4	90.7	80.9	67.8	35.0	64.6	100.1	45.4	46.7	98.8	46.2
SKATES	0.0	0.0	0.0	0.0	0.0	6.5	0.0	26.3	0.9	0.0	0.7
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RATFISH	0.0	0.7	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.0	0.7	9.5	0.0	0.0	6.5	0.7	26.3	0.9	0.0	0.7
DUNGENESS CRAB	2.2	1.8	0.0	1.1	1.4	1.1	0.5	0.0	0.0	0.5	0.0
SQUID	0.0	0.0	0.1	0.0	1.5	0.2	0.1	0.2	0.1	0.0	0.1
SEA URCHINS	0.1	3.2	0.0	0.2	0.0	13.6	24.9	5.7	36.1	0.0	5.2
OTHER INVERTS	4.1	3.2	13.5	8.0	12.1	8.4	3.2	2.6	2.4	4.3	3.4
TOT INVERTS	6.4	8.2	13.6	9.4	15.0	23.3	28.7	8.5	38.6	4.9	8.7
TOTAL CATCH	839.2	151.3	3060.6	407.2	105.8	140.8	160.3	94.3	122.3	110.6	137.3

Table 28. --Continued.

HAUL #	188	189	190	191	192	193	194	195	196	197	198
MONTH/DAY/YEAR	8/21/86	8/21/86	8/21/86	8/21/86	8/21/86	8/22/86	8/22/86	8/22/86	8/22/86	8/22/86	8/22/86
LATITUDE START	46 50.4	46 47.7	46 46.5	46 53.4	46 55.9	46 57.9	46 58.9	47 2.7	47 2.8	47 3.1	47 2.0
LONGITUDE START	124 36.1	124 40.2	124 47.0	124 41.5	124 28.4	124 39.1	124 54.6	124 56.3	124 51.6	124 35.6	124 32.3
LATITUDE END	46 51.9	46 46.4	46 47.7	46 54.8	46 55.1	46 56.6	46 59.1	47 2.2	47 1.4	47 1.6	47 3.4
LONGITUDE END	124 36.0	124 39.4	124 47.5	124 41.6	124 26.4	124 38.3	124 54.5	124 56.0	124 51.5	124 35.5	124 32.1
LORAN START	28185.70	28184.10	28198.60	28218.80	28191.30	28236.40	28288.70	28315.20	28301.60	28254.80	28238.10
LORAN START	41840.00	41827.30	41807.80	41825.40	41864.70	41833.90	41788.70	41784.40	41798.60	41846.40	41855.80
LORAN END	28193.50	28174.50	28206.60	28226.60	29180.30	28226.40	28289.40	28311.30	28293.40	28246.30	28245.50
LORAN END	41841.00	41829.30	41806.50	41825.60	41870.00	41835.80	41789.00	41785.30	41798.50	41846.00	41856.90
GEAR DEPTH	110	139	166	130	75	108	166	291	163	88	75
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.50	0.10	0.18	0.50	0.50	0.50
DISTANCE FISHED	2.85	2.69	2.33	2.56	2.85	2.70	0.33	1.04	2.61	2.69	2.56
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	6 /162	6 /162	0 /162	0 /162	0 /162
PAC WHITING	0.8	0.0	15.0	4.5	0.0	338.4	0.0	0.0	59.6	1138.8	10.2
PACIFIC COD	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	1.9	2.5
SABLEFISH	6.7	6.4	6.4	0.0	0.0	3.1	0.0	0.0	95.3	0.0	0.5
LINGCOD	19.7	3.2	3.9	0.0	0.0	8.4	0.0	0.0	15.2	49.9	47.6
PAC OC PERCH	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.9	0.0	0.0
ROUGHEYE	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	1.6	0.0	2.0
DARKBLOTCHED	0.4	8.8	0.0	1.0	0.1	0.1	0.0	0.0	10.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
YELLOWTAIL	0.0	8.4	73.9	2.7	4.1	3.6	0.0	1.4	7.7	0.0	63.7
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	4.8	0.0	0.0	0.2	2.3	0.0	0.0	0.0	256.5
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	40.8	1.8	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
OTHER RNDFISH	5.2	8.9	16.9	0.9	2.6	1.7	314.8	3.2	31.6	20.9	0.6
TOT RNDFISH	32.8	39.3	131.8	9.2	6.9	355.5	365.8	6.4	232.7	1211.5	383.8
ARROWTOOTH FL	8.2	9.8	10.9	11.3	0.0	7.5	0.0	0.0	30.6	0.6	0.0
DOVER SOLE	3.1	21.3	23.6	1.8	0.0	18.4	0.0	0.0	9.1	10.0	9.4
REX SOLE	3.9	3.5	5.9	0.9	0.1	8.8	0.0	0.0	8.2	16.2	10.4
ENGLISH SOLE	2.3	0.0	0.0	0.0	0.1	0.7	0.0	0.0	0.0	1.9	8.6
PETRALE SOLE	7.3	0.0	0.5	1.6	0.0	6.8	0.0	0.0	0.9	2.3	0.5
PAC SANDDAB	18.4	0.0	0.0	0.0	0.2	7.5	0.0	0.0	0.0	30.6	25.9
OTHER FLTFISH	6.8	8.2	0.1	1.0	0.2	8.6	0.0	0.0	26.8	9.5	6.8
TOT FLTFISH	49.8	42.8	41.0	16.6	0.7	58.2	0.0	0.0	75.5	71.1	60.6
SKATES	0.1	0.4	36.8	0.1	0.0	0.1	0.0	0.0	0.0	0.0	8.2
SPINY DOGFISH	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RATFISH	4.5	0.8	0.0	0.0	0.0	1.1	0.0	0.0	6.1	1.5	2.3
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	7.3	4.5	0.0	0.0	0.0
TOT ELASMOBRH	4.7	3.6	36.8	0.1	0.0	1.2	7.3	4.5	6.1	1.5	10.4
DUNGENESS CRAB	0.9	0.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
SQUID	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	3.1	0.1
SEA URCHINS	4.3	26.5	2.3	2.5	0.0	3.6	0.0	0.0	0.9	0.0	0.0
OTHER INVERTS	4.2	9.3	5.4	2.6	0.4	5.9	3.9	1.4	7.2	1.1	2.2
TOT INVERTS	9.5	36.8	7.6	5.1	0.4	9.9	3.9	1.4	8.3	4.3	2.3
TOTAL CATCH	96.9	122.4	217.2	31.0	7.8	424.9	376.9	12.2	322.6	1288.3	457.1

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Table 38. --continued.

HAUL #	199	200	201	202	203	204	205	206	207	208	209
MONTH/DAY/YEAR	8/23/86	8/23/86	8/23/86	8/23/86	8/23/86	8/23/86	8/23/86	8/23/86	8/24/86	8/24/86	8/24/86
LATITUDE START	47 3.4	47 5.9	47 7.4	47 5.5	47 6.4	47 9.4	47 10.9	47 9.7	47 11.2	47 5.6	47 3.8
LONGITUDE START	124 28.0	124 30.9	124 35.3	124 37.5	124 53.6	124 56.4	124 50.0	124 33.9	124 31.5	124 34.3	124 36.0
LATITUDE END	47 1.9	47 7.3	47 5.7	47 6.9	47 7.8	47 10.7	47 9.3	47 10.9	47 9.7	47 4.2	47 5.4
LONGITUDE END	124 28.1	124 30.6	124 35.1	124 37.4	124 53.0	124 56.1	124 49.9	124 32.9	124 31.7	124 34.0	124 35.6
LORAN START	28233.00	28256.40	28278.70	28274.70	28328.20	28353.80	28343.60	28288.30	28290.00	28265.30	28260.20
LORAN START	41869.20	41861.70	41848.90	41841.60	41793.40	41785.60	41805.30	41854.20	41862.30	41851.30	41845.50
LORAN END	28224.70	28263.80	28268.30	28282.30	28334.50	28360.50	28333.80	28292.40	28281.70	28256.00	28268.50
LORAN END	41868.40	41863.20	41848.80	41842.50	41795.40	41786.70	41805.40	41857.80	41861.00	41851.70	41847.20
GEAR DEPTH	64	70	77	88	150	207	148	75	68	77	84
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	2.70	2.63	3.11	2.54	2.63	2.39	2.93	2.56	2.76	2.67	3.04
PERFORMANCE / GEAR	0 /162	5 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	49.0	776.1	25.4	3.4	0.0	24.8	0.7	68.3	35.4	23.4	51.7
PACIFIC COD	4.8	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.5
SABLEFISH	0.0	0.5	0.0	0.1	53.1	30.3	27.7	0.0	0.0	0.0	0.0
LINGCOD	2.7	1.8	65.1	92.8	7.3	0.0	0.0	0.6	0.0	98.9	37.6
PAC OC PERCH	0.0	0.0	0.0	0.0	0.0	246.7	0.0	0.0	0.0	0.0	0.2
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.1	0.0	0.0	0.0	0.6	974.2	2.9	0.5	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	43.8	0.2	0.2	0.0	0.0	0.0
YELLOWTAIL	0.0	0.2	0.0	0.0	5.9	0.0	0.0	0.0	0.7	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	7.3	7.3	103.4	1.1	4.4	0.0	0.0	0.0	30.4	2.3
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	1.9	3.0	4.8	26.6	12.1	25.4	9.0	0.1	0.1	4.0	2.9
TOT RNDFISH	58.4	788.8	102.5	226.9	80.1	1349.5	40.5	69.6	36.2	156.6	95.2
ARROWTOOTH FL	0.0	0.0	0.0	1.6	97.7	53.9	169.2	4.3	0.0	0.0	0.0
DOVER SOLE	5.0	9.5	15.6	3.4	23.1	3.7	8.2	15.0	2.7	26.8	20.9
REX SOLE	27.2	11.6	29.5	1.1	18.6	8.1	7.9	20.4	10.2	22.2	43.3
ENGLISH SOLE	24.9	43.3	59.4	71.2	1.1	6.2	0.0	1.4	0.2	7.9	84.8
PETRALE SOLE	1.0	0.4	0.7	20.2	1.0	6.2	0.5	0.0	0.0	0.1	7.3
PAC SANDDAB	17.7	25.3	42.9	65.3	0.4	0.0	0.0	7.0	0.2	6.4	45.7
OTHER FLTFISH	7.5	1.4	4.7	39.2	5.1	31.8	26.8	0.4	0.3	45.4	41.8
TOT FLTFISH	83.4	91.4	152.8	202.1	147.1	110.0	212.5	48.5	13.7	108.9	244.6
SKATES	0.0	0.0	0.1	0.0	0.0	0.0	1.1	0.0	0.0	0.0	5.1
SPINY DOGFISH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1
RATFISH	0.9	1.1	0.6	0.8	1.1	0.1	0.5	0.0	0.0	0.1	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	294.8	0.0	0.0	0.1	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.9	1.1	0.7	295.7	1.1	0.1	1.7	0.0	0.0	0.1	10.2
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.2	5.0	0.1	0.0	0.0	0.0	0.0	0.1	0.4
SEA URCHINS	0.0	0.0	0.0	0.0	10.0	3.5	14.5	0.0	0.0	0.0	0.0
OTHER INVERTS	6.7	3.1	1.7	2.7	0.0	6.5	0.6	4.1	41.7	27.9	6.5
TOT INVERTS	6.7	3.1	1.9	7.7	10.1	10.0	15.1	4.1	41.7	28.0	6.8
TOTAL CATCH	149.4	884.4	257.9	732.4	238.4	1469.7	269.8	122.2	91.6	293.5	356.8

Table 28.--Continued.

HAUL #	210	211	212	213	214	215	216	217	218	219	220
MONTH/DAY/YEAR	8/24/86	8/24/86	8/24/86	8/24/86	8/24/86	8/25/86	8/25/86	8/25/86	8/25/86	8/25/86	8/25/86
LATITUDE START	47 4.7	47 8.8	47 9.8	47 7.9	47 9.6	47 11.5	47 13.6	47 12.1	47 13.3	47 12.3	47 15.4
LONGITUDE START	124 55.1	124 43.2	124 33.9	124 30.6	124 28.3	124 28.4	124 29.6	124 30.9	124 32.3	124 53.5	124 45.3
LATITUDE END	47 6.0	47 10.3	47 8.4	47 9.5	47 8.0	47 11.9	47 11.9	47 13.6	47 11.8	47 13.4	47 17.6
LONGITUDE END	124 55.4	124 42.7	124 33.9	124 30.5	124 27.8	124 28.5	124 29.2	124 31.1	124 32.2	124 52.4	124 44.2
LORAN START	28323.00	28311.00	28288.80	28267.40	28270.20	28282.20	28298.40	28293.20	28304.50	28362.00	28362.60
LORAN START	41788.30	41825.50	41854.20	41863.60	41871.40	41872.10	41869.40	41864.50	41861.00	41795.10	41821.80
LORAN END	28331.20	28318.40	28280.30	28276.50	28259.00	28284.50	28286.80	28303.00	28295.40	28365.90	28366.60
LORAN END	41797.90	41827.70	41853.70	41864.60	41872.10	41871.90	41869.90	41864.60	41860.50	41798.80	41825.70
GEAR DEPTH	165	113	77	68	50	55	59	66	68	176	141
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.13	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.44	2.93	2.61	2.93	3.07	0.61	3.19	2.82	2.74	2.61	2.61
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	6 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	1.4	3.6	68.7	24.0	1.1	0.0	4.5	66.7	423.2	30.8	13.6
PACIFIC COD	3.2	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0
SABLEFISH	45.1	20.7	0.7	0.0	0.2	0.0	0.0	0.0	0.0	27.7	36.0
LINGCOD	6.4	9.1	0.5	1.8	0.0	0.0	0.0	0.0	0.0	5.2	19.1
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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	2.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	46.3	3.2
SPINEMOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	260.4	4.1	0.0	2.5	1.8	0.0	1.1	0.5	0.0	0.0	1.1
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	2.3	1.4	8.8	27.9	1.6	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE	72.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	138.4	6.7	15.9	30.8	4.5	0.0	0.1	0.0	0.1	0.3	2.3
TOT RNDFISH	531.4	48.0	94.9	87.0	12.3	0.0	5.8	67.1	423.3	110.3	75.3
ARROWTOOTH FL	5.9	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6	40.4
DOVER SOLE	9.3	12.2	22.7	2.3	9.1	0.0	0.1	0.5	0.0	1.1	1.4
REX SOLE	1.4	8.6	19.1	15.4	19.1	0.0	0.0	0.2	0.5	2.3	2.7
ENGLISH SOLE	0.7	24.0	8.4	31.3	96.5	0.0	0.9	1.1	0.5	2.0	0.0
PETRALE SOLE	0.9	1.6	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
PAC SANDDAB	0.2	2.5	5.4	19.1	19.5	0.0	0.0	0.0	0.0	0.0	0.0
OTHER FLTFISH	29.9	4.3	0.5	0.3	0.5	0.0	0.0	0.0	0.0	16.1	5.2
TOT FLTFISH	48.3	68.9	56.0	68.3	145.4	0.0	1.0	1.8	0.9	30.1	49.6
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0
SPINY DOGFISH	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
RATFISH	0.0	0.0	0.0	0.7	2.0	0.0	1.6	0.0	0.0	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
TOT ELASMOBRH	0.0	1.4	0.0	0.7	2.0	0.0	4.3	1.1	0.1	0.0	0.1
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.2	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.3	0.0
OTHER INVERTS	1.8	3.3	36.8	28.3	2.4	0.0	18.5	22.5	5.8	4.9	1.3
TOT INVERTS	2.2	7.8	36.8	28.5	2.5	0.0	18.5	22.5	5.8	31.2	1.3
TOTAL CATCH	581.8	126.2	187.8	184.5	162.2	0.0	29.6	92.6	430.1	171.6	126.3

Table 28. --Continued.

HAUL #	221	222	223	224	225	226	227	228	229	230	231
MONTH/DAY/YEAR	8/25/86	8/25/86	8/26/86	8/26/86	8/26/86	8/26/86	8/26/86	8/26/86	8/26/86	8/26/86	8/26/86
LATITUDE START	47 15.4	47 14.1	47 16.1	47 17.6	47 16.1	47 18.1	47 19.8	47 20.9	47 19.7	47 22.3	47 23.6
LONGITUDE START	124 35.5	124 30.3	124 30.6	124 33.0	124 34.5	124 33.4	124 35.8	124 37.6	124 42.2	124 36.0	124 34.0
LATITUDE END	47 13.8	47 15.6	47 17.7	47 15.9	47 17.5	47 19.5	47 21.4	47 19.4	47 20.9	47 23.6	47 22.2
LONGITUDE END	124 35.2	124 30.4	124 30.9	124 32.7	124 34.3	124 33.3	124 36.0	124 37.8	124 42.4	124 35.3	124 33.3
LORAN START	28327.20	28303.50	28317.20	28333.20	28328.40	28337.30	28355.70	28367.70	28373.80	28371.90	28374.10
LORAN START	41851.80	41867.60	41867.40	41860.80	41855.30	41859.80	41853.00	41847.90	41832.60	41853.70	41860.60
LORAN END	28316.90	28313.00	28327.40	28322.20	28336.70	28345.90	28366.30	28359.00	28381.90	28378.20	28362.80
LORAN END	41852.00	41867.90	41867.40	41861.00	41856.50	41860.70	41853.20	41846.40	41832.60	41856.40	41862.20
GEAR DEPTH	80	60	59	70	75	66	77	88	117	75	62
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	2.89	2.74	2.85	3.04	2.67	2.63	2.98	2.83	2.30	2.54	2.82
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	166.0	4.1	94.6	117.5	9.1	179.2	2.3	1.4	14.7	45.8	859.2
PACIFIC COD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
SABLEFISH	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.4	0.0	0.0
LINGCOD	0.0	5.2	4.8	0.0	0.0	0.0	7.7	24.9	3.6	5.4	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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.1	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	62.6	0.0	0.0	0.0	0.0	0.2	80.7	0.1	5.4	3.9	5.9
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
CANARY	3.2	0.0	0.0	1.1	0.0	0.9	389.7	5.0	0.0	1.6	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	49.0	2.0	2.3	2.5	1.2	0.5	28.8	4.6	416.5	4.1	25.0
TOT RNDFISH	280.9	11.3	101.6	121.1	10.3	180.8	509.4	36.5	446.0	60.9	891.1
ARROWTOOTH FL	1.4	0.9	0.0	0.1	0.0	0.0	0.0	0.7	39.9	0.1	0.0
DOVER SOLE	3.4	0.0	0.0	0.0	0.4	0.0	21.3	11.1	5.7	5.0	326.6
REX SOLE	8.2	0.2	0.0	0.0	0.5	0.0	38.1	18.6	1.6	29.0	46.5
ENGLISH SOLE	4.5	0.2	0.2	0.0	0.0	0.1	51.3	52.6	1.1	29.9	15.7
PETRALE SOLE	0.0	0.0	0.0	0.0	0.0	0.0	1.1	5.0	0.7	0.0	0.0
PAC SANDDAB	0.7	0.0	0.0	0.2	0.1	0.0	30.4	31.3	0.0	16.8	21.4
OTHER FLTFISH	0.0	0.0	0.0	0.0	0.1	0.1	2.0	12.1	3.8	2.7	0.1
TOT FLTFISH	18.1	1.4	0.2	0.3	1.1	0.3	144.2	131.4	52.8	83.5	410.3
SKATES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
SPINY DOGFISH	4.1	0.0	0.0	0.0	0.0	1.1	6.8	29.9	5.9	54.7	67.8
RATFISH	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.6	0.0	0.0	0.0
TOT ELASMOBRH	4.1	0.0	0.0	0.0	0.0	1.1	10.4	70.5	6.8	54.7	67.8
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
OTHER INVERTS	3.0	3.3	3.8	2.9	18.2	4.4	0.3	0.7	1.6	14.1	0.6
TOT INVERTS	3.2	3.3	3.8	2.9	18.2	4.4	0.3	0.7	3.4	14.1	0.6
TOTAL CATCH	306.4	16.0	105.7	124.3	29.5	186.6	664.3	239.1	509.0	213.1	1369.9

Table 28.--Continued.

HAUL #	232	233	234	235	236	237	238	239	240	241	242
MONTH/DAY/YEAR	8/27/86	8/27/86	8/27/86	8/27/86	8/27/86	8/27/86	8/27/86	8/27/86	8/28/86	8/28/86	8/28/86
LATITUDE START	47 23.7	47 25.3	47 25.6	47 25.8	47 23.0	47 29.3	47 30.4	47 32.2	47 33.8	47 33.8	47 35.2
LONGITUDE START	124 34.2	124 35.3	124 37.9	124 41.2	124 38.6	124 40.7	124 40.0	124 38.7	124 40.4	124 37.6	124 43.6
LATITUDE END	47 25.2	47 23.8	47 27.0	47 27.1	47 29.4	47 29.6	47 31.7	47 33.4	47 32.2	47 35.4	47 33.6
LONGITUDE END	124 34.0	124 35.1	124 37.8	124 40.8	124 37.9	124 40.5	124 39.7	124 38.5	124 39.9	124 37.4	124 43.4
LORAN START	28375.30	28388.60	28398.70	28409.40	28415.50	28423.90	28435.30	28443.30	28458.60	28450.90	28477.60
LORAN START	41860.00	41857.10	41848.90	41838.30	41848.00	41841.20	41844.40	41849.60	41844.80	41854.10	41834.70
LORAN END	28384.00	28378.40	28407.00	28416.60	28423.00	28432.00	28443.00	28451.00	28447.10	28461.00	28466.60
LORAN END	41861.40	41857.00	41850.00	41840.10	41850.90	41842.50	41846.00	41851.00	41845.70	41855.50	41834.60
GEAR DEPTH	62	66	77	97	71	84	75	68	73	59	84
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	2.72	2.80	2.52	2.46	2.83	2.50	2.46	2.37	2.91	2.96	2.94
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	236.8	85.7	585.1	1496.5	449.8	1334.2	882.6	15.4	601.0	59.2	991.3
PACIFIC COD	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.5	0.0
SABLEFISH	0.0	0.1	0.0	4.6	0.5	0.0	0.0	0.0	0.0	0.0	4.5
LINGCOD	0.5	0.0	2.9	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
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	2.0	0.5	0.0	0.0	1.4	0.0	5.5	55.3	0.0	2.3	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	14.4	9.1	1.5	0.1	2.2	0.0	0.0	0.0	0.2	28.4	4.7
TOT RNDFISH	256.4	95.4	589.6	1505.5	452.8	1334.2	888.2	70.8	601.2	90.3	1000.5
ARROWTOOTH FL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DOVER SOLE	49.9	2.5	2.9	11.2	2.3	2.2	33.2	36.3	54.2	5.2	36.2
REX SOLE	56.0	25.6	5.7	8.6	7.9	6.0	25.4	1.4	9.5	14.5	46.5
ENGLISH SOLE	10.4	12.7	10.9	0.7	22.7	26.1	3.3	6.4	3.4	44.9	77.7
PETRALE SOLE	0.0	0.1	1.6	0.7	0.1	0.0	0.0	0.2	0.0	0.0	3.9
PAC SANDDAB	31.5	37.6	19.5	10.6	49.4	10.9	17.7	33.3	53.5	26.8	85.4
OTHER FLTFISH	0.0	0.0	21.9	0.4	0.0	0.0	0.0	0.0	0.0	1.6	1.7
TOT FLTFISH	147.9	78.6	62.5	32.1	82.4	45.1	79.7	77.6	120.7	93.0	251.5
SKATES	1.8	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
SPINY DOGFISH	13.6	57.4	54.0	26.4	22.0	21.7	2.2	0.2	2.7	9.5	34.9
RATFISH	2.7	0.5	0.2	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	18.1	57.8	54.2	29.7	22.0	21.7	2.2	2.0	2.7	9.5	34.9
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.4	0.0	0.0	0.0
SQUID	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	0.2	1.1	0.2	2.1	0.6	0.5	0.7	1.3	1.8	0.6	5.9
TOT INVERTS	0.2	1.2	0.2	2.3	1.3	0.5	0.7	1.7	1.9	0.6	5.9
TOTAL CATCH	422.6	233.1	706.5	1569.6	558.5	1401.6	970.7	152.1	726.5	193.4	1292.8

Table 28. --Continued.

HAUL #	243	244	245	246	247	248	249	250	251	252	253
MONTH/DAY/YEAR	8/28/86	8/28/86	8/28/86	8/29/86	8/29/86	8/29/86	8/29/86	8/29/86	8/29/86	8/30/86	8/30/86
LATITUDE START	47 34.0	47 34.1	47 39.2	47 38.5	47 42.0	47 43.5	47 45.0	47 46.9	47 45.7	47 50.2	47 51.3
LONGITUDE START	124 47.2	124 59.0	124 43.6	124 39.5	124 44.4	124 46.6	124 52.8	124 49.4	124 47.6	124 53.9	124 55.9
LATITUDE END	47 35.4	47 35.2	47 37.7	47 39.9	47 43.5	47 42.1	47 46.4	47 45.5	47 47.2	47 51.7	47 49.6
LONGITUDE END	124 46.7	125 0.1	124 43.6	124 39.1	124 44.6	124 46.3	124 52.7	124 49.2	124 47.5	124 54.3	124 55.8
LORAN START	28479.50	28512.90	28504.40	28487.60	28525.50	28541.40	28568.60	28572.50	28559.10	28607.60	28619.80
LORAN START	41822.10	41783.20	41836.50	41849.90	41835.20	41828.20	41807.70	41820.30	41825.90	41805.70	41799.20
LORAN END	28487.20	28523.20	28494.10	28495.80	28535.80	28530.80	28577.90	28562.10	28569.50	28618.50	28609.20
LORAN END	41824.50	41780.00	41835.90	41852.10	41835.20	41828.80	41808.50	41820.20	41826.80	41804.90	41798.90
GEAR DEPTH	102	188	75	59	73	80	106	90	80	101	108
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	2.70	2.50	2.82	2.65	2.67	2.65	2.59	2.70	2.83	2.69	2.80
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	2697.7	0.0	7.3	31.8	3.2	19.3	129.5	3715.2	4.1	61.2	21.5
PACIFIC COD	0.0	42.2	4.5	0.4	32.7	48.3	1.4	24.0	56.9	11.2	0.0
SABLEFISH	6.4	44.0	0.0	0.0	0.1	0.0	0.7	2.5	0.2	0.0	0.5
LINGCOD	0.0	5.9	0.5	0.0	0.0	2.5	5.9	0.0	0.0	88.5	0.0
PAC OC PERCH	0.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	1.1	0.0	0.0	0.7	25.3	0.0	265.6	1.4
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.7	0.0
CANARY	0.0	3.2	0.0	5.0	1.1	0.9	0.0	0.0	0.0	2274.2	9.5
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	0.1	10.4	4.9	11.0	1.5	5.0	2.4	5.1	15.7	33.0	1.1
TOT RNDFISH	2705.5	106.6	17.2	49.3	38.6	76.0	140.5	3772.2	76.9	2760.5	34.0
ARROWTOOTH FL	0.4	39.5	0.0	0.0	0.1	0.0	7.3	0.3	0.0	0.0	4.3
DOVER SOLE	9.0	0.5	0.5	2.0	2.3	4.3	7.9	10.1	0.9	0.8	1.8
REX SOLE	6.4	0.7	5.0	54.4	17.0	5.9	10.0	1.3	3.4	4.0	1.8
ENGLISH SOLE	9.7	0.0	30.4	110.4	71.7	13.8	1.6	58.2	21.8	4.8	1.4
PETRALE SOLE	9.0	1.4	5.4	1.1	0.7	0.5	1.9	2.5	0.9	27.4	3.4
PAC SANDDAB	16.7	0.2	30.8	157.4	54.0	29.3	28.6	17.7	23.6	6.4	7.3
OTHER FLTFISH	0.9	4.5	40.6	81.3	14.4	119.3	8.8	18.2	14.6	25.4	1.0
TOT FLTFISH	52.2	46.7	112.7	406.8	160.1	173.0	66.0	108.4	65.1	68.9	21.0
SKATES	0.4	0.1	0.1	25.0	6.4	0.1	0.0	25.3	0.0	0.0	0.0
SPINY DOGFISH	7.7	0.0	51.3	5.0	51.3	151.5	35.4	253.1	95.7	69.2	12.7
RATFISH	0.0	0.2	1.4	0.0	0.0	3.6	0.5	0.0	0.0	1.6	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	8.1	0.4	52.7	30.0	57.6	155.2	35.8	278.4	95.7	70.8	12.7
DUNGENESS CRAB	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.5	0.1
SEA URCHINS	0.0	2.7	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
OTHER INVERTS	1.0	0.7	0.9	0.2	0.1	7.2	2.9	0.5	1.7	10.2	6.1
TOT INVERTS	1.2	3.4	0.9	1.3	0.1	7.2	3.2	0.8	1.7	10.7	6.3
TOTAL CATCH	2767.0	157.1	183.6	487.4	256.5	411.5	245.5	4159.7	239.5	2930.8	74.0

Table 28.--continued.

HAUL #	254	255	256	257	258	259	260	261	262	263	264
MONTH/DAY/YEAR	8/30/86	8/30/86	8/30/86	9/ 6/86	9/ 6/86	9/ 6/86	9/ 6/86	9/ 7/86	9/ 7/86	9/ 7/86	9/ 7/86
LATITUDE START	47 49.8	47 51.4	47 50.1	48 2.6	48 5.9	48 8.5	48 10.8	48 20.5	48 17.2	48 13.1	48 9.7
LONGITUDE START	125 1.7	125 4.5	125 4.8	125 0.6	124 56.8	124 55.9	124 57.4	124 49.5	124 54.5	124 54.9	125 5.4
LATITUDE END	47 50.9	47 50.1	47 51.0	48 4.1	48 7.1	48 10.1	48 12.3	48 19.4	48 16.3	48 11.9	48 8.4
LONGITUDE END	125 2.7	125 4.3	125 6.4	125 0.1	124 56.0	124 56.0	124 57.0	124 50.6	124 55.8	124 55.6	125 4.7
LORAN START	28624.30	28643.00	28634.80	28711.60	28725.80	28742.60	28763.50	28817.90	28804.40	28774.80	28774.10
LORAN START	41778.50	41769.00	41767.90	41786.50	41801.80	41806.20	41801.70	41837.70	41816.10	41812.30	41771.00
LORAN END	28635.00	28633.20	28644.70	28720.70	28733.20	28754.60	28773.60	28812.20	28800.20	28767.20	28763.20
LORAN END	41775.30	41769.30	41762.40	41789.00	41805.20	41806.90	41804.00	41832.50	41810.40	41809.30	41773.30
GEAR DEPTH	141	155	176	123	99	108	172	62	190	108	230
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	2.54	2.54	2.57	2.78	2.54	3.02	2.83	2.46	2.44	2.39	2.52
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	7 /162
PAC WHITING	5.2	0.0	0.0	111.2	90.3	315.2	31.8	0.0	2.0	0.0	6.3
PACIFIC COD	0.0	0.0	0.5	18.9	2.5	4.3	2.5	0.0	18.6	0.0	4.5
SABLEFISH	2.7	5.7	28.6	953.4	19.1	71.7	66.7	0.2	4.8	0.0	4.5
LINGCOD	0.0	15.0	53.1	37.9	2.5	2.7	7.3	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	821.1
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.3
DARKBLOTCHED	0.2	0.7	0.0	0.0	0.0	0.0	4.8	0.0	2.9	0.2	0.3
SPLITNOSE	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	26.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4
CANARY	0.0	0.0	271.2	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0
STRIPETAIL	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	0.6	4.1	155.6	59.1	2.0	0.5	33.3	0.0	6.6	2.7	46.4
TOT RNDFISH	8.7	25.4	540.8	1194.8	116.3	394.4	150.4	0.2	35.0	2.9	927.0
ARROWTOOTH FL	50.8	127.9	93.4	2.4	1.1	23.6	179.6	0.4	74.8	4.3	0.1
DOVER SOLE	3.4	0.0	0.0	7.1	0.2	3.9	26.3	2.0	229.5	2.0	6.3
REX SOLE	1.0	0.2	0.0	0.0	1.4	8.2	11.8	6.5	19.1	3.2	0.4
ENGLISH SOLE	0.2	0.0	0.0	11.8	7.5	194.6	2.7	35.6	2.0	17.7	0.0
PETRALE SOLE	0.9	0.0	0.0	0.0	2.5	17.7	4.5	0.0	2.3	0.7	0.0
PAC SANDDAB	0.0	0.0	0.0	85.2	23.1	188.2	0.0	17.7	0.5	9.5	0.0
OTHER FLTFISH	0.4	0.6	4.5	15.1	17.5	43.4	39.8	2.0	9.9	0.3	0.4
TOT FLTFISH	56.7	128.7	98.0	121.6	53.3	479.5	264.8	64.3	338.1	37.7	7.2
SKATES	0.0	0.0	0.0	0.0	0.0	18.1	5.5	38.1	0.0	52.4	2.1
SPINY DOGFISH	2.0	0.0	14.7	1291.8	56.2	49.4	93.4	0.9	24.5	0.0	0.0
RATFISH	0.0	0.0	0.0	0.0	0.0	6.4	0.0	0.0	0.1	0.0	0.0
OTHER ELASMOBRH	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	6.6	0.0	14.7	1291.8	56.2	73.9	99.0	39.0	24.6	52.4	2.1
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.1	0.9	0.1	0.0	0.0	0.1	0.0
SEA URCHINS	0.5	0.4	0.2	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0
OTHER INVERTS	1.2	2.7	1.6	0.0	1.8	0.0	3.9	17.0	2.9	1.6	0.0
TOT INVERTS	1.7	3.1	1.8	0.0	1.9	0.9	4.2	17.0	3.0	1.7	0.0
TOTAL CATCH	73.7	157.2	655.4	2608.1	227.8	948.8	518.3	120.6	400.7	94.8	936.3

Table 28. --Continued.

HAUL #	265	266	267	268	269	270	271	272	273	274	275
MONTH/DAY/YEAR	9/ 7/86	9/ 8/86	9/ 8/86	9/ 8/86	9/ 8/86	9/ 8/86	9/ 9/86	9/ 9/86	9/11/86	9/11/86	9/11/86
LATITUDE START	48 5.1	48 3.1	48 4.1	48 4.5	48 5.1	48 5.2	48 5.2	48 6.0	48 15.1	48 8.2	48 7.9
LONGITUDE START	125 0.3	125 3.0	125 4.3	125 13.4	125 21.2	125 35.3	125 25.4	125 27.7	124 54.4	125 6.3	125 19.1
LATITUDE END	48 4.4	48 4.4	48 2.7	48 4.5	48 3.9	48 4.0	48 3.8	48 5.0	48 14.1	48 8.0	48 8.5
LONGITUDE END	125 1.8	125 3.2	125 4.3	125 15.3	125 22.2	125 34.1	125 25.1	125 27.3	124 55.3	125 8.3	125 19.5
LORAN START	28729.20	28720.70	28731.20	28755.90	28777.40	28810.00	28788.10	28798.70	28788.50	28765.60	28793.10
LORAN START	41788.40	41778.00	41773.40	41740.30	41712.00	41661.40	41696.70	41688.30	41815.40	41767.20	41719.70
LORAN END	28727.10	28730.70	28720.90	28760.30	28771.50	28799.00	28777.50	28790.60	28782.60	28768.60	28797.80
LORAN END	41782.60	41777.70	41773.20	41733.10	41708.10	41665.50	41697.70	41690.00	41811.40	41760.00	41718.60
GEAR DEPTH	163	132	134	146	165	176	124	128	119	252	132
DURATION IN HOURS	0.50	0.47	0.50	0.50	0.50	0.50	0.50	0.32	0.50	0.50	0.22
DISTANCE FISHED	2.37	2.48	2.63	2.44	2.56	2.70	2.69	1.98	2.28	2.41	1.11
PERFORMANCE / GEAR	7 /162	0 /162	0 /162	0 /162	1 /162	0 /162	0 /162	7 /162	0 /162	0 /162	6 /162
PAC WHITING	13.6	257.0	18.6	0.7	0.0	0.0	0.0	0.0	63.5	27.2	0.0
PACIFIC COD	4.8	17.2	1.1	0.0	2.0	14.1	0.0	0.0	9.3	0.0	0.0
SABLEFISH	51.7	5.2	1.8	1.4	0.0	11.8	0.0	0.0	23.6	15.6	0.0
LINGCOD	52.6	5.4	4.8	2.3	57.8	42.6	9.1	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	78.7	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	11.3	0.0	0.0	0.0	151.0	0.0	0.0	6.4	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0
YELLOWTAIL	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	96.4	0.0	0.0	2.9	64.4	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	23.1	0.0	0.0	0.0	1344.5	5.4	0.0	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	0.0	0.0	0.2	233.9	0.2	0.3	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	20.5	11.2	6.2	0.0	26.9	8.7	0.0	1.4	49.3	65.0	0.0
TOT RNDFISH	277.7	296.1	32.5	7.5	1800.4	82.9	9.4	7.7	145.7	187.5	0.0
ARROWTOOTH FL	232.7	111.4	129.3	6.4	0.6	97.1	0.0	0.0	2.5	81.6	0.0
DOVER SOLE	9.3	2.0	4.3	0.0	0.0	0.0	0.0	0.0	1.4	38.1	0.0
REX SOLE	2.5	2.3	1.2	0.1	0.0	0.0	0.0	0.0	1.6	5.1	0.0
ENGLISH SOLE	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0
PETRALE SOLE	1.4	1.1	0.0	0.5	0.0	3.4	0.0	0.0	0.2	0.0	0.0
PAC SANDDAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
OTHER FLTFISH	1.0	17.2	13.1	9.3	0.0	16.2	30.2	0.5	4.0	3.9	0.0
TOT FLTFISH	246.9	135.6	147.9	16.2	0.6	116.7	30.2	0.5	27.0	129.7	0.0
SKATES	4.5	0.0	0.0	1.1	0.0	0.0	0.0	20.4	0.0	0.7	0.0
SPINY DOGFISH	109.5	165.1	66.2	4.1	0.0	0.0	0.0	0.0	36.3	8.2	0.0
RATFISH	0.2	0.0	0.0	1.8	1.3	4.8	8.4	0.9	0.0	1.1	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	114.3	165.1	66.2	7.0	1.3	4.8	8.4	21.3	36.3	10.0	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
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.1	0.0
OTHER INVERTS	0.1	3.5	3.8	1.0	0.0	2.5	1.1	0.2	0.1	5.6	0.0
TOT INVERTS	0.1	3.5	3.8	1.1	0.0	2.5	1.1	0.2	0.1	6.7	0.0
TOTAL CATCH	639.0	600.3	250.4	31.8	1882.3	206.8	49.1	29.7	209.1	333.9	0.0

Table 28. --Continued.

HAUL #	276	277	278	279	280	281	282	283	284	285	286
MONTH/DAY/YEAR	9/11/86	9/11/86	9/12/86	9/12/86	9/12/86	9/12/86	9/12/86	9/12/86	9/12/86	9/13/86	9/13/86
LATITUDE START	48 8.2	48 8.9	48 6.8	48 8.6	48 7.9	48 11.9	48 13.3	48 13.2	48 14.6	48 12.7	48 12.2
LONGITUDE START	125 37.0	125 38.2	125 39.5	125 31.4	125 26.5	125 32.7	125 30.8	125 28.4	125 26.5	125 8.1	125 7.3
LATITUDE END	48 9.3	48 7.4	48 5.5	48 8.5	48 8.0	48 12.3	48 13.5	48 14.5	48 13.5	48 12.1	48 12.7
LONGITUDE END	125 37.8	125 37.8	125 38.9	125 29.0	125 28.5	125 30.6	125 28.5	125 27.5	125 25.2	125 9.5	125 5.7
LORAN START	28834.00	28841.30	28830.00	28824.70	28809.00	28850.60	28856.70	28851.00	28856.90	28802.50	28798.20
LORAN START	41654.80	41650.30	41646.00	41675.00	41692.70	41669.70	41676.60	41685.60	41692.70	41761.90	41762.80
LORAN END	28843.00	28830.30	28819.60	28819.20	28814.60	28849.10	28853.20	28857.70	28845.70	28801.10	28796.90
LORAN END	41651.60	41651.80	41648.40	41683.50	41685.40	41677.40	41685.30	41689.10	41697.60	41756.30	41770.90
GEAR DEPTH	170	181	223	144	132	155	146	135	124	123	123
DURATION IN HOURS	0.50	0.50	0.43	0.47	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.20	2.80	2.59	2.91	2.50	2.70	2.93	2.56	2.72	2.59	2.74
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.9	0.5
PACIFIC COD	10.9	1.4	0.0	0.0	0.0	66.9	0.0	0.0	0.0	17.2	28.8
SABLEFISH	0.9	5.4	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.5
LINGCOD	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0
PAC OC PERCH	0.0	0.9	4.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	1.6	0.0	0.0	0.0	12.7	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.3	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	19.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	852.9	156.0	7.0
REDSTRIPE	0.0	35.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.1
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	0.1	1.4	0.9	1.8	0.0	23.4	0.0	0.3	0.0	6.7	1.5
TOT RNDFISH	11.9	69.9	5.2	3.4	0.0	108.2	0.9	0.3	854.7	194.5	38.3
ARROWTOOTH FL	117.9	122.9	0.0	0.0	0.0	32.2	10.9	2.0	0.1	17.2	42.0
DOVER SOLE	0.0	1.6	0.0	0.0	0.0	7.3	1.8	0.0	0.7	2.5	8.6
REX SOLE	2.0	4.5	0.0	0.0	0.0	2.5	2.0	0.0	0.0	1.6	2.7
ENGLISH SOLE	3.6	1.8	0.0	0.0	5.4	5.2	5.2	3.2	26.3	34.5	10.0
PETRALE SOLE	2.5	0.7	0.0	0.0	3.4	0.7	0.0	0.2	9.5	1.1	4.8
PAC SANDDAB	0.0	0.0	0.0	0.0	4.3	0.0	0.2	1.1	16.8	5.7	2.5
OTHER FLTFISH	3.5	0.2	0.0	0.0	0.0	0.7	1.2	0.1	2.9	4.3	11.8
TOT FLTFISH	129.6	131.8	0.0	0.0	13.2	48.6	21.4	6.7	56.4	66.9	82.3
SKATES	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
SPINY DOGFISH	1.1	0.0	0.0	0.0	0.0	30.8	16.6	3.9	0.0	31.8	11.3
RATFISH	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.2
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	1.1	0.2	0.0	0.0	0.0	30.8	16.6	3.9	0.0	33.0	11.5
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0
OTHER INVERTS	0.2	2.7	0.0	0.2	0.2	5.7	1.1	0.2	1.7	1.1	8.2
TOT INVERTS	0.2	2.7	0.1	0.2	0.2	5.7	1.1	0.2	1.7	1.1	20.2
TOTAL CATCH	142.8	204.6	5.3	3.6	13.4	193.3	40.0	11.0	912.8	285.5	152.4

Table 28. --Continued.

HAUL #	287	288	289	290	291	292	293	294	295	296	297
MONTH/DAY/YEAR	9/13/86	9/13/86	9/13/86	9/15/86	9/15/86	9/15/86	9/15/86	9/16/86	9/16/86	9/16/86	9/16/86
LATITUDE START	48 15.7	48 18.3	48 16.7	48 17.9	48 17.8	48 17.2	48 16.2	48 17.5	48 21.9	48 19.7	48 21.1
LONGITUDE START	125 0.9	125 9.2	125 16.1	125 15.9	125 24.5	125 26.8	125 28.1	125 32.9	125 13.2	125 5.3	125 6.0
LATITUDE END	48 16.9	48 16.9	48 16.7	48 18.6	48 17.0	48 15.9	48 17.5	48 17.5	48 20.5	48 21.3	48 20.4
LONGITUDE END	124 59.6	125 9.2	125 14.3	125 13.9	125 26.2	125 27.2	125 29.3	125 31.5	125 12.8	125 5.3	125 6.3
LORAN START	28807.80	28845.60	28849.30	28857.10	28875.10	28875.50	28871.50	28890.30	28880.80	28847.60	28859.40
LORAN START	41790.60	41759.40	41732.30	41733.50	41700.50	41691.70	41686.60	41668.70	41744.90	41774.90	41772.70
LORAN END	28813.90	28835.70	28845.10	28858.00	28872.90	28867.20	28883.00	28887.30	28869.80	28859.80	28855.30
LORAN END	41796.00	41758.90	41739.30	41741.30	41694.10	41690.30	41682.30	41674.00	41746.20	41775.60	41771.40
GEAR DEPTH	278	123	174	177	128	134	132	134	187	112	113
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.42	0.50	0.37	0.50	0.50	0.23
DISTANCE FISHED	2.72	2.50	2.26	2.78	2.54	2.39	2.76	1.74	2.57	3.04	1.20
PERFORMANCE / GEAR	7 /162	0 /162	0 /162	0 /162	0 /162	0 /162	1 /162	7 /162	0 /162	0 /162	6 /162
PAC WHITING	6.8	0.0	67.4	203.2	0.0	0.0	0.0	0.0	46.5	0.0	0.0
PACIFIC COD	1.4	27.0	36.7	12.7	0.0	0.0	0.0	0.0	37.6	0.0	2.0
SABLEFISH	17.7	0.0	5.9	2.9	1.4	0.0	0.0	0.0	1.8	0.0	0.0
LINGCOD	0.0	0.5	78.9	9.1	6.4	0.0	0.0	7.7	0.0	0.0	0.0
PAC OC PERCH	42.2	0.0	6.8	5.4	0.0	0.0	0.0	0.1	3.2	0.0	0.0
ROUGHEYE	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	3.2	28.8	5.9	0.0	0.0	1.6
DARKBLOTCHED	0.0	0.0	2.9	4.1	0.0	0.0	0.0	0.0	16.3	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.1	0.0	0.0
YELLOWTAIL	0.0	0.0	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	218.4
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	24.0	0.0	0.0	0.0	21.1	0.0	0.0	0.0	0.0
CANARY	0.0	2.7	0.0	0.0	0.0	90.7	111.1	0.0	0.0	0.0	0.0
REDSTRIPE	0.0	76.4	0.0	0.0	0.0	0.0	7.3	0.7	0.0	0.0	58.3
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	35.5	18.8	134.0	95.7	0.0	45.4	1.6	0.0	114.9	0.4	5.0
TOT RNDFISH	119.7	125.4	365.6	333.8	7.7	139.3	169.9	14.4	227.5	0.4	285.3
ARROWTOOTH FL	49.9	40.8	98.7	70.5	0.2	0.0	20.0	0.0	92.5	0.0	5.4
DOVER SOLE	23.6	4.8	22.5	5.2	0.0	0.0	0.0	0.5	6.6	0.2	2.7
REX SOLE	13.4	0.7	14.7	0.7	0.0	0.0	0.0	0.0	5.4	0.0	0.7
ENGLISH SOLE	0.5	0.2	0.2	0.2	10.7	0.0	0.5	0.0	0.9	0.0	0.0
PETRALE SOLE	0.4	2.9	1.4	0.0	4.1	0.0	1.4	0.0	0.0	0.0	0.0
PAC SANDDAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER FLTFISH	0.0	0.0	17.0	2.3	2.5	0.0	50.2	5.6	26.8	0.7	0.0
TOT FLTFISH	87.7	49.4	154.4	78.9	17.5	0.0	71.9	6.1	132.2	0.9	8.8
SKATES	0.0	0.0	20.9	32.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	5.4	46.3	46.3	10.9	634.1	6803.9	678.6	49.0	5.9	0.0	1.8
RATFISH	0.0	1.4	0.0	0.9	0.0	0.0	1.4	0.5	0.0	0.3	20.9
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	5.4	47.6	67.1	44.7	634.3	6803.9	679.9	49.4	5.9	0.3	22.7
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	5.0	11.1	0.0	0.4	0.1	0.0	0.1	0.7	2.7	1.5	3.2
OTHER INVERTS	10.8	10.3	6.2	1.0	2.1	0.0	0.9	0.0	3.0	0.2	22.1
TOT INVERTS	15.8	21.4	6.2	1.5	2.2	0.0	1.0	0.7	5.8	1.7	25.3
TOTAL CATCH	228.6	243.8	593.3	459.1	661.8	6943.1	922.7	70.6	371.4	3.3	342.1

Table 28.--Continued.

HAUL #	298	299	300	301	302	303	304	305	306	307	308
MONTH/DAY/YEAR	9/16/86	9/17/86	9/17/86	9/17/86	9/17/86	9/19/86	9/19/86	9/19/86	9/19/86	9/19/86	9/20/86
LATITUDE START	46 20.6	48 24.6	48 24.3	48 24.7	48 24.1	48 26.8	48 29.0	48 28.3	48 25.7	48 26.0	48 20.7
LONGITUDE START	124 51.6	125 6.3	125 6.9	125 11.9	125 12.5	124 57.6	124 58.1	124 59.2	125 5.3	125 8.4	125 9.6
LATITUDE END	48 20.6	48 23.5	48 24.6	48 23.7	48 25.4	48 27.4	48 28.1	48 28.8	48 24.9	48 24.7	48 20.3
LONGITUDE END	124 51.6	125 4.8	125 8.5	125 10.4	125 11.7	124 56.0	124 56.1	125 1.1	125 6.9	125 9.0	125 11.6
LORAN START	28823.50	28886.20	28885.20	28899.30	28896.20	28884.60	28902.40	28899.70	28892.40	28901.30	28864.90
LORAN START	41829.30	41773.00	41770.60	41751.30	41748.40	41809.00	41808.30	41803.40	41777.50	41765.20	41758.40
LORAN END	28823.50	28875.10	28891.30	28888.50	28903.90	28886.00	28891.20	28907.60	28889.90	28893.40	28865.80
LORAN END	41829.30	41778.50	41764.20	41756.20	41751.30	41816.00	41815.90	41795.80	41770.80	41762.40	41750.70
GEAR DEPTH	172	112	117	174	176	152	102	104	113	176	185
DURATION IN HOURS	0.68	0.50	0.37	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	0.00	2.67	2.11	2.56	2.59	2.33	2.96	2.54	2.44	2.37	2.54
PERFORMANCE / GEAR	6 /162	0 /162	0 /162	0 /162	0 /162	7 /162	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	0.9	0.0	0.0	3.6	13.6	0.9	0.0	0.0	0.0	3.4	66.2
PACIFIC COD	4.1	1.8	1.4	11.8	18.1	0.0	0.0	0.0	2.5	74.4	9.1
SABLEFISH	0.0	0.9	1.6	15.4	15.0	0.0	0.0	0.0	0.0	3.9	10.2
LINGCOD	0.0	7.3	0.0	0.0	0.0	0.0	57.2	65.2	6.8	0.0	0.0
PAC OC PERCH	0.0	0.0	0.0	2.3	1.4	0.0	0.0	0.0	0.0	42.2	2.0
ROUGHEYE	0.0	0.0	0.0	2.5	2.0	0.0	0.0	0.0	0.0	0.0	2.5
SILVERGRAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	2.7	2.3
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
YELLOWTAIL	8.8	161.7	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	7.3	0.0
CANARY	2.7	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0
REDSTRIPE	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	5.9	9.5	0.5	40.6	34.5	0.0	0.0	2.9	0.1	11.7	98.6
TOT RNDFISH	23.6	181.2	4.5	90.2	85.2	0.9	57.2	72.1	9.4	145.5	191.8
ARROWTOOTH FL	1.1	92.8	46.9	46.0	53.1	0.0	0.0	0.0	29.0	70.1	35.2
DOVER SOLE	5.4	3.4	5.7	1.6	3.6	0.0	0.0	0.0	1.4	30.4	23.1
REX SOLE	0.5	1.6	0.2	2.7	5.4	0.0	0.0	0.0	0.2	6.8	5.9
ENGLISH SOLE	0.5	9.1	18.4	0.4	1.8	0.0	0.0	0.0	15.6	2.5	1.4
PETRALE SOLE	0.9	0.7	0.9	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
PAC SANDDAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER FLTFISH	0.0	0.0	4.1	26.4	3.7	0.0	16.7	0.0	6.1	6.1	20.8
TOT FLTFISH	8.4	107.5	76.2	77.1	67.7	0.0	16.7	0.0	53.8	115.9	86.3
SKATES	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	1.6	0.0
SPINY DOGFISH	2.0	1.8	7.7	4.1	8.6	0.0	243.8	2463.5	4.1	17.0	15.9
RATFISH	1.6	0.5	0.0	0.0	0.0	0.0	76.2	21.7	0.5	0.7	0.5
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	3.6	2.3	7.7	4.3	8.6	0.0	320.0	2485.2	4.5	19.3	16.3
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	0.0	4.5	9.1	2.5	2.3	1.4	71.9	0.0	7.3	2.5	4.5
OTHER INVERTS	1.0	0.0	0.7	1.7	4.6	0.0	7.0	0.0	0.2	5.8	9.5
TOT INVERTS	1.0	4.5	9.7	4.2	6.9	1.4	78.9	0.0	7.5	8.3	14.1
TOTAL CATCH	36.7	295.5	98.1	165.8	168.4	2.3	472.8	2557.3	75.2	288.9	308.5

Table 28. --Continued.

HAUL #	309	310	311	312	313	314	315	316	317	318	319
MONTH/DAY/YEAR	9/20/86	9/20/86	9/20/86	9/20/86	9/21/86	9/21/86	9/21/86	9/21/86	9/21/86	9/21/86	9/22/86
LATITUDE START	48 19.8	48 20.4	48 16.7	48 16.1	48 17.4	48 17.4	48 11.9	48 14.7	48 12.7	48 11.2	48 7.5
LONGITUDE START	125 11.3	125 16.0	125 34.7	125 26.5	125 15.8	125 9.5	125 10.4	125 26.1	125 29.5	125 35.1	125 30.8
LATITUDE END	48 21.1	48 20.4	48 16.0	48 16.6	48 16.0	48 16.8	48 13.3	48 13.3	48 12.9	48 12.5	48 8.9
LONGITUDE END	125 10.7	125 13.7	125 36.2	125 24.8	125 16.4	125 9.0	125 8.9	125 26.3	125 27.3	125 34.4	125 30.7
LORAN START	28851.20	28876.40	28888.80	28867.10	28853.40	28840.20	28801.00	28856.10	28849.50	28851.10	28815.90
LORAN START	41751.70	41733.60	41662.00	41692.70	41733.50	41758.00	41752.80	41694.30	41681.80	41661.00	41677.10
LORAN END	28870.10	28871.00	28886.40	28867.30	28844.50	28834.00	28808.40	28846.80	28845.90	28858.20	28825.30
LORAN END	41754.30	41742.30	41656.40	41699.30	41731.20	41759.80	41758.40	41693.50	41689.60	41663.70	41677.50
GEAR DEPTH	187	187	143	126	177	121	126	128	143	159	144
DURATION IN HOURS	0.50	0.50	0.50	0.50	0.50	0.27	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	2.63	2.78	2.39	2.37	2.65	1.43	3.13	2.56	2.61	2.52	2.59
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162	1 /162	0 /162	0 /162	0 /162	1 /162	0 /162
PAC WHITING	66.7	242.4	1.4	0.0	123.4	0.0	0.0	0.0	0.0	0.0	0.0
PACIFIC COD	13.2	37.4	0.0	0.0	34.7	1.8	0.0	0.0	0.0	0.0	0.2
SABLEFISH	4.8	12.7	0.0	0.0	0.5	0.0	0.0	0.0	0.0	1.1	0.0
LINGCOD	0.0	0.0	11.3	12.9	0.0	0.0	0.0	0.0	10.7	11.8	5.4
PAC OC PERCH	10.9	2.0	0.0	0.0	15.9	0.0	0.0	0.0	0.0	0.0	0.0
ROUGHEYE	4.8	1.8	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	9.2	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	0.0	0.0	3.2	3.6	0.0	0.0	0.0	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CANARY	0.0	0.0	0.0	98.2	0.0	4.1	461.8	0.0	0.0	1.6	0.0
REDSTRIPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	149.0	35.8	0.1	0.1	32.1	1.2	0.1	0.0	0.0	17.0	0.2
TOT RNDFISH	259.9	332.4	12.8	127.8	212.0	7.1	461.9	0.0	10.7	31.5	5.9
ARROWTOOTH FL	69.4	120.2	0.5	0.9	105.7	12.9	0.7	0.7	278.7	0.0	6.4
DOVER SOLE	17.2	2.7	0.0	0.0	12.9	0.5	0.0	0.0	6.8	0.0	0.0
REX SOLE	13.2	5.4	0.0	0.0	20.0	0.0	0.2	0.0	0.5	1.1	0.5
ENGLISH SOLE	0.9	0.0	1.8	0.5	3.6	0.0	1.1	15.4	1.1	0.0	5.9
PETRALE SOLE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	3.6	0.0	0.0
PAC SANDDAB	0.0	0.0	0.0	0.5	0.0	0.0	0.0	10.2	0.5	0.0	0.2
OTHER FLTFISH	60.6	12.8	3.2	0.0	16.9	0.0	4.4	2.5	0.7	5.9	0.0
TOT FLTFISH	161.3	141.2	5.5	1.8	159.1	13.4	6.4	30.4	292.0	7.0	12.9
SKATES	3.4	5.4	0.0	0.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0
SPINY DOGFISH	39.0	28.6	78.2	1084.1	29.0	9.1	29.9	0.0	1.1	1.6	0.0
RATFISH	0.5	1.7	0.0	0.0	2.3	0.0	0.9	0.0	0.0	0.0	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	42.9	35.7	78.2	1084.1	38.1	9.1	30.8	0.0	1.1	1.6	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
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEA URCHINS	7.3	2.9	0.2	0.7	0.1	4.8	0.0	0.0	0.0	0.0	0.0
OTHER INVERTS	3.5	1.9	0.1	0.8	0.9	1.6	1.8	0.5	1.6	1.5	0.0
TOT INVERTS	10.8	4.8	0.4	1.5	1.0	6.4	1.8	0.5	1.6	1.5	0.0
TOTAL CATCH	474.8	514.2	96.9	1215.1	410.3	35.9	500.9	30.9	305.4	41.6	18.8

Table 28. --Continued.

HAUL #	320	321	322	323	324	325	326	327	328	329	330
MONTH/DAY/YEAR	9/22/86	9/25/86	9/25/86	9/25/86	9/25/86	9/25/86	9/26/86	9/27/86	9/27/86	9/27/86	9/28/86
LATITUDE START	48 8.5	48 5.1	48 4.5	48 4.3	48 1.6	48 0.6	47 59.3	48 4.1	48 2.8	48 2.3	48 16.6
LONGITUDE START	125 28.5	125 9.2	125 12.0	125 29.9	125 33.1	125 36.3	125 29.6	124 57.6	125 7.0	125 8.5	124 52.8
LATITUDE END	48 8.6	48 4.2	48 4.5	48 4.5	48 2.0	47 59.5	47 59.0	48 2.9	48 3.7	48 0.8	48 15.3
LONGITUDE END	125 27.8	125 10.0	125 13.8	125 31.9	125 33.0	125 35.5	125 27.3	124 57.3	125 8.7	125 8.2	124 53.3
LORAN START	28818.20	28749.70	28752.50	28791.50	28780.60	28780.80	28756.80	28714.70	28728.40	28728.30	28796.00
LORAN START	41685.30	41755.70	41745.30	41680.60	41669.50	41658.40	41682.10	41797.90	41763.10	41757.50	41822.50
LORAN END	28816.90	28745.90	28756.50	28797.40	28782.80	28771.30	28749.50	28705.30	28738.90	28717.00	28787.20
LORAN END	41687.80	41752.60	41738.80	41673.40	41669.70	41661.50	41690.00	41798.80	41757.30	41758.40	41819.70
GEAR DEPTH	139	139	146	155	176	218	172	102	141	146	73
DURATION IN HOURS	0.18	0.38	0.50	0.50	0.12	0.50	0.50	0.50	0.50	0.50	0.50
DISTANCE FISHED	0.85	1.78	2.20	2.54	0.65	2.35	2.85	2.22	2.67	2.78	2.56
PERFORMANCE / GEAR	1 /162	1 /162	0 /162	7 /162	6 /162	0 /162	7 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	0.0	0.0	0.0	0.0	0.0	8.6	0.0	38.6	68.0	20.9	138.3
PACIFIC COD	0.0	3.2	62.6	0.0	0.7	0.0	3.6	7.7	0.0	0.0	39.0
SABLEFISH	0.0	1.4	3.9	0.0	0.0	0.0	0.0	0.9	0.0	0.0	2.6
LINGCOD	7.7	14.1	2.7	1.4	2.3	3.6	0.0	0.0	3.4	1.1	0.0
PAC OC PERCH	0.0	0.0	0.6	0.0	0.1	123.8	0.0	0.0	0.1	0.0	0.0
ROUGHEYE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SILVERGRAY	31.1	13.6	18.6	0.0	0.0	5.0	289.8	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	755.7	875.0	0.0	0.0	0.0	0.0	0.0	2.5	165.6	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BOCACCIO	13.2	0.0	0.0	0.0	0.0	6.6	0.0	0.0	0.0	0.0	0.0
CANARY	63.7	69.9	13.2	5.4	0.0	3.6	3.4	0.0	2.9	103.4	0.0
REDSTRIPE	0.0	12.2	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER ROCKFISH	0.0	102.2	17.2	0.0	4.0	9.3	0.8	10.6	8.4	108.5	22.7
TOT ROCKFISH	115.7	972.1	993.7	6.8	7.1	161.4	297.7	57.7	85.3	399.5	202.7
ARROWTOOTH FL	0.0	27.7	86.6	0.0	8.6	15.2	12.9	8.4	28.6	17.2	3.4
DOVER SOLE	0.0	9.5	0.8	0.0	0.9	3.6	0.5	4.8	1.8	1.4	12.7
REX SOLE	0.0	0.5	0.2	0.0	0.0	0.1	0.0	8.4	0.2	0.0	15.6
ENGLISH SOLE	0.0	0.2	0.5	0.0	0.0	0.0	0.0	13.2	0.0	0.0	48.5
PETRALE SOLE	0.0	1.1	5.7	0.0	0.0	0.0	0.0	3.2	2.5	0.4	2.7
PAC SANDDAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.0	1.7
OTHER FLTFISH	0.0	3.6	6.8	0.0	2.7	5.2	0.0	0.0	1.0	2.0	3.8
TOT FLTFISH	0.0	42.6	100.5	0.0	12.2	24.1	13.4	50.1	34.2	21.0	93.5
SKATES	0.0	0.0	0.0	0.0	0.0	5.7	0.0	0.0	5.0	26.8	0.2
SPINY DOGFISH	0.0	0.0	3.4	323.4	13.4	13.2	40.4	32.7	57.6	352.9	2.0
RATFISH	0.0	0.0	0.0	0.0	1.4	1.6	1.8	0.0	0.0	4.8	0.0
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	0.0	0.0	3.4	323.4	14.7	20.4	42.2	32.7	62.6	384.4	2.3
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SQUID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
SEA URCHINS	0.0	0.1	0.9	0.0	0.7	0.6	0.9	0.0	0.0	0.1	0.0
OTHER INVERTS	0.0	0.1	0.1	0.9	1.1	4.2	1.1	2.6	16.3	4.4	11.2
TOT INVERTS	0.0	0.2	1.0	0.9	1.8	4.8	2.0	2.6	16.3	4.5	12.8
TOTAL CATCH	115.7	1015.0	1098.7	331.1	35.9	210.7	355.3	143.1	198.4	809.4	311.3

Table 28. --Continued.

HAUL #	331	332	333	334	335
MONTH/DAY/YEAR	9/28/86	9/28/86	9/28/86	9/28/86	9/28/86
LATITUDE START	48 15.2	48 14.6	48 16.9	48 15.4	48 12.3
LONGITUDE START	124 54.3	124 54.9	124 55.0	124 57.4	124 59.4
LATITUDE END	48 13.9	48 16.2	48 15.6	48 16.2	48 13.6
LONGITUDE END	124 54.5	124 54.3	124 55.8	124 56.9	124 59.6
LORAN START	28789.10	28785.80	28803.30	28797.20	28779.10
LORAN START	41815.90	41813.10	41814.20	41804.00	41794.90
LORAN END	28779.80	28796.50	28795.10	28802.50	28789.60
LORAN END	41814.30	41816.50	41810.20	41806.40	41794.50
GEAR DEPTH	99	119	181	225	274
DURATION IN HOURS	0.50	0.50	0.50	0.33	0.50
DISTANCE FISHED	2.46	3.13	2.72	1.72	2.50
PERFORMANCE / GEAR	0 /162	0 /162	0 /162	0 /162	0 /162
PAC WHITING	266.3	116.1	205.5	67.1	7.3
PACIFIC COD	7.3	8.6	36.7	9.1	0.0
SABLEFISH	5.9	16.2	5.9	1.8	15.0
LINGCOD	3.4	0.0	1.4	0.0	0.0
PAC OC PERCH	0.0	0.0	0.2	15.0	0.0
ROUGHEYE	0.0	0.0	0.0	1.8	0.5
SILVERGRAY	0.0	0.0	0.0	0.0	0.0
DARKBLOTCHED	0.0	0.2	2.5	7.7	0.0
SPLITNOSE	0.0	0.0	0.0	0.0	0.0
YELLOWTAIL	0.0	1.4	0.0	0.0	0.0
CHILIPEPPER	0.0	0.0	0.0	0.0	0.0
SHORTBELLY	0.0	0.0	0.0	0.0	0.0
BOCACCIO	0.0	0.0	0.5	0.0	0.0
CANARY	0.0	1.1	3.4	0.0	0.0
REDSTRIPE	0.1	0.1	0.0	0.0	0.0
STRIPETAIL	0.0	0.0	0.0	0.0	0.0
OTHER RNDFISH	14.9	9.0	49.0	45.4	15.6
TOT RNDFISH	297.8	152.7	305.0	147.9	39.2
ARROWTOOTH FL	9.1	50.3	20.9	24.0	24.0
DOVER SOLE	6.4	56.2	252.9	58.1	20.0
REX SOLE	12.2	34.9	54.4	44.5	2.5
ENGLISH SOLE	11.1	16.1	0.0	0.5	0.0
PETRALE SOLE	4.1	8.6	2.5	0.4	1.4
PAC SANDDAB	0.0	0.2	0.0	0.0	0.0
OTHER FLTFISH	5.0	20.4	11.8	5.4	9.0
TOT FLTFISH	47.9	186.8	342.5	132.8	56.9
SKATES	0.0	1.4	3.3	19.3	6.8
SPINY DOGFISH	6.8	35.2	70.8	50.8	0.5
RATFISH	0.9	2.9	24.5	5.4	1.4
OTHER ELASMOBRH	0.0	0.0	0.0	0.0	0.0
TOT ELASMOBRH	7.7	39.5	98.6	75.5	8.6
DUNGENESS CRAB	0.0	0.0	0.0	0.0	0.0
SQUID	0.1	0.1	0.0	0.0	0.0
SEA URCHINS	0.0	0.0	0.4	2.3	1.6
OTHER INVERTS	5.2	7.0	5.6	2.7	0.3
TOT INVERTS	5.3	7.1	6.0	5.0	1.9
TOTAL CATCH	358.7	386.1	752.1	361.2	106.6

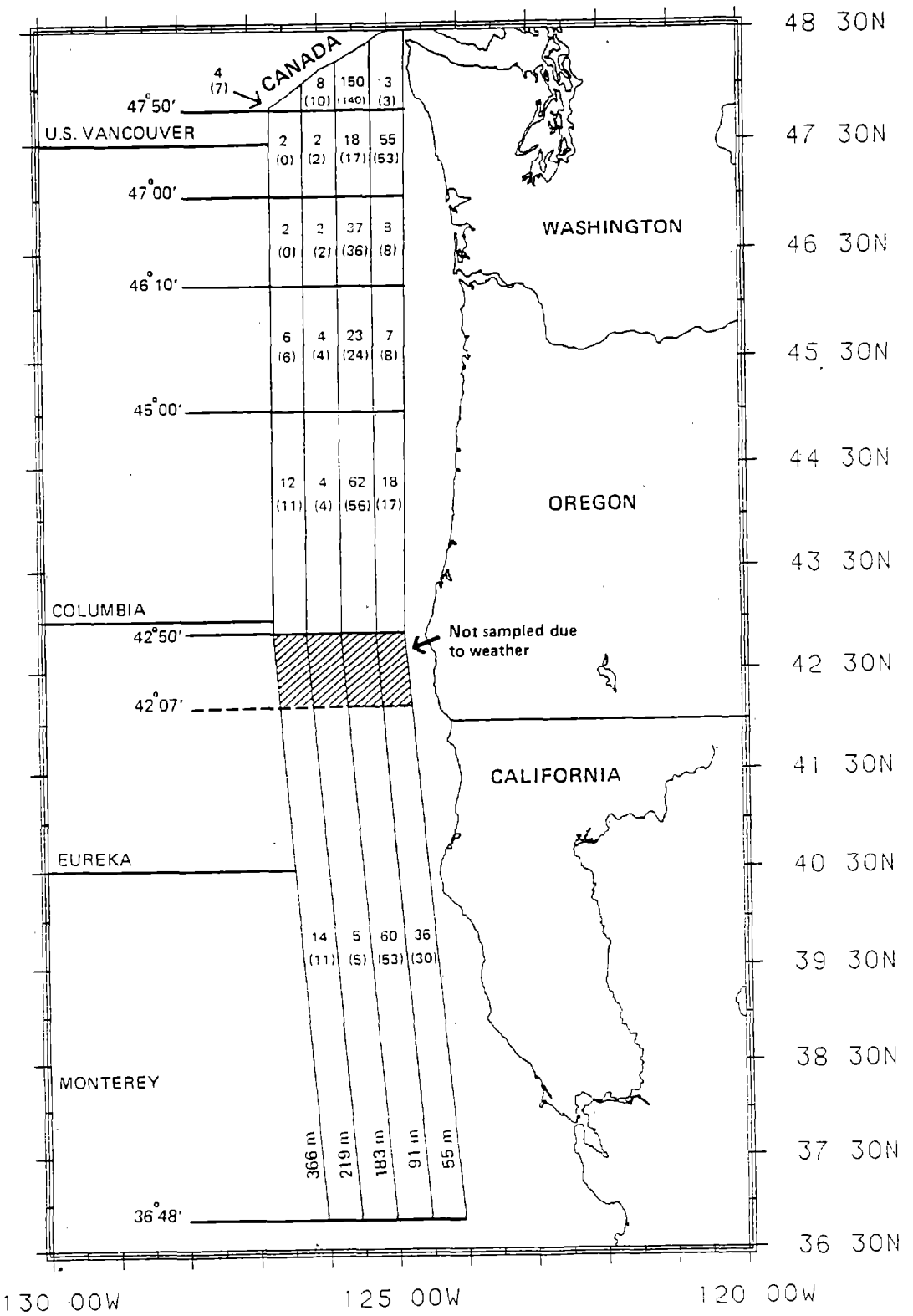

Figure 1.--The 1986 bottom trawl survey area and station allocation. Successfully completed sampling stations are in parenthesis.

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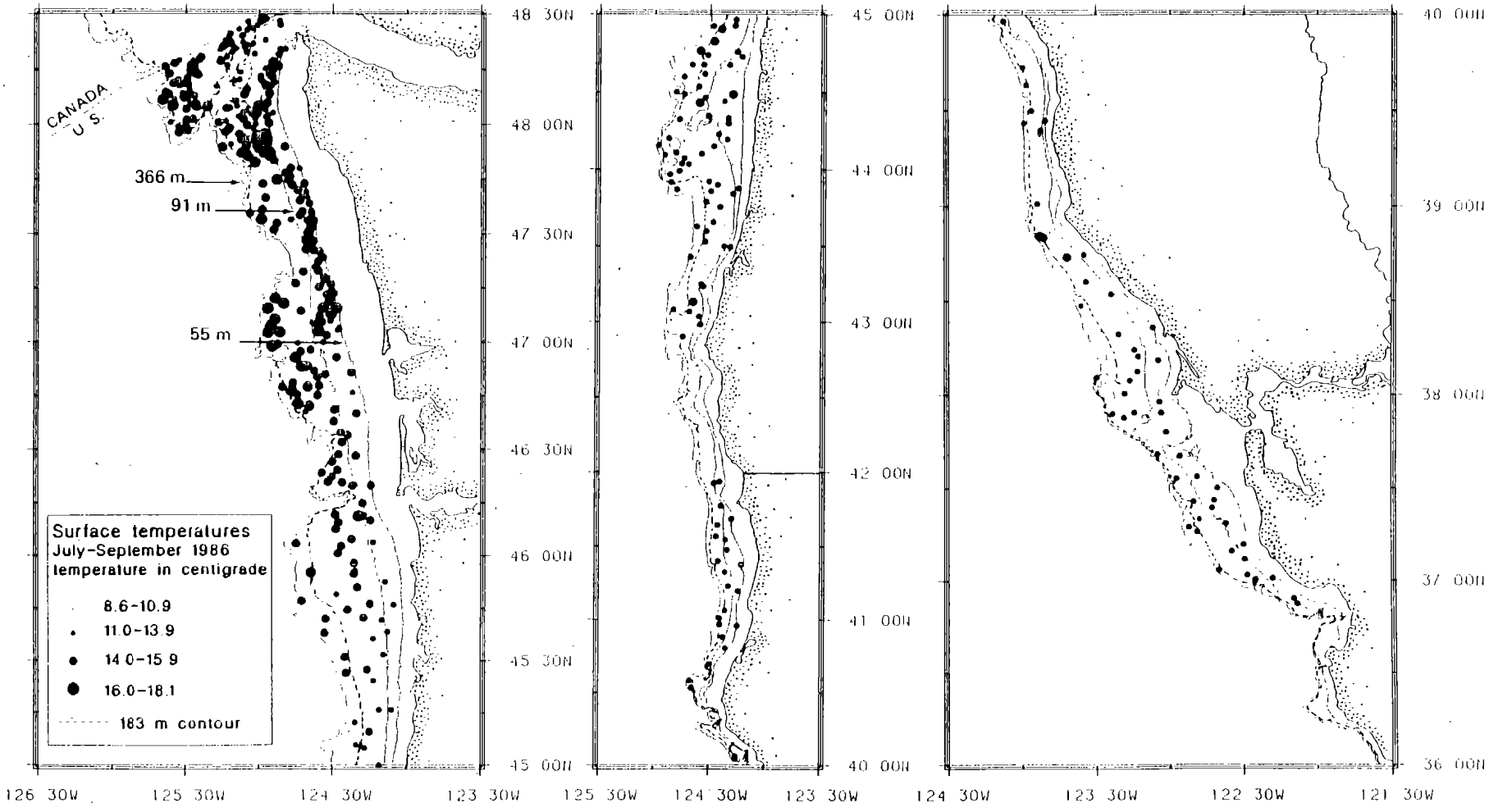

Figure 2.--Distribution of sea surface temperatures during July-September 1986.

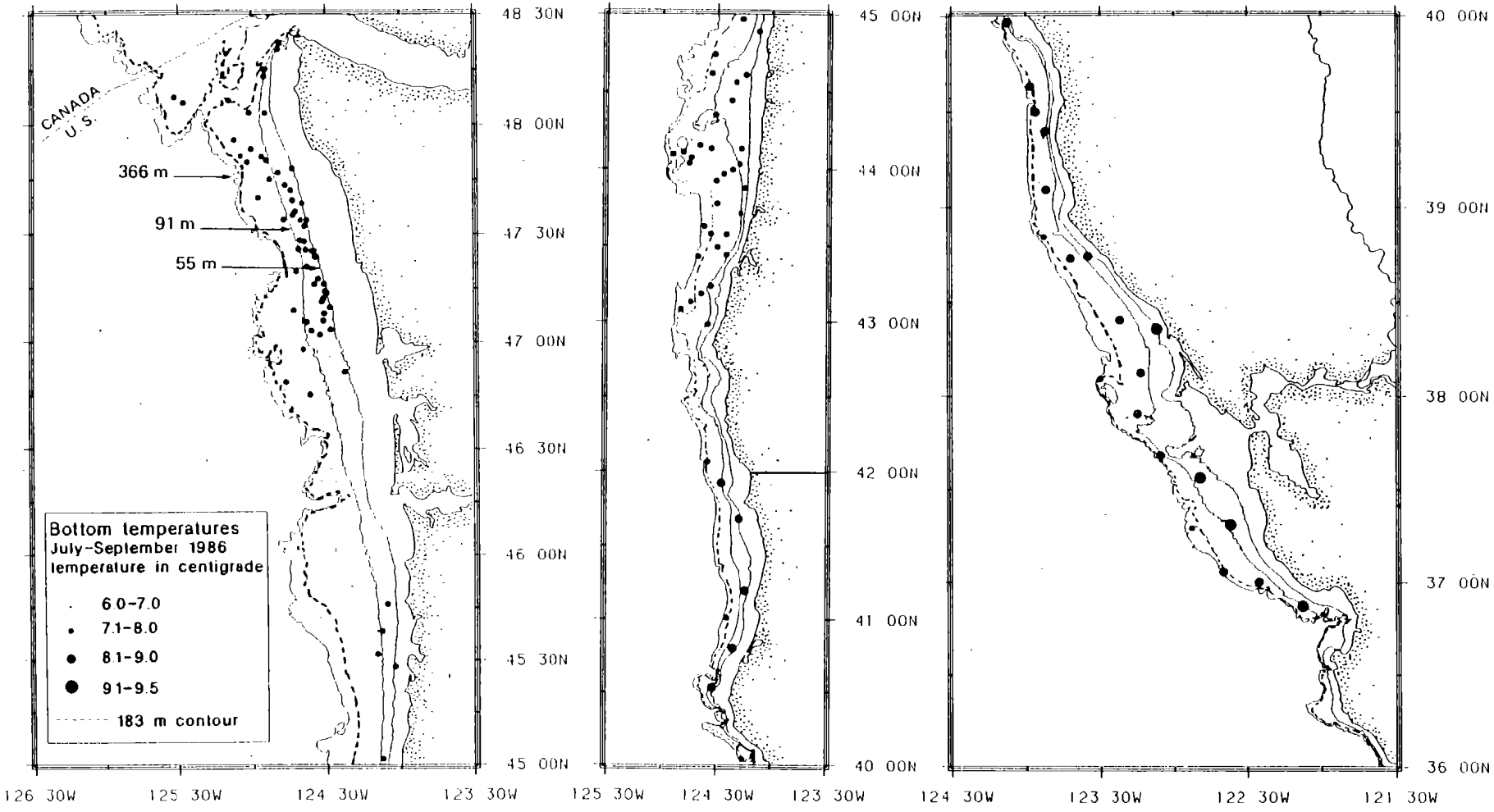

Figure 3.--Distribution of sea bottom temperatures during July-September 1986.

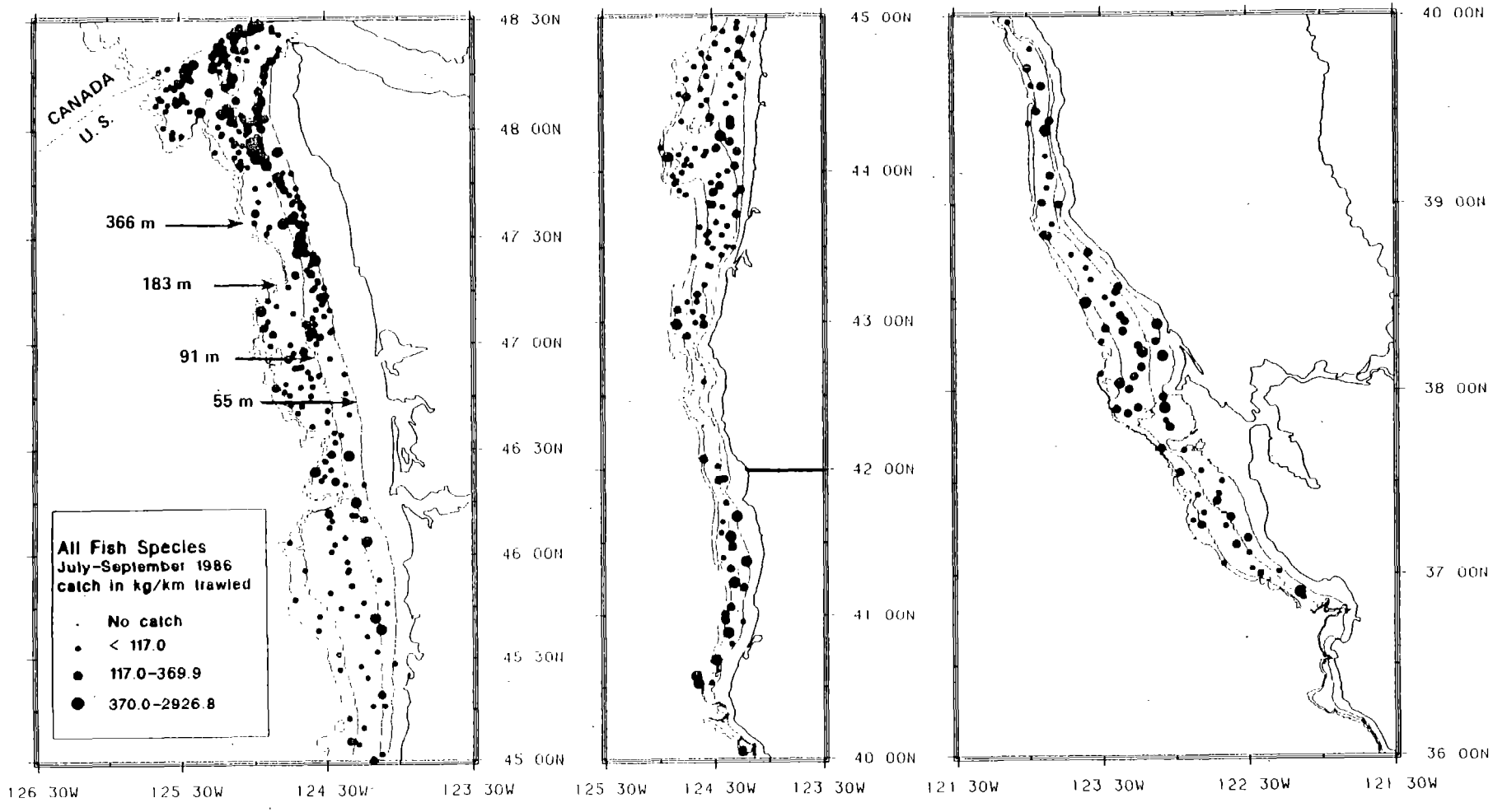

Figure 4.--Distribution and relative abundance for all species measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

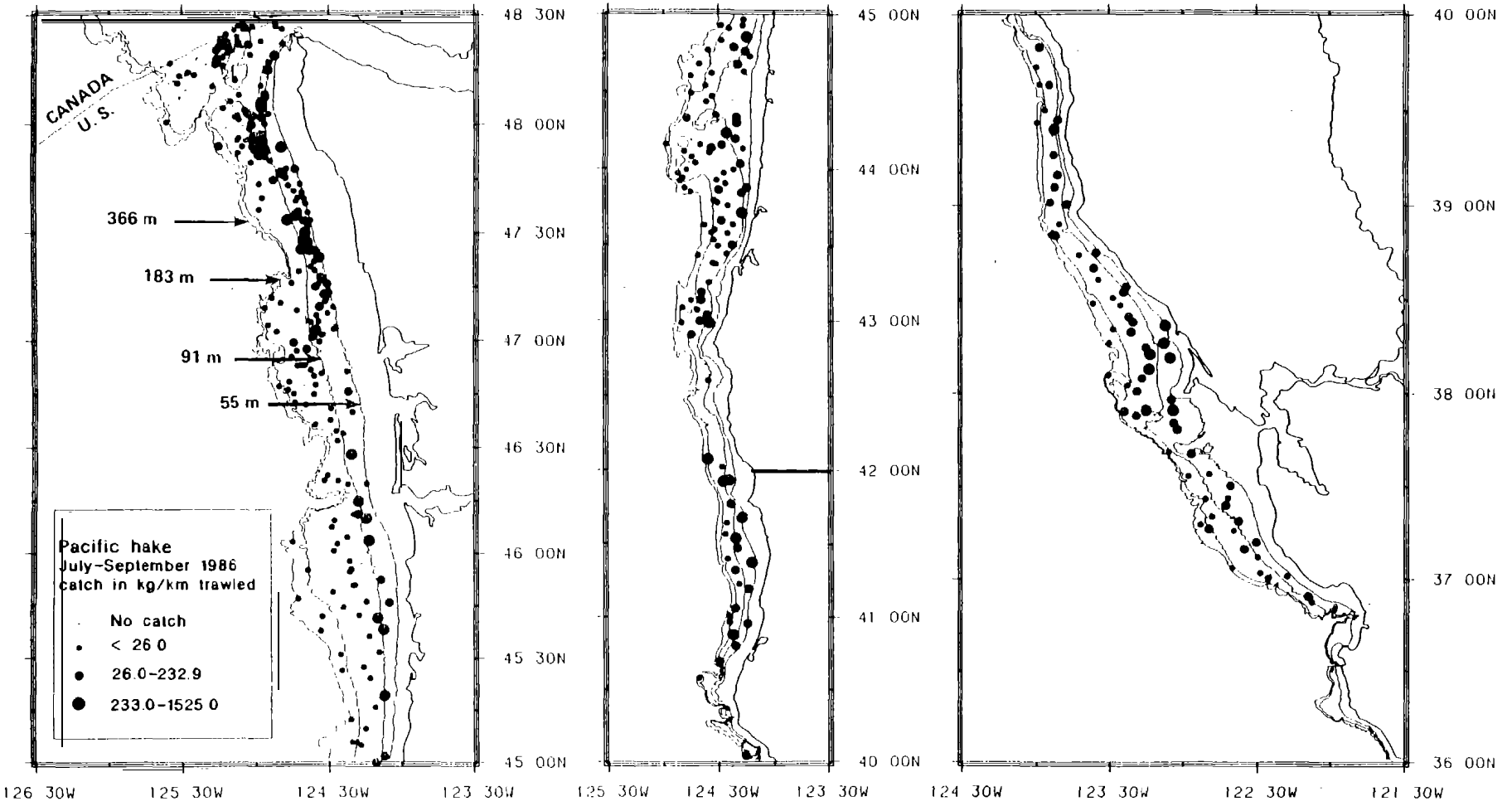

Figure 5.--Distribution and relative abundance for Pacific hake measured in catch rates (kg/km trawled from the 1986 bottom trawl survey.

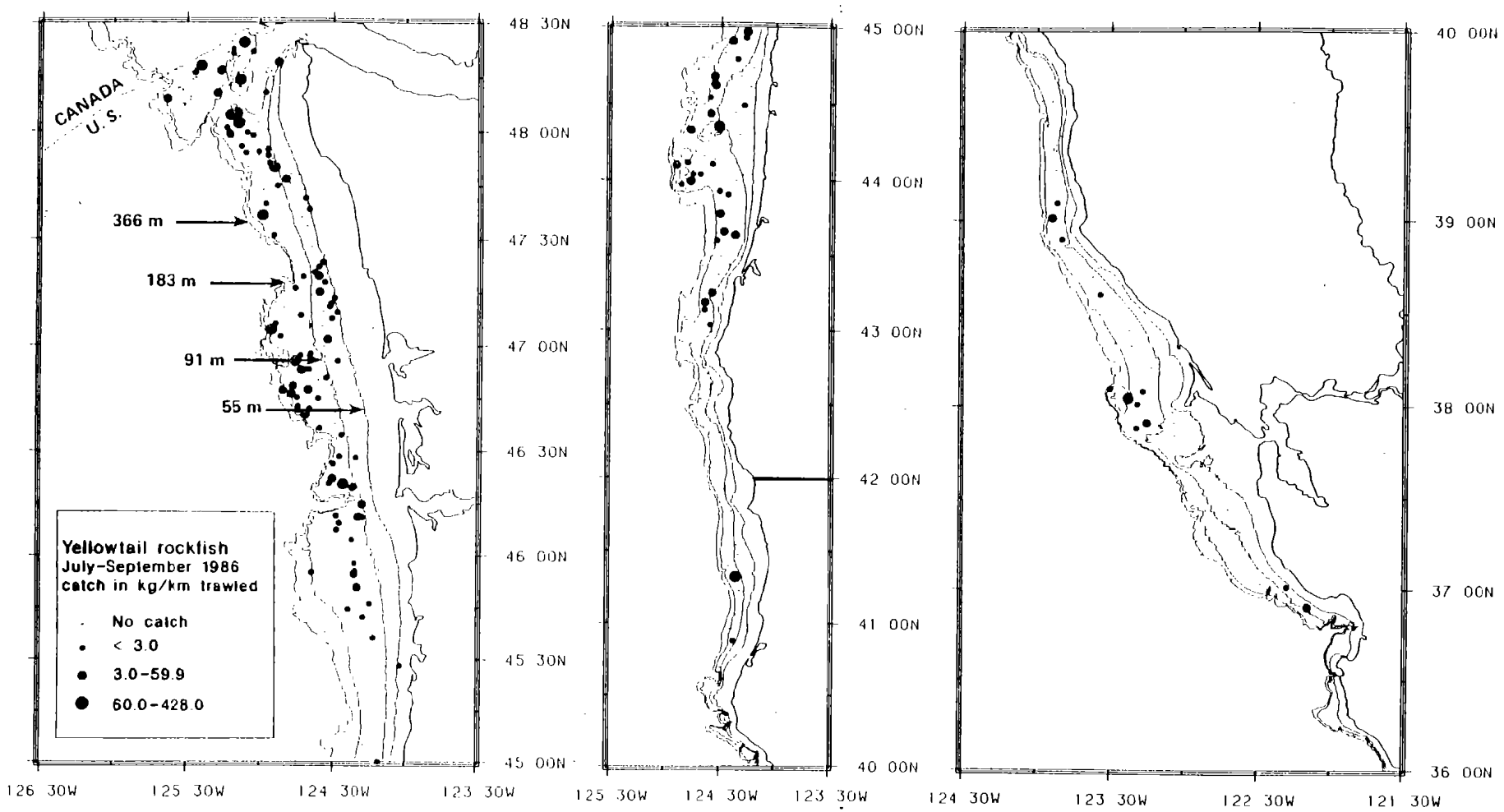

Figure 6.--Distribution and relative abundance for yellowtail rockfish measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

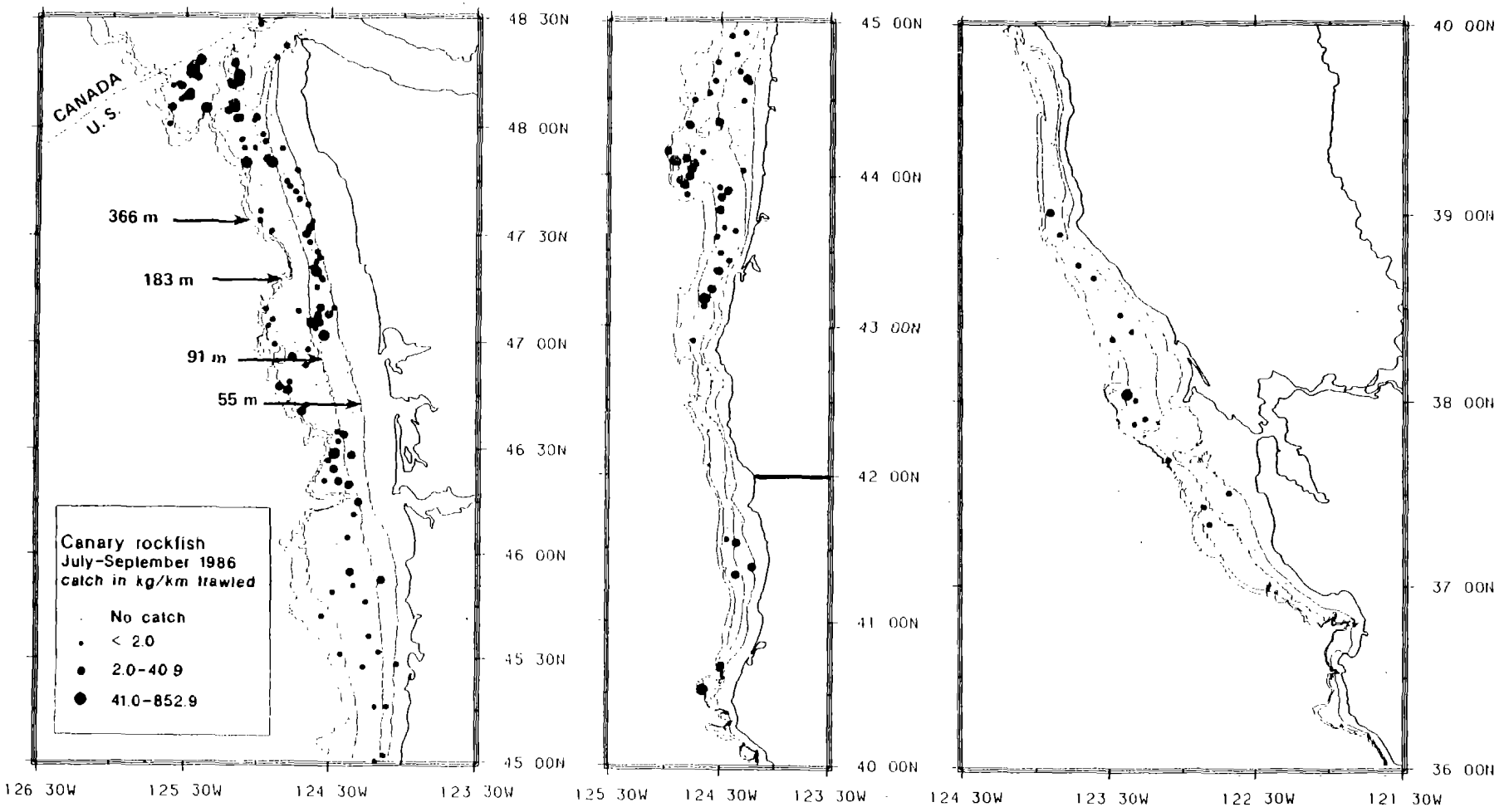

Figure 7.--Distribution and relative abundance for canary rockfish measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

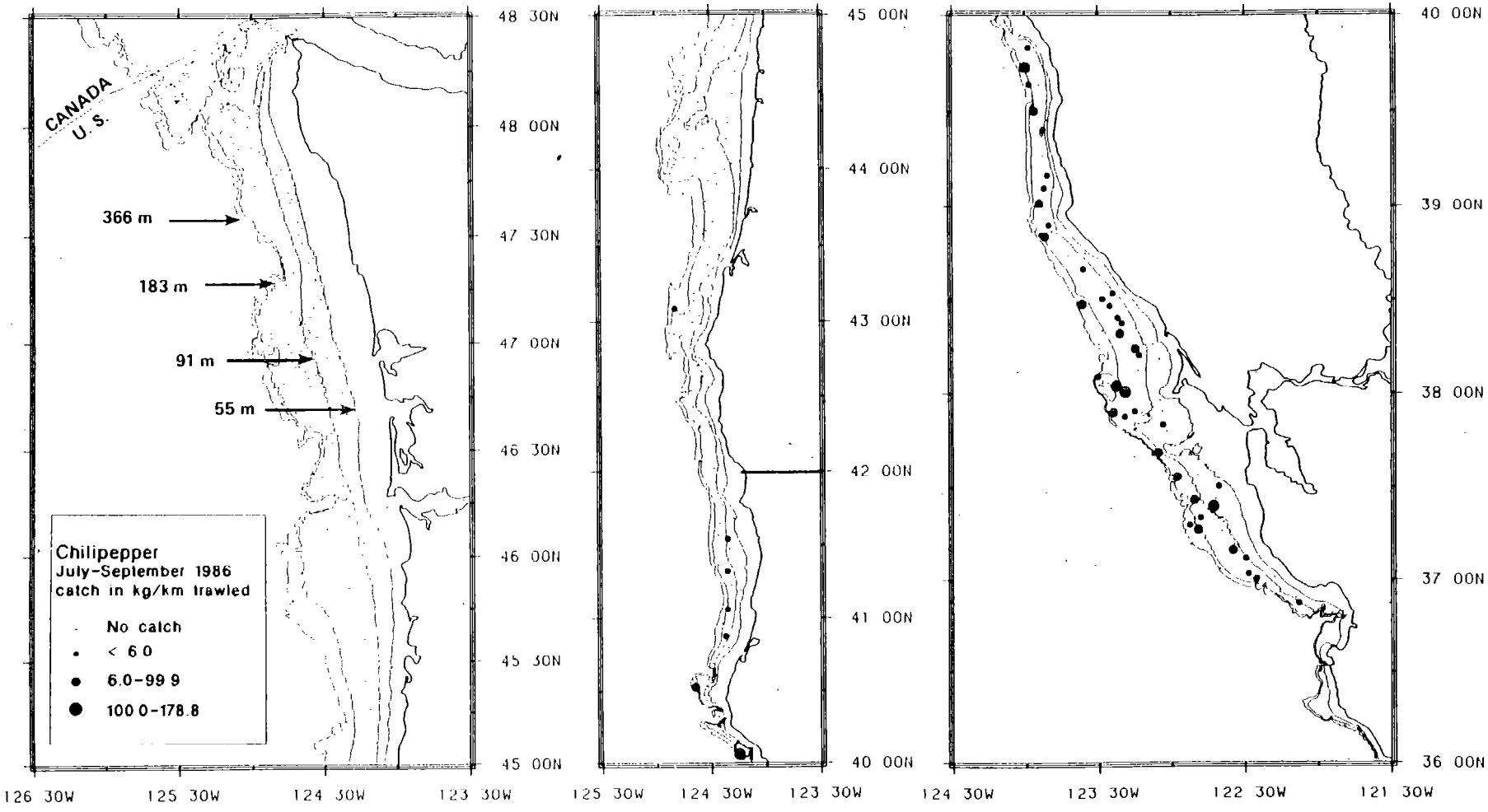

Figure 8.--Distribution and relative abundance for chilipepper measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

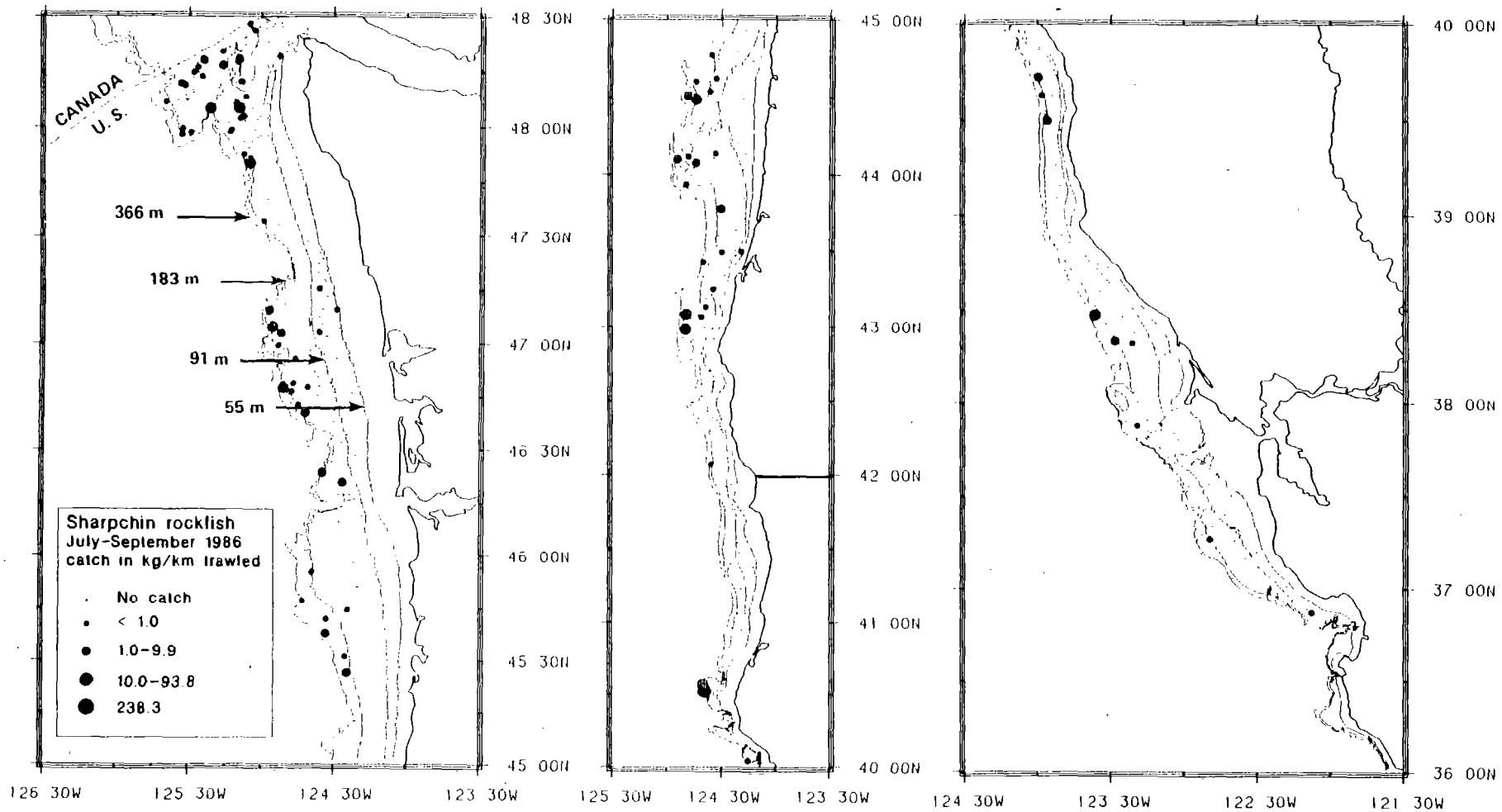

Figure 9. --Distribution and relative abundance for sharpchin rockfish measured in catch rates (kg/km trawled) form the 1986 bottom trawl survey.

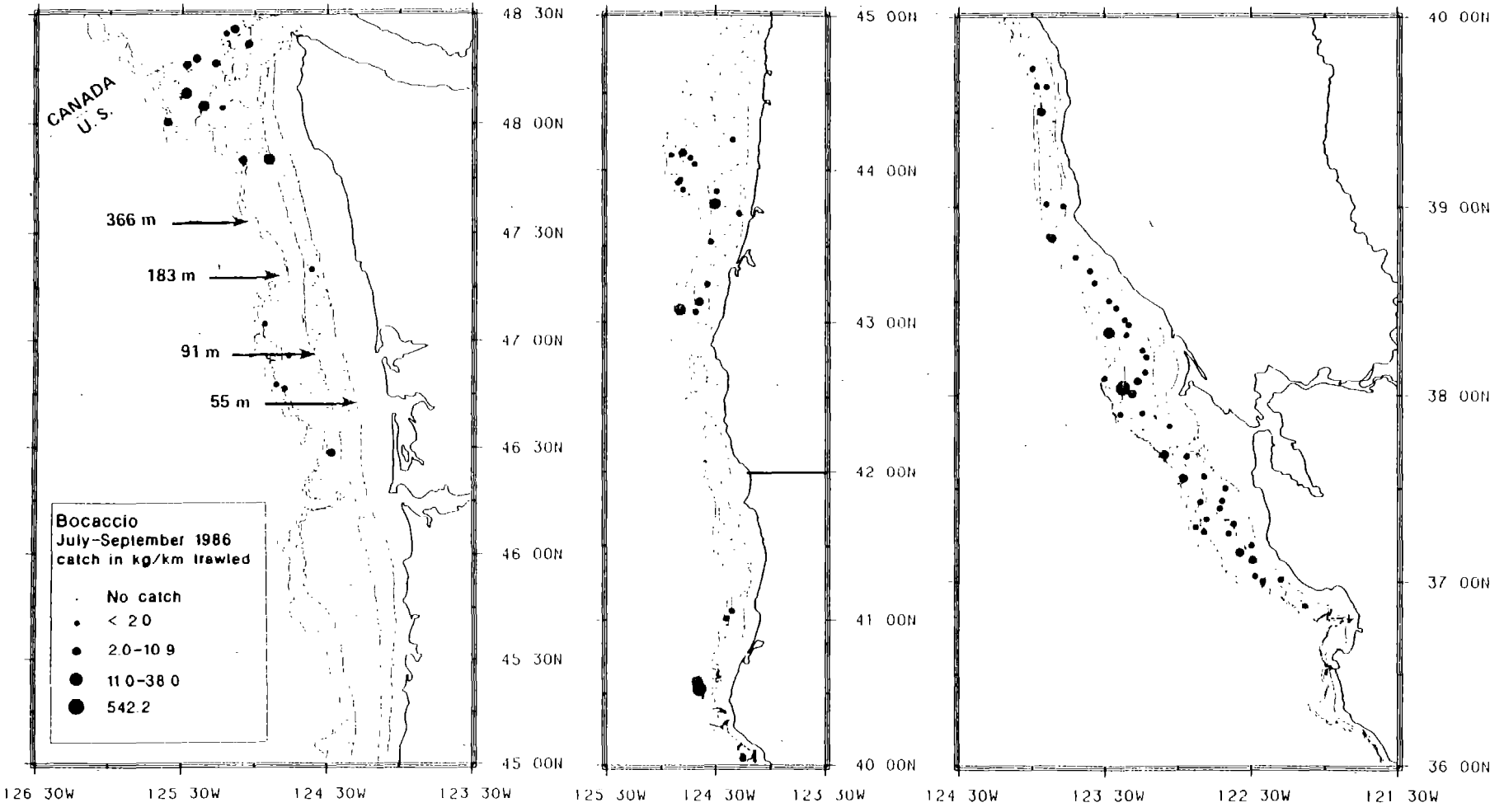

Figure 10. --Distribution and relative abundance for bocaccio measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

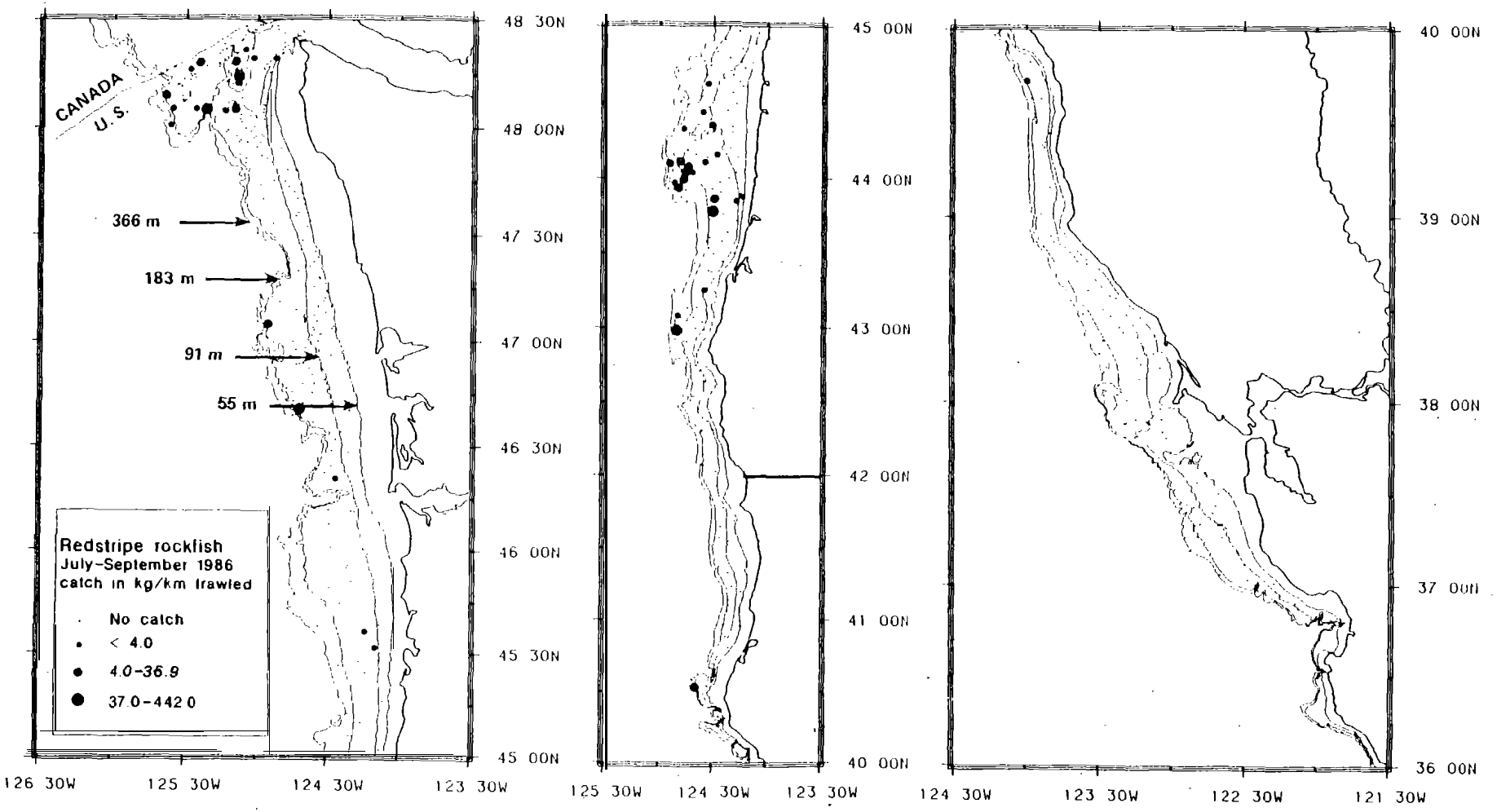

Figure 11.--Distribution and relative abundance for redstripe rockfish measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

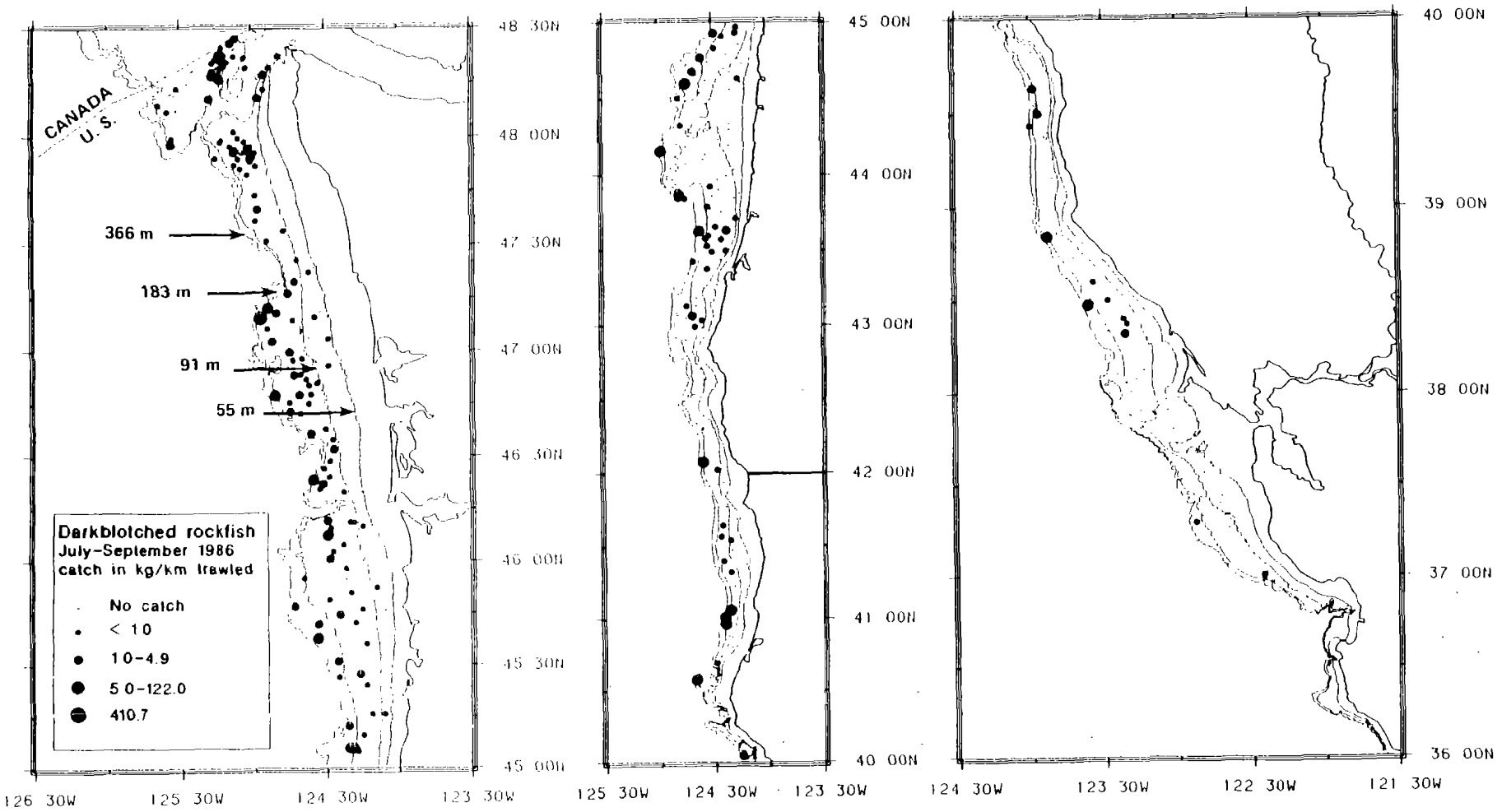

Figure 12.--Distribution and relative abundance for darkblotched rockfish measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

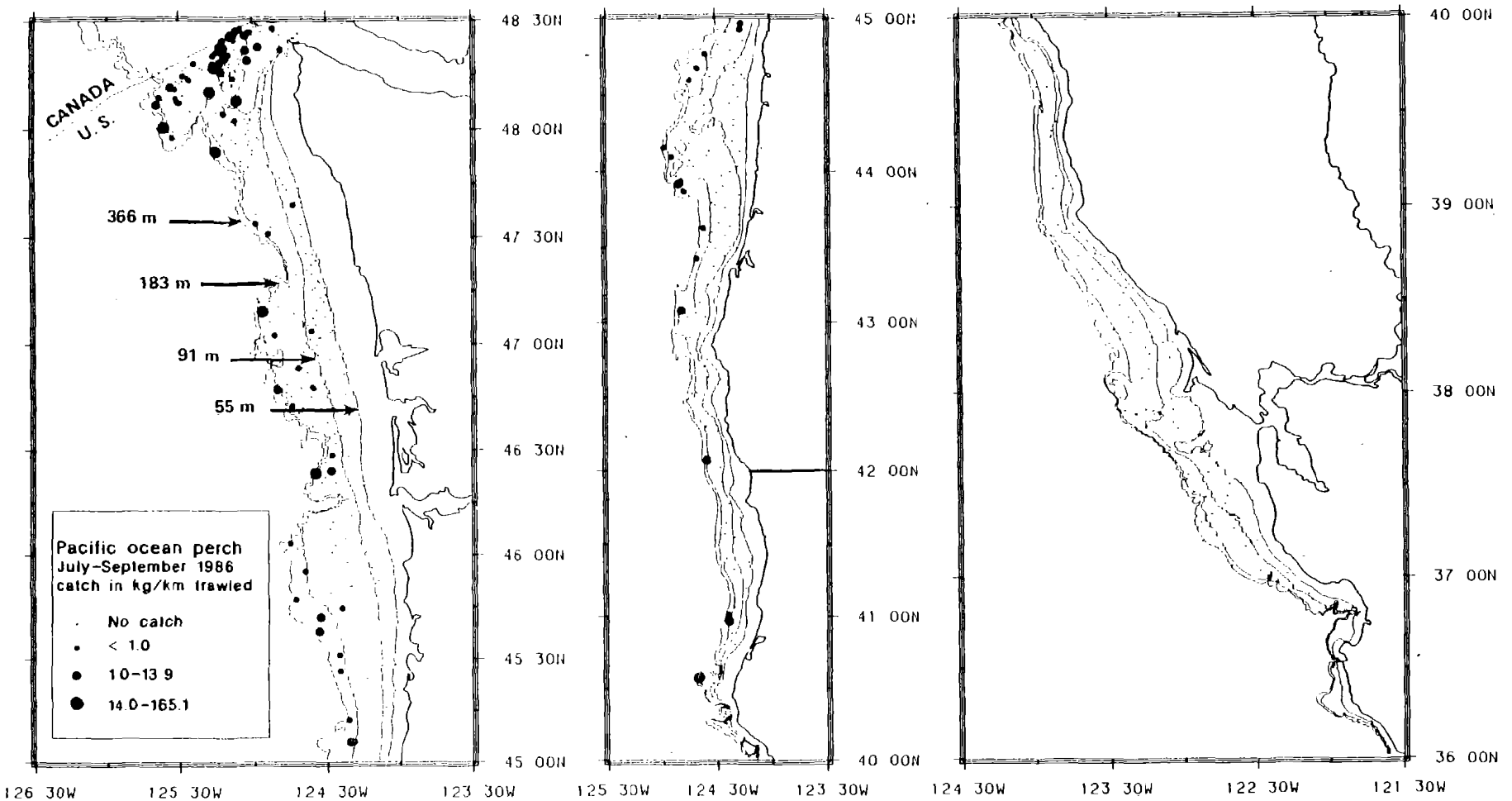

Figure 13.--Distribution and relative abundance for Pacific ocean perch measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

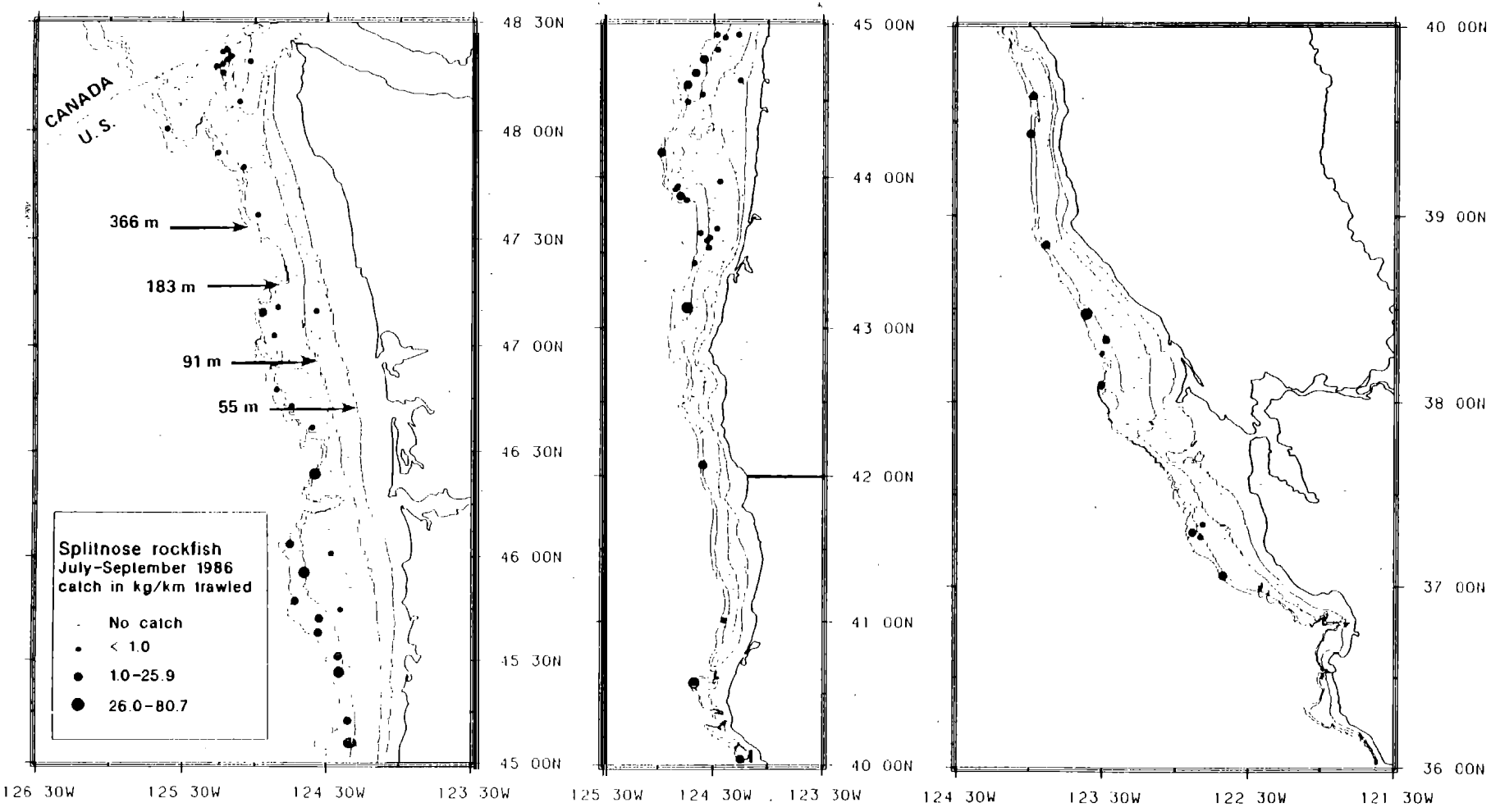

Figure 14.--Distribution and relative abundance for splitnose rockfish measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

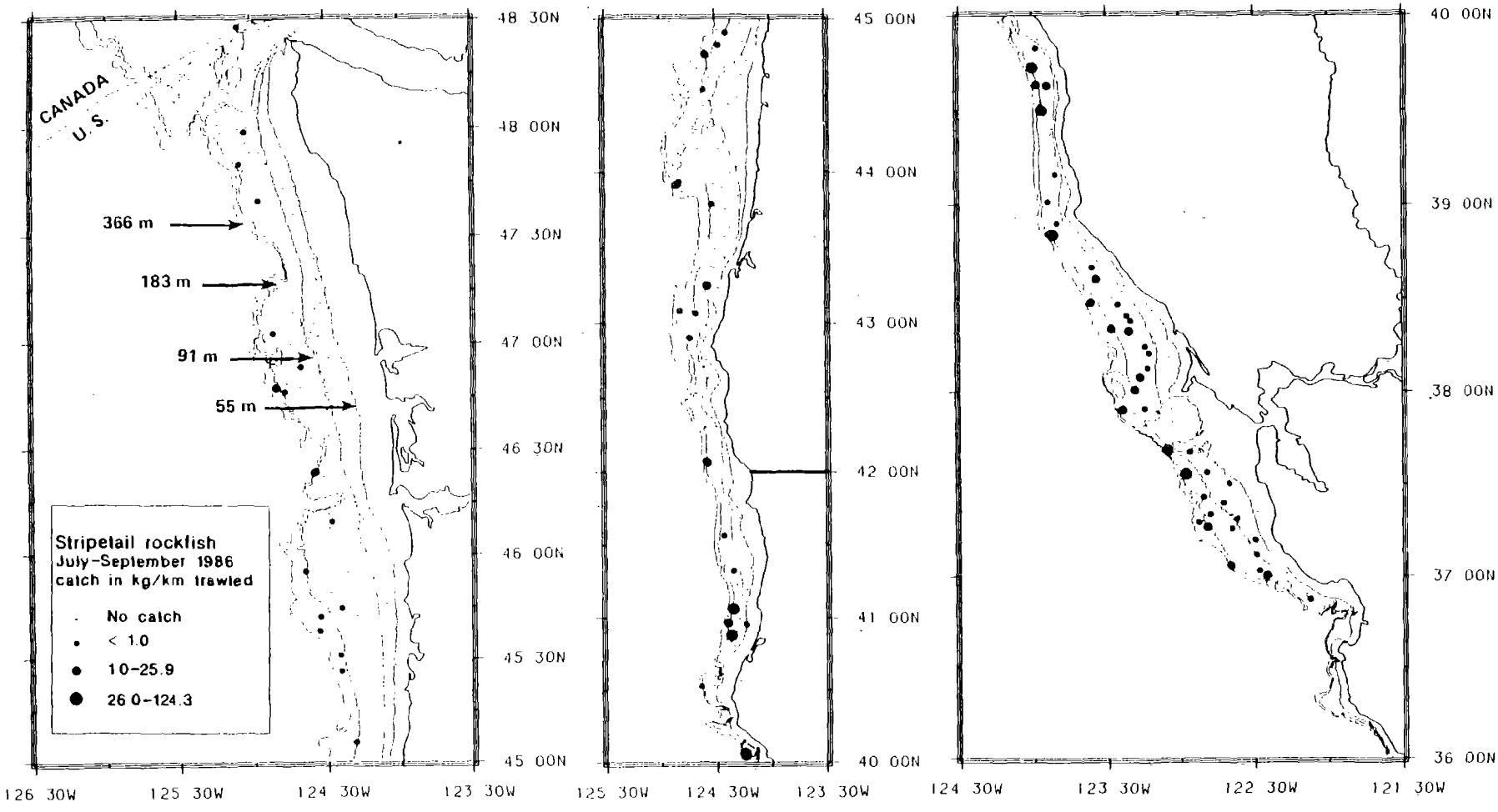

Figure 15.--Distribution and relative abundance for stripetail rockfish measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

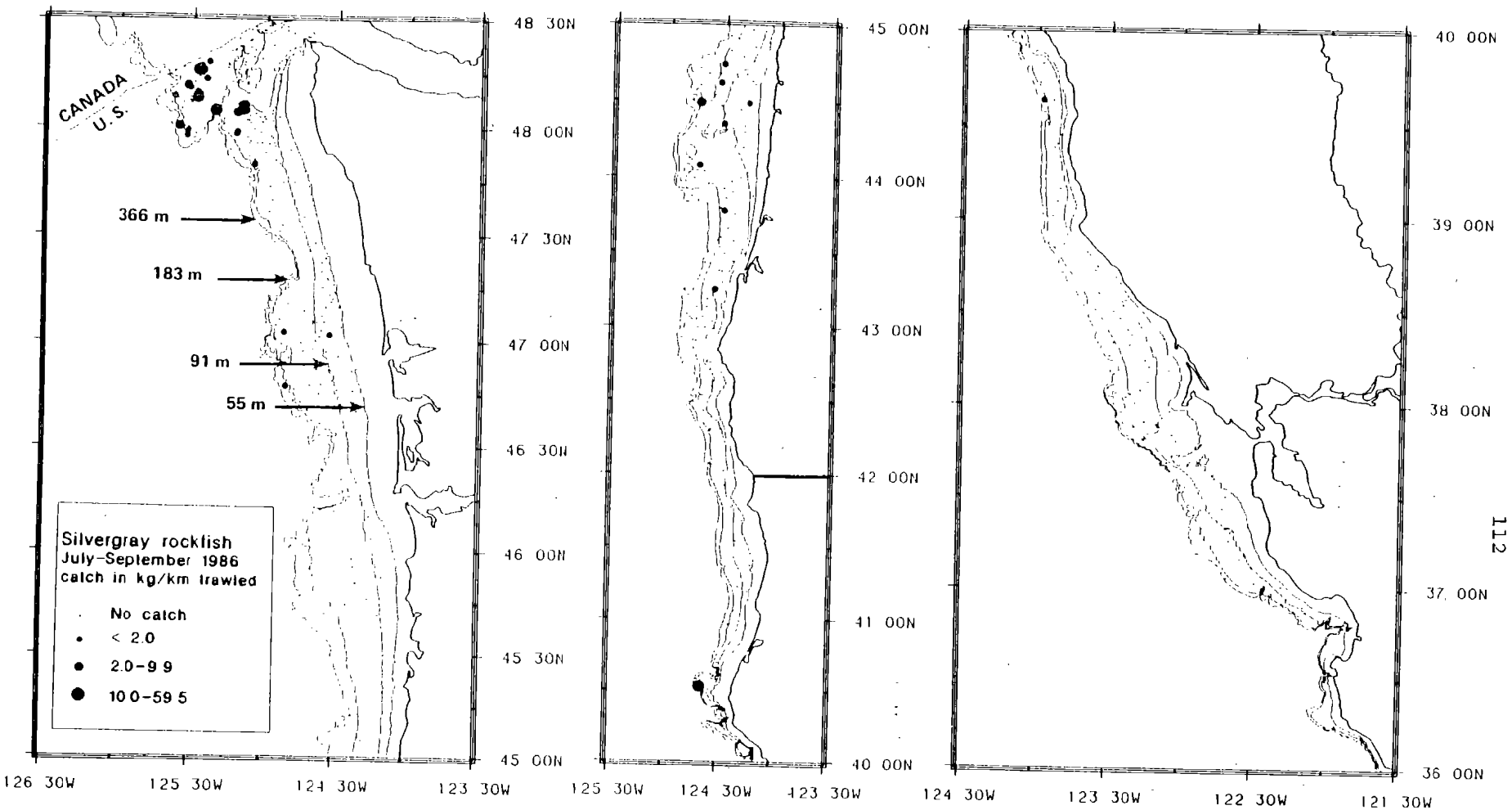

Figure 16.--Distribution and relative abundance for silvergray rockfish measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

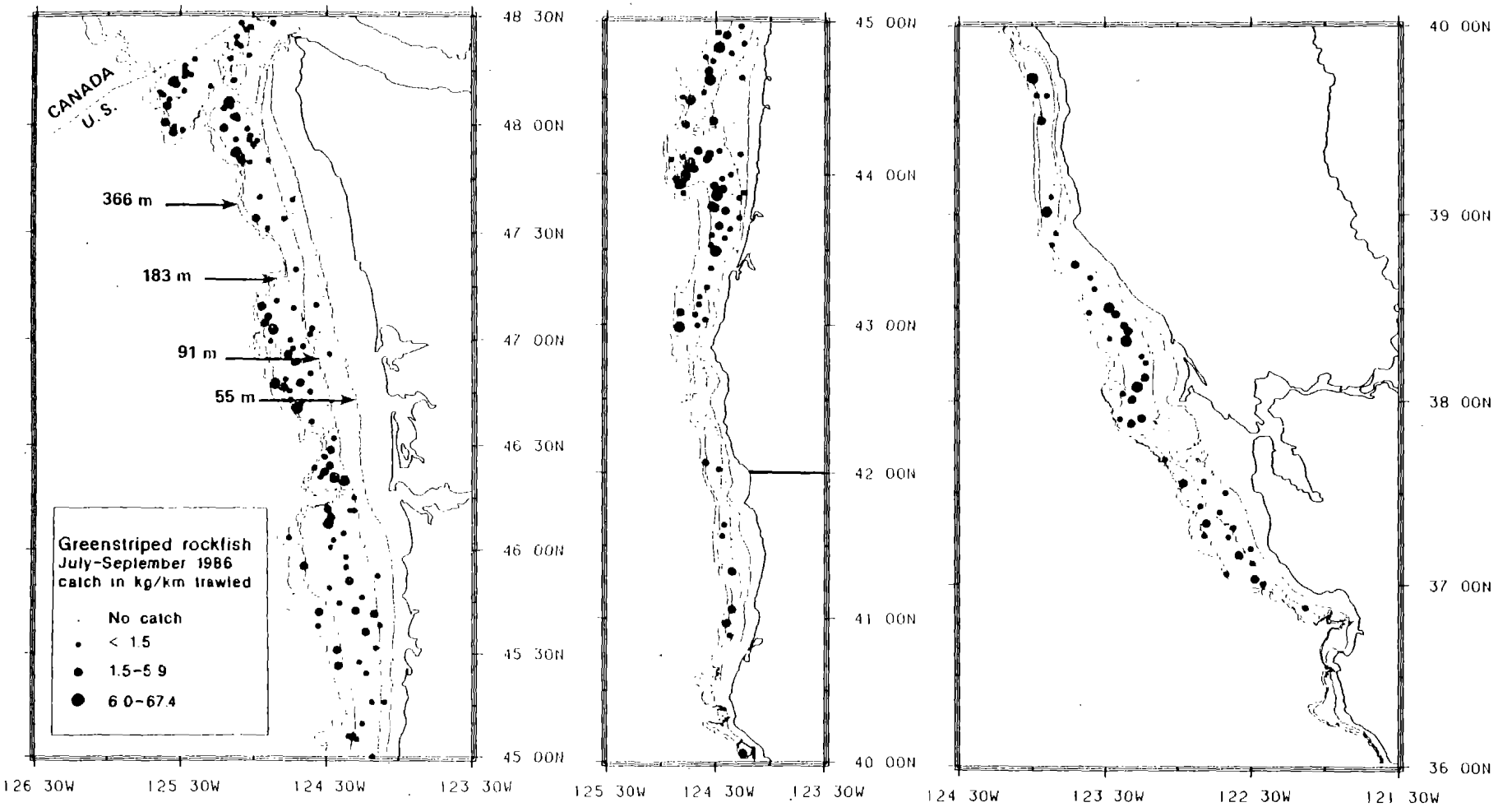

Figure 17.--Distribution and relative abundance for greenstriped rockfish measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

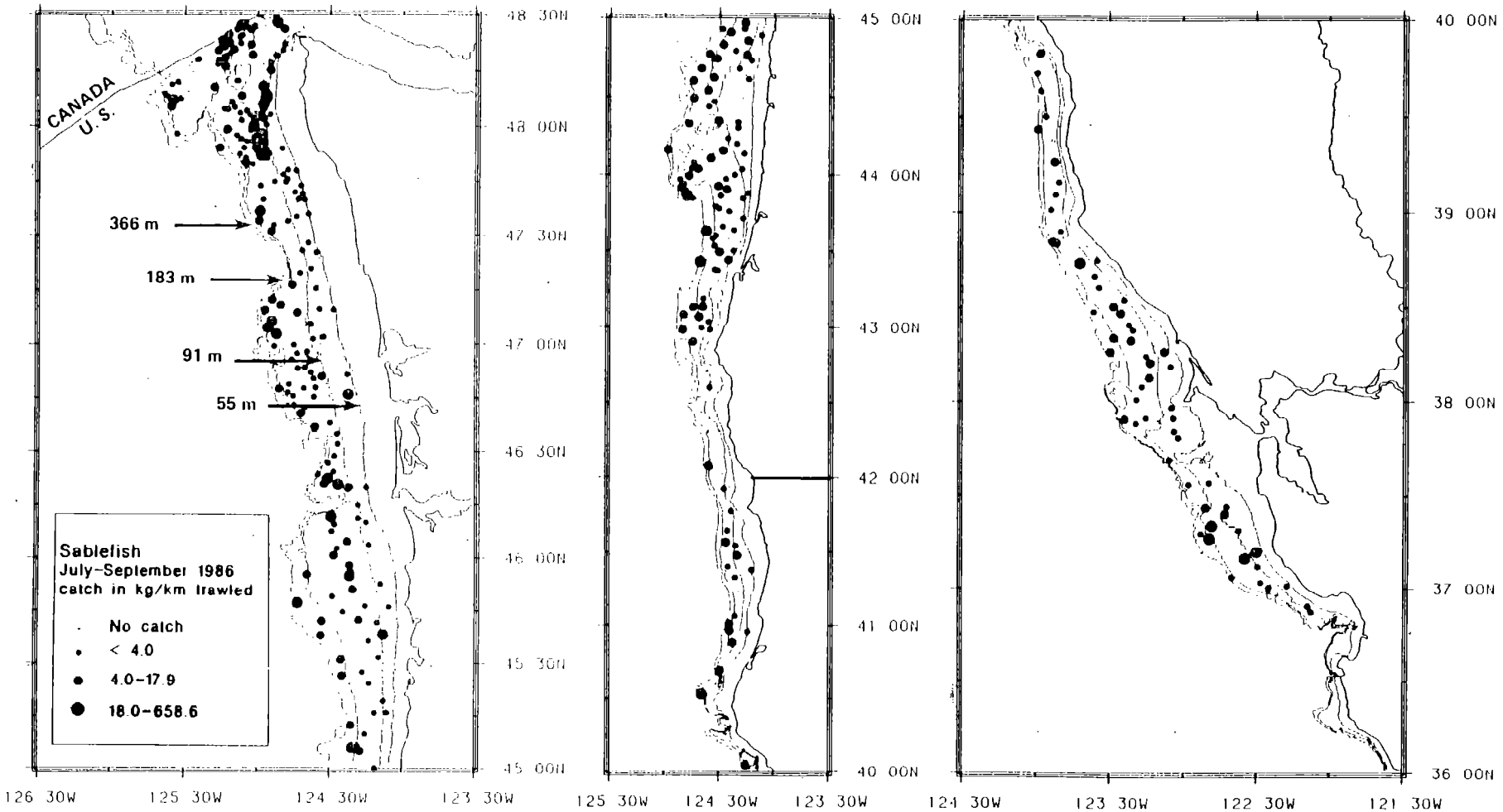

Figure 18 .--Distribution and relative abundance for sablefish measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

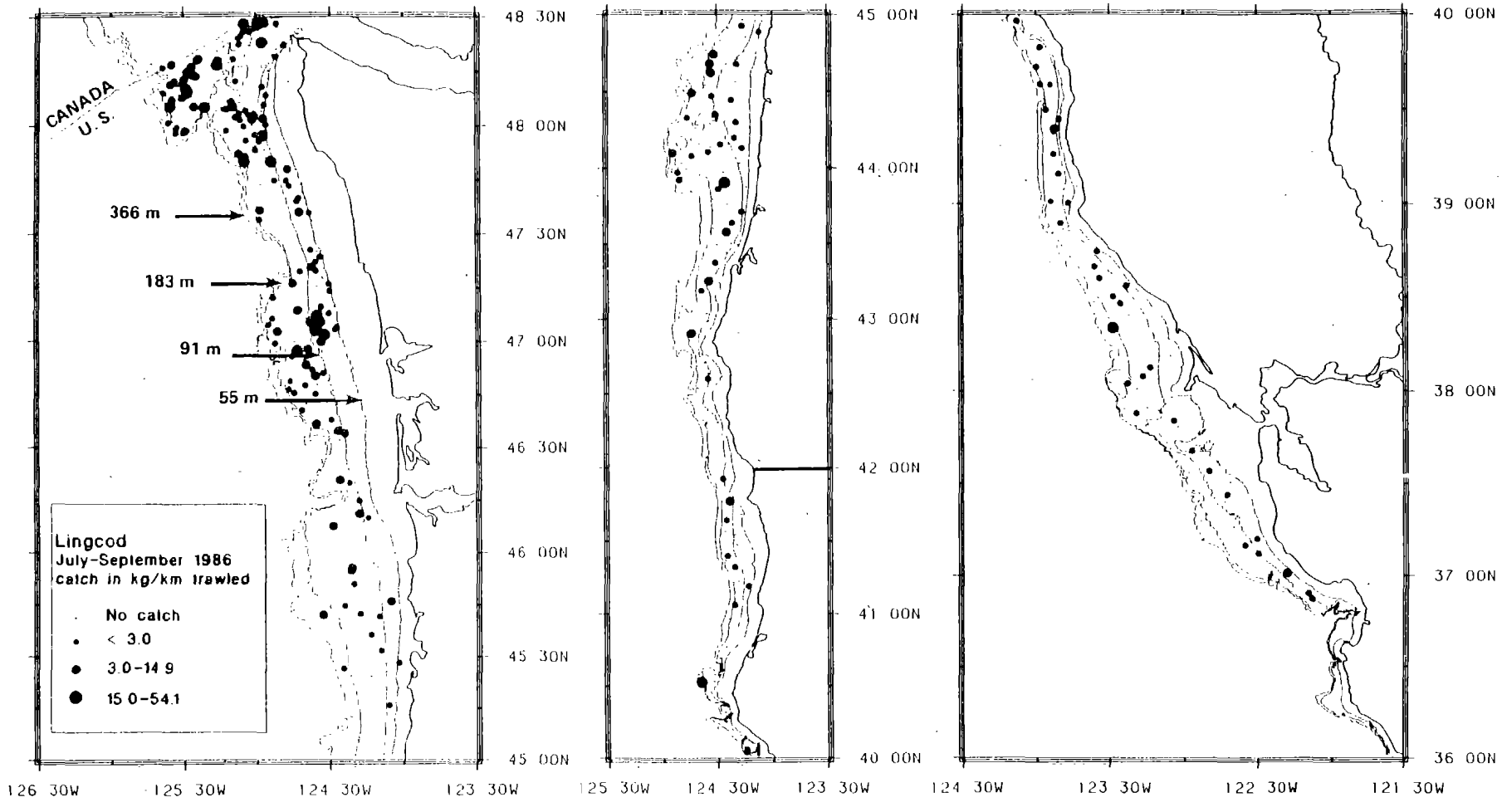

Figure 19.--Distribution and relative abundance for lingcod measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

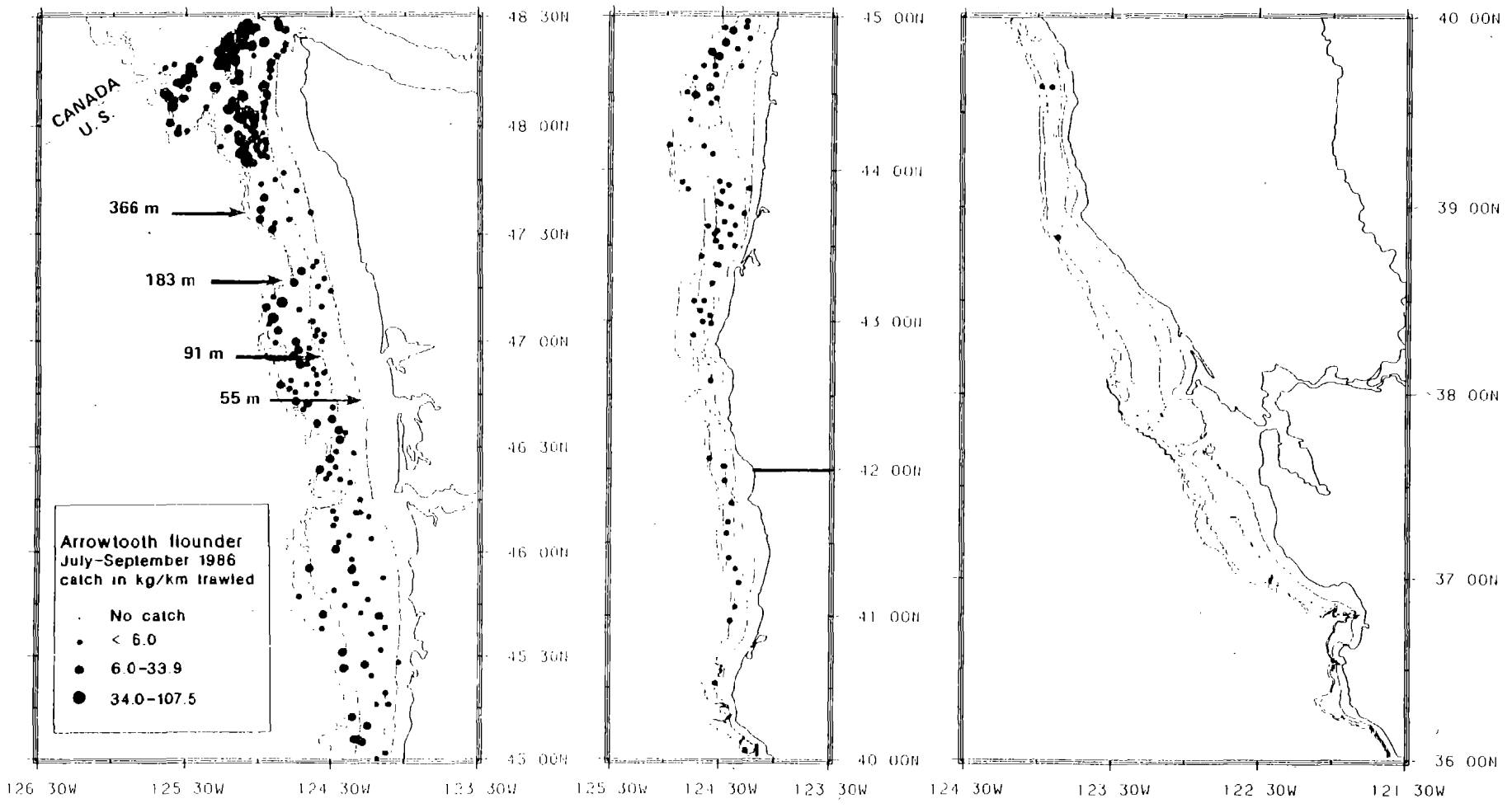

Figure 20.--Distribution and relative abundance for arrowtooth flounder measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

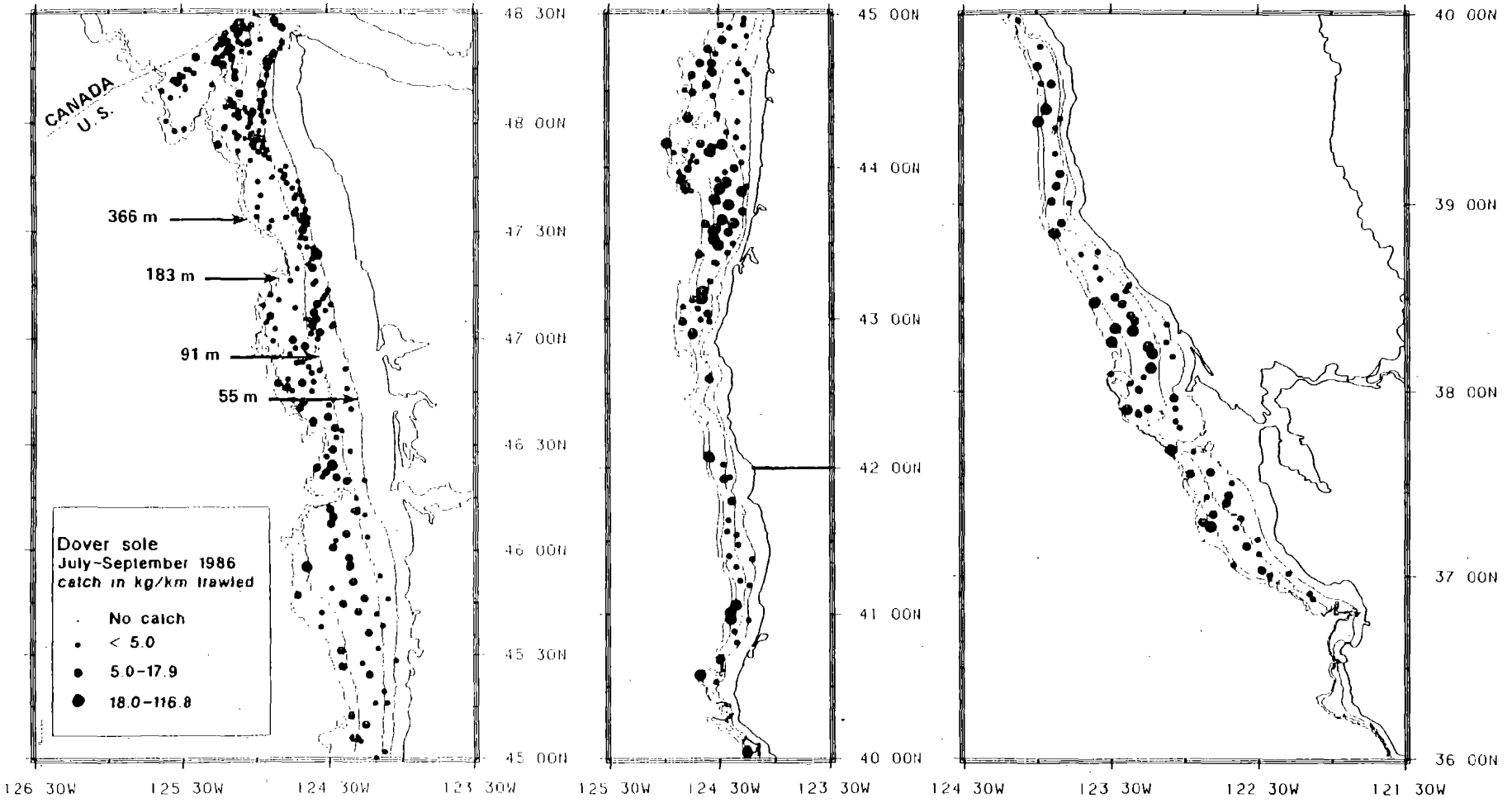

Figure 21.--Distribution and relative abundance for Dover sole measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

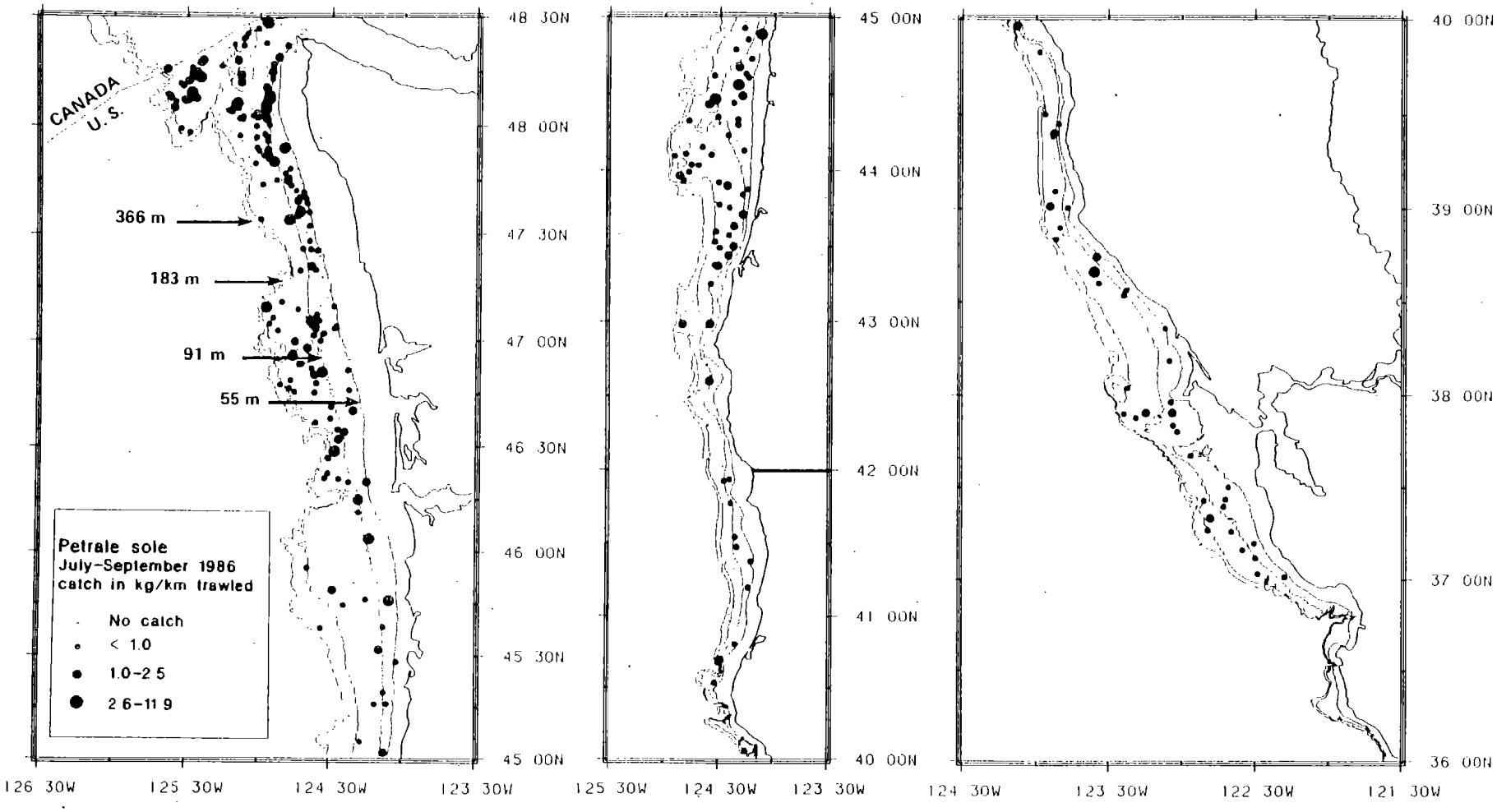

Figure 22.--Distribution and relative abundance for petrale sole measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

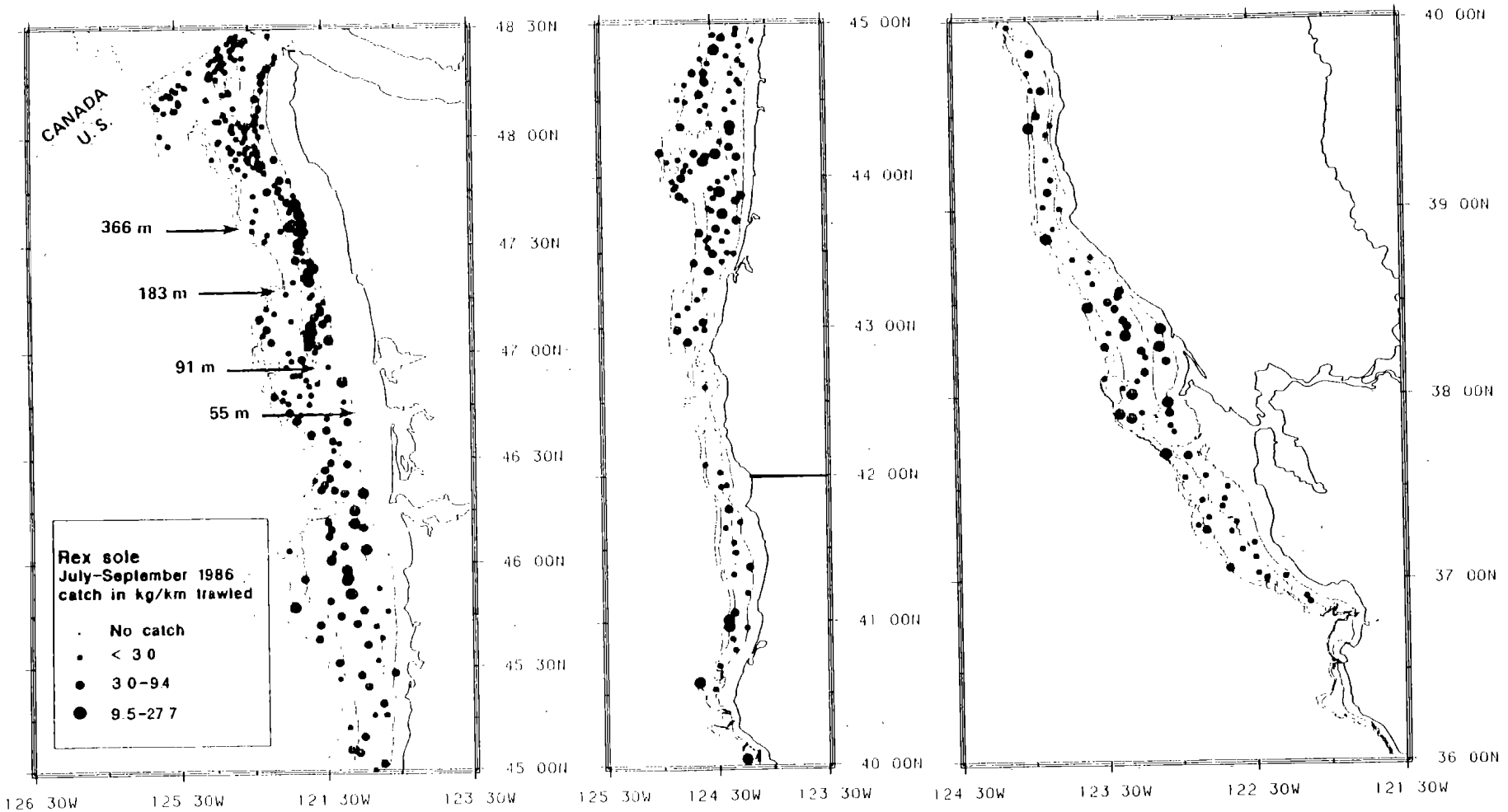

Figure 23.--Distribution and relative abundance for rex sole measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

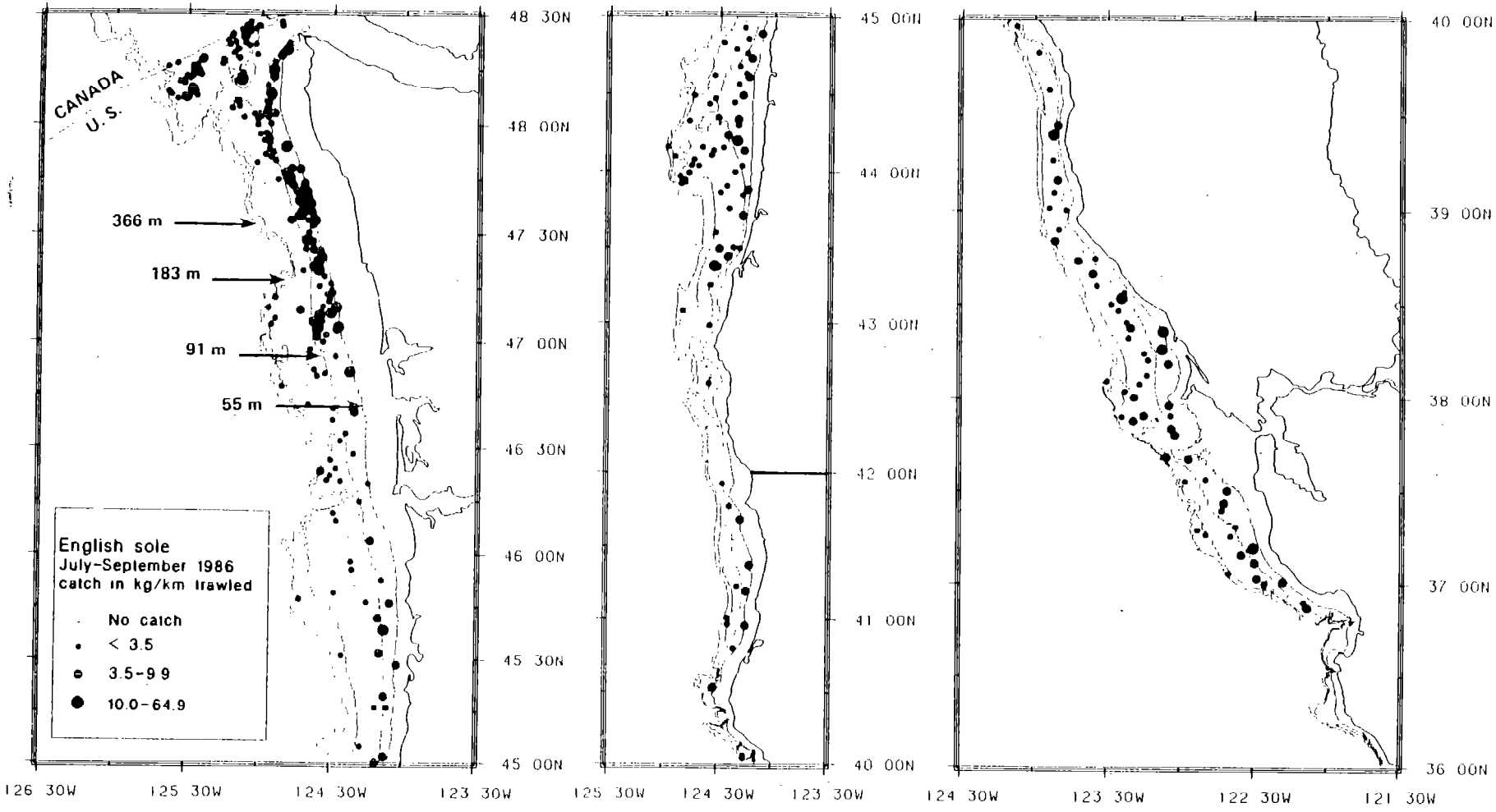

Figure 24.--Distribution and relative abundance for English sole measured in catch rates (kg/km trawled) from the 1986 bottom trawl survey.

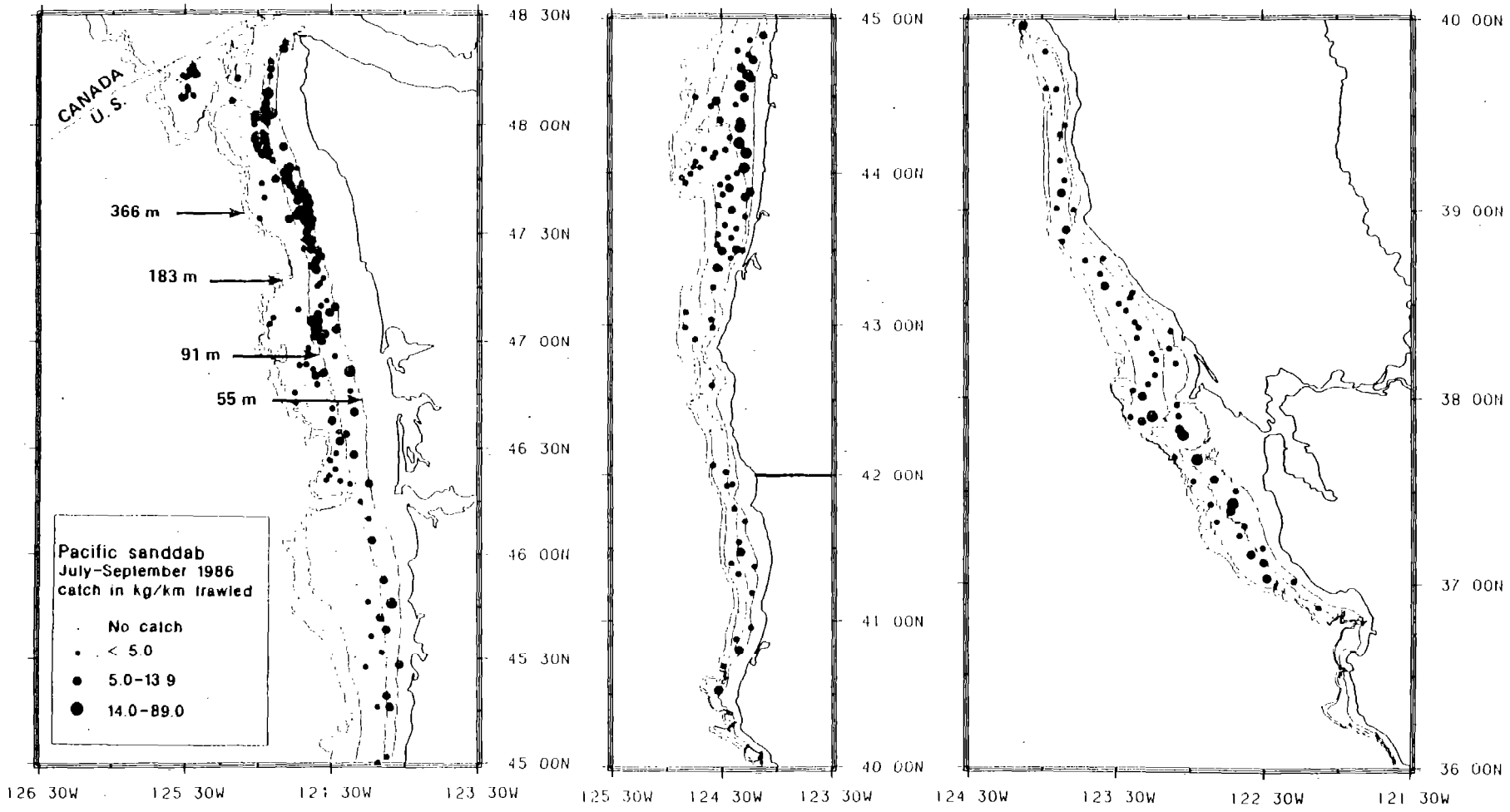

Figure 25.--Distribution and relative abundance for Pacific sanddab measured in catch rates (kg/km trawled from the 1986 bottom trawl survey.

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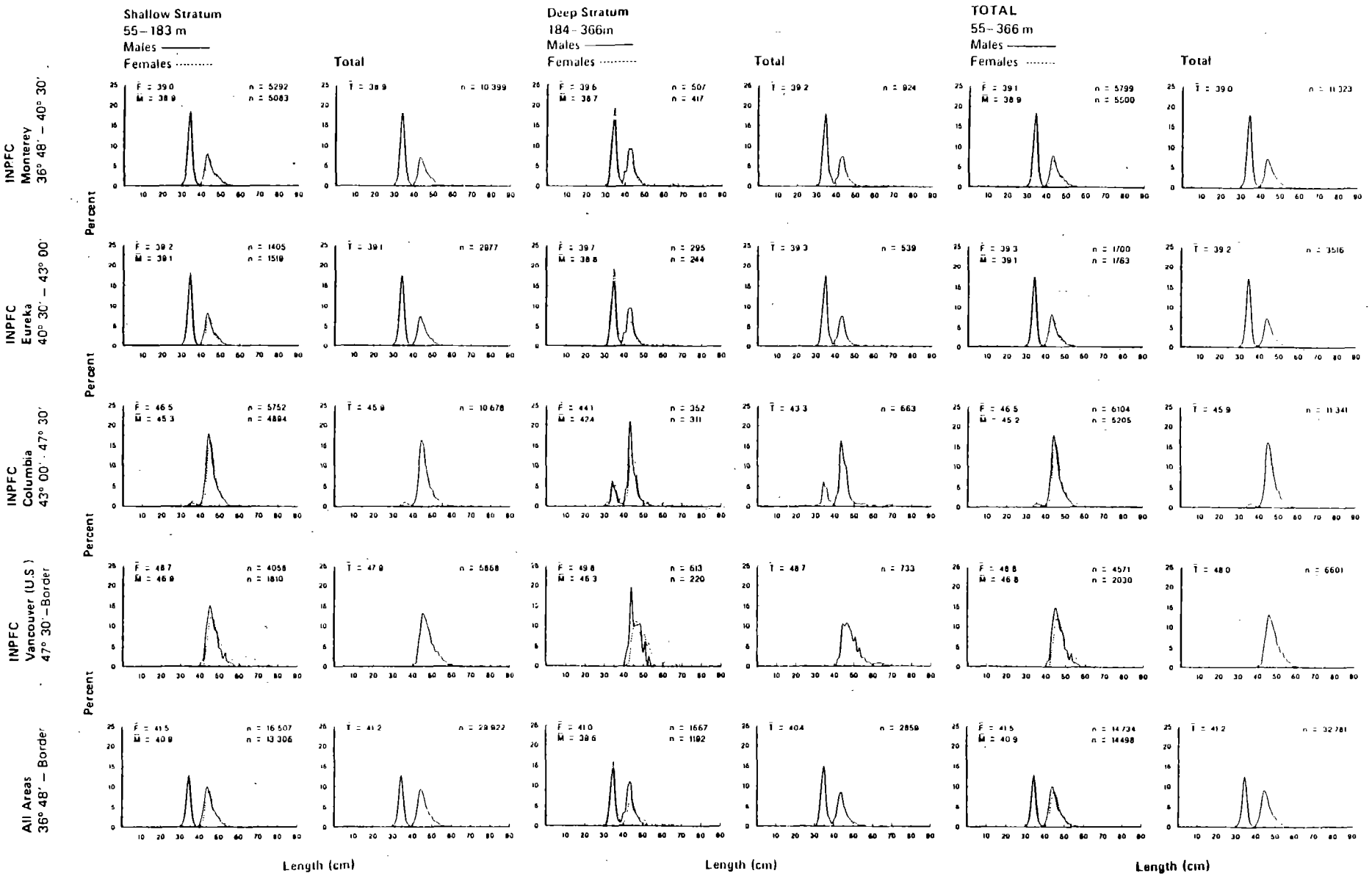

Figure 26.--Estimated size composition for Pacific hake by sex, depth stratum, and International North Pacific Fisheries Commission (INPFC) area from the 1986 bottom trawl survey.

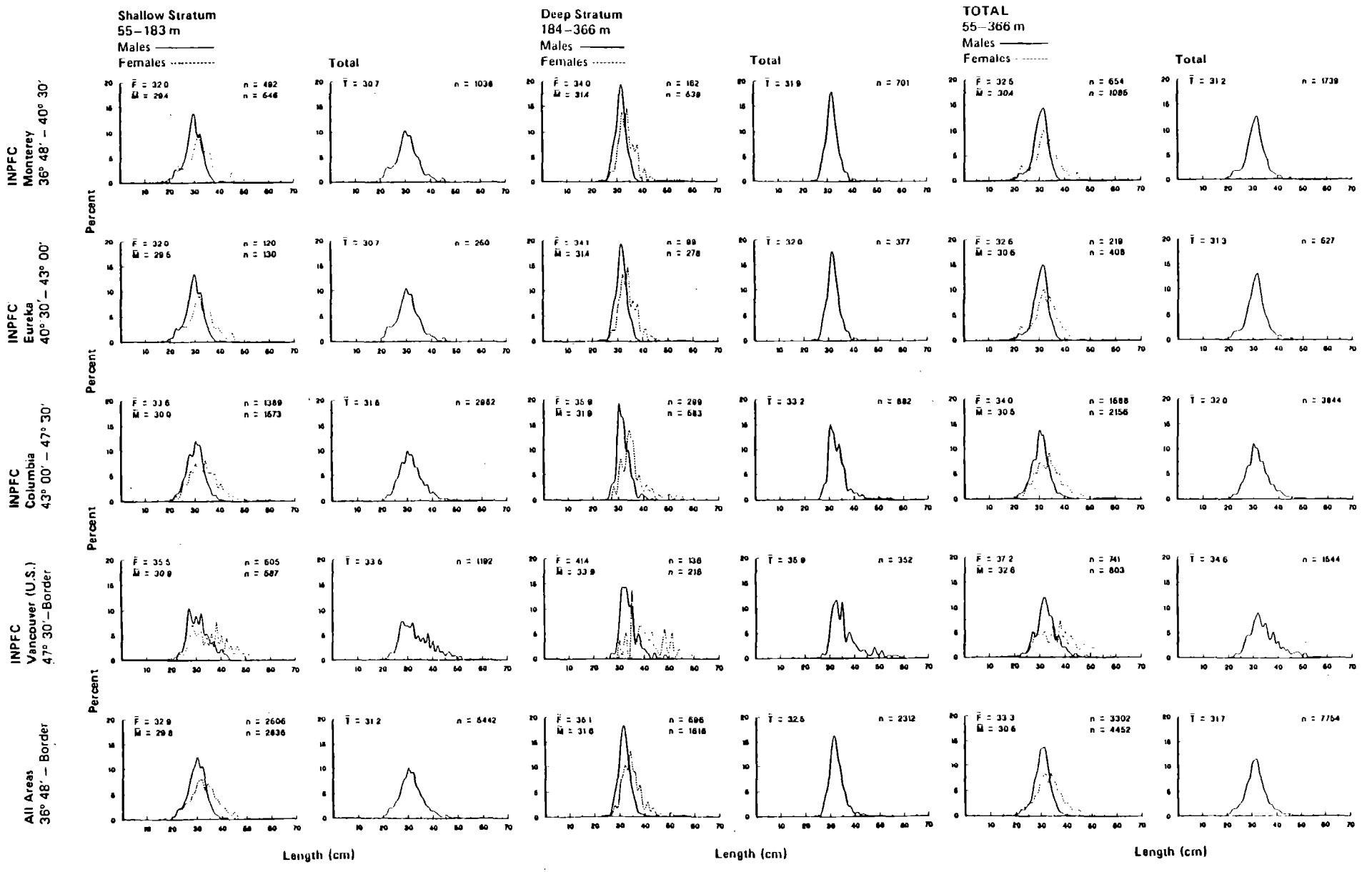

Figure 27.--Estimated size composition for Dover sole by sex, depth stratum, and International North Pacific Fisheries Commission (INPFC) area from the 1986 bottom trawl survey.

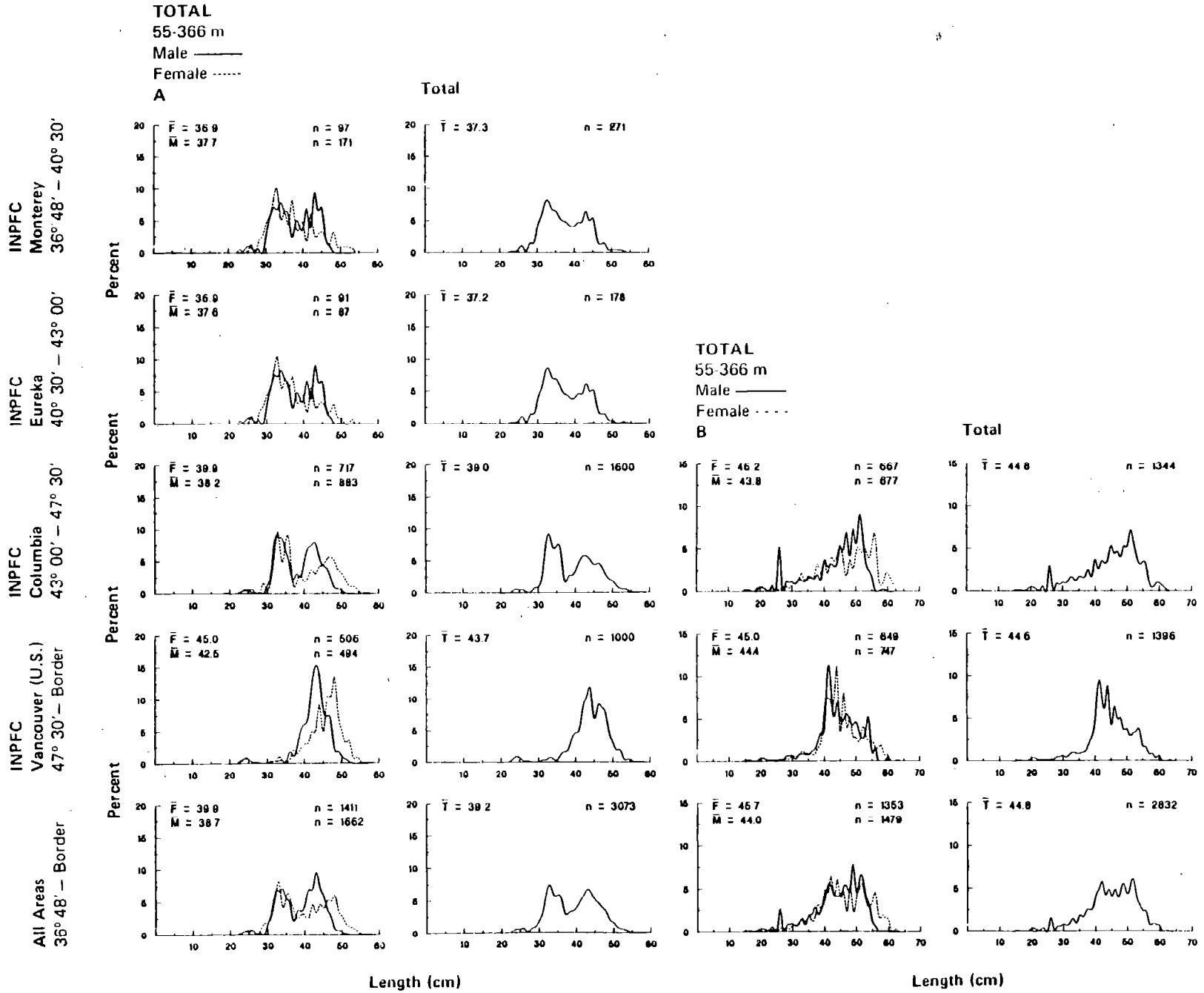

Figure 28. --Estimated size composition for (A) yellowtail and (U) canary rockfishes by sex, depth stratum, and International North Pacific Fisheries Commission (INPFC) area from the 1986 bottom trawl survey.

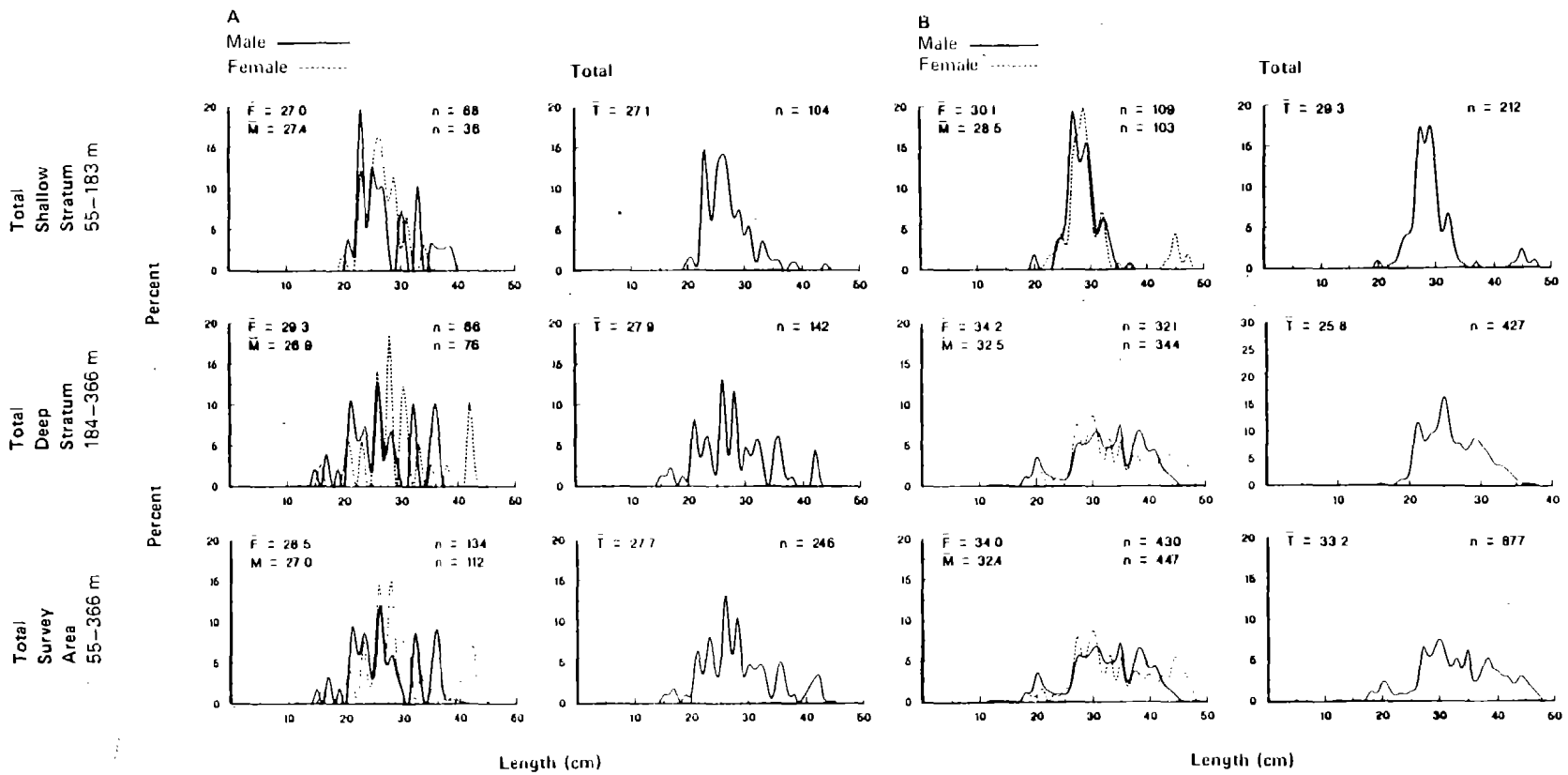

Figure 29.--Total estimated size composition presented by sex and depth stratum for (A) shortspine thornyhead and (B) Pacific ocean perch from the 1986 bottom trawl survey.

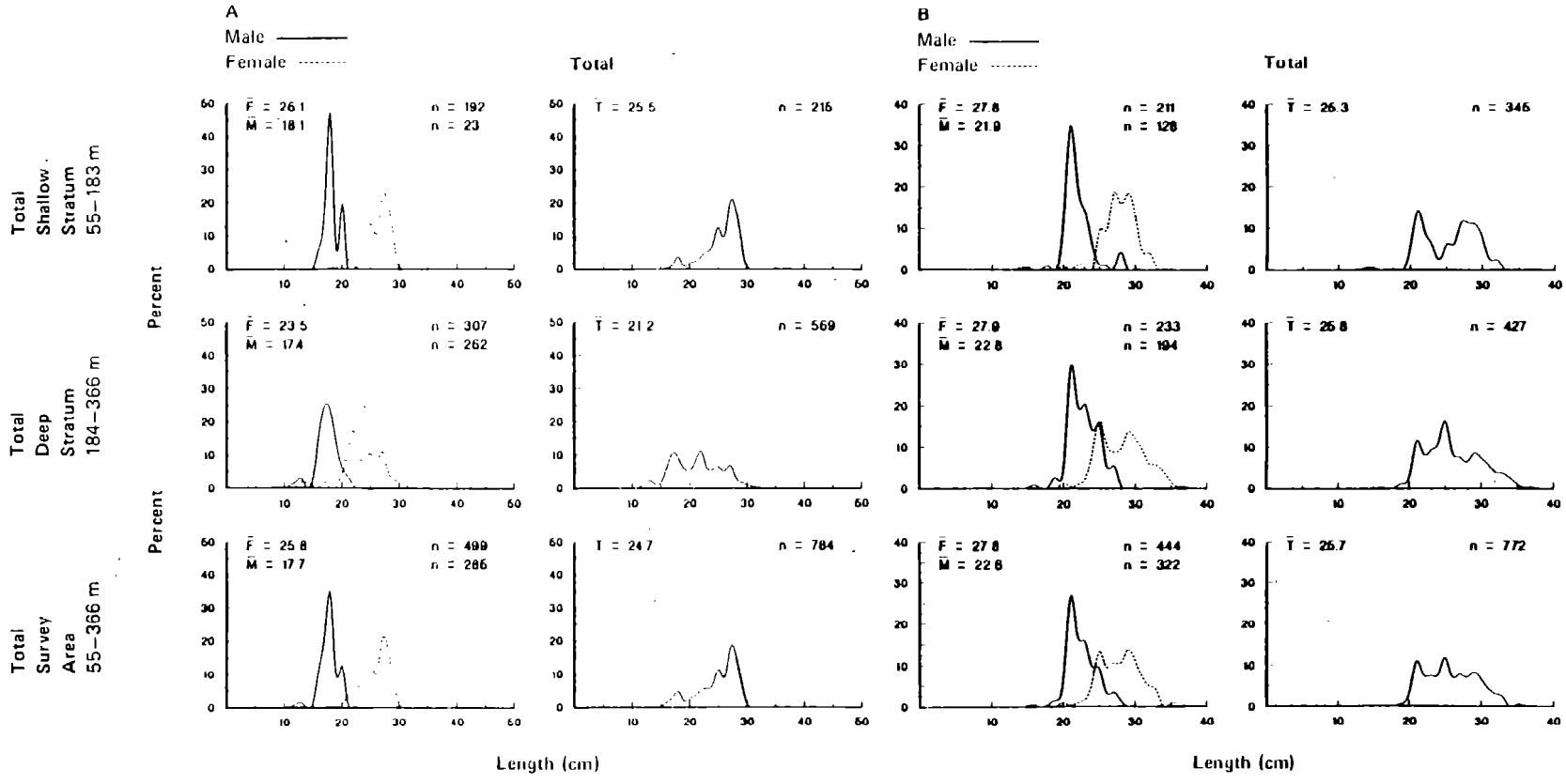

Figure 30. --Total estimated size composition presented by sex and depth stratum for (A) stripetail and (B) sharpchin rockfishes from the 1986 bottom trawl survey.

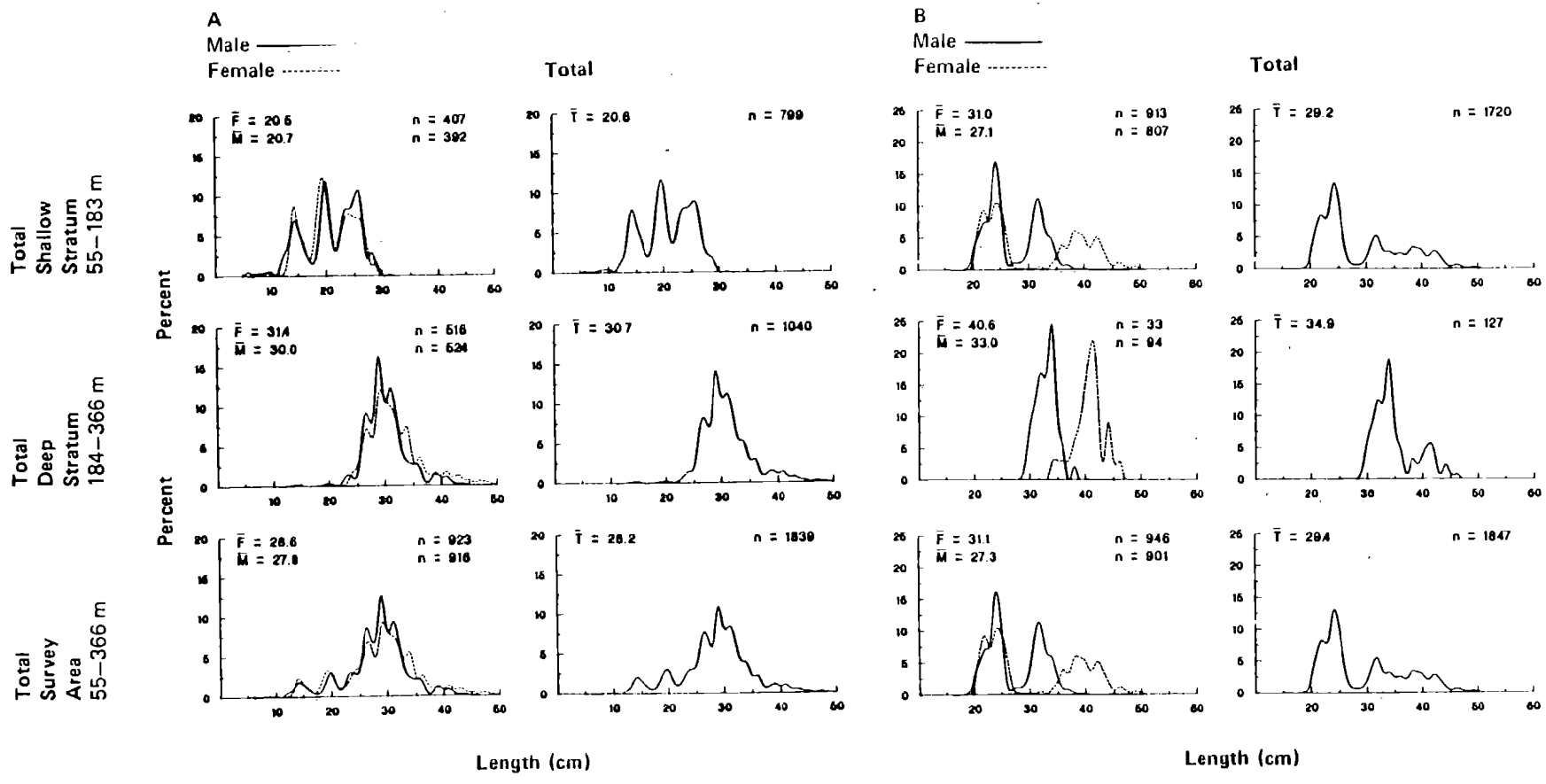

Figure 31.--Total estimated size composition presented by sex and depth stratum for (A) darkblotched and (B) chilipepper rockfishes from the 1986 bottom trawl survey.

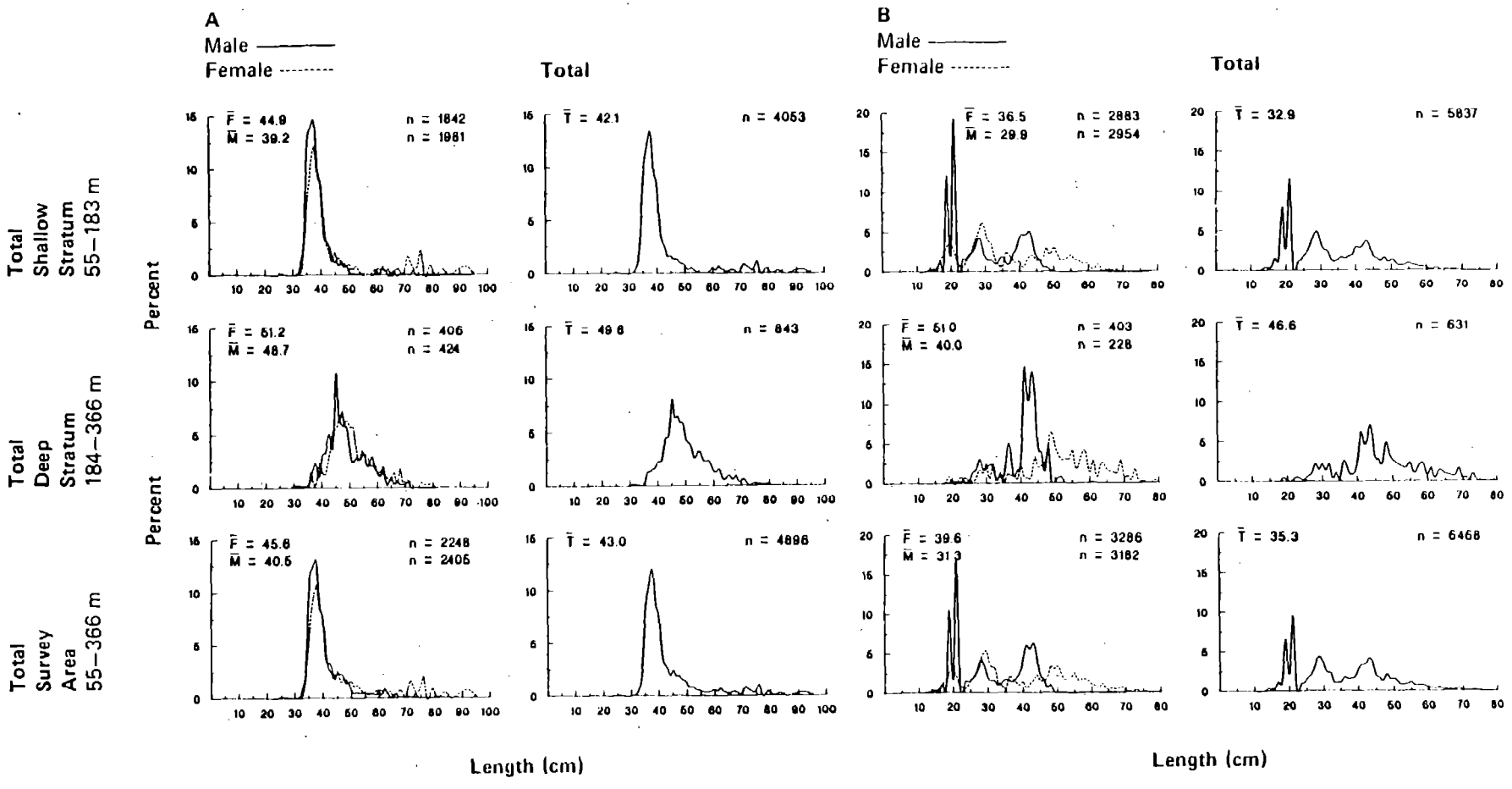

Figure 32.--Total estimated size composition presented by sex and depth stratum for (A) sablefish and (B) arrowtooth flounder from the 1986 bottom trawl survey.

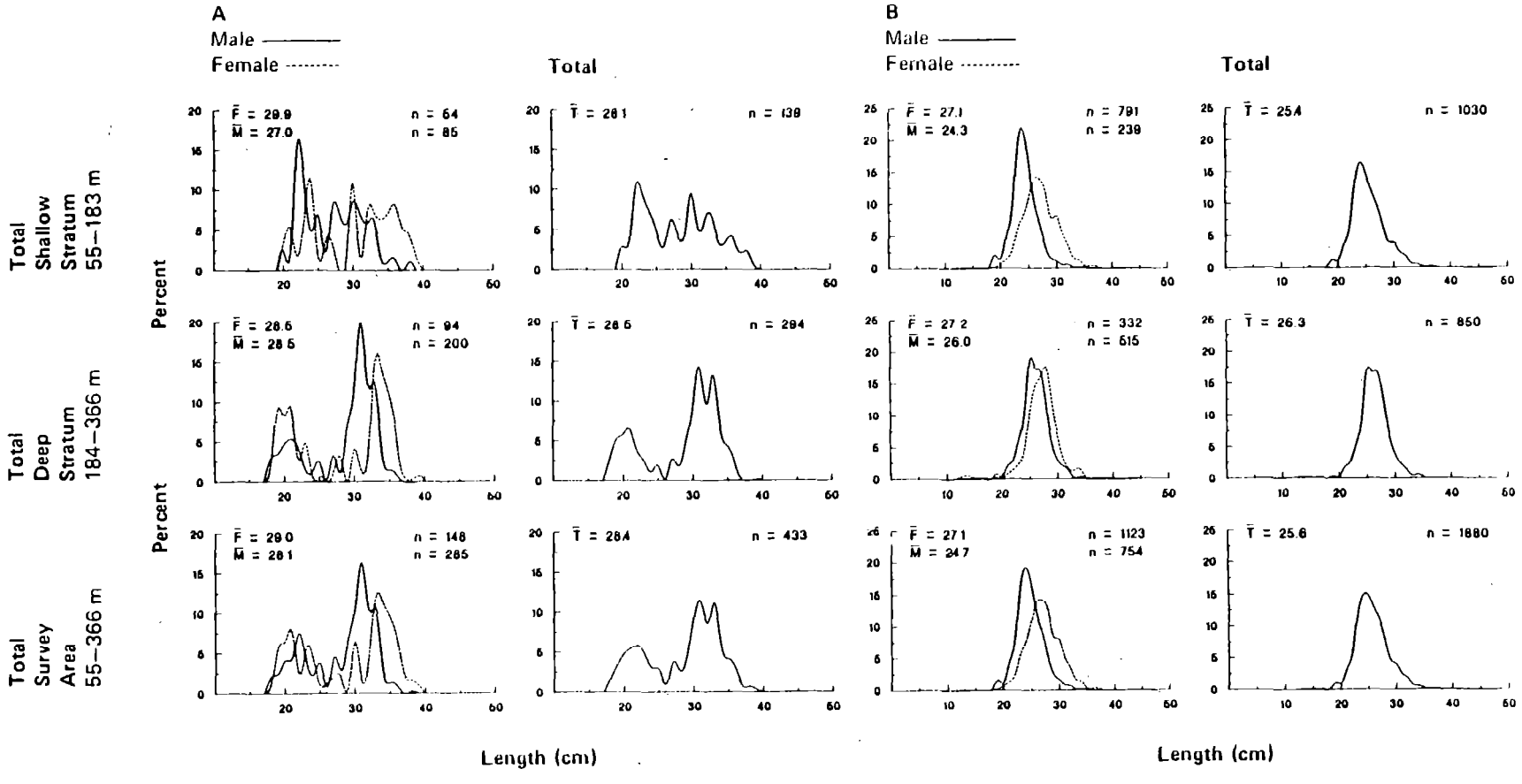

Figure 33.--Total estimated size composition presented by sex and depth stratum for (A) flathead and (B) rex sole from the 1986 bottom trawl survey.

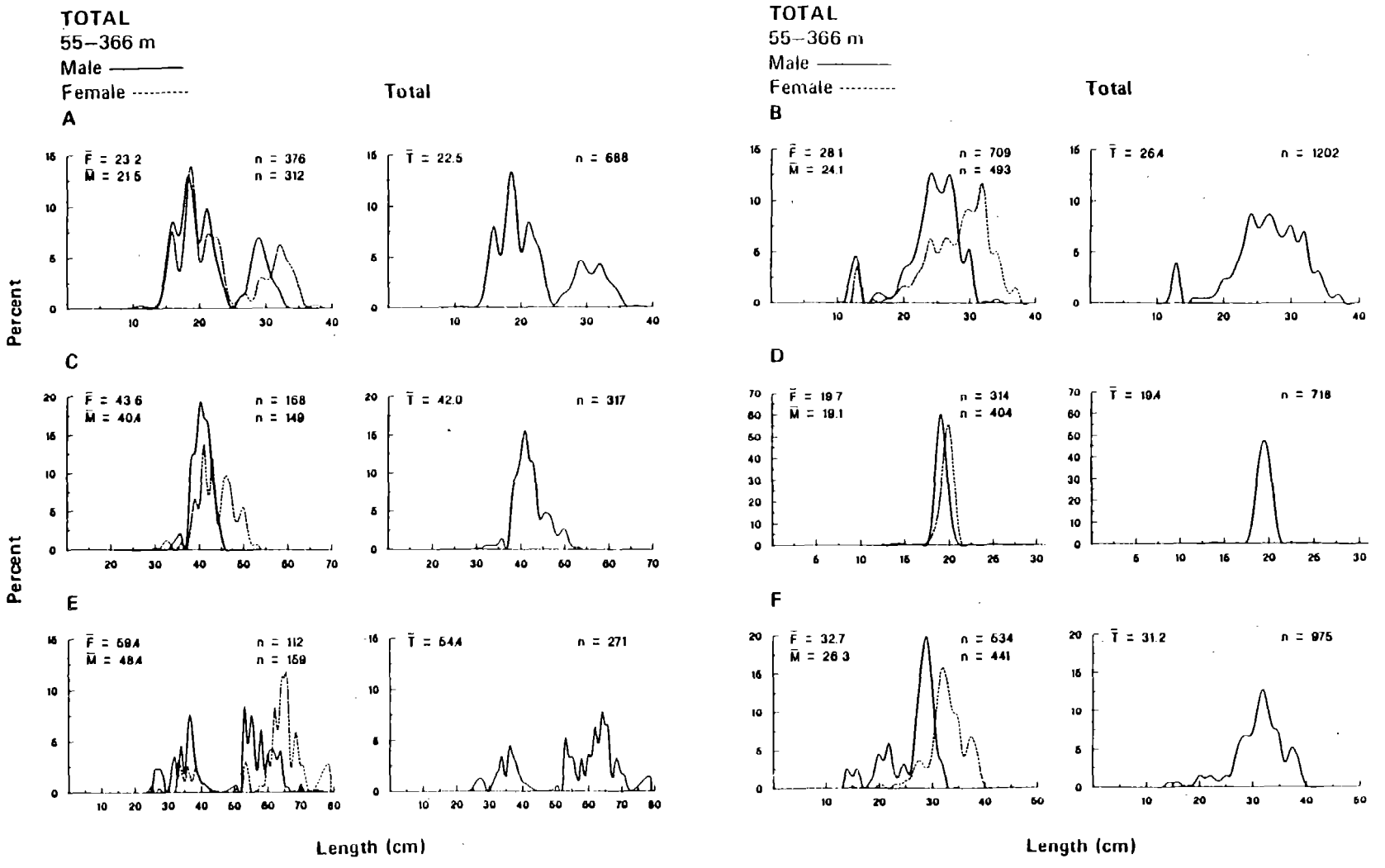

Figure 34.--Total estimated size composition presented by sex for (A) splitnose, (B) greenstriped, (C) widow, (D) shortbelly, (E) bocaccio, and (F) redstripe rockfishes from the 1986 bottom trawl survey.

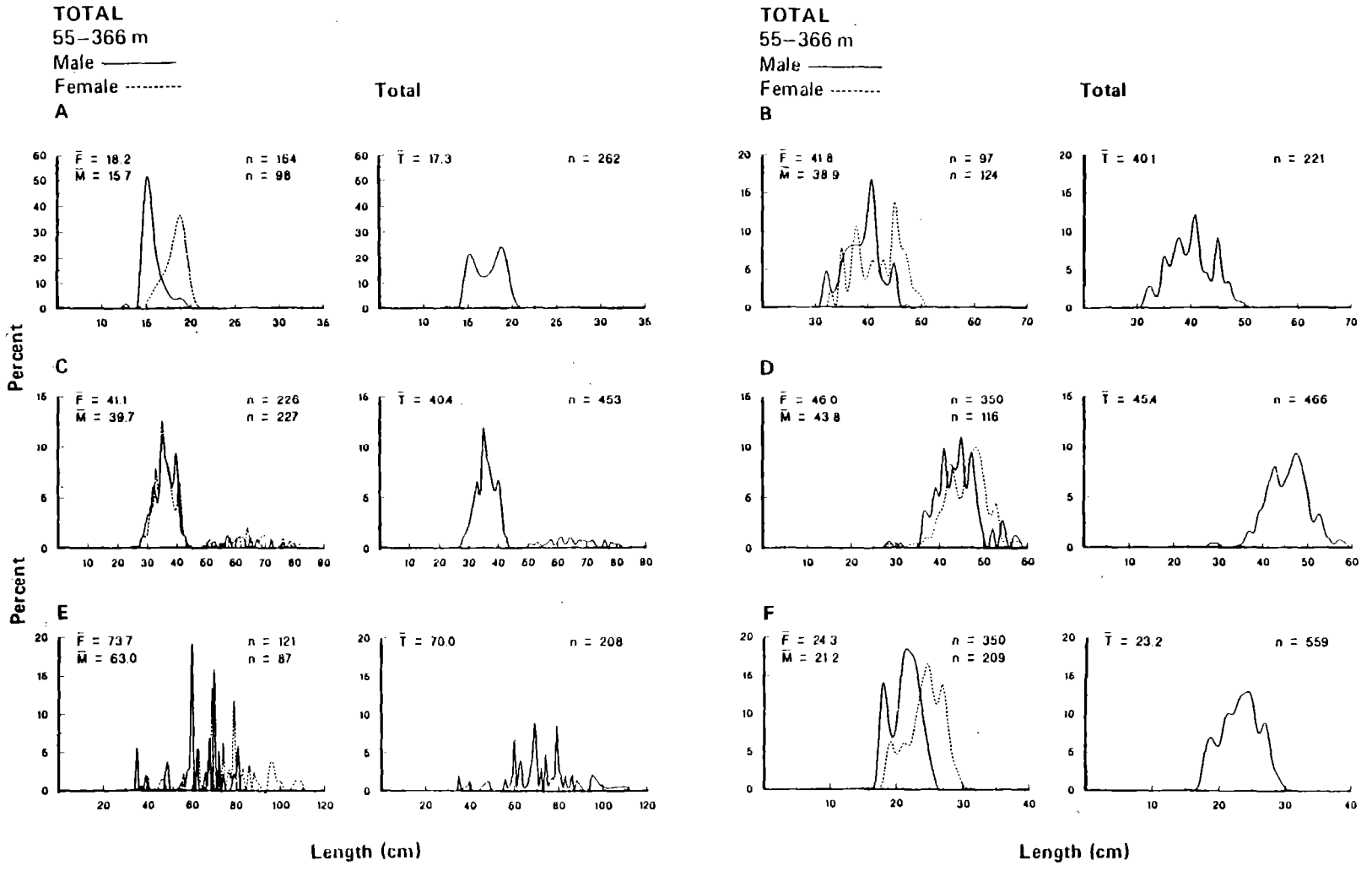

Figure 35. --Tota1 estimated size composition presented by sex for (A) pygmy and (B) bank rockfishes; (C) Pacific cod, (D) walleye pollock, (E) lingcod, and (F) Pacific sanddab from the 1986 bottom trawl survey.

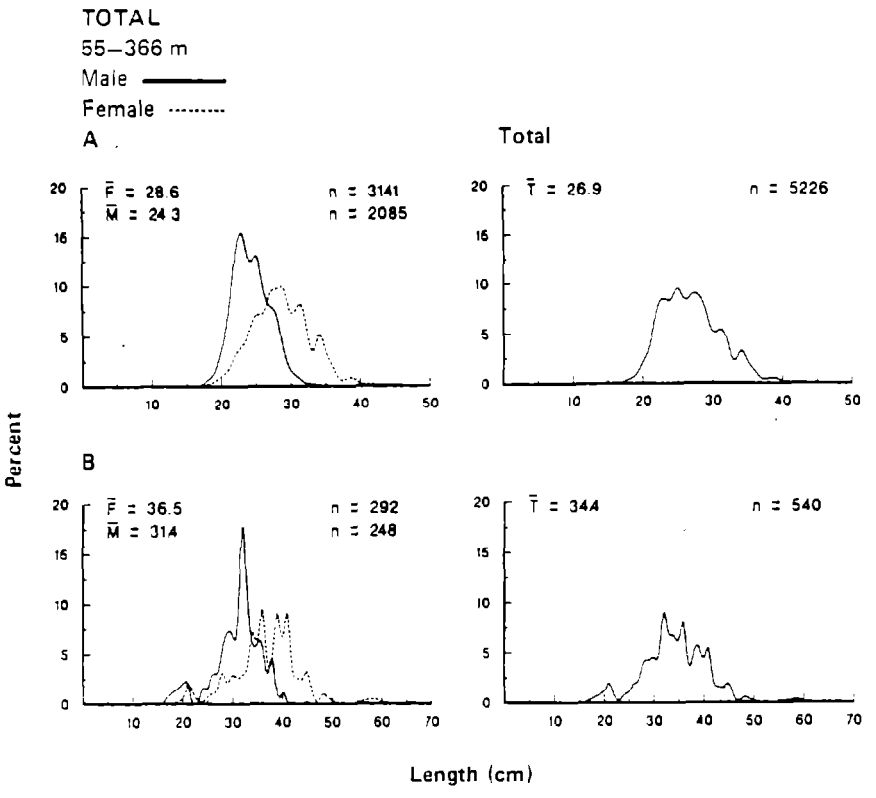

Figure 36.--Total estimated size composition presented by sex for (A) English and (B) petrale sole from the 1986 bottom trawl survey.

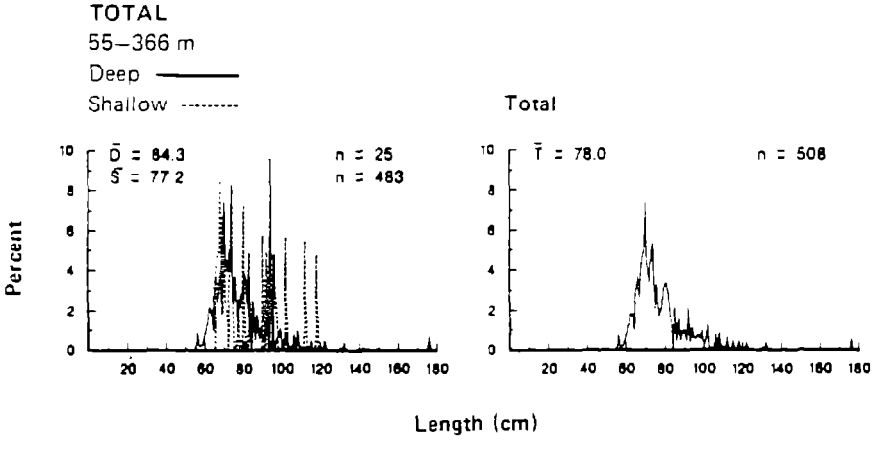

Figure 37.--Total estimated size composition for Pacific halibut present&d by depth stratum from the 1986 bottom trawl survey.

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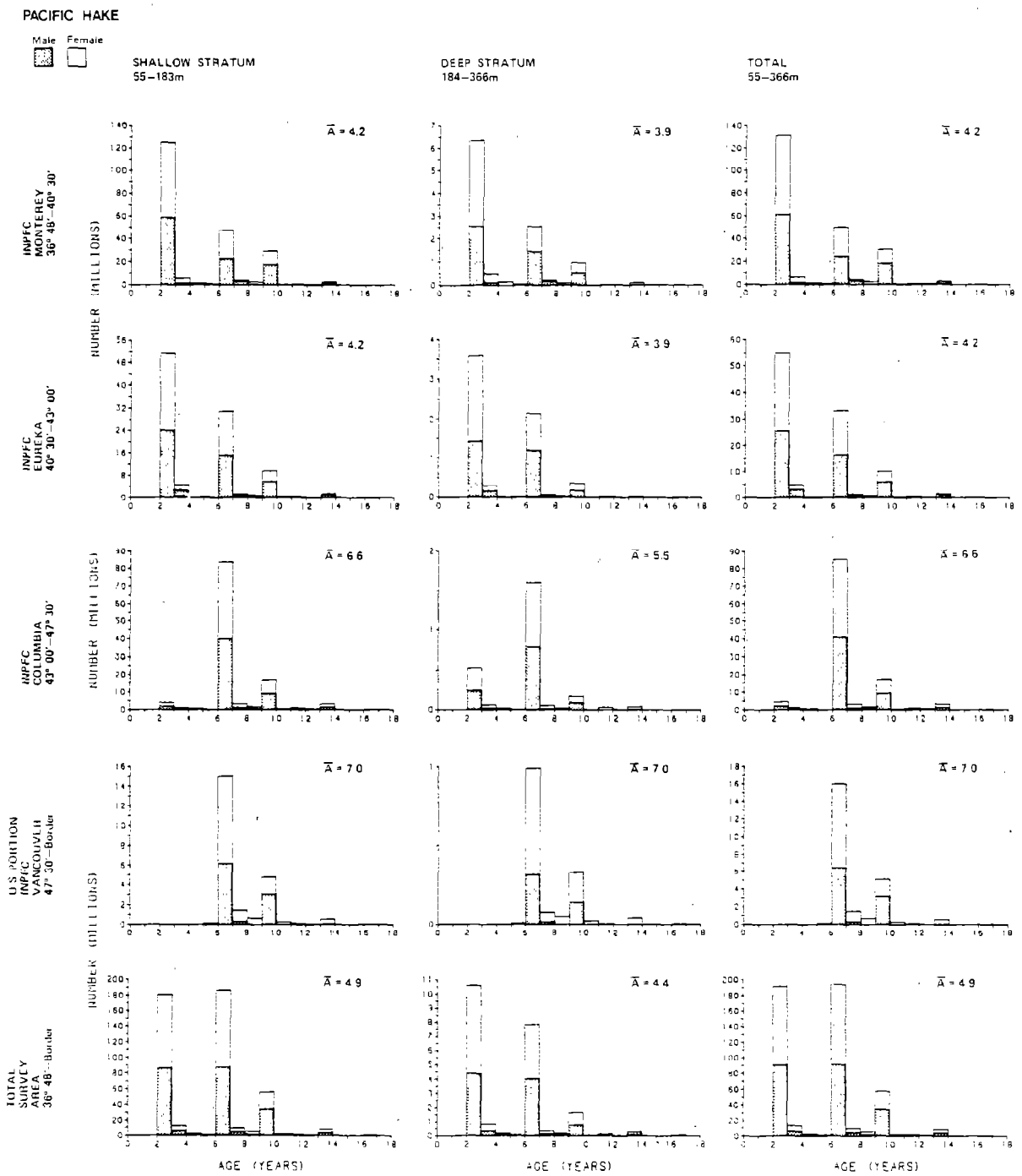

Figure 38. --Estimated age composition for Pacific hake by sex, depth stratum, and International North Pacific Fisheries Commission (INPFC) area from the 1986 bottom trawl survey.

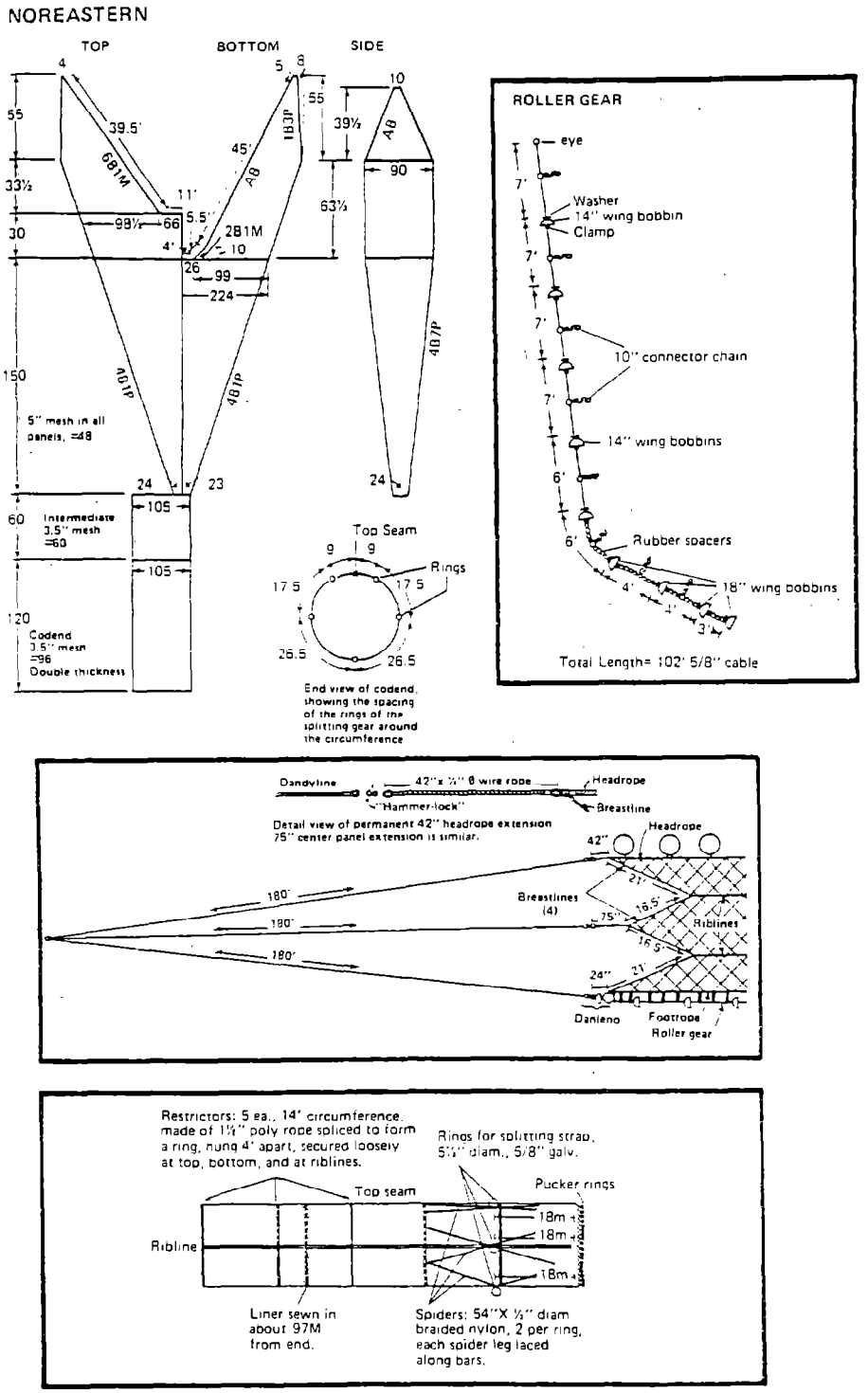

Figure 39. --Specifications and design of the nylon Noreastern bottom trawl used during the 1986 bottom trawl survey.

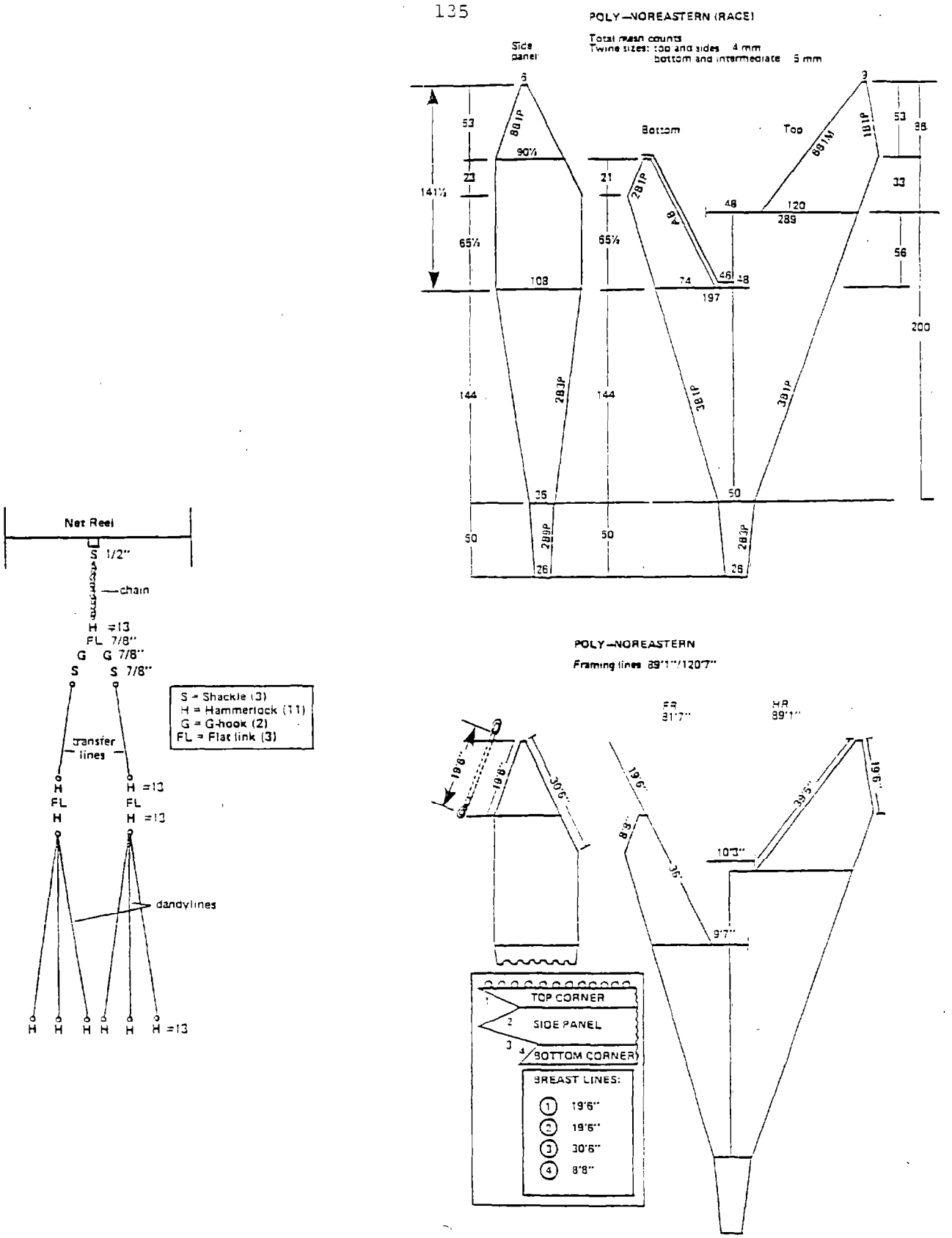

Figure 40. --Specifications and design of the polyethylene Noreastern bottom trawl used during the 1986 bottom trawl survey.

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