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INTRODUCTION

The Southeast Area Monitoring and Assessment Program (SEAMAP) is a State/Federal/university program for the collection, management and dissemination of fishery-independent data (information collected without direct reliance on statistics reported by commercial or recreational fishermen) in United States waters of the Gulf of Mexico. A major SEAMAP objective is to provide the large, standardized data base needed by management agencies, industry and scientists to wisely manage and develop fishery resources for the least possible cost. To accomplish this goal, survey data must be disseminated in a useful format to SEAMAP participants, cooperators and other interested organizations.

The SEAMAP Program began in March 1981 when the National Marine Fisheries Service (NMFS), Southeast Fisheries Center (SEFC), presented a SEAMAP Strategic Plan (January 1981) to the Gulf States Marine Fisheries Commission (GSMFC). This strategic plan outlined the proposed program organization (goals, objectives, procedures, resource requirements, etc.); within the existing framework of the GSMFC, a SEAMAP Subcommittee was then formed. The Subcommittee consists of one representative from each state fishery management agency [Florida Department of Natural Resources (FDNR); Alabama Department of Conservation and Natural Resources (ADCNR); Mississippi Department of Wildlife Conservation (MDWC), represented by the Gulf Coast Research Laboratory (GCRL); Louisiana Department of Wildlife and Fisheries (LDWF) and Texas Parks and Wildlife Department (TPWD)], one from NMFS Southeast Fisheries Center and a non-voting member representing the Gulf of Mexico Fishery Management Council. The Subcommittee organized and successfully coordinated three assessment activities in 1982 - an April-May plankton survey, a June-July shrimp and bottomfish survey, and environmental sampling, in conjunction with the two surveys (see Stuntz et al. 1985); four assessment activities in 1983 - an April-May plankton survey, a June-July shrimp and bottomfish survey, a December plankton survey and environmental sampling in conjunction with these three surveys (see Thompson and Bane 1986a); and five assessment activities in 1984 - an April-May plankton survey, a June-July shrimp and bottomfish survey, an August plankton survey for mackerel, a December plankton survey and environmental sampling in conjunction with these four surveys (see Thompson and Bane 1986b).

In January 1985, the SEAMAP Subcommittee identified and began to plan the year's SEAMAP survey activities for the Gulf of Mexico. In keeping with the program goal of establishing a coordinated long-term resource data base, it was decided to continue the same types of survey activities conducted in 1982, 1983 and 1984 but with several exceptions. The offshore plankton survey conducted during April-May of 1982, 1983 and 1984 was cancelled due to other NMFS commitments. A coordinated July-August Squid/Butterfish Survey was established by the Subcommittee to collect data on the abundance and distribution of several squid species and butterflyfish across the northern Gulf of Mexico. The September assessment conducted in 1984 at the request of the Gulf of Mexico Fishery Management Council (GMFMC) for king mackerel eggs and larvae was not requested by the GMFMC in 1985. Finally a Shrimp/Groundfish Survey was added to the SEAMAP survey activities between September and December to assess the abundance and distribution of the fall shrimp and groundfish stocks across the northern Gulf of Mexico. Overall survey objectives as in 1982, 1983 and 1984 were to assess the distribution and abundance of ichthyoplankton and trawl-caught organisms and document environmental factors that might affect their distribution and abundance. The basis for plankton work was primarily assessment of selected finfish

and invertebrate eggs and larvae across the northern Gulf of Mexico (see Sherman et al. 1983), while the Texas Closure formed the basis for trawl-caught shrimp and bottomfish surveys (see Nichols 1982, 1984 and 1987).

A major purpose of SEAMAP is to provide resource survey data to State and Federal management agencies and universities participating in SEAMAP activities. This fourth in a series of SEAMAP environmental and biological atlases presents such data, in a summarized form, collected during 1985 SEAMAP surveys. The area covered in the Gulf of Mexico for all SEAMAP survey activities during 1985 is shown in Figure 1.

MATERIALS AND METHODS

Methodology for the 1985 SEAMAP surveys is similar to that of the 1982, 1983 and 1984 surveys with the exception of the Squid/Butterfish and Fall Shrimp/Groundfish Surveys. Sampling was conducted within the U.S. Exclusive Economic Zone (EEZ) and state territorial waters.

Plankton abundance and distribution were assessed by three piggyback surveys in the Gulf of Mexico. Inshore and offshore plankton were sampled in June-July (Figure 2), July-August (Figure 3) and September-December (Figure 4). In some cases during each of the surveys, plankton stations were independent of trawl stations.

Vessels that participated in only collecting plankton samples were the Florida vessel BELLOWS in June and small inshore LDWF vessels in November.

Vessels participating in the Summer Shrimp/Bottomfish Trawl Survey and concurrent plankton sampling during June and July included the NOAA Ship OREGON II, GCRL vessel TOMMY MUNRO, an inshore vessel from the ADCNR and vessels of the LDWF (PELICAN and small inshore vessels) which collected samples within state territorial waters. TPWD vessels, MATAGORDA BAY, ARANSAS BAY and LAGUNA MADRE, took no plankton samples in conjunction with their June and July trawl survey samples.

The July-August Squid/Butterfish Survey was conducted jointly by the NOAA Ship OREGON II and the GCRL vessel TOMMY MUNRO.

Vessels participating in the September through December Fall Shrimp/Groundfish Trawl Survey and concurrent plankton sampling included the NOAA Ship OREGON II, an inshore vessel from the ADCNR, the LDWF vessel PELICAN and the GCRL vessel TOMMY MUNRO. The TPWD vessels MATAGORDA BAY, GALVESTON BAY, ARANSAS BAY and LAGUNA MADRE took no plankton samples in conjunction with their fall survey activities. All station locations and dates of sampling by vessel and by survey are listed in Table 1.

Plankton Surveys

Plankton samples were taken opportunistically from a systematic grid across the Gulf of Mexico during the summer and fall trawl surveys. Such a grid was chosen because of the large survey area. Stations were set at minimum intervals of 30 miles

(1/2 degree), with the exception of those taken by LDWF vessels, which collected plankton samples at each trawl station.

Ichthyoplankton samples were collected during the Squid/Butterfish Survey before dawn at the location of the beginning trawl station for the day and again at night at the location of the last trawl station for the day. When time allowed, another ichthyoplankton station was made midway between successive transects.

Sampling gear and procedures were similar to those recommended by Kramer et al. (1972), Smith and Richardson (1977) and Posgay and Marak (1980). Plankton sampling gear consisted of standard 61-cm bongos and a 2x1-m neuston net for the large vessels. The bongos were fitted with 0.333-mm mesh nets with either hard (PVC) or soft (0.333-mm mesh net) cod ends. A flowmeter was mounted off-center in the mouth of each net to record the volume of water filtered. A 50-lb weight was attached approximately 1 m below the bongo frame attachment. The neuston net consisted of a 2x1-m pipe frame fitted with a 0.948-mm mesh net on which the cod end was tied off.

At each designated plankton station, an oblique bongo tow and surface neuston tow were made. In deep water (more than 95 m) a standard oblique bongo tow was made to 200 m, or to 5 m off the bottom at depths less than 200 m, with a payout speed of 50 m/min, 1-min settling time, and a retrieval speed of 20 m/min, at a vessel speed of 1.5 knots to maintain a 45° angle. In shallow water (less than 95 m), tows were modified to extend tow times to a minimum of 10 min in clear water, or 5 min in turbid water, in order to filter enough water for quantitative purposes. This was accomplished by reducing wire payout and retrieval rates, although during each tow, payout and retrieval rates were held constant so that the water column was sampled uniformly. For all bongo tows, a 45°-wire angle was maintained. Neuston tows were made at the surface with the net half-submerged for 10 min at a vessel speed of 1.5 knots. The Louisiana vessels made plankton tows with small, 20-cm bongo nets with 0.333-mm mesh and soft cod ends.

Samples were preserved initially in 10% buffered formalin. After a 24-hr period, the bongo and neuston samples were transferred to 95% ethyl alcohol for final preservation, and subsequently shipped to the NMFS Miami Laboratory. At that facility, the samples were curated and the sampling data computerized. The right bongo sample and the neuston sample from each station were transshipped to the Polish Sorting Center (PSC) in Szczecin, Poland, for sorting and identification. All ichthyoplankton components (eggs and larvae) were removed from each sample and the fish larvae identified to the lowest feasible taxon (families in most cases).

All sorted ichthyoplankton specimens were returned to the SEAMAP Archiving Center, managed in conjunction with the FDNR, for long-term storage under museum-like conditions. Sorted ichthyoplankton samples from 1982 through 1985 are available for loan to researchers throughout the country. Plankton volumes were determined according to procedures in Smith and Richardson (1977). The alternate bongo sample from each station was retained in Miami as a backup for those samples transshipped to the PSC, in case of loss or damage during transit. These backup unsorted plankton samples containing zooplankton and phytoplankton were sent to the SEAMAP Invertebrate Plankton Archiving Center, managed in conjunction with GCRL, for storage and use by researchers.

Environmental Surveys

Environmental data stations for the Summer Shrimp/Bottomfish Survey are shown in Figure 5, Squid/Butterfish Survey in Figure 6 and Fall Shrimp/Groundfish Survey in Figure 7. Environmental data are summarized in Figures 5 and 7 by 10-min squares. During transects in deep water for the Squid/Butterfish Survey there was insufficient time to take a hydrocast at each station. Hydrocasts were made at the beginning and end of the days transect. Also during the plankton stations for the Squid/Butterfish Survey an XBT and hydrocast were taken.

Standardized methodology was used although the actual parameters measured varied among vessels participating in each survey. The following parameters were recorded:

Station: Station identifiers varied by state and vessel.

Cruise: Cruise numbers varied by state and vessels.

Date: Month/Day/Year.

Time: Local time and time zone, recorded at the start of sampling.

Latitude/longitude: Recorded to seconds.

Wind speed and direction: Recorded in kilometers per hour with direction recorded in compass degrees from which the wind was blowing.

Wave height: Estimated visually in meters.

Cloud cover: Estimated visually in percent cloud cover.

Barometric pressure: Recorded in millibars.

Secchi depth: Secchi depth in meters, estimated at each daylight station.

Standard oceanographic 50-cm white discs were lowered until no longer visible, then raised until visible. If different depths were recorded, an average was used.

The following parameters were measured at the surface, mid-depth and bottom; for bottom depths greater than 200 m, a maximum depth of 200 m was recorded:

Water temperature: Temperatures were measured by a hand-held thermometer onboard ship, in situ electronic sensors, and in situ reversing thermometers. No attempt was made to intercalibrate the various instruments used on individual vessels although several vessels did sample together to calibrate other sampling gear. Some error can be expected.

Salinity: Salinity samples were collected by Niskin bottles and stored for laboratory analysis with a salinometer. Conductivity probes and refractometers were used on some vessels.

Chlorophyll: Chlorophyll samples were collected and frozen for later laboratory analysis. The general procedure for shipboard collection of chlorophyll was to collect 3 liters of sea water. The water sample, to which 1 ml 1% (W/V) suspension of $MgCO_3$ was added, was filtered through GF/C filters, and the filters were subsequently wrapped in opaque material and frozen.

Laboratory analyses for chlorophyll a and phaeophytin a (chlorophyll degradation product) were conducted by fluorometry and spectrophotometry. The general extraction procedures prior to measurement were similar. Samples analyzed by spectrophotometer included other chlorophyllous products but have not been included as data in this report. The methodology used is described in Strickland and Parsons (1972) and Jeffrey and Humphrey (1975). Approximately 10 percent of the values have been deleted from the data base because of analytical errors.

Dissolved oxygen: Dissolved oxygen values were measured by electronic probes (depending on the vessel) or by the standard Winkler method. No attempts were made to intercalibrate the methods. When oxygen was measured in samples collected from a Niskin sampler, the oxygen bottles were allowed to overflow a minimum of 10 seconds to eliminate oxygen contamination. The tubing which delivered the water sample was inserted to the bottom of the bottle and withdrawn while the sample was still flowing. The oxygen bottles were sealed with a ground-glass stopper and analyzed onboard the vessels.

Satellite Images

Thermal data were collected by the Advanced Very High Resolution Radiometers (AVHRR) carried on the NOAA Polar Orbiter series of satellites. The data were analyzed by the National Environmental Satellite Data and Information Service (NESDIS).

TRAWL SURVEYS

Summer Shrimp/Bottomfish Survey

Shrimp and bottomfish sampling was carried out from Pensacola, Florida to Brownsville, Texas (Figure 8). Trawl stations made with a standard 40-ft SEAMAP net covered NMFS shrimp statistical zones 10 through 21 (Figure 9), to a depth of 50 fm.

The sampling strategy and a description of the statistical rationale for the sampling design are described by Nichols in the 1982 SEAMAP Atlas (Stuntz, et al 1985). Briefly, the strategy was as follows: sampling sites were chosen randomly in three areas (east of the Mississippi River, west of the Mississippi River to the Louisiana-Texas border and off Texas) stratified by depth and statistical area (two areas per stratum). In depths of 5-25 fm, stations consisted of 1-fm strata; out to 30 fm, stations covered 2.5-fm strata; and to 50 fm, stations consisted of 5-fm strata. Trawls were towed perpendicularly to the depth contours and covered the entire depth stratum on each station. Single tows were for a maximum of 30 min; for certain stations, a series of consecutive trawl tows was necessary to cover a given depth stratum, with a minimum individual tow across each stratum of 10 min and a maximum tow of 30 min. All offshore stations were sampled at night using a 40-ft shrimp trawl (Gutherz et al. 1985). The Texas and Louisiana vessels did not cover a complete depth stratum on several stations, but did make one maximum 30-min tow for that particular stratum. In areas off Texas and Louisiana the 1-fm strata can cover a distance of 15-20 miles and take 5-7 tows to complete.

The LDWF used small vessels (less than 30 ft) to sample seven study areas in NMFS statistical zones 12, 13, 14, 16 and 17, utilizing 16-ft shrimp trawls during daylight hours. Statistical Zone 15 was not sampled, as stations were made along set transects occurring only in the five other zones with the 16-ft trawl. Six samples were taken weekly in each study area during the survey period. A sampling station consisted of a 1-fm increment at depths from 1-5 fm. Tows were made perpendicularly to shore. Alabama vessels using 16-ft trawls in daylight hours sampled passes

leading from Mobile Bay to the Gulf of Mexico, with nine stations made in June and nine in July.

All Penaeus spp. shrimp were separated from the trawl catch at each station. Total count and weight by species were recorded for pooled trawls within 1-fm strata. A sample of up to 200 shrimp of each species from every trawl tow was sexed and measured to obtain length-frequency information. Estimated total numbers were derived from the total weights of those processed. Other species of fishes and invertebrates were identified, enumerated and weighed. Weights and individual measurements on selected species other than commercial shrimp were also recorded.

Squid/Butterfish Survey

The July-August Squid/Butterfish sampling was conducted from the Florida shelf west of Tampa, Florida to the south Texas shelf northeast of Brownsville, Texas (Figure 10). Trawl stations are summarized in Figure 10 by 10-min squares. Ten stations were sampled along each transect line. Transect lines were separated 30 miles apart across the survey area in depths that ranged from 20-269 fm. The OREGON II used 60- and 80-ft nets and the TOMMY MUNRO used 80-ft nets.

The 80-ft net was a two-seam fish trawl. The net was spread with a pair of 3m² steel "V" doors. The bridles used were 50 fm in length. Warp length was generally 3:1 except at the shallowest stations where a 4:1 ratio was used. Towing speed was 3 knots.

The 60-ft net was a two-seam fish trawl. This net was only intended as backup for the 80-ft trawls, but it became necessary to use the 60-ft trawls when the 80-ft nets were lost and/or damaged beyond repair at sea. The 60-ft trawl was spread using 2.6m² steel "V" doors. The bridles were 50 fm in length. Warp lengths were the same as for the 80-ft trawls.

Trawl tows were made during daylight hours along the selected depth contours for each station. Tows made in depths of greater than 100 fm were of 60-min duration. In depths of less than 100 fm tows were 30-min in duration.

On both the OREGON II and the TOMMY MUNRO species of fish and invertebrates were identified, enumerated, weighed and measured identically to the procedures outlined for the Summer Shrimp/Bottomfish Survey.

Fall Shrimp/Groundfish Survey

The Fall Shrimp/Groundfish sampling was conducted between September and December from Pensacola, Florida to Brownsville, Texas (Figure 11). Trawl stations are summarized in Figure 11 by 10-min squares.

Two component activities were conducted, an expanded pilot Fall Shrimp/ Groundfish Survey and a comparative gear test between TPWD 20-ft trawl and NMFS 40-ft SEAMAP trawl. The comparative gear test data will not be listed in this Atlas. The

data can be obtained by contacting the SEAMAP Data Manager. During the fall survey trawl stations were made with a standard 40-ft SEAMAP net and covered NMFS shrimp statistical zones 10 through 17. Also SEAMAP stations made with a Texas 20-ft net covered statistical zones 18 through 21.

All tows were 15 min in duration paralleled to the depth strata out to 100 fm. A modified random sample design was developed to evaluate day-night variation in catch rates of fish and shrimp. This sample design included an equal number of day/night stations with a replicated number of day/night stations. With the same geographic area sampled, both day and night within a 24-hr period, areal variation was reduced for analysis of day-night catch rates.

Catch rates on all the vessels sampling were treated in the same manner as the Summer Shrimp/Bottomfish and Squid/Butterfish Survey.

RESULTS

Plankton Surveys

Approximately 490 identified ichthyoplankton samples taken during 1985 surveys were returned from the PSC to the SEAMAP Archiving Center in May 1988. The data will be verified and incorporated into the SEAMAP data system. Distribution plots, by key families, will appear in the separate 1985 SEAMAP Ichthyoplankton Atlas (in preparation).

Plankton stations for June-July Shrimp/Bottomfish are shown in Figure 2, for July-August Squid/Butterfish Figure 3 and for September-December Fall Shrimp/ Groundfish in Figure 4.

Environmental Surveys

As detailed previously, environmental data are collected in conjunction with Summer Shrimp/Bottomfish, Squid/Butterfish and Fall Shrimp/Groundfish surveys (Figures 5, 6 and 7). A complete listing of selected environmental parameters for all SEAMAP surveys is shown in Table 1.

During the Summer Shrimp/Bottomfish Survey an extensive (more than 2,000 sq. mi.) area of hypoxia was found offshore Louisiana from Bastion Bay westward to Calcasieu Lake. Bottom oxygen levels of less than 2 parts per million were measured throughout this area. It was later reported by the Louisiana Universities Marine Consortium Research Center in Cocodrie, Louisiana that the hypoxic area had increased by another 1,000 sq. mi. and measured about 3,000 sq. mi.

Additional environmental information (Secchi readings, Forelule, cloud cover, etc.) may be obtained from the SEAMAP Information System by contacting the SEAMAP Data Manager.

Satellite-derived sea-surface temperatures, averaged over a few days, are shown for the months of June (Figure 12), July (Figure 13), August (Figure 14), September (Figure 15), October (Figure 16) and November (Figure 17).

Shrimp/Bottomfish Survey

The June-July Shrimp/Bottomfish Survey consisted primarily of biological trawl data (Figure 8), and concomitant environmental and plankton data. A species composition listing from the trawls is presented in Table 2, ranked in order of abundance, within the categories of finfish, crustaceans and other invertebrates. Biological distributions of the ten most abundant finfish plus red snapper, three main penaeid shrimps, five most abundant non-Penaeus invertebrates and squid species, taken from Table 2, are displayed in plots of number/hour and lb/hour in Figures 18-57. Data for the biological plots were computed from both the 40-ft trawl data, and from 16-ft trawl data, standardized to 40-ft trawls using relative headrope length. In the plots of lb/hour, a zero value indicates less than 0.5 lb/hr taken; only stations where at least some of the species were taken are shown. No trawl stations were made by the state of Florida during this survey. Tables 3-7 summarize environmental data taken in statistical zone 5 through 9 during Florida June-July Plankton Survey.

Tables 8a-18a present the biological data from the 40-ft nets of the eight most abundant fish, six most abundant invertebrates and squid combined for all NMFS statistical zones by depth stratum. Tables 8b-18b present the biological data, from the 40-ft nets, of the eight most abundant fish, six most abundant invertebrates and squid within each NMFS statistical zone by depth stratum. Tables 8c-18c list the total catch and environmental data from the 40-ft nets by NMFS statistical zone and depth stratum.

Tables 19a-25a present the biological data from the 16-ft nets of the eight most abundant fish, six most abundant invertebrates and squid combined for all NMFS statistical zones 10, 11, 12, 13, 14, 16 and 17. Tables 19b-25b present the biological data from the 16-ft nets of the eight most abundant fish, six most abundant invertebrates and squid within these NMFS statistical zones. Tables 19c-25c present the total catch and environmental data from the 16-ft nets, by NMFS statistical zones listed above.

For all tables, the standard error of the mean (SEM) was calculated with the equation:

$$SEM = \frac{\alpha}{\sqrt{n}}$$

where α is the population standard deviation
and n is the number of the sample.

On all tables, NUM = number per hour; all weights shown are in kilograms per hour.

Squid/Butterfish Survey

The Squid/Butterfish Survey consisted predominately of biological trawl data (Figure 10), and environmental and plankton data. A species composition listing from the trawls is presented in Table 26, ranked in order of abundance within the categories of finfish, crustaceans and other invertebrates. The biological catch data were converted to 80-ft trawls by using a conversion factor of 1.3333 for the 60-ft trawl. Catch data were divided into four geographical areas: Area 1 - 84°00'W-87°14'W (Table 27); Area 2 - 87°15'W-89°14'W (Table 28); Area 3 - 89°15'W-92°14'W (Table 29) and Area 4 - 92°15'W-97°00'W (Table 30). Tables 27-30 present the biological data of the eight most abundant finfish, six most abundant invertebrates and squid combined by depth stratum for each geographic area.

The catch rates for the survey were computed with the same equation used to compute the Summer Shrimp/Bottomfish Survey catch rates.

Fall Shrimp/Groundfish Survey

The September-December Fall Shrimp/Groundfish Survey consisted of biological trawl data (Figure 11) along with environmental data. A species composition listing from the trawls is presented in Table 31, ranked in order of abundance, within the categories of finfish, crustaceans and other invertebrates.

Biological distributions of the ten most abundant finfish plus red snapper, three main penaeid shrimps, five most abundant non-Penaeus invertebrates and squid species, taken from Table 31 are displayed in plots of number/hour and lb/hour in Figures 58-97. Data for the biological plots were computed from the 40-ft trawl data, 20-ft trawl data and from 16-ft trawl data, standardized to 40-ft trawls using relative headrope length. In the plots of lb/hour, a zero value indicates less than 0.5 lb/hr taken; only stations where at least some of the species were taken are shown. No trawl stations were made by the Florida vessel.

Tables 32a-39a present the biological data, from the 40-ft nets, of the eight most abundant fish, six most abundant invertebrates and squid combined for all NMFS statistical zones (10 through 17), by depth stratum. Tables 32b-39b present the biological data, from the 40-ft nets, of the eight most abundant fish, six most abundant invertebrates and squid within each NMFS statistical zone (10 through 17), by depth stratum. Tables 32c-39c list the total catch and environmental data from the 40-ft nets by NMFS statistical zone (10 through 17) and depth stratum.

Tables 40a-43a present the biological data from the 20-ft net used by TPWD of the eight most abundant finfish, six most abundant invertebrates and squid combined for all NMFS shrimp statistical zones 18 through 21. Tables 40b-43b present the biological data from the 20-ft net used by TPWD of the eight most abundant finfish, six most abundant invertebrates and squid within each NMFS shrimp statistical zones 18 through 21. Tables 40c-43c present the total catch data for the TPWD 20-ft net and combined environmental data taken by the Texas vessels and the OREGON II.

Table 44 presents the biological data from the 16-ft nets of the eight most abundant fish, six most abundant invertebrates and squid combined for NMFS statistical zones 10 and 11, inside 10 fm. Tables 45-46 present the biological data from the 16-ft nets of the eight most abundant fish, six most abundant invertebrates and squid within NMFS statistical zones 10 and 11, respectively, inside 10 fm. Tables 47-48 present the total catch and environmental data from the 16-ft nets, by NMFS statistical zone, inside 10 fm.

The catch data were calculated using the same equation that was used to compute catch rates for the Summer Shrimp/Bottomfish and Squid/Butterfish surveys.

Real-time Data Management

The SEAMAP Subcommittee agreed it was imperative to the success of the SEAMAP Program to distribute data on a near real-time basis to the fishing industry and others interested in SEAMAP. To distribute near real-time data, NMFS, in cooperation with NASA, installed a data communications terminal aboard the NOAA Ship OREGON II. The terminal was designed to operate through the ATS-3 satellite system located in geostationary orbit over the Pacific Ocean. This enabled personnel aboard the vessel to transmit daily catch rates and environmental data to the NMFS computer system through computer hardware located at the NMFS Mississippi Laboratories in Bay St. Louis.

Summarized data were distributed weekly to over 250 individuals, management agencies and industry members as computer plots and data listings. These plots showed stations locations, catches of brown, pink and white shrimp in lb/hr and count/lb, and total finfish catch in lb/hr.

Summarized data from the July-August Squid/Butterfish Survey were provided to over 108 interested individuals in weekly mailouts.

DISCUSSION

The quasisynoptic SEAMAP sampling program and the intended long-term nature of the sampling programs have been designed to provide the baseline data set needed for fishery management and conservation. In 1985 the intent to continue with SEAMAP long-term baseline data was disrupted by the loss of the April-May Gulf-wide plankton survey. In 1986 the SEAMAP Subcommittee renewed its commitment to urge continued support for the April-May baseline data for collection of plankton data. Also in 1986, the SEAMAP Subcommittee reinstated the September plankton survey for king mackerel and red drum eggs and larvae as a SEAMAP survey activity. These ichthyoplankton samples are and will be used by researchers studying taxonomy, age and growth, bioenergetics, and other life history aspects, as well as spawning biomass and recruitment. Information on species' relative distributions within the Gulf of Mexico can be analyzed with respect to environmental data to assess population abundance as a function of environmental change. In the same way, satellite data can be related to species distribution and changing conditions in the Gulf.

Similar analyses and investigations are being undertaken with Summer Shrimp/Bottomfish Survey data and in the future with the Fall Shrimp/Groundfish Survey which will be an annual SEAMAP Survey activity. These data sets will be utilized in resource management decisions, and because of the program's ability to process data quickly, the capability exists to optimize some fisheries on a real-time basis. The long-term data set on all of the species collected, not just those of commercial and recreational importance, offers an opportunity to examine ecological relationships, with the eventual goal of developing management models that take into account the multi-species nature of most Gulf fisheries. The value of the SEAMAP Program lies in its use for both immediate and long-range management. There are, in addition, many studies and other uses for SEAMAP data that are not mentioned here.

Much use has already been made of SEAMAP data. For example, during the surveys an area of very low dissolved bottom oxygen was found off Louisiana in 1982, 1985 and in May 1986. The presence of this phenomenon and some of the related conditions and biological effects were reported by Leming and Stuntz (1984), and during such occurrences, SEAMAP has distributed special environmental bulletins and news releases to management agencies and the shrimp industry. In addition, SEAMAP data were used by some coastal states to determine the status of shrimp stocks and their movements just as the shrimping seasons were to be opened.

In 1982 to 1984 SEAMAP ichthyoplankton data were used to estimate spawning stock sizes of bluefin tuna in the Gulf of Mexico (McGowan and Richards 1986). The results of this work were recognized by the International Commission for the Conservation of Atlantic Tunas as a reliable index of stock size, thus precluding the need for a longline fishery in the Gulf which was proposed by Japan. Continuation of the ichthyoplankton surveys in the spring by SEAMAP will provide information on Gulf of Mexico tuna stocks.

SEAMAP data collected during the Summer Shrimp/Bottomfish Survey continue to be used extensively for fishery management purposes. In 1981, the Gulf of Mexico Fishery Management Council's plan for shrimp was implemented (Louisiana State University, Center for Wetland Resources 1980), with one management measure calling for the temporary closure to shrimping of the EEZ off Texas. This closure complements the traditional closure of the Texas territorial sea, normally June 1-July 15 of each year. The purpose of the closure is to increase the yield of shrimp and eliminate waste caused by discarding of undersized brown shrimp.

NMFS was charged with evaluating the effects of the Texas Closure and several reports were submitted to the Gulf Council in December 1985. These reports were subsequently summarized by Klima (1986), who reported on size and abundance of commercial shrimp collected by SEAMAP in 1985, and Nichols (1987), and Nichols and Poffenberger (1987), who described the impact of the combined Texas territorial sea and EEZ closures on brown shrimp yields. After review of these data and other information, the Gulf Council voted to continue the Texas Closure in 1986.

Data Requests

It is the policy of the SEAMAP Subcommittee that all verified non-confidential SEAMAP data, collected specimens and samples shall be available to all SEAMAP

participants, other fishery researchers and management organizations approved by the Subcommittee. This atlas presents, to those individuals interested in the data or specimens, a chance to review the data in a summary form.

Data and specimen requests from SEAMAP participants, cooperators and others will normally be handled on a first-come, first-serve and time-available basis. Because of personnel and funding limitations, however, certain priorities must be assigned to the data and specimen requests. These priorities are reviewed by the SEAMAP Subcommittee. For further information on SEAMAP data management, see the SEAMAP Operations Plan: 1985-1990 (Gulf States Marine Fisheries Commission 1984).

Data requests and inquiries, as well as requests for plankton samples, can be made by contacting the SEAMAP Coordinator, Gulf States Marine Fisheries Commission, P.O. Box 726, Ocean Springs, MS 39564; 601/875-5912.

Table 1. Selected environmental parameters measured during 1985 SEAMAP surveys in the Gulf of Mexico, by individual vessel and survey.

NMFS JUNE-JULY SHRIMP AND BOTTOMFISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
42789	6/10/85	2102	3008.8	8733.2	10	22	11	22	26.4	22.8	22.0	35.6	36.9	36.6	0.771	7.0	7.1	6.8	ST
42790	6/11/85	0024	3004.5	8752.7	10	16	8	16	26.8	22.2	21.0	33.1	36.3	36.5	0.881	6.9	7.0	6.5	ST
42791	6/11/85	0139	3003.3	8749.2	10	20	10	19	27.1	21.0	20.9	32.9	36.7	36.4	0.706	6.8	6.7	5.9	ST
42792	6/11/85	0422	2955.9	8748.1	10	16	8	16	28.2	25.0	20.2	30.9	36.1	36.4	0.800	6.5	7.0	5.4	ST
42793	6/11/85	0516	2953.9	8744.0	10	18	9	18	28.3	26.5	20.0	30.7	35.5	36.5	0.589	6.7	7.0	5.0	ST
42795	6/11/85	1730	2930.0	8730.0	10	69	34	69				34.3	36.3	36.4	0.570	6.7		6.5	PN
42796	6/11/85	2057	2926.6	8735.7	10	72	36	72	28.0	25.5	19.3	34.4	36.4	36.3	0.467	6.6	6.9	5.5	ST
42797	6/11/85	2240	2929.4	8738.7	10	54	26	54	27.2	23.0	20.0	34.0	36.1	36.2	0.794	7.2	7.0	6.1	ST
42798	6/12/85	0227	2922.8	8800.2	11	81	40	81	26.3	21.2	20.0	31.7	36.3	36.3	5.498	8.3	8.1	5.7	ST
42799	6/12/85	2013	2919.0	8852.8	11	37	18	37	23.0	21.0	20.0	26.8	36.3	36.3		6.4	6.5	5.5	ST
42800	6/12/85	2144	2923.9	8846.7	11	33	16	33	24.5	21.6	20.0	33.1	36.2	36.3	3.032	6.1	7.1	6.7	ST
42801	6/12/85	2358	2926.5	8828.2	11	55	27	55	25.2	21.5	19.5	33.1	36.3	36.5	3.848	6.7	6.9	5.1	ST
42806	6/13/85	0516	2927.6	8833.0	11	25	12	25	23.0	22.0	21.0	32.2	36.3	36.5	5.668	8.0	6.2	4.1	ST
42808	6/13/85	2048	2931.2	8837.8	11	26	13	26	25.0	20.4	20.0	30.4	35.0	36.5	6.902	5.5	4.5	3.6	ST
42809	6/13/85	2147	2934.4	8838.1	11	20	10	20	24.5	20.6	20.3	31.5	34.8	36.4	5.961	5.0	4.5	4.0	ST
42810	6/13/85	2340	2935.8	8848.3	11	13	6	13	23.7	23.7	21.0	31.3	32.2	36.3	7.320	5.7	5.5	4.5	ST
42811	6/14/85	0210	2947.8	8835.7	11	14	7	14	24.3	24.4	20.0	34.0	34.8	36.5	0.774	4.9	4.8	4.1	ST
42812	6/14/85	0427	2958.9	8847.5	11	11	5	11	24.2	24.0	23.8	35.4	35.3	36.0	0.841	4.8	4.6	3.5	ST
42813	6/16/85	0410	2958.6	8811.0	11	26	13	24	24.5	20.7	20.7	34.2	36.4	36.4	0.785	6.7	6.1	5.9	ST
42814	6/16/85	2014	2859.1	8933.8	13	25	12	25	27.4	27.8	21.2	23.5	36.2	36.3	3.528	6.9	2.3	3.9	ST
42815	6/16/85	2228	2857.8	8944.0	13	46	23	46	27.7	22.0	20.1	27.5	36.4	36.4	2.305	7.4	2.0	2.3	ST
42816	6/17/85	0045	2906.2	8946.5	13	23	13	22	27.3	22.7	21.8	26.1	36.1	36.3	8.252	7.2	1.2	0.4	ST
42817	6/17/85	0204	2907.7	8949.9	13	20	10	20	27.3	27.2	22.1	26.3	27.6	36.4	3.897	7.0	5.9	0.5	ST
42818	6/17/85	0405	2859.5	8951.5	13	34	17	34	27.5	22.3	20.4	25.9	36.1	36.4	4.143	7.1	3.2	1.7	ST
42819	6/17/85	0929	2830.0	8930.0	13	506	100	200	27.3	18.9	15.9	33.3	36.6	36.2	1.075	6.3	4.6	4.4	PN
42820	6/17/85	1325	2829.8	9000.6	14	85	42	85				31.3	36.0	36.4	0.880	6.4	6.0	5.0	PN
42821	6/17/85	2010	2855.4	9003.2	14	29	14	29	27.0	25.0	23.0	25.9	27.1	36.1	6.670	8.0	7.3	1.1	ST
42822	6/17/85	2228	2846.5	9008.0	14	33	17	33	27.5	27.0	20.8				1.313	6.9	6.6	4.4	ST

Table 1 (cont'd.)

MISSISSIPPI JUNE-JULY SHRIMP AND BOTTOMFISH SURVEY
TOMMY MUNRO

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
17001	6/10/85	2125	2927.3	8859.8	11	10	5	10	25.2	21.7	20.4	27.5	36.0	36.5		10.3	6.7	6.4	ST
17002	6/10/85	2257	2923.6	8853.7	11	18	9	18	25.6	21.6	20.5	22.0	36.0	36.0	16.020	11.9	6.7	6.0	ST
17003	6/11/85	0009	2921.0	8848.8	11	9	5	9	26.6	21.0	20.8	20.0	36.0	36.0		13.0	6.9	6.3	ST
17004	6/11/85	0305	2924.3	8844.8	11	36	17	34	26.2	22.5	21.1	22.0	35.0	36.0		10.4	6.9	6.4	ST
17005	6/11/85	0412	2925.9	8843.3	11	34	17	33	25.6	21.9	21.3	25.0	36.0	36.0		8.5	6.8	6.2	ST
17006	6/11/85	0605	2925.8	8848.9	11	17	9	16	25.3	21.7	20.9	23.5	35.5	36.0	19.251	7.9	6.8	6.2	ST
17007	6/12/85	2034	2928.4	8846.7	11	19	9	18	23.9	22.3	20.7	32.0	34.5	36.0	6.915	9.7	6.3	6.2	ST
17008	6/12/85	2300	2936.9	8833.3	11	31	15	30	25.1	21.3	20.9	33.5	36.0	36.5	0.000	7.0	6.7	6.0	ST
17009	6/13/85	0140	2941.8	8852.7	11	8	4	7	24.1	22.8	22.0	32.0	35.0	36.0		7.9	7.3	6.6	ST
17010	6/13/85	0320	2947.3	8849.3	11	8	4	7	23.3	23.2	22.3	35.5	35.5	36.0	1.495	7.3	7.4	6.4	ST
17011	6/13/85	0445	2950.5	8849.1	11	5	2	4	25.4	25.4	25.3	32.5	33.5	33.5	1.308	6.8	6.9	6.9	ST
17012	6/13/85	2059	2949.3	8831.0	11	29	14	28	24.6	20.9	20.9	33.5	34.5	35.0		6.7	7.0	6.5	ST
17013	6/13/85	2325	2958.6	8840.6	11	18	9	17	24.8	24.8	21.3	33.0	34.0	35.5	0.561	6.7	6.8	6.7	ST
17014	6/14/85	0108	3002.2	8846.1	11	15	7	14	24.6	24.7	22.4	33.5	34.0	35.0	0.748	6.6	6.7	6.4	ST
17015	6/14/85	0355	3008.4	8852.2	11	11	5	10	24.9	24.5	24.4	33.5	34.0	34.5	0.374	7.2	7.3	7.3	ST
17016	6/14/85	0550	3013.8	8848.2	11	7	4	6	25.1	24.9	23.7	32.0	32.0	33.5	0.748	6.7	6.7	6.6	ST
17017	7/15/85	2022	2927.5	8855.1	11	12	6	11	27.4	27.8	22.7	32.0	33.0	36.0	1.211	6.9	6.3	7.1	ST
17018	7/15/85	2207	2919.8	8851.0	11	40	20	39	28.2	23.5	22.7	26.0	35.0	35.0	0.826	7.6	6.2	5.8	ST
17019	7/15/85	2308	2920.5	8849.5	11	43	21	42	27.4	23.8	23.0	26.0	36.0	36.0	1.186	7.0	6.0	5.5	ST
17020	7/16/85	0135	2925.2	8831.9	11	55	27	54	27.2	25.2	24.4	28.0	35.0	37.0		6.5	5.5	5.9	ST
17021	7/16/85	0308	2928.3	8838.6	11	40	20	39	28.3	23.7	22.6	29.0	36.0	37.0	0.039	5.9	6.1	4.3	ST
17022	7/16/85	0353	2929.1	8838.5	11	33	16	32	27.1	25.1	22.4	29.0	35.0	36.0	0.075	6.0	6.1	5.0	ST
17023	7/16/85	0442	2928.9	8838.1	11	37	18	36	28.3	24.1	22.0	28.0	35.0	37.0	0.056	6.0	6.2	4.4	ST
17024	7/16/85	2029	2932.5	8838.8	11	23	11	22	29.2	27.7	24.0	28.0	32.0	36.0		6.6	6.2	5.2	ST
17025	7/16/85	2338	2942.1	8833.6	11	27	13	26	28.0	22.6	21.4	32.0	35.0	36.0	0.352	6.3	5.9	4.5	ST
17026	7/17/85	0101	2944.8	8837.5	11	21	10	20	27.8	27.3	21.4	32.0	32.0	37.0		6.2	6.1	4.2	ST
17027	7/17/85	0321	2958.0	8834.3	11	24	12	23	28.2	23.9	21.8	31.0	35.0	36.0	0.131	6.2	6.0	5.1	ST
17028	7/17/85	2042	3012.3	8836.2	11	10	5	9	28.4	28.4	24.6	31.0	31.0	35.0	0.192	6.8	6.1	4.2	ST

Table 1 (cont'd.)

MISSISSIPPI JUNE-JULY SHRIMP AND BOTTOMFISH SURVEY
TOMMY MUNRO

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
17029	7/18/85	0027	3011.9	8854.4	11	7	3	6	27.8	27.2	25.1	30.0	31.0	34.0	1.850	6.4	6.3	5.8	ST
17030	7/18/85	0134	3011.7	8858.0	11	6	3	5	28.0	28.0	26.6	29.0	29.0	32.0	0.513	5.7	5.7	5.5	ST
17031	7/18/85	0353	3004.6	8856.8	11	9	4	8	28.7	28.5	28.3	28.0	29.0	30.0		6.2	6.2	5.8	ST

Table 1 (cont'd.)

TEXAS JUNE-JULY SHRIMP AND BOTTOMFISH SURVEY
ARANSAS BAY

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
31001	6/26/85	2248	2738.9	9643.8	20	37	19	36	26.0	26.0	25.5	34.0	35.2	35.7	0.449	6.8	6.0	6.0	ST
31002	6/27/85	0235	2727.4	9660.0	20	29	15	28	27.0	27.0	26.8	34.0	34.0	34.6	0.897	6.3	6.5	6.6	ST
31003	6/27/85	2039	2759.5	9644.8	20	16	8	15	28.2	27.4	27.2	33.2	33.1	33.1		6.1	5.7	5.9	ST
31004	6/27/85	2234	2760.0	9637.3	20	22	11	21	27.8	27.3	26.2	32.8	33.3	34.8	1.720	6.3	5.7	5.3	ST
31005	6/28/85	0024	2755.5	9637.9	20	26	13	25	27.4	27.0	26.9	33.1	33.5	33.5	1.037	6.0	5.9	5.8	ST
31006	6/28/85	0312	2744.1	9636.1	20	40	20	39	27.3	26.2	22.5	33.5	36.0	35.9		6.3	6.3	6.0	ST
31007	6/28/85	0542	2742.9	9645.5	20	31	16	30	27.0	27.2	25.4	33.6	33.9	35.7	2.131	6.3	6.3	5.7	ST
31008	6/28/85	2127	2738.3	9707.3	20	13	7	12	27.0	27.7	27.3	34.0	34.7	35.5	1.009	7.1	7.0	6.8	ST
31009	6/28/85	2324	2744.5	9702.5	20	15	8	14	26.9	27.2	27.2	33.7	33.7	34.5	1.850	6.7	6.8	6.4	ST
31010	6/29/85	0125	2748.5	9701.3	20	9	5	8	27.0	27.8	26.9	32.5	33.6	34.5	2.990	7.0	6.8	7.2	ST

Table 1 (cont'd.)

TEXAS JUNE-JULY SHRIMP AND BOTTOMFISH SURVEY
MATAGORDA BAY

STA#	DATE MM/DD/YY	TIME	POSITION LAT LONG		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)			TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
							MID	MAX		SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
32001	6/15/85	2059	2803.3	9556.4	19	40	20	39	28.4	26.0	23.1	33.5	35.4	0.654	7.5	8.0	8.2	ST		
32002	6/15/85	2150	2803.0	9555.6	19	40	20	39	28.4	26.0	23.1				7.5	8.0	8.2	ST		
32003	6/16/85	0015	2802.7	9608.5	19	37	18	36	27.8	25.8	25.5	34.1	35.4	35.6	0.561	5.9	6.1	6.1	ST	
32004	6/16/85	0252	2805.3	9608.3	19	32	16	31	27.8	25.9	25.2	33.8	35.5	35.5	0.666	5.7	6.0	5.8	ST	
32005	6/16/85	0408	2809.7	9606.5	19	27	13	26	27.8	27.8	25.2	33.7	34.4	35.2	0.785	5.8	5.9	5.8	ST	
32006	6/16/85	0548	2810.5	9611.6	19	26	13	25	27.9	27.5	26.0	33.8	35.0	35.2	0.505	5.8	5.9	5.8	ST	
32007	6/16/85	1028	2803.4	9621.3	19	27	13	26	29.0	27.0	27.0	34.8	35.6	35.4	0.841	5.6	5.8	5.4	ST	
32008	6/16/85	1128	2804.5	9623.1	19	25	12	24	29.0	27.2	27.0	34.5	35.2	35.4	0.729	5.6	5.8	5.7	ST	
32009	6/16/85	2048	2758.5	9618.4	20	37	18	36	28.5	28.0	25.2	35.2	36.1	35.5	1.163	5.6	5.7	5.9	ST	
32010	6/17/85	0106	2805.4	9625.4	19	25	12	24	29.0	27.2	27.0				5.6	5.8	5.7	ST		
32011	6/17/85	0340	2809.8	9623.9	19	24	12	23	28.5	28.0	28.0	33.9	34.5	34.5	0.224	6.7	7.0	6.4	ST	
32012	6/17/85	0459	2813.7	9624.6	19	18	9	17	28.0	28.1	28.0	34.3	34.3	34.5	0.785	5.7	5.6	5.2	ST	
32013	6/24/85	2040	2854.9	9517.4	19	5	2	4	29.5	28.2	28.2				5.046	9.0	5.8	6.4	ST	
32014	6/24/85	2236	2849.5	9522.0	19	9	4	8	28.2	28.0	28.0				2.803	4.1	5.0	4.4	ST	
32015	6/25/85	0000	2847.5	9523.5	19	10	5	9	28.0	28.0	28.0				1.794	5.3	5.6	5.3	ST	
32016	6/25/85	0150	2845.7	9526.4	19	10	5	9	28.3	28.5	28.4				2.131	4.9	5.1	5.0	ST	
32017	6/25/85	0425	2840.5	9519.6	19	20	10	19	28.2	28.0	27.8				0.561	5.0	5.0	4.6	ST	
32018	6/25/85	2045	2906.7	9459.2	18	5	2	4	29.5	29.6	29.5	26.9	27.1	27.0	1.346	8.2	7.4	7.6	ST	
32019	6/25/85	2154	2905.3	9500.0	19	9	4	8	29.0	29.0	28.5	27.0	27.0	27.1	2.243	7.4	7.0	4.4	ST	
32020	6/26/85	0004	2905.6	9455.6	18	13	6	12	28.7	28.8	28.5	25.3	25.7	27.4	3.140	7.3	6.8	6.2	ST	
32021	6/26/85	0129	2905.3	9459.3	18	14	7	13	28.2	28.4	28.3	25.0	26.3	27.7	2.355	4.5	4.6	5.0	ST	
32022	6/26/85	0220	2904.3	9458.1	18	14	7	13	28.2	28.4	28.3					4.5	4.6	5.0	ST	
32023	6/26/85	0306	2903.2	9456.6	18	14	7	13	28.2	28.4	28.3					4.5	4.6	5.0	ST	
32024	6/26/85	0530	2854.3	9510.7	19	14	7	13	28.2	28.2	28.1	29.1	29.2	29.5	3.476	7.4	7.8	6.8	ST	

Table 1 (cont'd.)

TEXAS JUNE-JULY SHRIMP AND BOTTOMFISH SURVEY
LAGUNA MADRE

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
33001	6/29/85	2107	2645.9	9715.9	21	18	9	17	26.3	26.8	27.0	35.7	35.8	36.1	0.449	6.2	6.0	6.4	ST
33002	6/29/85	2325	2641.2	9711.9	21	20	10	19	26.8	25.5	26.5	35.5	35.5	35.8	0.636	6.2	5.9	6.2	ST
33003	6/30/85	0028	2641.0	9710.7	21	22	11	21	26.5	27.0	26.1	35.5	35.5	35.8	0.748	6.2	5.8	5.6	ST
33004	6/30/85	0250	2645.5	9703.7	21	35	17	34	27.0	26.2	24.0	35.2	35.8	35.8	0.748	5.8	5.8	4.3	ST
33005	6/30/85	0517	2638.1	9707.8	21	26	13	25	26.8	26.8	26.3	35.7	35.7	35.9	0.841	6.0	6.0	5.5	ST
33006	6/30/85	2105	2611.2	9709.2	21	11	6	10	26.5	26.8	27.0	36.1	36.0	36.0	1.028	6.5	6.3	6.3	ST
33007	6/30/85	2248	2616.1	9710.1	21	11	6	10	27.0	27.0	27.0	36.1	36.0	36.0	0.953	6.4	6.5	6.4	ST
33008	7/ 1/85	0055	2608.9	9701.6	21	24	12	23	27.0	27.0	26.8	36.0	35.9	36.0	0.841	6.4	6.4	6.3	ST
33009	7/ 1/85	0311	2602.3	9701.2	21	26	13	25	27.0	27.0	27.0	36.0	36.0	36.0	1.121	6.6	6.5	6.3	ST
33010	7/ 1/85	0443	2600.7	9708.6	21	5	3	5	27.0	27.0	27.0	36.1	36.0	36.0	1.738	6.3	6.3	6.3	ST

Table 1 (cont'd.)

LOUISIANA JULY SHRIMP AND BOTTOMFISH SURVEY
PELICAN

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
35020	7/22/85	1638	2900.5	9027.9	14	9	5	9	29.5	29.3	27.6	28.0	28.3	32.6	5.182	6.7	4.8	4.6	ST/PN
35021	7/22/85	1915	2902.9	9016.5	14	7	4	7	29.2	28.2	27.0	29.8	31.2	32.8	3.112	6.1	4.8	1.0	ST/PN
35022	7/22/85	2305	2857.9	9014.3	14	16	8	16	29.4	28.3	23.1	28.6	31.1	35.7	1.387	2.3	2.3	0.1	ST/PN
35023	7/23/85	0324	2837.3	9026.1	14	27	14	27	29.3	28.0	21.5	22.8	33.0	35.9	0.435	4.6	2.2	0.4	ST/PN
35024	7/23/85	0610	2837.1	9038.2	14	20	10	20	29.5	27.5	21.9	22.0	32.0	35.9	0.652	6.6	4.9	1.5	ST/PN
35025	7/23/85	0914	2833.2	9048.0	14	26	13	26	29.3	28.6	21.9	25.4	29.3	31.6	0.290	6.3	5.9	1.6	ST/PN
35026	7/23/85	1342	2846.6	9102.8	15	11	6	11	29.8	27.3	25.3	16.8	31.7	34.6	8.929	10.2	1.1	0.1	ST/PN
35027	7/23/85	1744	2852.1	9044.6	14	15	8	15	30.2	27.8	24.6	23.0	32.3	35.2	3.298	2.3	1.1	0.1	ST/PN
35028	7/23/85	2139	2852.1	9044.6	14	15	8	15	30.1	27.7	24.6	23.2	32.4	35.2	3.450	2.6	1.6	0.2	ST/PN
35029	7/24/85	0124	2846.6	9102.8	15	11	6	11	29.9	29.4	25.1	14.9	27.4	34.8	15.321	8.5	5.2	0.2	ST/PN
35030	7/24/85	0459	2833.2	9048.0	14	24	12	24	29.7	27.2	21.9	25.3	34.8	36.0	0.270	6.3	5.5	3.6	ST/PN
35031	7/24/85	0748	2837.1	9038.2	14	20	10	20	27.5	26.9	22.0	23.1	32.8	35.9	0.536	0.5	0.3	0.2	ST/PN
35032	7/24/85	1032	2837.3	9026.1	14	27	14	27	29.3	26.9	21.5	23.3	32.6	36.0	0.761	6.4	3.8	0.6	ST/PN
35033	7/24/85	1906	2857.9	9014.3	14	15	8	15	29.9	26.2	22.7	26.4	32.5	35.8	1.082	6.4	3.2	0.2	ST/PN
35034	7/24/85	2341	2916.5	8953.2	13	5	3	5	28.1	28.1	26.0	30.5	30.5	34.0	6.443	5.1	3.7	1.0	ST/PN
35035	7/25/85	0251	2906.9	8943.5	13	20	10	20	29.2	25.9	24.2	29.2	35.2	35.6	0.406	6.4	5.3	4.1	ST/PN
35036	7/25/85	0440	2901.3	8933.7	13	16	8	16	29.0	28.5	26.5	29.4	30.3	35.5	0.789	6.6	4.7	4.8	ST/PN
35037	7/25/85	0620	2900.5	8936.2	13	40	20	40	29.2	27.0	24.7	28.7	35.7	36.0	0.609	7.4	6.5	5.0	ST/PN
35038	7/25/85	0950	2900.5	8936.2	13	30	15	30	29.1	27.1	25.4	28.7	33.0	35.7	0.761	6.7	6.6	4.7	ST/PN
35039	7/25/85	1110	2901.3	8933.7	13	15	8	15	29.0	29.0	26.6	29.0	29.1	35.7	0.930	6.3	5.8	4.8	ST/PN
35040	7/25/85	1341	2906.9	8943.5	13	22	11	22	28.5	27.9	24.2	31.2	32.0	35.6	1.218	6.5	6.0	3.2	ST/PN
35041	7/25/85	1642	2916.5	8953.2	13	4	2	4	28.7	26.5	26.5	27.8	33.4	33.3	8.193	4.7	2.9	2.1	ST/PN
35042	7/25/85	2053	2902.9	9016.5	14	7	4	7	28.4	26.0	24.2	28.9	34.0	35.2	7.001	4.3	1.8	0.1	ST/PN
35043	7/25/85	2332	2900.5	9027.9	14	7	4	7	29.0	28.2	24.7	27.0	30.1	35.1	4.667	3.5	1.5	1.4	ST/PN

Table 1 (cont'd.)

NMFS JULY-AUGUST SQUID AND BUTTERFISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43144	7/30/85	2035	2800.3	8420.1	6	60	30	60	28.9	23.2	19.8	32.4	36.2	36.3	0.168	7.8	8.7	6.2	PN
43146	7/31/85	0500	2802.1	8412.5	6	49	24	49	28.8	24.7	20.6	33.1	36.1	36.0	0.150	6.2	6.4	6.0	PN
43147	7/31/85	0638	2759.9	8420.3	5	60	30	60	28.8	22.7	19.7	33.4	36.5	36.3	0.150	6.5	7.3	5.7	FT
43149	7/31/85	1049	2759.6	8439.0	5	100	50	100	29.2	20.1	16.5	31.6	36.4	36.3	0.112	6.3	6.6	4.4	FT
43150	7/31/85	1242	2801.0	8444.5	6	140	70	140	30.0	19.7	15.2	30.4	36.2	36.0	0.187	6.4	4.8	4.2	FT
43151	7/31/85	1425	2759.4	8447.7	5	175	87	175	29.9	19.5	13.5	30.4	36.3	35.8	0.112	6.3	5.8	4.1	FT
43152	7/31/85	1704	2800.6	8454.3	6	214	107	214	29.7	18.6	12.3				0.093	6.3	5.7	5.2	FT
43153	7/31/85	2050	2759.8	8452.5	5	205	102	205	29.6	18.7	12.3	30.8	36.3	35.6		6.3	5.0	3.8	PN
43155	8/ 1/85	0426	2759.7	8501.5	8	265	132	265	28.8	17.8	11.5	32.6	35.5	36.3	0.056	6.5	4.1	4.9	PN
43156	8/ 1/85	0645	2759.9	8502.5	8	265	132	265	28.2	17.7	11.5	30.9	36.6	36.1	0.093	6.5	5.2	4.3	FT
43157	8/ 1/85	0941	2802.8	8511.5	8	317	158	317	28.8	16.7	9.9	34.0	36.3	35.4	0.131	6.4	4.8	4.2	FT
43158	8/ 1/85	1240	2758.7	8510.3	8	372	186	372	29.0	15.7	9.1	33.7	36.5	35.6		6.3	6.0	4.1	FT
43159	8/ 1/85	1628	2759.5	8517.3	8	427	214	427	29.4	14.3	8.6		36.1	35.1		6.4	4.6	4.6	FT
43160	8/ 1/85	1901	2801.9	8526.1	8	484	242	484	29.4	13.6	8.0				0.150				FT
43161	8/ 1/85	2055	2751.5	8520.6	8	481	240	481	29.2	13.5	8.0	31.2	35.9	35.1	0.112	6.7	4.5	3.7	PN
43162	8/ 2/85	0427	2820.7	8600.3	9	457	228	457	28.8	14.3	8.4	32.1	35.9	35.2	0.056	7.0	6.9	4.5	PN
43164	8/ 2/85	0922	2822.1	8557.2	8	392	196	392	28.8	15.4	9.1	31.8	36.3	36.0	0.112	6.4	4.3	4.9	FT
43165	8/ 2/85	1210	2826.4	8556.7	8	360	180	360	29.3	16.1	9.6	31.5	37.2	35.6	0.131	6.2	4.9	4.3	FT
43166	8/ 2/85	1616	2841.8	8559.3	8	292	146	292	29.2	17.3	11.5	31.4	36.3	35.4	0.150	6.6	5.1	4.3	FT
43168	8/ 2/85	2145	2905.0	8603.3	9	239	120	239	28.5	18.1	12.6	30.6	36.4	35.6	0.117	6.5	4.2	4.0	PN
43169	8/ 3/85	0119	2852.8	8615.9	9	335	167	335	29.1	15.8	10.8	31.3	36.2	35.2		6.5	4.7	3.9	PN
43171	8/ 3/85	0548	2839.6	8630.2	9	457	228	457	28.9	14.5	8.4	33.6	36.1	35.1	0.093	6.4	5.5	4.2	FT
43172	8/ 3/85	0905	2851.9	8629.2	9	400	200	400	28.7	15.1	9.8								FT
43173	8/ 3/85	1258	2914.2	8629.9	9	346	173	346	29.4	15.6	10.1								FT
43174	8/ 3/85	1532	2922.9	8630.2	9	292	146	292	29.2	15.4	10.6								FT
43175	8/ 3/85	1742	2927.2	8629.6	9	236	118	236	28.8	17.8	11.8								FT
43176	8/ 3/85	2010	2926.6	8629.5	9	234	117	234	28.9	17.4	11.3	31.2	36.4	35.4	0.125	7.0	5.9	4.0	PN
43177	8/ 3/85	2251	2931.0	8644.9	9	280	140	280	29.0	16.4	10.7	29.6	35.9	35.1		6.5	4.2	3.9	PN

Table 1 (cont'd.)

NMFS JULY-AUGUST SQUID AND BUTTERFISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43178	8/ 4/85	0413	2936.8	8659.7	9	265	132	265	28.1	16.1	11.0	32.0	36.6	35.5	0.075	6.7	4.9	4.0	PN
43180	8/ 4/85	0834	2933.3	8659.5	9	320	160	320	28.7	15.3	10.1								FT
43181	8/ 4/85	1056	2931.0	8701.7	10	379	189	379	28.5	14.2	9.6								FT
43182	8/ 4/85	1259	2929.4	8657.9	9	432	216	432	28.4	13.7	9.2								FT
43183	8/ 4/85	1522	2928.5	8659.1	9	479	240	479	28.9	13.0	8.3								FT
43184	8/ 4/85	2005	2928.3	8700.1	10	486	243	486	28.9	12.7	8.4	30.3	35.7	35.1	0.218	6.6	4.5	4.0	PN
43185	8/ 4/85	2247	2925.4	8715.0	10	457	228	457	28.0	13.1	8.3	28.6	35.7	35.0	0.374	6.4	4.2	3.7	PN
43187	8/ 5/85	0545	2919.5	8731.1	10	484	242	484	27.9	12.4	8.8	31.2	35.7	35.1	0.206	6.5	4.6	4.1	FT
43188	8/ 5/85	0759	2922.9	8724.2	10	436	218	436	27.8	13.4	9.1								FT
43189	8/ 5/85	1028	2922.5	8729.1	10	375	187	375	28.1	14.1	9.8								FT
43190	8/ 5/85	1224	2921.1	8733.0	10	320	160	320	29.3	15.0	11.2								FT
43191	8/ 5/85	1405	2923.6	8730.1	10	258	129	258	28.5	16.2	11.8								FT
43192	8/ 5/85	1601	2922.6	8733.2	10	220	110	220	28.2	17.2	12.8								FT
43193	8/ 5/85	2035	2924.5	8730.3	10	192	98	192	28.5	17.3	13.2	29.5	36.3	35.7	0.327	6.8	4.5	4.2	PN
43195	8/ 6/85	0618	2925.2	8730.5	10	174	87	174	27.6	19.1	14.1	32.3	36.5	35.9	0.150	6.8	4.8	4.4	FT
43196	8/ 7/85	0419	2926.1	8730.3	10	137	68	137	27.5	20.9	14.6	29.8	36.6	36.0	0.318	6.0	5.1	4.4	PN
43197	8/ 7/85	0617	2925.4	8731.2	10	137	68	137	27.5	20.9	14.6					6.0	5.1	4.4	FT
43198	8/ 7/85	0735	2927.7	8728.6	10	96	48	96	27.3	22.4	16.6								FT
43199	8/ 7/85	0858	2927.7	8729.4	10	89	44	89	27.5	22.8	16.7								FT
43200	8/ 7/85	1409	2930.6	8758.8	10	43	21	43	28.1	26.0	21.8	27.9							FT
43201	8/ 7/85	1621	2922.8	8800.8	11	81	40	81	27.7	22.8	18.5								FT
43202	8/ 7/85	1748	2920.2	8758.1	10	114	56	114	27.5	21.3	16.6								FT
43203	8/ 7/85	1906	2918.0	8800.7	11	154	77	154	27.6	19.7	14.3								FT
43204	8/ 7/85	2045	2918.0	8800.5	11	169	84	169	27.5	19.1	13.5	27.0	36.4	35.8	0.454	6.7	4.7	3.9	PN
43205	8/ 8/85	0414	2917.1	8800.4	11	183	91	183	27.6	19.1	13.4	26.8	36.6	35.8	0.467	6.6	4.7	4.2	PN
43206	8/ 8/85	0644	2917.4	8757.7	10	182	91	182	27.6	19.1	13.4	26.0	35.0	36.0		6.6	4.7	4.2	FT
43207	8/ 8/85	0838	2915.3	8801.6	11	238	119	238	28.2	17.1	12.2								FT
43208	8/ 8/85	1316	2914.6	8759.5	10	282	141	282	27.9	15.1	11.6								FT

Table 1 (cont'd.)

NMFS JULY-AUGUST SQUID AND BUTTERFISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43209	8/ 8/85	1532	2914.1	8754.9	10	356	178	356	28.9	13.8	10.4								FT
43210	8/ 8/85	1743	2914.2	8754.9	10	408	204	408	29.1	13.0	9.5		36.5						FT
43211	8/ 8/85	1929	2912.3	8755.7	10	460	230	460	28.7	12.6	8.9								FT
43212	8/ 8/85	2215	2911.4	8800.3	11	470	135	270	28.2	15.8	11.7	27.7	36.2	35.5	0.224	6.5	4.5	3.8	PN
43213	8/ 9/85	0103	2910.3	8814.9	11	360	180	360	28.5	13.3	11.6	27.5	35.9	35.3	0.243	6.5	4.1	3.9	PN
43214	8/ 9/85	0408	2908.4	8829.3	11	238	119	238	27.9	16.7	12.0	28.3	35.0	35.5	0.299	6.9	5.0	4.4	PN
43215	8/ 9/85	0605	2908.7	8823.7	11	238	119	238	27.9	16.7	12.0					6.9	5.0	4.4	FT
43217	8/ 9/85	1037	2903.8	8832.8	11	357	178	357	27.7	14.2	10.1								FT
43218	8/ 9/85	1233	2904.0	8827.7	11	410	205	410	28.1	13.2	9.6								FT
43219	8/ 9/85	1426	2901.6	8832.7	11	450	225	450	27.9	12.9	9.0								FT
43220	8/ 9/85	2010	2859.5	8834.1	11	464	232	464	28.1	12.5	9.0	29.1	35.6	35.2	0.505	6.5	4.2	3.8	PN
43221	8/ 9/85	2230	2856.9	8845.1	11	235	117	235	28.1	16.8	12.0	30.1	36.3	35.6	0.467	6.4	4.4	4.1	PN
43222	8/10/85	0418	2850.3	8900.0	13	265	131	265	28.0	16.0	11.4	26.7	36.3	35.7	4.710	7.6	4.6	4.1	PN
43223	8/10/85	0608	2849.8	8900.7	13	265	132	265	28.0	16.0	11.4					7.6	4.6	4.1	FT
43224	8/10/85	0749	2851.9	8855.1	11	320	160	320	28.3	15.1	10.7								FT
43225	8/10/85	1005	2850.7	8855.3	11	390	195	390	28.4	13.4	10.1								FT
43226	8/10/85	1211	2848.8	8858.3	11	430	215	430	28.4	13.2	9.3								FT
43227	8/10/85	1438	2847.3	8858.9	11	490	220	490	28.6	13.1									FT
43228	8/10/85	1950	2844.9	8900.7	13	512	256	512	28.9	11.9	8.7	26.9	35.5	35.0	2.617	8.1	4.5	4.0	PN
43229	8/11/85	0426	2809.9	9000.3	14	265	132	265	28.7	15.9	11.4	30.7	36.2	35.6	0.150	6.8	4.9	4.4	PN
43230	8/11/85	0611	2809.8	9001.2	14	265	134	265	28.7	15.9	11.4								FT
43231	8/11/85	0832	2813.6	8955.9	13	320	160	320	28.1	14.2	10.4	30.8	36.1	35.4	0.243	6.6	4.9	4.2	FT
43232	8/11/85	1042	2808.3	8957.5	13	360	180	360	28.8	13.7	10.0	30.9	36.1	35.4	0.224	6.4	4.6		FT
43233	8/11/85	1320	2804.6	9000.1	14	454	227	454	28.6	12.8	8.9	30.5	36.0	35.2	0.336	6.5	4.8	4.0	FT
43234	8/11/85	1526	2802.3	9002.3	14	496	248	496	28.6	12.6	8.2								FT
43235	8/11/85	2000	2803.8	9000.0	14	485	242	485	28.8	12.6	8.3	30.4	35.7	35.1	0.243	6.9	4.6	4.3	PN
43236	8/12/85	0423	2752.0	9059.2	14	483	241	483	28.8	12.4	8.4	32.2	35.6	35.3	0.112	6.5	4.4	4.2	PN

Table 1 (cont'd.)

NMFS JULY-AUGUST SQUID AND BUTTERFISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43237	8/12/85	0610	2752.3	9059.2	14	483	241	483	28.8	12.4	8.4								FT
43238	8/12/85	0854	2753.7	9002.7	14	423	211	423	28.7	13.2	8.8								FT
43239	8/12/85	1044	2753.3	9057.0	14	371	185	371	28.7	14.2	9.7								FT
43240	8/12/85	1240	2754.5	9102.1	15	321	160	321	29.5	15.2	10.8								FT
43241	8/12/85	1436	2755.7	9103.2	15	278	139	278	30.1	16.3	11.8	30.6	36.3	35.6	0.093				FT
43242	8/18/85	0532	2630.0	9648.5	21	45	21	45	28.1	24.5	22.2	36.3	36.3	36.3	0.093	4.6	4.3	4.2	PN
43244	8/18/85	0956	2630.4	9630.6	21	90	45	87	29.2	23.2	20.5	35.9	36.7	36.4	0.112	6.7	7.1	4.6	FT
43245	8/18/85	1255	2630.8	9622.6	21	119	59	119	29.3	21.8	17.8	36.3	35.9	36.3	0.112	6.6	7.4	4.8	FT
43246	8/18/85	1442	2630.5	9621.2	21	162	81	162	29.6	20.1	15.6	36.0	36.3	35.8	0.056	6.2	5.5	4.5	FT
43248	8/18/85	2142	2629.1	9620.8	21	200	200	200	29.7	19.0	14.2	35.9	36.4	36.0		6.6	5.3	4.2	PN
43250	8/19/85	0422	2630.3	9620.0	21	238	120	238	29.4	17.6	12.7	35.9	36.3	35.7	0.093	6.3	4.2	4.2	PN
43252	8/19/85	0922	2629.9	9619.1	21	293	147	293	29.4	16.5	11.3	35.9	36.3	35.6	0.075	8.2	5.1	4.4	FT
43253	8/19/85	1218	2628.3	9617.9	21	348	174	348	29.9	15.0	10.5	35.9	36.2	35.4	0.131	6.8	4.6	4.4	FT
43254	8/19/85	1545	2629.1	9617.1	21	403	202	403	29.9	14.5	9.5	35.9	36.1	35.3		7.1	4.9	4.6	FT
43256	8/19/85	2118	2635.5	9618.5	21	459	229	459	29.5	13.3	9.5	36.1	36.0	35.3		6.3	4.3	3.9	PN
43257	8/20/85	0429	2705.7	9611.3	20	457	229	456	29.4	14.1	8.9	35.6	36.2	35.3	0.056	7.4	4.7	4.5	PN
43259	8/20/85	1103	2720.7	9600.1	20	403	202	403	29.5	15.3	9.3								FT
43260	8/20/85	1319	2725.6	9557.8	20	348	174	348	30.0	16.2	10.1								FT
43261	8/20/85	2215	2725.6	9557.7	20	353	176	353	29.8	16.6	10.5	35.7	36.3	35.3	0.187	6.2	4.5	4.0	PN
43264	8/21/85	1219	2733.2	9557.9	20	183	92	183	30.2	22.3	15.6								FT
43265	8/21/85	1340	2733.5	9600.6	20	156	78	156	30.4	23.2	17.8								FT
43266	8/21/85	1457	2738.1	9600.4	20	119	60	119	30.7	24.6	18.9								FT
43267	8/21/85	1922	2744.6	9600.2	20	82	41	82	29.5	26.7	21.7								FT
43268	8/21/85	2107	2744.6	9556.6	20	77	38	77	29.4	27.2	23.4	35.9	36.3	36.4	0.056	7.0	7.0	5.2	PN
43269	8/22/85	0429	2804.2	9460.0	18	64	32	64	29.8	25.4	21.6	36.2	36.2	36.2	0.056	6.7	6.0	5.8	PN
43271	8/22/85	0859	2755.3	9459.1	18	101	48	96	29.5	23.7	17.9	35.8	36.3	35.9	0.131	6.6	6.4	4.7	FT
43272	8/22/85	1148	2751.0	9500.6	19	175	88	174	29.5	21.3	14.3	35.8	36.4	35.7	0.187	6.7	7.2	4.7	FT
43273	8/22/85	1333	2750.7	9457.1	18	215	108	215	29.7	17.4	13.2					6.6	6.0	5.8	FT

Table 1 (cont'd.)

NMFS JULY-AUGUST SQUID AND BUTTERFISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)			TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR		MID	MAX		
43275	8/22/85	2130	2750.0	9454.4	18	267	133	267	29.4	16.5	12.1	35.8	36.2	35.6		6.8	4.3	3.9	PN	
43276	8/23/85	0423	2747.9	9500.1	19	320	60	320	29.5	15.9	10.7	35.5	36.2	35.4	0.075	6.7	4.4	4.0	PN	
43278	8/23/85	0858	2746.2	9500.4	19	376	188	376	29.6	14.4	9.4	35.5	36.2	35.6		6.7	4.5	4.0	FT	
43279	8/23/85	1229	2743.9	9500.5	19	432	216	431	29.7	14.0	9.0	35.7	35.9	35.2	0.131	6.9	4.6	4.5	FT	
43281	8/23/85	2058	2742.7	9459.4	18	468	234	468	29.7	13.7	9.0	35.4	36.2	35.2	0.019	6.1	4.1	3.9	PN	
43282	8/24/85	0424	2737.8	9359.1	17	455			28.0						0.243				PN	
43283	8/24/85	2038	2746.6	9359.5	17	256	128	256	29.8	16.1	12.7	35.9	36.2	35.6		6.1	4.4	4.2	PN	
43284	8/25/85	0419	2740.4	9259.8	16	265	134	264	29.7	16.1	11.3	36.0	36.2	35.5	0.131	6.5	4.5	4.1	PN	
43286	8/25/85	0858	2741.5	9257.6	16	320	160	319	29.7	15.0	11.0	35.0	36.1	35.4	0.150	6.7	4.7	4.3	FT	
43287	8/25/85	1131	2737.2	9300.5	17	375	188	374	29.7	14.2	9.8	36.1	36.1	35.3	0.355	6.5	4.5	4.2	FT	
43288	8/25/85	1432	2735.3	9304.2	17	438	219	438	29.4	13.1	9.0	36.0	35.9	35.2	0.056	7.4	6.8	7.1	FT	
43289	8/25/85	1652	2735.4	9257.9	16	485	243	485	29.2	12.1	8.4								FT	
43290	8/25/85	2116	2735.3	9300.0	17	490	245	490	29.0	12.0	8.1	35.9	35.6	35.0	0.075	7.0	4.5	4.3	PN	
43291	8/26/85	0423	2746.4	9200.2	16	457	229	456	30.0	13.4	8.4	35.4	35.8	35.1	0.093	6.6	4.4	4.4	PN	
43293	8/26/85	0900	2748.1	9202.4	16	403	202	402	30.0	14.4	9.4	35.5	36.0	35.1	0.112	6.4	4.4	4.2	FT	
43294	8/26/85	1121	2750.0	9156.8	15	293	147	293	30.3	16.3	10.9								FT	
43295	8/26/85	1320	2750.3	9202.8	16	239	119	239	29.3	18.1	12.5								FT	
43296	8/26/85	1840	2754.8	9127.1	15	183	91	183	29.0	19.1	14.4								FT	

Table 1 (cont'd.)

MISSISSIPPI AUGUST SQUID AND BUTTERFISH SURVEY
TOMMY MUNRO

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
17002	8/ 2/85	0746	2930.1	8600.0	9	57	29	57	30.0	25.0	20.2	30.0	35.0	35.5	0.131	5.8	7.0	7.5	FT
17003	8/ 2/85	1045	2924.8	8604.1	9	82	41	82	29.0	23.5	21.0	30.0	36.0	36.0	0.150	7.8	8.5	8.5	FT
17004	8/ 2/85	1327	2918.2	8600.8	9	145	75	145	29.1	22.0	20.5	30.4	36.0	36.0	0.150	8.1	7.0	7.1	FT
17005	8/ 2/85	1540	2913.0	8613.0	9	190	95	190	28.8	23.2	15.2	34.5	36.0	37.0	0.112	7.4	6.4	5.7	FT
17006	8/ 2/85	1746	2906.9	8600.0	9	230	100	200	28.6	23.2	21.5	34.6	36.5	36.0	0.131	6.6	6.4	6.5	FT
17010	8/ 3/85	0816	2929.0	8629.0	9	200	100	200	27.2	20.0	17.5	30.0	37.0	36.0	0.262	6.4	7.2	7.4	FT
17011	8/ 3/85	1027	2937.3	8630.2	9	190	95	190	29.5	22.0	16.5	32.5	37.0	36.0	0.112	6.6	6.2	5.7	FT
17012	8/ 3/85	1300	2948.6	8630.6	9	130	60	130	27.8	23.5	19.0	32.0	36.0	36.5	0.140	6.6	5.9	6.0	FT
17013	8/ 3/85	1512	2956.4	8629.9	9	90	45	90	28.2	24.0	22.5	32.5	35.0	36.0	0.131	6.2	6.0	5.8	FT
17014	8/ 3/85	1704	3003.4	8629.9	9	50	25	50	28.2	25.0	24.0	32.0	35.0	36.0	0.150	7.0	6.2	6.8	FT
17018	8/ 8/85	1130	2935.6	8830.2	11	39	20	38	28.7	24.1	21.9	33.7	32.6	32.7		6.8	4.7	4.2	FT
17019	8/ 8/85	1500	2915.1	8830.0	11	88	40	83	29.2	21.5	19.2	34.2	34.1	33.8		6.2	5.5	4.7	FT
17020	8/ 8/85	1620	2913.1	8830.7	11	112	55	111	29.9	21.5	20.0	28.0	36.0	36.0		6.8	6.4	6.4	FT
17021	8/ 8/85	1710	2911.3	8829.5	11	160	80	160	30.0	21.0	16.0	27.6	36.0	36.0		6.2	5.4	6.4	FT
17022	8/ 8/85	2038	2910.4	8828.4	11	192	95	191	29.6	19.0	15.0	28.0	36.0	36.0		6.2	5.3	5.2	FT
17026	8/ 9/85	0825	2901.4	8858.7	11	68	34	67	28.5	23.5	19.0	26.0	35.0	36.0		6.5	5.0	5.4	FT
17027	8/ 9/85	1055	2859.1	8857.7	11	103	51	102	29.0	22.0	18.5	27.0	35.0	37.0		6.7	5.2	5.9	FT
17028	8/ 9/85	1329	2856.2	8858.6	11	135	78	134	29.0	20.5	17.0	26.0	36.0	36.0		7.6	5.5	6.0	FT
17029	8/ 9/85	1655	2854.3	8860.0	11	172	86	170	29.0	20.0	16.0	23.0	36.0	36.0		8.0	5.4	6.2	FT
17030	8/ 9/85	1830	2852.5	8900.1	13	216	108	200	29.0	19.0	18.0	23.0	36.0	36.0		9.0	5.6	5.8	FT
17034	8/10/85	0805	2844.5	8959.1	13	46	23	46	29.5	24.0	23.0	28.0	34.0	35.0		6.0	4.8	5.4	FT
17035	8/10/85	0934	2842.0	8959.4	13	82	41	81	30.0	22.5	20.5	28.0	36.0	36.0		5.6	5.0	5.3	FT
17036	8/10/85	1320	2818.9	8959.6	13	113	57	112	29.0	22.0	19.0	28.0	35.0	36.0		5.8	6.4	5.8	FT
17037	8/10/85	1615	2816.2	8960.0	13	150	75	149	30.0	22.0	16.0	29.0	36.0	36.0		6.0	5.8	5.8	FT
17038	8/10/85	1812	2813.2	9000.9	14	198	99	197	30.5	21.0	16.0	29.0	35.0	37.0		5.8	5.4	6.2	FT
17042	8/11/85	0655	2818.5	9029.1	14	58	24	57	30.0	23.0	20.0	30.0	35.0	36.0	0.093	5.9	6.7	6.2	FT
17043	8/11/85	1251	2811.6	9028.2	14	92	46	91	29.5	23.0	20.0	29.0	35.0	37.0		5.8	6.4	5.7	FT
17044	8/11/85	1429	2806.4	9029.7	14	135	77	134	29.0	23.0	17.0	30.0	36.0	36.0	0.075	5.8	6.4	6.2	FT

Table 1 (cont'd.)

MISSISSIPPI AUGUST SQUID AND BUTTERFISH SURVEY
TOMMY MUNRO

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
17045	8/11/85	1545	2804.4	9030.2	14	174	87	173	29.0	21.0	16.0	32.0	36.0	36.0	0.168	5.7	5.6	5.8	FT
17046	8/11/85	1715	2803.1	9030.5	14	210	105	200	29.0	21.0	16.0	32.0	36.0	36.0	0.150	5.9	5.6	6.0	FT
17048	8/12/85	0748	2802.0	9029.7	14	265	100	200	29.0	20.5	16.0	32.0	36.0	36.0	0.150	5.7	5.7	6.6	FT
17049	8/12/85	1017	2801.0	9029.8	14	320	100	200	29.0	21.0	16.0	30.0	36.0	36.0		5.8	5.4	6.1	FT
17050	8/12/85	1315	2800.8	9024.9	14	430	100	200	30.0	21.0	19.0	30.0	36.0	36.0	0.131	5.7	5.4	5.8	FT
17051	8/12/85	1604	2801.6	9025.3	14	375	100	200	31.0	20.0	18.0	30.0	36.0	36.0	0.150	5.7	5.8	6.0	FT
17052	8/12/85	1835	2759.5	9028.2	14	481	100	200	30.0	20.0	17.0	30.0	36.0	36.0	0.112	5.9	5.6	6.1	FT
17056	8/13/85	0803	2758.9	9101.2	15	192	95	191	29.0	20.0	15.0	30.0	36.0	36.0		6.1	6.3	6.4	FT
17057	8/13/85	1006	2800.4	9100.3	15	153	71	152	30.0	22.0	17.0	30.0	36.0	36.0		5.6	6.3	6.4	FT
17058	8/13/85	1150	2803.1	9100.0	15	123	61	122	30.0	23.0	18.5	30.0	36.0	36.0		5.1	6.7	6.0	FT
17059	8/13/85	1417	2812.7	9059.7	14	82	41	81	30.0	24.0	21.0	30.0	35.0	37.0		6.1	6.8	5.6	FT
17060	8/13/85	1625	2822.7	9058.2	14	48	24	47	31.0	26.0	22.5	31.0	35.0	36.0		6.1	4.4	6.0	FT
17101	8/22/85	0800	2828.0	9032.0	14	37	28	37	28.8	23.2	22.9	31.3	35.6	35.7		6.7	4.7	4.7	PN
17102	8/22/85	1230	2819.0	9132.0	15	83	41	81	29.3	26.6	21.4	10.0	35.3	36.4		6.8	5.9	4.4	FT
17103	8/22/85	1533	2808.0	9130.5	15	90	45	87	30.6	22.4	19.3	32.6	35.3	34.0		6.1	6.3	3.8	FT
17104	8/22/85	1753	2802.0	9131.0	15	124	62	123	32.4	21.1	16.7	12.9	37.0	37.7		6.4	5.1	3.6	FT
17105	8/22/85	2030	2755.0	9130.0	15	162	81	160	30.0	18.5	15.6	32.9	35.2	36.4		6.0	3.8	3.5	FT
17106	8/23/85	0959	2751.5	9200.0	16	198	87	175	29.4	20.1	17.2	33.5	36.5	36.7		5.9	4.8	3.7	FT/PN
17107	8/23/85	1213	2754.5	9200.0	16	153	76	151	29.9	20.3	16.1	33.1	35.8	36.7		5.8	4.9	3.5	FT
17108	8/23/85	1444	2800.0	9200.0	16	117	58	115	30.4	28.3	17.8	33.1	35.0	35.3		5.8	6.2	3.7	FT
17109	8/23/85	1649	2808.9	9200.0	16	86	42	83	30.0	23.2	19.4	33.2	35.1	35.3		5.8	6.4	4.3	FT
17110	8/23/85	2020	2832.0	9200.0	16	50	26	50	30.1	25.3	21.3	31.3	35.3	35.6		6.4	6.1	3.6	FT/PN
17111	8/24/85	0650	2814.5	9300.0	17	59	30	57	29.8	28.6	20.7	32.9	35.0	36.5		5.7	5.9	4.8	FT/PN
17112	8/24/85	0935	2800.0	9300.0	17	95	48	94	29.7	23.3	18.3	33.8	35.0	35.2		5.7	6.3	3.5	FT
17114	8/24/85	1326	2820.0	9300.0	17	133	67	132	29.9	20.4	17.0	33.8	34.5	35.3		5.7	4.8	3.4	FT
17115	8/24/85	1413	2754.0	9300.0	17	167	84	136	30.4	19.0	16.3	33.2	34.0	37.5		5.7	3.6	3.5	FT
17116	8/24/85	1657	2743.0	9300.0	17	205	101	175	30.9	18.1	14.7	33.9	37.2	37.4		5.7	3.5	3.2	FT/PN

Table 1 (cont'd.)

LOUISIANA SEPTEMBER-OCTOBER GROUND FISH SURVEY
PELICAN

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)			TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR		MID	MAX		
35043	9/16/85	0607	2857.9	9014.3	14	18	9	18	25.6	25.9	26.5	30.1	30.6	32.1					ST/PN	
35044	9/16/85	1535	2900.5	9027.9	14	7	4	7	27.9	27.9	27.9	28.8	28.6	28.6		6.5	6.0	6.4	ST/PN	
35045	9/16/85	1928	2902.9	9016.5	14	9	5	9	27.8	27.8	27.8	29.3	29.4	29.4		7.5	6.7	6.7	ST/PN	
35046	9/16/85	2204	2902.9	9016.5	14	9	5	9	27.7	27.8	27.7	29.3	29.3	29.3		7.6	8.6	6.5	ST/PN	
35047	9/17/85	0010	2900.5	9027.9	14	7	4	7	27.9	27.9	27.9	29.1	29.1	29.1		6.3	6.3	6.4	ST/PN	
35048	9/17/85	0633	2916.5	8953.2	13	8	3	5	27.0	27.0	27.0	27.2	27.2	27.2		6.1	6.0	6.0	ST/PN	
35049	9/17/85	0817	2916.5	8953.2	13	7	4	7	26.9	26.9	26.9	27.3	27.3	27.3		5.4	5.5	5.6	ST/PN	
35050	9/17/85	1051	2906.9	8943.5	13	20	10	20	27.6	27.6	28.2	29.3	29.3	30.5			6.6	4.9	ST/PN	
35051	9/17/85	1308	2901.3	8933.7	13	16	8	16	27.4	27.4	28.4	26.6	26.7	31.2		4.0	5.6	3.8	ST/PN	
35052	9/17/85	1420	2900.5	8936.2	13	27	14	27	27.7	27.6	28.4	27.4	28.3	31.9		6.0	5.4	3.2	ST/PN	
35053	9/17/85	1747	2906.9	8943.5	13	20	10	20	27.8	27.8	27.9	29.5	29.6	29.9		7.6	7.3	6.1	ST/PN	
35054	9/17/85	2152	2901.3	8933.7	13	16	8	16	27.5	27.5	28.3	26.3	29.3	31.3		6.9	6.7	5.4	ST/PN	
35055	9/17/85	2302	2900.5	8936.2	13	27	14	27	27.3	27.7	28.4	27.3	28.7	32.7		5.8	5.1	4.8	ST/PN	
35056	9/18/85	0554	2837.3	9026.1	14	27	14	27	27.8	27.9	27.9	32.6	32.8	33.7		6.5	5.7	4.5	ST/PN	
35057	9/18/85	0750	2837.3	9026.1	14	27	14	27	27.8	27.9	27.9	32.5	32.8	32.6					ST/PN	
35058	9/18/85	0949	2837.1	9038.2	14	20	10	20	27.9	27.9	27.9	22.5	32.3	32.8		8.7			ST/PN	
35059	9/18/85	1153	2833.2	9048.0	14	26	13	26	27.9	27.9	27.9	33.3	33.3	33.4					ST/PN	
35060	9/18/85	1512	2852.1	9044.6	14	13	7	13	27.7	27.7	27.7	30.2	30.2	30.2					ST/PN	
35061	9/18/85	1753	2846.6	9102.8	15	11	6	11	28.1	28.1	28.1	32.3	32.3	32.3		6.2	6.0	6.0	ST/PN	
35062	9/18/85	1948	2846.6	9102.8	15	11	6	11	28.0	28.0	28.0	32.1	32.1	32.1		6.4	6.2	6.0	ST/PN	
35063	10/ 3/85	1926	2833.2	9048.0	14	26	13	26	26.9	27.2	27.3	34.0	34.3	34.4					ST/PN	
35064	10/ 3/85	2210	2837.1	9038.2	14	20	10	20	26.7	26.8	26.8	33.3	33.4	33.6					ST/PN	
35065	10/ 4/85	0206	2852.1	9044.6	14	13	7	13	25.8	25.8	25.7	30.2	30.2	30.4		6.5	6.4	6.5	ST/PN	
35066	10/ 4/85	0816	2857.9	9014.3	14	18	9	18	25.5	26.0	26.5	29.7	31.0	32.0					ST/PN	

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43384	10/15/85	1921	3005.1	8815.2	11	20	10	20	26.6	25.9	25.8	31.4	33.2	34.4		7.1	7.0	5.9	ST
43385	10/15/85	2136	3006.9	8802.8	11	20	10	20	25.9	25.5	25.6	32.3	32.5	34.1		7.0	6.9	6.2	ST
43386	10/15/85	2332	3000.3	8755.9	10	27	13	27	26.3	25.5	25.8	31.5	33.0	34.8		6.9	6.7	5.8	ST
43387	10/16/85	0128	3000.8	8744.7	10	13	7	13	26.0	26.0	26.0	32.5	32.2	33.7		7.2	7.0	6.9	ST
43388	10/16/85	0252	3013.8	8744.1	10	9	5	9	26.0	26.0	26.0	32.5	31.4	33.2		7.1	7.1	6.2	ST
43389	10/16/85	0700	3009.0	8757.2	10	13	6	11	25.3	28.5	25.5	30.3	33.0	34.1		6.9	6.8	6.0	ST
43390	10/16/85	0820	3007.0	8802.9	11	20	10	20	25.6	25.8	25.7	30.4	32.2	34.3		6.6	6.8	5.5	ST
43391	10/16/85	0940	3011.0	8807.1	11	11	6	11	25.6			28.1	30.1	33.4		6.7	6.7	6.2	ST
43392	10/16/85	1050	3006.0	8806.1	11	20	10	20	25.5	25.5	25.5	31.1	31.2	34.4		6.7	6.7	6.3	ST
43393	10/16/85	1236	3000.2	8755.9	10	26	13	26	26.5	26.5	26.5	31.8	33.2	34.7		7.1	6.9	5.9	ST
43394	10/16/85	1331	3002.0	8752.7	10	22	11	22	26.2	26.2	26.2		32.6	34.5		7.1	6.9	5.7	ST
43395	10/16/85	1516	3002.0	8740.8	10	27	13	27	26.8	26.2	26.1	34.0	34.3	34.7		6.8	6.7	6.7	ST
43396	10/16/85	1630	2959.0	8736.0	10	29	15	29	26.5	26.5	26.5	34.3	34.5	34.4		6.9	6.9	6.9	ST
43397	10/16/85	1752	3006.1	8733.3	10	26	13	26	26.2	26.2	26.2	33.9	34.0			7.1	7.0	6.5	ST
43398	10/16/85	2147	3019.0	8700.1	10	18	9	18	25.5	25.5	25.0	33.8	33.7	34.5		8.5	8.4	8.2	ST
43399	10/17/85	0004	3002.9	8707.1	10	31	15	31	25.5	26.0	25.5	34.7	34.6	34.9		8.2	8.1	8.3	ST
43400	10/17/85	0145	2953.9	8710.2	10	77	38	75	27.0	27.0	21.0	34.7	35.4	36.4		6.7	6.6	4.5	ST
43401	10/17/85	0302	2949.8	8714.2	10	81	40	80	27.0	26.0	20.0	34.8	34.8	36.4		6.9	6.9	4.6	ST
43402	10/17/85	0513	2942.0	8728.0	10	55	28	55	26.0	26.5	22.0	34.8	34.7	36.3		6.8	6.7	4.8	ST
43403	10/17/85	0642	2941.1	8720.0	10	86	43	86	25.5	26.0	20.0	34.9	35.5	36.4		8.2	8.1	6.1	ST
43404	10/17/85	0754	2940.0	8720.1	10	88	44	88	26.0	25.5	20.0	35.2	35.5	36.4		8.3	6.6	5.0	ST
43405	10/17/85	0856	2937.0	8722.3	10	81	40	81	26.0	26.0	20.5	35.3	35.6	36.4		6.6	6.6	5.1	ST
43406	10/17/85	1041	2941.0	8727.0	10	57	28	57	26.0	25.8	21.1	34.7	34.7	36.3		6.6	5.6	4.6	ST
43407	10/17/85	1145	2942.1	8728.1	10	60	30	60	26.5	26.2	21.4	34.8	34.7	36.3		6.6	6.6	5.0	ST
43408	10/17/85	1311	2948.3	8727.7	10	38	19	38	27.0	27.0	26.5	34.7	34.6	35.0		6.7	6.7	6.6	ST
43409	10/17/85	1422	2951.3	8723.0	10	39	19	38	26.8	26.5	26.3	34.3	34.6	34.7		7.0	7.0	7.0	ST
43410	10/17/85	1622	2954.0	8710.0	10	79	39	79	27.0	26.5	20.5	34.3	34.8	36.4		7.0	6.9	4.6	ST
43411	10/17/85	1810	3002.0	8706.0	10	38	19	38	26.0	26.0	25.0	34.8	34.6	35.7		6.8	6.7	6.7	ST

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43412	10/17/85	2214	2945.0	8738.1	10	38	19	38	26.0	26.0		34.9	34.9	35.3		6.8	6.8	6.8	ST
43413	10/18/85	0055	2925.1	8740.4	10	89	44	89	27.0	27.0	20.5	35.0	35.9	36.4		7.2	7.1	5.1	ST
43414	10/18/85	0242	2921.7	8751.2	10	78	39	78	27.0	26.5	21.0	34.7	36.0	36.4		7.2	6.9	5.3	ST
43415	10/18/85	0352	2919.9	8750.4	10	103	50	99	26.5	26.5	19.0	34.6	36.0	36.5		7.4	7.3	5.1	ST
43416	10/18/85	0527	2919.0	8756.0	10	136	68	136	27.0	24.0	17.0	34.5	36.1	36.2		7.0	6.8	5.2	ST
43418	10/18/85	1157	2947.1	8736.4	10	33	16	33	26.5	26.5	26.0	33.8	34.0	34.8		7.4	7.2	7.2	ST
43419	10/18/85	1349	2950.3	8746.5	10	37	19	37	26.5	26.5	26.2	34.1	34.0	34.0		6.9	6.9	6.7	ST
43420	10/18/85	1616	2957.0	8806.5	11	29	15	29	26.5	26.5	26.2					7.2	7.2	7.0	ST
43421	10/18/85	1856	2953.0	8825.2	11	33	16	33	26.0	26.1	25.9	31.9	32.9	34.8		7.1	7.0	6.3	ST
43422	10/18/85	2044	2944.0	8825.0	11	37	19	37	25.5	26.2	25.0	32.6	33.7	35.9		7.2	7.1	6.1	ST
43423	10/18/85	2304	2955.0	8814.0	11	33	16	33	25.9	26.0	25.7	33.8	33.7	34.3		7.1	7.0	6.2	ST
43424	10/19/85	0048	2953.2	8804.5	11	33	17	33	26.0	26.0	26.0	33.9	33.9	34.4		7.0	6.9	7.1	ST
43425	10/19/85	0208	2948.7	8810.2	11	37	18	36	26.0	26.0	25.8	33.9	34.0	35.2		7.0	7.1	4.8	ST
43426	10/19/85	0336	2943.1	8807.5	11	37	19	37	26.0	26.0	26.0	34.2	34.2	35.3		6.8	7.0	5.7	ST
43427	10/19/85	0627	2928.0	8802.0	11	91	25	51	26.0	26.0	25.0	34.8	34.7	35.9		8.5	8.2	7.3	ST
43429	10/19/85	0830	2934.0	8803.1	11	42	21	42	26.0	25.0	25.0	34.3	34.3	35.1		7.2	6.8	5.6	ST
43430	10/19/85	0952	2937.0	8757.0	10	40	20	40	26.0	26.0	25.8	34.8	34.8	35.1		6.9	6.8	6.5	ST
43431	10/19/85	1031	2939.0	8757.0	10	40	20	40	25.0	26.0	26.0	34.9	35.0	35.1		6.8	6.7	6.7	ST
43432	10/19/85	1144	2944.0	8755.9	10	38	19	38	25.0	26.0	25.8	34.6	34.6	35.2		7.0	6.7	6.2	ST
43433	10/19/85	1301	2943.0	8804.5	11	37	18	36	26.5	26.5	26.2	34.6	34.5	35.1		6.7	6.6	5.4	ST
43434	10/19/85	1441	2948.9	8810.1	11	35	17	35	25.8	26.2	25.8					6.4	6.5	5.2	ST
43435	10/19/85	1613	2955.0	8814.1	11	33	17	33	26.1	25.9	25.7	33.9	33.9	34.5		6.9	6.9	6.9	ST
43436	10/19/85	1736	2954.0	8819.2	11	33	16	33	26.5	26.5	26.2	33.7	33.6	34.5		6.6	6.5	5.8	ST
43437	10/19/85	1813	2956.0	8819.9	11	32	16	32	25.9	25.9	25.9	33.8	34.0	33.1		6.5	7.0	6.2	ST
43438	10/19/85	2056	2941.0	8830.1	11	35	17	35	26.0	26.0	26.0	32.2	34.0	35.3		6.6	6.0	5.5	ST
43439	10/19/85	2239	2940.0	8842.1	11	18	9	18	25.9	25.5	25.5	32.1	32.1	34.3		7.0	7.0	5.8	ST
43440	10/20/85	0000	2946.1	8847.0	11	11	5	11	25.0	25.0	25.0	29.9	30.0	31.3		6.4	6.5	6.0	ST
43441	10/20/85	0135	2953.8	8841.9	11	18	9	18	26.0	26.0	26.0	31.5	31.5	32.3		6.7	6.7	6.0	ST

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)			TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR		MID	MAX		
43442	10/20/85	0235	2955.2	8842.9	11	18	9	18	26.0	26.0	25.8	30.0	30.3	32.6		6.7	6.6	5.9	ST	
43443	10/20/85	0403	3005.1	8843.2	11	16	8	16	26.0	26.0	26.0	32.1	32.3	32.2		6.7	6.7	6.7	ST	
43444	10/20/85	0522	3008.1	8848.0	11	13	7	13	26.0	26.0	26.0	29.7	32.3	32.3		6.9	6.7	6.5	ST	
43445	10/20/85	0701	3000.0	8846.0	11	13	6	13	25.0	25.0	25.0	29.3	29.6	31.7		6.4	6.4	6.4	ST	
43446	10/20/85	0824	3006.8	8840.0	11	16	8	16	25.0	25.0	25.0					6.2	6.4	6.4	ST	
43447	10/20/85	0939	3011.9	8836.1	11	11	6	11	31.0	25.9	25.5					6.3	6.2	6.1	ST	
43448	10/20/85	1120	3004.9	8829.0	11	18	9	18	26.0	26.0	26.0					6.3	6.3	6.2	ST	
43449	10/20/85	1217	3006.0	8826.1	11	16	8	16	26.5	26.5	26.5	33.0	33.1	33.3		6.7	6.7	6.7	ST	
43450	10/20/85	1315	3002.7	8823.3	11	20	9	19	27.0	27.0	27.0	33.1	33.2	33.3		6.7	6.7	6.7	ST	
43451	10/20/85	1624	2940.9	8839.2	11	22	11	22	27.0	26.5	26.5					6.8	6.8	5.6	ST	
43452	10/20/85	1736	2939.9	8842.2	11	16	6	13	26.3	26.0	25.9	32.5	32.5	32.9		7.0	7.0	6.8	ST	
43453	10/20/85	2051	2930.0	8856.3	11	11	6	11	26.3	26.1	26.1	31.3	31.3	31.6		7.0	7.0	7.0	ST	
43454	10/20/85	2036	2929.3	8859.1	11	11	6	11	26.0	26.2	26.2	30.5	30.4	30.5		7.1	6.8	4.0	ST	
43455	10/20/85	2145	2924.0	8859.1	11	15	7	15	26.0	26.0	25.0	31.0	30.9	31.0		6.9	6.9	7.0	ST	
43456	10/20/85	2235	2923.5	8857.2	11	16	8	16	26.0	25.8	26.0	31.6	32.2	31.4		6.8	6.5	6.8	ST	
43457	10/21/85	0000	2925.0	8850.0	11	20	10	20	25.6	26.0	25.8	32.5	32.4	33.2		6.6	6.8	6.3	ST	
43458	10/21/85	0315	2922.0	8825.9	11	60	29	58	26.5	26.5	25.0	33.8	34.6	36.0		6.7	6.5	5.3	ST	
43459	10/21/85	0515	2918.0	8814.9	11	84	42	84	26.5	26.0	21.0	34.8	35.1	36.3		6.4	6.3	4.4	ST	
43460	10/21/85	0613	2915.0	8814.0	11	108	54	108	26.0	25.5	19.3	34.7	35.9	36.4		6.4	6.2	4.4	ST	
43461	10/21/85	0740	2916.0	8817.0	11	90	45	89	26.3	25.5	21.0	34.7	35.6	36.4		6.4	6.4	4.6	ST	
43462	10/21/85	0926	2919.0	8805.1	11	90	45	90	27.0		21.0					6.2	6.0	4.5	ST	
43463	10/21/85	1019	2920.7	8803.2	11	92	46	92	26.0	27.0	20.5					6.2	6.2	4.4	ST	
43464	10/21/85	1319	2931.0	8823.5	11	49	25	49	26.9	26.9	26.5					6.7	6.6	5.7	ST	
43465	10/21/85	1428	2935.0	8826.4	11	44	21	42	27.0	26.5	25.9					7.0	6.9	5.2	ST	
43466	10/21/85	1733	2929.9	8856.2	11	13	3	13	26.9	26.9	26.5					6.6	6.6	6.5	ST	
43467	10/21/85	1913	2923.0	8904.0	12	11	5	10	26.5	27.0	26.5					6.9	7.3	6.7	ST	
43468	10/21/85	2209	2908.0	8846.0	11	81	40	81	26.0	26.0	21.7	34.7	35.3	36.3		6.1	6.3	5.3	ST	
43469	10/21/85	2339	2911.0	8838.2	11	77	39	77	26.0	26.2	24.0	34.5	35.2	36.3		6.2	6.1	5.0	ST	

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43470	10/22/85	0044	2914.3	8836.9	11	72	33	71	26.5	26.5	23.5					6.5	6.5	5.2	ST
43471	10/22/85	0701	2925.8	8832.0	11	58	49	58				34.2	34.5	35.6		6.8	6.6	5.8	ST
43472	10/22/85	0909	2928.0	8849.0	11	18	9	18	26.1	26.0	26.0	32.6	32.5	32.8		6.8	6.7	6.2	ST
43473	10/22/85	1047	2936.7	8844.0	11	18	8	17	26.1	26.0	26.0	32.3	33.2	32.4		6.6	6.6	5.8	ST
43474	10/22/85	1145	2941.0	8845.1	11	17	8	17	26.0	26.0	26.0	30.1	31.5	32.5		6.9	6.8	6.0	ST
43475	10/22/85	1312	2936.8	8853.1	11	11	5	11	26.9	26.9	26.9					6.9	6.9	6.8	ST
43476	10/22/85	1405	2933.9	8856.2	11	11	5	11								7.2	7.2	6.8	ST
43477	10/22/85	1613	2922.9	8904.0	12	9	4	9	27.9	27.2	27.0					7.8	7.0	6.5	ST
43478	10/22/85	1857	2905.7	8858.2	11	38	19	38	26.0	26.0	26.0					6.3	6.4	6.2	ST
43479	10/22/85	2035	2858.0	8901.1	13	79	40	79	26.2	26.0	22.0	28.2	34.7	36.3		7.3	6.3	5.2	ST
43480	10/22/85	2311	2848.0	8926.2	13	73	36	73	26.1	26.0	26.0	32.9	34.8	35.9		6.7	6.5	6.4	ST
43481	10/23/85	0113	2836.0	8927.9	13	181	90	181	26.6	19.9	15.9	34.9	36.3	36.2		6.5	5.2	4.4	ST
43482	10/23/85	0235	2837.9	8932.9	13	88	50	88	26.8	25.5	19.5	34.9	36.0	36.5		6.5	6.3	5.0	ST
43483	10/23/85	0413	2833.9	8941.9	13	142	71	142	26.6	21.6	17.4	32.8	36.2	36.4		6.7	6.1	4.4	ST
43484	10/23/85	0927	2857.8	8901.3	13	79	40	79	26.5	26.6	22.7	29.1	34.9	36.2		6.9	6.2	5.5	ST
43485	10/23/85	1141	2906.0	8858.1	11	33	16	32	26.0	26.7	25.6	29.0	33.7	34.3		6.9	6.3	6.2	ST
43486	10/23/85	1702	2846.1	8937.1	13	104	52	104	27.2	26.5	23.0	34.7	35.4		6.5	6.4		ST	
43487	10/23/85	1844	2838.9	8945.2	13	108	54	108	26.2	25.6	19.8	34.4	35.8	36.1		6.6	6.5	4.9	ST
43488	10/23/85	2002	2839.8	8849.4	11	93	46	93	26.5	26.0	22.5	31.1	35.2	36.1		7.0	6.6	5.6	ST
43489	10/23/85	2328	2849.0	8940.3	13	73	36	73	26.8	26.4	28.9	28.4	34.6	35.9		6.0	6.6	6.0	ST
43490	10/24/85	0134	2859.9	8932.0	13	26	13	26	26.5	26.5	26.5	24.3	31.1	34.2		8.5	5.6	5.5	ST
43491	10/24/85	0407	2850.2	8950.2	13	53	26	53	26.5	26.5	26.2	27.4	33.4	35.2		6.9	6.6	6.2	ST
43492	10/24/85	0606	2842.1	9000.9	14	55	25	49	26.0	26.2	26.1					7.1	6.6	6.7	ST
43493	10/24/85	0715	2843.1	9004.3	14	46	23	46	26.0	26.0	26.0	31.3	33.8	35.4		7.0	6.5	6.4	ST
43494	10/24/85	0805	2842.2	9006.2	14	49	24	49	26.0	26.0	26.0					6.8	6.8	6.2	ST
43495	10/24/85	0942	2835.2	9007.2	14	60	30	59	26.3	26.5	26.5	32.7	34.6	36.0		6.4	6.5	6.4	ST
43496	10/24/85	1219	2819.0	9002.9	14	99	50	99	26.9	26.9	22.5	34.7	35.8	36.3		6.6	6.3	4.6	ST
43497	10/24/85	1557	2848.8	8955.0	13	97	48	97	26.5	26.5	23.0	33.4	35.5	36.2		6.6	6.4	4.9	ST

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43498	10/24/85	1746	2838.8	8945.0	13	106	53	106	26.2	26.3	19.5	34.0	35.7	36.4		6.5	6.4	4.7	ST
43499	11/ 2/85	0200	2905.8	8930.3	13	9	4	9	20.2	25.0	25.9	7.5	30.6	33.0	1.962	8.5	6.2	5.9	ST
43501	11/ 2/85	0619	2855.0	8942.2	13	55	28	55	23.6	26.0	25.8	28.9	34.4	35.1	0.654	6.8	6.1	5.8	ST
43502	11/ 2/85	0919	2903.1	8958.1	13	20	10	20	23.8	24.0	25.9	30.1	30.3	33.9	1.059	6.6	6.5		ST
43503	11/ 2/85	1115	2856.3	9006.2	14	23	11	23	23.8	23.8	26.1	29.7	29.8	34.4	1.153	6.8	6.6	6.1	ST
43504	11/ 2/85	1320	2853.0	9021.2	14	19	9	19	24.1	24.1	25.0	31.4	31.5	33.3	1.511	6.7	6.4	6.0	ST
43505	11/ 2/85	1812	2903.0	8958.1	13	21	10	21	23.7	23.8	25.7	29.8	30.0	33.5	1.293	6.6	6.4	5.6	ST
43506	11/ 2/85	2010	2855.8	9006.1	14	24	12	24	22.7	23.9	25.9	30.5	30.5	34.4	1.199	6.7	6.3	6.0	ST
43507	11/ 2/85	2216	2852.8	9020.8	14	20	10	20	22.3	23.9	24.9	31.4	31.4	33.2	1.355	6.8	6.6	5.9	ST
43508	11/ 3/85	0038	2843.7	9009.2	14	39	19	39	24.0	24.6	25.0	34.5	34.2	34.3	0.586	6.2	5.7	6.2	ST
43509	11/ 3/85	0213	2837.9	9007.3	14	105	52	105	25.0	24.0	19.0	34.1	34.6	36.4	1.028	6.5	6.4	4.7	ST
43510	11/ 3/85	0358	2830.1	9011.4	14	55	27	55	25.0	25.6	25.6	33.9	34.7	35.1	0.903	6.5	6.0	6.0	ST
43511	11/ 3/85	0603	2815.1	9013.0	14	100	50	100	25.1	25.8	19.6	34.2	35.6	36.5	0.648	6.7	5.8	4.5	ST
43512	11/ 3/85	0749	2811.1	9013.2	14	128	64	128	25.0	22.8	17.7	34.2	36.5	36.6	0.959	6.4	5.2	4.3	ST
43513	11/ 3/85	0947	2815.0	9025.1	14	74	37	74	25.0	25.4	21.4	34.0	34.8	36.5	1.234	6.3	6.2	4.8	ST
43514	11/ 3/85	1220	2803.7	9036.4	14	140	70	140	25.2	21.1	18.0	34.7	36.7	36.5	0.935	6.3	5.2	4.9	ST
43515	11/ 3/85	1548	2821.0	9035.7	14	48	24	48	24.9	24.9	25.0	34.8	34.8	34.9	0.312	6.5	6.4	6.3	ST
43516	11/ 3/85	1702	2821.9	9029.8	14	48	24	48	24.9	24.9	25.0	34.5	34.5	34.9	1.258	6.5	6.5	6.2	ST
43517	11/ 3/85	1828	2818.9	9022.8	14	60	30	60	24.9	25.8	25.6	34.0	34.8	35.7	1.072	6.6	6.3	5.8	ST
43518	11/ 3/85	2020	2815.0	9013.1	14	96	48	96	24.8	26.1	19.8	33.7	35.5	36.5	1.097	6.5	6.1	4.5	ST
43519	11/ 3/85	2158	2822.0	9010.0	14	68	34	68	24.8	24.9	22.3	33.8	33.8	36.8	1.196	6.8	6.7	5.0	ST
43520	11/ 4/85	0043	2829.6	9022.2	14	44	22	44	24.8	25.2	25.5	34.1	34.5	35.0	0.976	6.6	6.4	6.3	ST
43521	11/ 4/85	0309	2820.6	9036.0	14	48	24	48	24.6	24.7	24.8	34.7	34.8	34.9	2.056	6.9	6.6	6.2	ST
43522	11/ 4/85	0658	2823.4	9104.6	15	49	24	49	24.4	24.5	25.1	34.6	34.7	35.3	0.174	6.5	6.3	5.7	ST
43523	11/ 4/85	0822	2830.0	9107.1	15	34	17	34	24.0	24.1	24.1	34.2	34.5	34.5	0.586	6.4	6.4	6.3	ST
43524	11/ 4/85	1006	2837.1	9115.0	15	26	13	26	23.3	23.3	23.0	34.0	34.1	34.2	0.893	6.5	6.4	6.4	ST
43525	11/ 4/85	1221	2843.0	9101.1	15	11	5	11	23.0	23.0	23.0	33.0	33.0	33.1	1.573	6.8	6.5	6.4	ST
43526	11/ 4/85	1453	2849.7	9043.8	14	17	8	17	23.2	23.2	23.2	31.5	31.6	32.1	1.464	6.9	6.7	6.5	ST

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE		POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
	MM/DD/YY	TIME	LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43527	11/	4/85	1728	2835.9 9036.7	14	20	10	20	23.6	23.6	23.6	34.2	34.3	34.3	0.607	6.6	6.6	6.5	ST
43528	11/	4/85	1816	2834.1 9038.0	14	23	12	23	23.1	24.2	24.3								ST
43529	11/	4/85	1909	2833.1 9043.0	14	23	12	23	23.0	23.0	23.3								ST
43530	11/	4/85	2008	2837.1 9042.9	14	16	8	16	23.2	23.2	23.2	34.2	34.2	34.2	0.717	6.7	6.6	6.6	ST
43531	11/	4/85	2224	2850.0 9044.0	14	15	8	15	22.8	22.9	23.1	31.5	31.6	32.0	1.012	6.9	6.8	6.5	ST
43532	11/	5/85	0146	2829.6 9107.0	15	34	17	34	23.9	24.0	24.0	34.5	34.5	34.5		6.6	6.5	6.4	ST
43533	11/	5/85	0333	2817.9 9108.8	15	65	33	65	24.7	24.8	24.8	35.0	35.3	35.3	0.613	6.4	6.5	6.0	ST
43534	11/	5/85	0438	2815.6 9107.8	15	72	36	72	24.7	24.8	24.8	34.9	35.3	35.4	0.596	6.0		6.0	ST
43535	11/	5/85	0518	2815.0 9107.0	15	79	39	79	24.8	24.8	23.5	35.2	35.3	36.4	0.673	6.4	6.4	5.4	ST
43536	11/	5/85	0807	2817.1 9125.2	15	74	36	74	24.6	24.7	24.2	34.4	35.5	36.1	0.673	6.6	6.5	5.8	ST
43537	11/	5/85	0911	2820.0 9128.0	15	66	33	66	24.6	24.6	24.4	34.6	35.5	36.0	0.636	6.6	6.5	6.0	ST
43538	11/	5/85	1046	2815.0 9135.0	15	74	37	74	24.9	24.8	23.3	34.5	35.3	36.3	0.586	6.6	6.5	5.6	ST
43539	11/	5/85	1203	2818.2 9139.5	15	68	34	68	24.6	24.6	23.7	34.6	35.4	36.3	0.239	6.5	6.6	5.9	ST
43540	11/	5/85	1357	2826.9 9137.5	15	53	26	53	24.3	24.7	24.8	35.0	35.4	35.8	0.758	6.7	6.6	6.1	ST
43541	11/	5/85	1652	2818.1 9109.0	15	66	33	66	24.7	24.7	24.1	34.9	35.3	36.0	0.543	6.6	6.5	5.7	ST
43542	11/	5/85	1854	2810.0 9102.0	15	95	47	95	24.7	24.8	19.6	34.7	35.3	36.6	0.586	6.6	6.3	4.7	ST
43543	11/	5/85	2105	2800.0 9116.0	15	114	57	114	24.7	24.8	18.9	33.9	35.1	36.6	0.797	6.7	6.4	4.6	XX
43544	11/	6/85	0003	2817.2 9125.1	15	72	36	72	24.7	24.7	24.3	34.7	35.4	36.0	0.592	6.6	6.4	5.9	ST
43545	11/	6/85	0145	2814.8 9135.0	15	75	37	75	24.6	24.7	23.3	34.0	35.4	36.3		6.6	6.1	5.5	ST
43546	11/	6/85	0235	2814.0 9135.9	15	76	38	76	24.8	24.8	23.3	34.9	35.4	36.3	0.436	6.5	6.3		ST
43547	11/	6/85	0358	2817.9 9138.9	15	68	34	68	24.6	24.6	23.3	35.0	35.4	36.3		6.5	6.4	5.5	ST
43548	11/	6/85	0458	2819.9 9142.5	15	64	32	64	24.4	24.5	24.2	34.1	35.4	36.0	0.800	7.1	7.0	6.2	ST
43549	11/	6/85	0729	2833.2 9142.0	15	45	23	45	23.5	24.1	24.3	33.5	35.0	35.5	1.794	7.4	6.8	6.4	ST
43550	11/	6/85	0858	2831.1 9133.0	15	47	24	47	24.2	24.3	24.8	34.5	35.1	35.8	0.860	7.1	6.8	6.3	ST
43551	11/	6/85	1028	2829.1 9123.0	15	48	24	48	24.2	24.2	25.1	34.4	34.8	35.6	0.822	6.9	6.8	6.1	ST
43552	11/	6/85	1237	2841.0 9117.5	15	21	10	21	19.5	23.2	22.8	15.7	29.6	34.0	1.765	8.7	7.3	6.9	ST
43553	11/	6/85	1336	2840.2 9120.9	15	24	12	24	19.9	23.4	22.9	17.9	32.3	34.0	1.911	8.4	7.0	6.6	ST
43554	11/	6/85	1457	2845.3 9128.5	15	22	11	22	19.3	23.3	24.2	16.8	31.3	33.7	4.091	8.6	7.1	6.5	ST

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43555	11/ 6/85	1615	2852.4	9127.8	15	16	8	16	19.4	21.4	23.6	17.8	28.1	33.5	5.503	9.5	7.2	6.5	ST
43556	11/ 6/85	1854	2844.1	9147.0	15	29	14	29	22.8	23.0	24.4	33.3	33.9	34.6	2.632	7.0	6.8	6.1	ST
43557	11/ 6/85	2003	2841.1	9145.0	15	33	16	33	23.5	23.5	24.3	34.2	34.5	35.3	2.305	7.0	7.0	6.2	ST
43558	11/ 6/85	2131	2833.1	9142.0	15	45	22	45	23.6	24.4	24.5	34.7	35.0	35.8	1.097	7.1	6.5	6.0	ST
43559	11/ 7/85	0018	2840.2	9119.6	15	24	12	24	21.1	23.6	23.3	29.6	33.3	34.1		6.9	6.3	6.1	ST
43560	11/ 7/85	0130	2841.0	9116.6	15	21	10	21	20.6	23.4	23.3	28.2	33.4	34.1		7.3	6.4	6.3	ST
43561	11/ 7/85	0310	2845.2	9128.0	15	23	11	23	20.7	23.2	24.2	26.9	33.1	34.3		6.9	6.3	5.7	ST
43562	11/ 7/85	0624	2900.1	9145.9	15	15	7	15	19.8	20.1	23.5	26.0	27.4	32.4	4.652	9.0	9.0	6.6	ST
43563	11/ 7/85	0739	2855.0	9143.2	15	18	9	18	20.0	20.2	24.2	28.0	29.0	34.5	5.249	8.4	7.2	6.0	ST
43565	11/ 7/85	0910	2852.9	9146.0	15	22	11	22	20.2	21.7	24.3	27.1	31.5	34.7	7.601	8.4	7.0	6.0	ST
43566	11/ 7/85	1103	2841.9	9142.1	15	30	15	30	23.1	23.5	24.7	34.0	34.5	35.3	1.994	7.1	6.7	6.1	ST
43567	11/ 7/85	1204	2840.0	9145.0	15	34	17	34	23.0	24.0	24.2	33.8	34.2	35.6	2.343	7.7	6.7	5.9	ST
43568	11/ 7/85	1458	2847.1	9207.8	16	32	16	32	22.5	22.9	23.6	32.8	34.7	35.2	4.844	8.3	7.9	6.1	ST
43569	11/ 7/85	1742	2855.0	9144.0	15	19	9	19	20.2	21.1	24.2	27.3	30.2	34.5		8.9	6.7	5.6	ST
43570	11/ 7/85	1832	2855.0	9143.0	15	18	9	18	20.2	20.6	24.2	27.0	29.4	34.3	10.046				ST
43571	11/ 7/85	2035	2842.0	9142.2	15	30	15	30	22.7	23.5	24.6	32.0	34.5	35.3	3.707	8.8	8.4	7.5	ST
43572	11/ 7/85	2235	2830.0	9144.0	15	50	25	50	23.9	24.4	24.5	35.1	35.6	35.7	1.981	8.8	8.8	7.6	ST
43573	11/ 8/85	0027	2834.0	9154.5	15	44	22	44	22.7	24.5	24.2	34.0	35.7	35.9	1.919	7.9	6.8	6.1	ST
43574	11/ 8/85	0214	2843.0	9202.5	16	36	18	36	21.7	22.7	24.0	30.7	33.9	35.4	5.078	8.0	7.2	5.5	ST
43575	11/ 8/85	0328	2847.0	9208.5	16	32	16	32	21.3	23.1	23.7	30.5	34.6	34.9		7.5	6.6	5.5	ST
43576	11/ 8/85	0549	2831.3	9217.0	16	52	26	52	22.9	24.0	23.1	34.2	35.4	36.1	1.620	7.3	6.7	5.4	ST
43577	11/ 8/85	0814	2829.2	9232.1	16	52	26	52	23.3	23.4	21.6	34.6	34.7	36.7	0.972	7.2	7.2	5.5	ST
43578	11/ 8/85	0944	2830.2	9235.8	16	50	26	50	23.4	23.8	22.0	34.7	35.0	36.9	0.935	7.5	7.1	5.6	ST
43579	11/ 8/85	1221	2833.2	9215.1	16	46	23	46	22.9	23.4	23.5	34.1	34.8	35.7	1.632	7.9	7.7	5.8	ST
43580	11/ 8/85	1451	2826.2	9155.1	15	56	28	56	24.3	24.2	23.8	35.5	35.6	36.0	0.374	7.8	7.9	6.8	ST
43581	11/ 8/85	1648	2816.0	9205.0	16	66	33	66	24.7	24.5	22.4	35.2	35.5	36.5	0.428	7.8	7.6	6.4	ST
43582	11/ 8/85	1825	2819.0	9214.3	16	62	31	62	24.3	24.1	21.9	35.6	35.7	36.5	0.199	8.1	8.3	5.7	ST
43583	11/ 8/85	1948	2824.1	9219.1	16	58	29	58	24.1	24.0	22.5	35.6	35.7	36.1	0.199	7.8	8.0	5.6	ST

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)			TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR		MID	MAX		
43584	11/ 8/85	2148	2827.0	9205.0	16	57	28	57	23.8	23.9	22.4	35.4	35.6	36.4	0.498	8.3	8.3	5.9	ST	
43585	11/ 9/85	0040	2813.0	9149.7	15	75	37	75	24.7	24.5	22.2	35.1	35.4	36.4		7.6	7.9	6.3	ST	
43586	11/ 9/85	0205	2808.2	9145.5	15	87	43	87	24.8	24.8	21.3	35.1	35.1	36.3		7.7	8.0	6.3	ST	
43587	11/ 9/85	0425	2807.2	9131.2	15	101	51	101	24.8	24.8	17.6	35.1	35.1	36.6		7.7	7.5	6.0	ST	
43588	11/ 9/85	0708	2755.2	9143.0	15	167	83	167	24.5	20.5	15.7	34.8	36.7	36.3		7.0	5.3	4.8	ST	
43589	11/ 9/85	0833	2800.2	9148.0	15	109	55	109	24.6	24.7	19.0	35.0	35.2	36.6		7.0	7.0	5.8	ST	
43590	11/ 9/85	1147	2801.2	9152.0	15	114	57	114	24.7	24.8	17.1	35.0	35.2	36.5		7.0	6.8	4.9	ST	
43591	11/ 9/85	1241	2805.2	9202.1	16	98	49	98	24.8	24.8	18.7	35.0	35.2	36.5		6.7	6.6	5.2	ST	
43592	11/ 9/85	1424	2801.1	9203.1	16	114	57	114	24.8	24.9	18.7	35.1	35.3	36.6		6.8	6.7	5.5	ST	
43593	11/ 9/85	1606	2758.3	9209.1	16	112	56	112	24.7	24.6	18.7	35.0	35.4	36.5		7.0	7.0	5.5	ST	
43594	11/ 9/85	1934	2800.5	9147.6	15	98	49	98	24.7	24.8	20.0	34.9	35.2	36.6		7.3	7.1	5.0	ST	
43595	11/ 9/85	2126	2803.0	9139.8	15	110	55	110	24.7	24.8	17.9	35.1	35.2	36.5		7.0	6.8	4.8	ST	
43596	11/ 9/85	2302	2802.0	9148.0	15	113	57	113	24.6	24.7	18.6	35.0	35.2	36.6		7.0	6.8	4.7	ST	
43597	11/10/85	0030	2801.3	9152.2	15	110	55	110	24.7	24.8	17.4	35.0	35.2	36.7		6.6	6.5	5.0	ST	
43598	11/10/85	0213	2804.0	9201.0	16	100	50	100	24.7	24.8	19.0	35.1	35.1	36.8		6.4	6.6	5.1	ST	
43599	11/10/85	0346	2801.9	9208.0	16	106	53	106	24.6	24.4	18.6	35.1	35.5	36.4		6.6	6.4	5.2	ST	
43600	11/10/85	0654	2802.2	9229.3	16	92	46	92	24.5	24.0	20.2	35.2	35.5	36.5		7.1	7.4	5.0	ST	
43601	11/10/85	0852	2813.2	9233.8	16	71	36	71	23.6	24.0	21.0	35.2	35.6	36.5		7.3	7.2	4.8	ST	
43602	11/10/85	1116	2810.2	9249.9	16	77	38	77	23.6	23.6	20.6	35.0	35.1	36.5		7.2	7.2	4.9	ST	
43603	11/10/85	1242	2805.0	9254.4	16	90	45	90	23.7	23.8	19.6	35.1	35.8	36.5		6.7	6.8	5.9	ST	
43604	11/10/85	1507	2753.1	9254.7	16	184	92	184	24.1	18.9	16.0	35.1	36.5	36.3		7.2	5.7	5.3	ST	
43605	11/10/85	1737	2800.7	9251.0	16	106	53	106	24.1	23.2	19.0	35.2	36.0	36.4		6.9	6.3	5.0	ST	
43606	11/10/85	1852	2805.0	9254.2	16	92	46	92	23.7	23.8	19.7	35.1	35.8	36.4		7.4	7.3	5.1	ST	
43607	11/10/85	2053	2813.0	9248.7	16	70	35	70	23.6	23.8	20.8	34.7	35.1	36.5		7.4	7.1	5.3	ST	
43608	11/12/85	1928	2857.4	9353.0	17	22	11	22	23.7	23.5	23.4	30.9	31.0	31.0	0.056				ST	
43609	11/12/85	2055	2850.0	9354.1	17	24	13	24	24.1	24.2	24.1	30.9	31.2	31.4	0.299	8.2	8.0	7.6	ST	
43610	11/12/85	2354	2850.1	9334.2	17	22	11	22	23.8	23.8	23.6	30.2	30.3	30.6	0.318	7.5	7.4	7.2	ST	
43611	11/13/85	0208	2901.1	9339.3	17	20	10	19	23.7	23.6	23.3	30.3	30.4	30.5	0.355	7.4	7.4	7.0	ST	

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43612	11/13/85	0644	2850.0	9354.0	17	24	12	24	24.0	24.1	24.1	31.0	31.2	31.3	0.299	7.2	7.2	6.9	ST
43613	11/13/85	0851	2902.0	9354.3	17	19	10	19	23.1	23.1	23.2	30.0	30.0	30.5	0.920	7.2	7.3	7.2	ST
43614	11/13/85	1234	2908.3	9323.8	17	20	10	20	23.9	23.6	23.4	29.7	29.8	29.8	0.486	7.9	7.4	7.0	ST
43615	11/13/85	1447	2914.2	9307.8	17	18	9	18	23.2	23.1	23.0	27.7	28.8	29.5	4.074	7.2	7.3	6.8	ST
43616	11/13/85	1634	2818.9	9259.2	16	17	8	16	23.0	22.7	23.1	27.0	27.1	28.9	0.841	7.9	8.5	7.2	ST
43617	11/13/85	1826	2914.2	9308.0	17	19	9	19	23.2	23.5	23.0	27.7	28.9	29.5	0.916	7.5	7.5	7.3	ST
43618	11/13/85	2105	2904.1	9247.0	16	25	13	25	23.5	23.9	23.9	29.4	29.9	30.7	1.776	7.8	7.4	7.3	ST
43620	11/13/85	2328	2902.1	9230.1	16	24	12	24	23.5	23.9	24.3	27.0	29.6	31.0	2.860	8.0	7.1	6.7	ST
43621	11/14/85	0137	2849.1	9226.2	16	33	16	32	24.5	24.7	25.2	31.2	31.5	32.2	0.175	7.2	7.0	5.3	ST
43622	11/14/85	0401	2857.0	9243.0	16	25	12	24	23.9	24.2	24.3	30.0	30.3	31.1	3.053	6.6	6.5	5.5	ST
43623	11/14/85	0634	2852.1	9250.2	16	26	13	26	23.8	23.8	24.3	30.5	30.6	31.6	1.620	6.9	6.8	6.2	ST
43624	11/14/85	1019	2857.1	9221.1	16	26	13	26	23.4	24.3	24.7	28.0	30.2	31.3	3.476	7.8	7.2	7.8	ST
43626	11/14/85	1250	2910.4	9230.3	16	18	9	18	22.9	22.8	23.1	25.7	26.1	29.3	2.835	5.9	5.9	5.1	ST
43627	11/14/85	1353	2909.6	9232.1	16	20	10	20	23.3	23.4	23.4	25.7	27.9	29.6	2.275	7.3	6.5	5.6	ST
43628	11/14/85	1529	2919.0	9238.4	16	16	8	16	23.7	23.6	22.9	28.2	28.3	28.9	0.806	7.7	8.0	6.7	ST
43630	11/14/85	1920	2852.0	9250.3	16	26	13	26	24.6	24.4	24.3	31.1	31.4	31.6	0.336	7.3	7.2	7.1	ST
43632	11/15/85	1603	2929.2	9400.1	18	13	6	12	23.1	23.1	22.4	26.4	26.7	27.5	2.502	7.1	6.9	6.4	ST
43634	11/15/85	1802	2927.4	9352.3	17	10	5	10	23.7	23.1	23.0	27.9	27.9	28.0	1.850	7.6	7.4	7.1	ST
43635	11/15/85	2154	2925.0	9343.1	17	15	8	15	22.8	22.9	22.9	27.2	27.4	28.1	2.579	7.3	7.0	6.6	ST
43636	11/16/85	0158	2929.0	9400.1	18	13	6	12	23.0	22.9	22.7	27.2	27.8	27.9	2.507	7.4	7.3	7.0	ST
43638	11/16/85	0839	2923.5	9431.5	18	11	6	11	22.5	22.5	22.3	20.7	21.1	22.7	5.663	7.3	6.5	6.0	ST
43640	11/16/85	0959	2919.2	9432.9	18	13	7	13	22.3	22.4	22.7	22.5	22.8	27.6	4.149	7.6	7.0	6.7	ST
43642	11/16/85	1125	2913.5	9439.5	18	15	7	15	22.2	22.3	22.6	21.9	22.6	27.2	2.972	7.8	7.6	6.8	ST
43644	11/16/85	1252	2908.6	9443.7	18	17	8	16	22.4	22.5	22.8	24.7	25.4	27.0	2.355	7.7	7.6	7.0	ST
43647	11/16/85	1455	2903.7	9439.5	18	18	8	17	23.0	23.1	23.4	29.1	29.3	30.4	1.822	7.4	7.5	7.2	ST
43649	11/16/85	1809	2911.5	9449.6	18	13	6	12	22.4	22.4	22.4	22.3	22.5	23.2	2.890	7.6	7.6	7.2	ST
43651	11/16/85	1929	2909.5	9450.5	18	14	7	14	22.5	22.5	22.5	24.2	24.2	24.7	3.364	7.7	7.8	7.2	ST
43653	11/16/85	2058	2910.6	9445.7	18	16	8	16	22.4	22.5	22.6	21.8	24.0	25.3	2.860	7.8	7.7	7.1	ST

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43655	11/16/85	2204	2908.6	9446.3	18	17	9	17	22.5	22.6	22.6	23.0	25.4	27.6	3.364	7.8	7.6	6.7	ST
43657	11/17/85	0021	2859.8	9435.9	18	18	9	18	23.5	23.5	23.6	30.6	30.7	30.8	0.701	7.7	7.7	7.5	ST
43659	11/17/85	0128	2903.4	9439.8	18	18	9	18	21.8	22.0	22.3								ST
43661	11/17/85	0237	2908.5	9443.5	18	18	9	18	21.3	21.4	22.1								ST
43663	11/17/85	0348	2913.3	9439.5	18	16	8	16	21.4	21.4	21.4								ST
43665	11/17/85	0607	2923.5	9431.5	18	14	7	14	21.5	21.5	21.5				3.154				ST
43667	11/17/85	0901	2911.5	9449.5	18	13	7	13	22.6	22.6	22.7	21.5	21.5	21.9	3.715	8.3	8.3	7.7	ST
43669	11/17/85	1006	2909.6	9450.6	18	14	7	14	22.5	22.8	22.5	21.6	21.8	25.0		7.4	7.3	7.4	ST
43671	11/17/85	1134	2910.5	9445.5	18	15	8	15	23.0	22.5	22.7	20.8	24.9	27.4	4.735	7.8	7.2	6.4	ST
43673	11/17/85	1236	2908.3	9447.0	18	16	8	16	22.7	22.6	22.7	22.3	24.7	27.1	3.364				ST
43676	11/17/85	1522	2859.7	9435.7	18	18	9	17	23.8	23.4	23.5	30.4	30.4	30.6	0.561	7.2	7.3	7.0	ST
43678	11/18/85	0246	2828.4	9604.1	19	15	7	14	24.3	22.7	23.1	24.1	24.6	28.2		7.1	6.9	6.8	ST
43680	11/18/85	0328	2827.4	9602.8	19	16	8	16	21.6	21.4	21.5								ST
43682	11/18/85	0844	2827.4	9606.4	19	15	7	15	22.7	22.8	23.1	23.9	26.3	28.6	1.906	7.2	7.2	6.8	ST
43684	11/18/85	0941	2827.4	9605.6	19	16	8	16	23.4	22.7	23.0	24.1	26.4	28.3	3.551	7.8	7.6	7.7	ST
43686	11/18/85	1053	2824.5	9605.4	19	20	10	20	23.1	23.2	23.4	26.1	29.1	30.0	1.738	7.9	7.8	7.6	ST
43688	11/18/85	1157	2823.0	9603.8	19	20	10	20	23.1	23.2	23.4	26.8	27.8	30.0	1.234	7.8	7.7	7.5	ST
43690	11/18/85	1427	2814.1	9557.8	19	27	13	25	24.0	24.0	24.4	30.9	31.0	31.5	0.224	7.7	7.8	7.5	ST
43692	11/18/85	1710	2809.0	9614.0	19	26	13	26	23.4	23.4	23.4	34.0	33.4	34.8	0.533	7.0	7.3	6.8	ST
43694	11/18/85	1942	2819.4	9619.7	19	20	10	20	22.3	21.6	22.4	26.9	26.8	32.3	1.720				ST
43696	11/18/85	2046	2818.3	9622.7	19	13	6	13	22.2	21.9	21.9	27.2	27.1	30.8	2.294	7.7	7.7	7.6	ST
43698	11/18/85	2143	2816.4	9624.8	19	13	7	13	22.2	21.8	21.8	27.4	27.4	30.9	2.090	7.4	7.5	7.3	ST
43700	11/18/85	2310	2814.5	9618.5	19	17	8	17	22.4	23.2	23.1	28.4	32.6	34.1	3.001	7.3	6.7	6.2	ST
43702	11/19/85	0043	2808.7	9613.5	19	26	13	26	23.1	23.4	23.4				0.589				ST
43704	11/19/85	0303	2813.9	9557.9	19	26	13	26	23.4	23.3	23.3								ST
43706	11/19/85	0456	2823.5	9603.4	19	19	9	19	22.0	22.0	22.4								ST
43708	11/19/85	0610	2827.5	9605.5	19	20	10	20	22.3	21.7	22.1								ST
43710	11/19/85	0839	2819.5	9619.5	19	17	8	17	22.2	21.6	22.4	26.7	26.8	30.1	2.430	7.2	7.1	6.7	ST

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43712	11/19/85	0950	2818.4	9622.5	19	13	7	13	22.2	21.6	21.6	26.9	26.9	30.0	2.243	7.8	7.8	6.7	ST
43714	11/19/85	1123	2816.4	9624.5	19	13	7	13	22.4	21.9	22.3	27.1	27.4	30.6	2.430	7.4	7.4	7.5	ST
43716	11/19/85	1243	2814.2	9619.0	19	23	11	22	23.4	23.6	24.2	26.7	29.7	31.5	2.027	6.9		7.1	ST
43718	11/19/85	1815	2727.7	9650.7	20	15	7	15	23.6	23.1	23.3	26.9	27.5	28.3	2.745	7.4	7.5	7.2	ST
43720	11/19/85	1947	2751.5	9654.5	20	17	9	17	23.9	23.7	23.8	26.9	29.0	29.6	3.364	7.9	7.7	7.6	ST
43722	11/19/85	2044	2751.5	9651.5	20	20	10	20	23.6	23.5	23.7	28.3	28.6	29.2	1.346	7.7	7.6	7.3	ST
43724	11/19/85	2152	2750.5	9651.7	20	21	11	21	23.8	23.6	23.6	27.8	28.8	29.4	1.682	7.7	7.6	7.6	ST
43726	11/20/85	0007	2745.3	9640.5	20	36	17	36	24.1	24.6	25.0	29.6	30.9	32.3	0.738	7.6	7.5	6.8	ST
43728	11/20/85	0226	2735.0	9654.0	20	31	15	30	22.6	22.8	23.9	30.7	31.0	34.6	1.121	7.6	7.6	6.6	ST
43729	11/20/85	1218	2757.5	9650.3	20	16	8	16	21.6	21.7	21.9								ST
43731	11/20/85	1340	2751.7	9654.4	20	17	8	17	21.5	21.7	22.0				2.545				ST
43733	11/20/85	1440	2751.5	9651.3	20	18	9	18	21.5	21.9	21.9								ST
43735	11/20/85	1527	2750.5	9651.4	20	20	10	20	21.6	21.7	21.7				1.984				ST
43737	11/20/85	1812	2744.3	9656.5	20	22	11	22	21.7	21.8	21.8	29.3	29.5	30.0	1.522	7.5	7.3	7.2	ST
43739	11/20/85	1944	2739.6	9700.6	20	22	11	22	21.5	21.8	21.9	29.2	29.8	29.9	1.994	7.7	7.6	7.2	ST
43741	11/20/85	2053	2737.5	9701.6	20	22	11	22	21.8	21.9	21.9	29.6	29.8	30.0	1.418	7.4	7.8	7.3	ST
43743	11/20/85	2206	2737.2	9706.7	20	16	8	16	21.6	21.7	22.0	29.8	30.2	30.6	1.580	7.6	7.5		ST
43745	11/21/85	0012	2734.3	9654.6	20	31	15	29	22.1	22.7	23.0	31.4	31.9	33.6	1.332	7.1	6.9	6.2	ST
43747	11/21/85	0719	2742.3	9656.5	20	22	11	22	21.6	21.7	22.4	30.4	30.5	31.7	1.234	7.6	7.5	7.2	ST
43749	11/21/85	0837	2739.5	9700.7	20	22	11	22	21.6	21.6	21.7	29.6	29.7	29.7		7.2	7.1	7.0	ST
43751	11/21/85	0933	2737.4	9701.7	20	22	11	22	21.6	21.6	21.6	29.5	29.7	29.8	1.626	7.8	7.8		ST
43753	11/21/85	1041	2737.5	9706.6	20	16	8	16	21.4	21.4	21.4	29.4	29.5	30.1	1.916	7.4	7.4	7.3	ST
43755	11/21/85	1250	2735.4	9653.8	20	29	15	29	22.3	22.4	23.4								ST
43757	11/21/85	2200	2620.5	9703.7	21	22	11	22	22.9	23.0	23.7	32.7	32.8	34.0	0.533	6.9	6.8	6.6	ST
43759	11/21/85	2324	2619.5	9702.5	21	23	11	23	23.0	23.1	23.7	32.9	32.9	33.9	0.449	6.8	6.8	6.7	ST
43761	11/22/85	0043	2614.8	9701.3	21	26	13	25	23.1	23.4	23.9	32.9	33.2	33.9	0.627	7.1	7.2	6.8	ST
43763	11/22/85	0142	2612.6	9701.5	21	24	12	23	23.5	23.6	23.7	33.2	33.5	33.8	0.628	6.9	6.8	6.6	ST
43765	11/22/85	0325	2604.6	9700.6	21	26	13	25	23.7	24.2	24.2	33.8	34.3	34.7	0.748	7.8	6.7	6.6	ST

Table 1 (cont'd.)

NMFS OCTOBER-NOVEMBER GROUND FISH SURVEY
OREGON II

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
43767	11/22/85	0905	2620.5	9703.5	21	22	11	22	22.4	22.3	23.0								ST
43769	11/22/85	0959	2619.5	9702.4	21	22	11	22	22.0	22.0	22.7			0.636					ST
43771	11/22/85	1057	2615.5	9701.4	21	22	11	22	22.4	22.4	23.0			0.701					ST
43773	11/22/85	1200	2612.1	9701.4	21	25	12	25	22.5	22.7	23.7			0.876	6.9				ST
43775	11/22/85	1325	2612.5	9654.0	21	36	18	36	23.1	24.7	24.8	33.3		0.645	7.0				ST
43777	11/22/85	1505	2604.6	9700.5	21	26	13	26	22.9	23.4	24.6	33.0		0.561	6.9				ST
43779	11/22/85	1554	2601.5	9700.5	21	26	13	26	23.0	23.8	24.6			0.523					ST
43781	11/22/85	1639	2601.0	9659.5	21	28	14	28	23.1	24.3	24.8			0.841	6.9				ST
43783	11/22/85	1715	2600.1	9659.5	21	30	15	30	23.0	24.5	24.4				6.8				ST
43785	11/22/85	1926	2603.5	9647.5	21	44	22	44	25.5	25.7	25.7	34.9	35.1	35.7	0.374	7.0	6.9	6.6	ST
43787	11/22/85	2119	2612.6	9654.0	21	38	19	38	23.6	24.5	25.0	33.6	34.0	35.1	0.538	7.7	7.6	7.2	ST
43789	11/22/85	2321	2601.5	9700.5	21	27	13	27	23.2	23.2	23.2	33.2	33.2	33.2	0.645				ST
43791	11/23/85	0040	2601.7	9659.6	21	27	13	26	23.2	23.2	23.3	33.2	33.2	33.5	0.414				ST
43793	11/23/85	0130	2600.3	9659.5	21	28	14	27	23.4	23.4	24.8	33.4	33.4	34.4	0.627				ST

Table 1 (cont'd.)

ALABAMA OCTOBER GROUND FISH SURVEY
ALABAMA INSHORE VESSELS

STA#	DATE		POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
	MM/DD/YY	TIME	LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
23001	10/15/85	1035	3015.0	8733.0	10	9	5	9	25.5	25.0	25.5	32.0	32.0	32.0		5.4	5.8	5.4	ST
23002	10/15/85	0845	3013.0	8738.0	10	11	6	11	25.0	25.0	25.0	31.0	32.0	32.0		3.8	4.4	6.8	ST
23003	10/15/85	0725	3011.0	8753.0	10	9	5	9	25.0	24.5	24.0	30.0	32.0	32.0		6.4	2.8	6.0	ST
23004	10/15/85	1241	3014.0	8814.0	11	7	4	7	26.0	25.5	25.0	27.0	30.0	30.0		2.2	5.4	5.2	ST
23005	10/15/85	1319	3013.0	8818.0	11	7	4	7	26.5	25.5	25.5	28.0	30.0		5.4	4.4	4.8	ST	
23006	10/15/85	1400	3012.0	8822.0	11	5	3	5	26.0	25.0	25.0	28.0	31.0	32.0		3.2	6.0	5.4	ST
23007	10/15/85	1425	3012.0	8823.0	11	7	4	7		25.0	25.0	28.0	30.0		5.4	4.2	2.6	ST	
23008	10/15/85	1830	3012.0	8823.0	11	7	4	7	25.5	24.0	25.0	30.0	31.0	30.0		5.8	6.2	2.2	ST
23010	10/15/85	1938	3014.0	8814.0	11	7	4	7	26.0	25.5	25.0	29.0	29.0	30.0		4.6	3.0	5.4	ST
23011	10/15/85	2015	3013.0	8818.0	11	7	4	7	26.0	25.5	25.5	28.0	30.0	30.0		5.4	2.2	3.8	ST

Table 1 (cont'd.)

LOUISIANA NOVEMBER PLANKTON SURVEY
LOUISIANA INSHORE VESSELS

STA#	DATE		POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE,C			SALINITY,PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
	MM/DD/YY	TIME	LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
35091	11/ 5/85	0744	2919.3	9206.8	16	5	5	20.0	20.4	30.2	30.5	1.488	7.2	7.0	PN				
35092	11/ 5/85	0835	2909.5	9209.5	16	9	9	18.7	22.1	27.6	32.0	0.744	7.7	6.6	PN				
35093	11/ 5/85	0840	2940.0	9322.0	17	9	9	18.7	19.4	16.8	25.0	2.790	6.7	7.4	PN				
35094	11/ 5/85	0849	2944.0	9322.0	17	5	5	17.7	19.1	15.9	22.0	0.507	7.5	7.4	PN				
35095	11/ 5/85	0915	2945.0	9322.0	17	2	2	17.7	17.7	11.1	12.8	1.015	7.0	3.5	PN				
35096	11/ 5/85	1328	2926.9	8909.6	12	5	5	18.2	18.4	24.6	24.6	2.638	7.9	7.9	PN				
35097	11/ 5/85	1600	2924.8	8904.3	12	9	9	18.7	22.7	26.3	31.9	2.131	7.9	7.2	PN				
35098	11/ 5/85	1614	2934.0	9201.8	16	2	2	17.5	17.5	8.9	8.9	1.319	8.5	7.6	PN				
35099	11/ 5/85	1653	2927.4	8912.2	12	2	2	17.6	17.7	32.8	32.0	2.841	8.4	8.2	PN				
35100	11/ 6/85	1148	2916.3	8956.0	13	2	2	20.0	21.6	20.0	29.6		7.8	7.7	PN				
35101	11/ 6/85	1226	2915.1	8954.2	13	5	5	19.6	21.4	22.7	30.9		7.2	6.1	PN				
35102	11/ 6/85	1251	2913.9	8952.7	13	9	9	22.2	24.3	26.3	32.7		7.7	4.7	PN				
35103	11/ 6/85	1330	3003.2	8851.7	11	2	2	21.2	21.3	29.1	30.1		7.9	7.8	PN				
35104	11/ 6/85	1354	3003.3	8851.4	11	5	5	20.0	21.2	27.1	31.0		8.6	7.6	PN				
35105	11/ 6/85	1418	3003.7	8850.8	11	9	9	20.0	21.8	26.2	31.7		8.4	7.0	PN				
35106	11/ 7/85	1140	2904.5	9035.7	14	2	2	18.5	18.7	25.6	26.3		7.8	7.8	PN				
35108	11/ 7/85	1300	2900.5	9035.7	14	9	9	21.2	20.7	30.8	31.6		7.2	6.9	PN				
35107	11/ 7/85	1210	2902.0	9035.7	14	5	5	18.5	18.2	26.6	27.5		7.8	7.8	PN				

Table 1 (cont'd.)

TEXAS NOVEMBER GROUND FISH SURVEY
LAGUNA MADRE

STA#	DATE		POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
	MM/DD/YY	TIME	LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
33001	11/22/85	0908	2621.1	9703.7	21	20	20	26.0	23.0	31.0	30.0				9.0	7.0	ST		
33002	11/22/85	1000	2620.2	9702.8	21	24	24	22.5	23.0	30.0	31.0				9.0	9.0	ST		
33003	11/22/85	1100	2616.2	9701.6	21	22	22	23.0	23.0	30.0	32.0			10.0	9.0	ST			
33004	11/22/85	1205	2612.8	9701.8	21	26	26	23.0	23.5	31.0	31.0			8.0	7.0	ST			
33005	11/22/85	1330	2613.3	9654.2	21	37	37	24.0	25.0	31.0	34.0			9.0	7.0	ST			
33006	11/22/85	1510	2605.0	9700.8	21	26	26	24.0	25.0	31.0	34.0			9.0	8.0	ST			
33007	11/22/85	1558	2602.1	9700.6	21	24	24	24.0	24.0	32.0	31.0			9.0	8.0	ST			
33008	11/22/85	1640	2601.7	9660.0	21	27	27	24.0	24.0	32.0	31.0			9.0	8.0	ST			
33009	11/22/85	1725	2600.6	9659.6	21	27	27	24.0	24.0	32.0	31.0			9.0	8.0	ST			

Table 1 (cont'd.)

TEXAS NOVEMBER GROUND FISH SURVEY
GALVESTON BAY

STA#	DATE		POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
	MM/DD/YY	TIME	LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
34001	11/16/85	0842	2923.4	9431.2	18	13		13			20.5			24.0				12.0	ST
34002	11/16/85	0959	2919.2	9433.1	18	13		13			21.5			20.0				11.0	ST
34003	11/16/85	1126	2913.1	9439.5	18	16		16			21.0			28.0				12.0	ST
34004	11/16/85	1254	2908.2	9443.1	18	18		18			21.5			30.0				9.0	ST
34005	11/16/85	1455	2903.4	9439.2	18	20		20			22.0			33.0				9.0	ST
34006	11/17/85	0903	2911.4	9449.3	18	13		13			22.0			25.0				10.0	ST
34007	11/17/85	1005	2909.1	9450.7	18	15		15			22.0			29.0				9.0	ST
34008	11/17/85	1134	2910.1	9445.5	18	15		15			22.0			30.0				8.0	ST
34009	11/17/85	1235	2908.1	9446.9	18	15		15			22.0			28.0				9.0	ST

Table 1 (cont'd.)

MISSISSIPPI NOVEMBER GROUND FISH SURVEY
TOMMY MUNRO

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
17001	11/12/85	1015	3012.2	8847.6	11	9	8	20.8	21.0	31.0	31.0	1.346	8.6	8.3	ST				
17002	11/12/85	1130	3012.9	8844.3	11	7	6	22.1	22.1	35.1	34.4	1.607			ST				
17003	11/12/85	1250	3012.4	8838.0	11	10	9	21.8	22.2	31.9	32.0	2.579			ST				
17004	11/12/85	1345	3012.2	8835.8	11	10	9	22.7	22.5	36.7	36.6	1.271			ST				
17005	11/12/85	1445	3011.2	8833.4	11	11	10	22.7	22.4	31.0	31.0	0.785			ST				
17006	11/12/85	1540	3010.2	8834.9	11	13	13	21.5	22.0	31.0	32.5	1.142			PN				
17007	11/12/85	1738	3011.5	8834.3	11	11	10	22.7	22.6	31.0	32.0	0.804			ST				
17008	11/12/85	1815	3012.4	8836.5	11	10	9	22.4	22.4	32.6	33.1	0.860			ST				
17009	11/12/85	1900	3012.8	8838.2	11	9	8	21.6	22.4	32.3	33.2	1.787			ST				
17010	11/12/85	2025	3013.1	8844.3	11	7	6	21.6	22.1	32.0	32.3	1.682			ST				
17011	11/12/85	2122	3012.2	8846.8	11	9	9	22.1	22.2	33.2	33.2	1.196			ST				
17012	11/12/85	2235	3012.7	8849.8	11	8	8	22.2	22.2	33.3	33.4	0.942			ST				
17013	11/12/85	2350	3012.5	8850.0	11	9	9	20.7	22.2	30.0	33.4	0.785			ST				
17014	11/13/85	0110	3010.0	8853.0	11	10	9	22.2	22.2	33.8	33.9	0.561			ST				
17015	11/13/85	0211	3008.8	8854.9	11	10	9	21.5	22.0	32.9	33.8	1.720			ST				
17016	11/13/85	0309	3002.7	8856.9	11	10	9	20.8	21.7	32.3	33.6	1.402			ST				
17017	11/13/85	0415	3011.7	8855.3	11	6	5	21.5	22.0	31.8	32.9	3.499			ST				
17018	11/13/85	0640	3013.0	8849.7	11	7	7	21.3	22.0	32.1	33.1	3.364			ST				
17019	11/13/85	0800	3012.3	8849.8	11	7	7	21.4	21.9	31.8	32.9	3.962			ST				
17020	11/13/85	0905	3010.2	8853.5	11	9	9	21.6	21.9	32.0	33.4	4.735			ST				
17021	11/13/85	1000	3007.9	8855.3	11	9	9	21.5	21.3	32.7	33.6	2.691			ST				
17022	11/13/85	1105	3007.2	8858.1	11	9	9	21.5	21.2	32.1	33.0	2.916			ST				
17023	11/13/85	1235	3011.3	8856.0	11	7	6	21.8	22.0	33.5	34.2	3.252			ST				
17024	11/13/85	1327	3011.7	8859.2	11	10	9	21.7	21.5	28.8	31.0	5.327			ST				
17025	11/13/85	1410	3011.8	8901.5	12	8	7	21.6	21.6	28.8	30.4	5.607			ST				
17026	11/13/85	1450	3010.7	8903.3	12	7	6	21.6	21.6	30.0	32.4	9.027			ST				
17027	11/13/85	1540	3008.9	8902.8	12	7	6	21.8	21.5	32.4	33.0	3.589			ST				
17028	11/13/85	1614	3008.0	8901.8	12	8	7	21.8	21.4	30.6	31.1	4.306			ST				

Table 1 (cont'd.)

MISSISSIPPI NOVEMBER GROUND FISH SURVEY
TOMMY MUNRO

STA#	DATE MM/DD/YY	TIME	POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
			LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
17029	11/13/85	1650	3007.9	8901.0	12	8	7	21.6	21.4	30.1	30.5	3.678						ST	
17030	11/13/85	1810	3011.4	8900.6	12	7	7	21.7	21.8	29.4	29.6	2.355						ST	
17031	11/13/85	1900	3012.2	8902.3	12	7	6	21.5	22.0	28.8	30.3							ST	
17032	11/13/85	2000	3010.4	8904.0	12	7	7	21.4	21.7	29.2	30.2	2.422						ST	
17033	11/13/85	2110	3008.6	8904.3	12	7	7	21.4	21.6	30.0	30.7	3.028						ST	
17034	11/13/85	2215	3007.3	8902.8	12	7	7	21.3	21.4	30.3	31.8	3.065						ST	
17035	11/13/85	2345	3007.9	8901.9	12	8	8	20.9	21.5	29.7	31.6	2.243						ST	
17036	11/14/85	0120	3003.5	8858.0	11	8	8	21.3	21.3	31.3	32.1	2.047						ST	
17037	11/14/85	0215	3001.0	8858.9	11	8	7	20.9	20.9	31.0	32.1	2.803						ST	
17038	11/14/85	0250	3001.1	8859.9	11	6	6	20.9	20.7	30.8	32.1	3.076						ST	
17039	11/14/85	0617	3000.3	8900.7	12	5	5	20.8	20.7	27.9	31.1	3.415						ST	
17040	11/14/85	0730	3000.9	8859.7	11	6	6	20.9	20.7	27.3	30.9	3.947						ST	
17041	11/14/85	0830	3003.4	8858.5	11	7	7	20.9	20.8	27.6	31.7	5.562						ST	
17042	11/14/85	1116	3009.2	8902.8	12	6	6	21.0	21.1	18.0	28.0	6.685						PN	

Table 1 (cont'd.)

LOUISIANA DECEMBER GROUND FISH SURVEY
PELICAN

STA#	DATE		POSITION		STAT ZONE	DEPTH (M)	SAMPLE DEPTHS		TEMPERATURE, C			SALINITY, PPT			CL, SUR	DISSOLVED OXYGEN			GEAR
	MM/DD/YY	TIME	LAT	LONG			MID	MAX	SUR	MID	MAX	SUR	MID	MAX		SUR	MID	MAX	
35067	12/ 3/85	1900	2846.6	9102.8	15	11	6	11	21.9	22.0	21.9	31.7	31.7	31.7	1.319	9.5	7.5	7.0	ST/PN
35068	12/ 3/85	2227	2833.2	9048.0	14	26	13	26	23.0	23.1	23.1	34.0	34.0	34.0	0.304	7.0	6.9	6.9	ST/PN
35069	12/ 4/85	0042	2837.1	9038.2	14	20	10	20	22.8	22.8	22.8	33.3	33.3	33.7	0.507	6.9	6.7	6.7	ST/PN
35070	12/ 4/85	0316	2837.3	9026.1	14	27	14	27	22.7	22.7	23.9	32.7	32.7	34.1	1.015	7.0	6.8	6.5	ST/PN
35071	12/ 4/85	0725	2837.3	9026.1	14	27	14	27	22.7	22.8	24.0	32.9	32.9	34.3	1.167	7.0	6.8	6.3	ST/PN
35072	12/ 4/85	0930	2837.1	9038.2	14	20	10	20	22.7	22.7	22.8	33.5	33.5	33.7	0.355	7.1	7.5	7.1	ST/PN
35073	12/ 4/85	1142	2833.2	9048.0	14	26	13	26	23.0	23.0	23.0	33.9	34.0	34.0	0.304	6.8	7.0	6.8	ST/PN
35074	12/ 4/85	1457	2846.6	9102.8	15	11	6	11	21.8	21.8	21.7	31.7	31.7	31.7	0.863	6.7	6.9	6.9	ST/PN
35075	12/ 5/85	0041	2906.9	8943.5	13	20	10	20	20.5	21.2	23.6	28.0	28.8	33.3	1.471	7.8	7.4	5.5	ST/PN
35076	12/ 5/85	0223	2900.5	8936.2	13	42	21	42	18.1	21.6	22.9	20.3	31.5	34.4	0.203	7.5	6.6	5.9	ST/PN
35077	12/ 5/85	0343	2901.3	8933.7	13	16	8	16	18.0	21.0	22.4	20.6	29.2	33.5	0.812	7.9	7.7	7.0	ST/PN
35078	12/ 5/85	0735	2901.3	8933.7	13	16	8	16	18.6	21.2	22.3	24.2	29.4	33.2	1.725	7.5	7.8	6.3	ST/PN
35079	12/ 5/85	0838	2900.5	8936.2	13	40	20	40	19.1	21.0	22.7	25.3	30.5	34.1	1.623	7.6	6.6	6.0	ST/PN
35080	12/ 5/85	1032	2906.9	8943.5	13	20	10	20	20.9	20.8	23.3	28.1	28.1	33.9	1.319	7.1	6.9	5.9	ST/PN
35081	12/ 5/85	1250	2916.5	8953.2	13	7	4	7	18.3	18.4	19.1	26.6	26.9	27.7	3.348	7.6	7.6	7.4	ST/PN
35082	12/ 5/85	1826	2916.5	8953.2	13	7	4	7	18.0	18.0	19.2	25.0	25.0	27.2	3.653	8.0	7.9	7.6	ST/PN
35083	12/ 6/85	0106	2852.1	9044.6	14	13	7	13	20.7	20.7	21.2	28.7	28.7	29.7	0.710	7.5	7.6	7.0	ST/PN
35084	12/ 6/85	0725	2852.1	9044.6	14	13	7	13	20.3	20.3	20.7	28.4	28.4	28.8	0.761	7.4	7.5	7.0	ST/PN
35085	12/13/85	1250	2900.5	9027.9	14	7	4	7	19.3	19.7	21.8	24.6	26.9	30.8	2.097	7.3	7.4	7.2	ST/PN
35086	12/13/85	1505	2902.9	9016.5	14	9	5	9	19.8	19.9	21.1	27.5	28.0	29.7	0.859	7.2	7.2	6.4	ST/PN
35087	12/13/85	1642	2857.9	9014.3	14	18	9	18	18.9	22.9	22.8	24.4	33.4	33.3	0.898	6.9	6.7	6.6	ST/PN
35088	12/13/85	1814	2857.9	9014.3	14	18	9	18	19.1	22.9	22.9	25.2	33.8	33.8	0.652	8.0	6.8	6.6	ST/PN
35089	12/13/85	2013	2902.9	9016.5	14	9	5	9	20.1	20.3	21.2	29.4	29.4	30.3	0.580	7.3	7.5	6.7	ST/PN
35090	12/13/85	2236	2900.5	9027.9	14	7	4	7	20.4	20.5	21.8	29.8	29.9	31.4	1.051	7.2	7.3	6.8	ST/PN

Table 2. SEAMAP Summer Shrimp and Bottomfish Survey species composition list, 288 trawl stations. Species with a total weight of less than .05 lb (22.7 g) are indicated on table as 0.0 kg.

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
<u>Finfishes</u>						
	<i>Micropogonias undulatus</i>	Atlantic croaker	44127	1354.1	133	46.2
	<i>Stenotomus caprinus</i>	longspine porgy	34617	498.8	181	62.8
	<i>Prionotus rubio</i>	blackfin searobin	22172	232.0	200	69.4
	<i>Trichiurus lepturus</i>	Atlantic cutlassfish	9531	141.0	68	23.6
	<i>Centropristis philadelphica</i>	rock sea bass	6316	149.0	181	62.8
	<i>Stellifer lanceolatus</i>	star drum	5460	56.7	26	9.0
	<i>Peprilus burti</i>	gulf butterfish	4405	150.0	109	37.8
	<i>Anchoa mitchilli</i>	bay anchovy	3632	3.2	41	14.2
	<i>Upeneus parvus</i>	dwarf goatfish	3352	39.0	93	32.3
	<i>Serranus atrobranchus</i>	blackear bass	3347	48.3	90	31.3
	<i>Syacium</i> spp.	lefteye flounders	3337	78.3	73	25.3
	<i>Trachurus lathami</i>	rough scad	3133	53.7	65	22.6
	<i>Leiostomus xanthurus</i>	spot	2824	167.1	76	26.4
	<i>Etropus crossotus</i>	fringed flounder	2684	40.5	126	43.8
	<i>Cynoscion nothus</i>	silver seatrout	2471	91.5	65	22.6
	<i>Chloroscombrus chrysurus</i>	Atlantic bumper	2409	113.4	83	28.8
	<i>Cynoscion arenarius</i>	sand seatrout	2377	148.9	102	35.4
	<i>Saurida brasiliensis</i>	largescale lizardfish	2104	16.5	101	35.1
	<i>Halieutichthys aculeatus</i>	pancake batfish	2062	16.4	91	31.6
	<i>Arius felis</i>	sea catfish	2055	179.4	51	17.7
	<i>Porichthys plectrodon</i>	Atlantic midshipman	1996	44.4	116	40.3
	<i>Prionotus paralatus</i>	Mexican searobin	1899	46.5	60	20.8
	<i>Lagodon rhomboides</i>	pinfish	1632	95.1	64	22.2
	<i>Sphoeroides parvus</i>	least puffer	1467	13.2	114	39.6
	<i>Synodus foetens</i>	inshore lizardfish	1442	121.5	148	51.4
	<i>Pristipomoides aquilonaris</i>	wenchman	1382	70.7	64	22.2

Table 2. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Prionotus	stearnsi	shortwing searobin	1374	13.7	59	20.5
Polydactylus	octonemus	Atlantic threadfin	1314	25.3	59	20.5
Diplectrum	bivittatum	dwarf sand perch	1230	40.0	90	31.3
Syacium	gunteri	shoal flounder	1144	19.3	53	18.4
Lepophidium	graellsii	blackedge cusk-eel	953	40.0	90	31.3
Bollmannia	communis	ragged goby	854	5.8	60	20.8
Symphurus	plagiusa	blackcheek tonguefish	838	17.7	98	34.0
Selene	setapinnis	Atlantic moonfish	648	17.0	58	20.1
Anchoa	hepsetus	striped anchovy	610	9.0	55	19.1
Syacium	papillosum	dusky flounder	578	24.5	29	10.1
Harengula	jaguana	scaled sardine	563	26.8	31	10.8
Urophycis	floridana	southern hake	531	45.7	48	16.7
Trichopsetta	ventralis	sash flounder	489	11.1	38	13.2
Bellator	militaris	horned searobin	484	6.1	21	7.3
Citharichthys	spilopterus	bay whiff	445	5.5	49	17.0
Antennarius	radiosus	singlespot frogfish	422	5.2	38	13.2
Prionotus	salmonicolor	blackwing searobin	421	14.5	28	9.7
Scorpaena	calcarata	smoothhead scorpionfish	388	8.0	28	9.7
Cynoscion	spp.	seatrouts	385	3.7	13	4.5
Prionotus	scitulus	leopard searobin	384	4.6	17	5.9
Prionotus	tribulus	bighead searobin	355	11.0	49	17.0
Monacanthus	hispidus	planehead filefish	308	5.5	42	14.6
Larimus	fasciatus	banded drum	288	8.4	23	8.0
Brevoortia	patronus	gulf menhaden	281	15.6	22	7.6
Peprilus	alepidotus	harvestfish	278	5.3	45	15.6
Lutjanus	campechanus	red snapper	256	25.0	45	15.6

Table 2. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Lepophidium	spp.	cusks-eels	239	11.5	12	4.2
Synodus	poeyi	offshore lizardfish	235	4.2	38	13.2
Lagocephalus	laevigatus	smooth puffer	209	4.0	39	13.5
Menticirrhus	americanus	southern kingfish	202	19.9	38	13.2
Urophycis	cirrata	gulf hake	201	6.1	23	8.0
Orthopristis	chrysoptera	pigfish	182	15.1	16	5.6
Anchoa	nasuta	longnose anchovy	170	0.5	15	5.2
Cyclopsetta	chittendeni	Mexican flounder	169	18.6	42	14.6
Brotula	barbata	bearded brotula	155	33.5	38	13.2
Prionotus	roseus	bluespotted searobin	148	5.0	5	1.7
Engyophrys	senta	spiny flounder	141	1.5	25	8.7
Hildebrandia	flava	yellow conger	136	23.5	31	10.8
Diplectrum	formosum	sand perch	128	6.0	10	3.5
Bothidae	spp.	left-eye flounders	113	1.3	3	1.0
Ogcocephalus	spp.	batfishes	112	3.1	22	7.6
Hoplunnis	macrurus	freckled pike-conger	107	2.0	25	8.7
Equetus	umbrosus	cubbyu	100	6.2	14	4.9
Gymnachirus	texae	fringed sole	96	1.7	29	10.1
Ancylopsetta	dilecta	three-eye flounder	89	5.2	21	7.3
Etrumeus	teres	round herring	81	1.1	18	6.3
Prionotus	ophryas	bandtail searobin	67	1.8	10	3.5
Kathetostoma	albigutta	lancer stargazer	64	2.4	14	4.9
Opisthonema	oglinum	Atlantic thread herring	61	6.1	15	5.2
Lepophidium	jeannae	mottled cusk-eel	57	4.1	9	3.1
Ancylopsetta	quadrocellata	ocellated flounder	56	4.4	17	5.9

Table 2. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
<i>Caulolatilus</i>	<i>intermedius</i>	anchor tilefish	54	5.5	18	6.3
<i>Trachinocephalus</i>	<i>myops</i>	snakefish	52	2.9	12	4.2
<i>Symphurus</i>	<i>civitatus</i>	offshore tonguefish	48	0.9	9	3.1
<i>Priacanthus</i>	<i>arenatus</i>	bigeye	47	1.4	10	3.5
<i>Citharichthys</i>	<i>macrops</i>	spotted whiff	44	1.0	18	6.3
<i>Haemulon</i>	<i>aurolineatum</i>	tomtate	43	2.8	3	1.0
<i>Paralichthys</i>	<i>lethostigma</i>	southern flounder	40	11.0	19	6.6
<i>Ophidion</i>	<i>grayi</i>	blotched cusk-eel	39	4.0	11	3.8
<i>Prionotus</i>	spp.	searobins	34	0.2	1	0.3
<i>Ophidion</i>	<i>welshi</i>	crested cusk-eel	33	1.3	9	3.1
<i>Etropus</i>	<i>microstomus</i>	smallmouth flounder	33	0.1	3	1.0
<i>Ophidion</i>	<i>holbrookii</i>	bank cusk-eel	29	3.0	7	2.4
<i>Raja</i>	<i>texana</i>	roundel skate	29	9.5	15	5.2
<i>Rhizoprionodon</i>	<i>terraenovae</i>	Atlantic sharpnose shark	28	11.9	10	3.5
<i>Conodon</i>	<i>nobilis</i>	barred grunt	28	1.0	4	1.4
<i>Bairdiella</i>	<i>chrysoura</i>	silver perch	27	1.2	9	3.1
<i>Balistes</i>	<i>capriscus</i>	gray triggerfish	27	0.9	8	2.8
<i>Rhomboplites</i>	<i>aurorubens</i>	vermillion snapper	26	4.1	6	2.1
<i>Mullus</i>	<i>auratus</i>	red goatfish	25	2.6	6	2.1
<i>Ogcocephalus</i>	<i>radiatus</i>	polka-dot batfish	25	0.3	4	1.4
<i>Urophycis</i>	<i>regia</i>	spotted hake	24	0.7	2	0.7
<i>Peristedion</i>	<i>gracile</i>	slender searobin	23	0.2	3	1.0
<i>Hoplunnis</i>	spp.	pike-congers	22	0.5	2	0.7
<i>Selene</i>	<i>vomer</i>	lookdown	20	1.5	5	1.7
<i>Citharichthys</i>	<i>cornutus</i>	horned whiff	19	0.1	1	0.3
<i>Achirus</i>	<i>lineatus</i>	lined sole	17	0.1	8	2.8

Table 2. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Centropristis	ocyurus	bank sea bass	17	1.0	2	0.7
Eucinostomus	gula	silver jenny	16	0.9	6	2.1
Sphyrna	tiburo	bonnethead	16	10.5	2	0.7
Cyclopsetta	fimbriata	spotfin flounder	16	0.9	1	0.3
Serraniculus	pumilio	pygmy sea bass	15	0.2	8	2.8
Gymnothorax	nigromarginatus	blackedge moray	14	1.1	8	2.8
Hippocampus	erectus	lined seahorse	14	0.1	8	2.8
Pontinus	longispinis	longspine scorpionfish	14	0.3	3	1.0
Prionotus	alatus	spiny searobin	14	0.1	2	0.7
Dorosoma	petenense	threadfin shad	13	0.3	6	2.1
Astroscopus	y-graecum	southern stargazer	12	1.1	4	1.4
Symphurus	diomedianus	spottedfin tonguefish	12	0.4	4	1.4
Sphoeroides	spengleri	bandtail puffer	11	0.5	2	0.7
Serranus	phoebe	tattler	11	0.6	1	0.3
Equetus	punctatus	spotted drum	11	1.2	2	0.7
Anchoa	spp.	anchovies	10	0.1	2	0.7
Gymnothorax	spp.	moray eels	10	1.8	6	2.1
Bagre	marinus	gafftopsail catfish	10	0.1	1	0.3
Neobythites	gillii	cuskeel	10	0.0	2	0.7
Scomberomorus	maculatus	Spanish mackerel	10	1.8	4	1.4
Anchoviella	perfasciata	flat anchovy	9	0.0	3	1.0
Bregmaceros	atlanticus	antenna codlet	9	0.0	4	1.4
Rhinoptera	bonasus	cownose ray	9	101.8	4	1.4
Chaetodipterus	faber	Atlantic spadefish	9	0.1	5	1.7
Oligoplites	saurus	leatherjacket	8	0.3	2	0.7
Scomber	japonicus	chub mackerel	8	0.2	2	0.7

Table 2. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Ogcocephalidae		batfishes	8	0.3	2	0.7
Prionotus	carolinus	northern searobin	7	0.1	2	0.7
Scorpaena	brasiliensis	barbfish	7	0.6	2	0.7
Decapterus	punctatus	round scad	7	0.7	2	0.7
Epinephelus	flavolimbatus	yellowedge grouper	7	0.8	5	1.7
Syngnathus	louisianae	chain pipefish	7	0.0	4	1.4
Narcine	brasiliensis	lesser electric ray	6	2.1	4	1.4
Anchoa	lyolepis	dusky anchovy	6	0.0	1	0.3
Pomatomus	saltatrix	bluefish	6	1.3	3	1.0
Pristigenys	alta	short bigeye	6	0.1	3	1.0
Hemipteronotus	novacula	pearly razorfish	6	0.3	2	0.7
Histrion	histrion	sargassumfish	5	0.1	3	1.0
Caranx	cryos	blue runner	5	0.0	2	0.7
Selar	cruenophthalmus	bigeye scad	5	0.4	2	0.7
Pagrus	sedecim	red porgy	5	0.3	2	0.7
Menticirrhus	littoralis	gulf kingfish	5	1.0	2	0.7
Trachinotus	carolinus	Florida pompano	5	0.1	2	0.7
Lutjanus	synagris	lane snapper	4	1.0	3	1.0
Haemulon	plumieri	white grunt	4	0.9	1	0.3
Hemicaranx	amblyrhynchus	bluntnose jack	4	0.4	1	0.3
Pikea	mexicana	yellowtail bass	4	0.2	2	0.7
Serranus	subligarius	belted sandfish	4	0.2	2	0.7
Clupea	harengus harengus	Atlantic herring	4	0.7	1	0.3
Hippocampus	spp.	seahorses	4	0.0	2	0.7
Synodus	spp.	lizardfishes	4	0.2	1	0.3
Scomberomorus	cavalla	king mackerel	4	0.2	1	0.3

Table 2. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
	<i>Trinectes maculatus</i>	hogchoker	4	0.1	4	1.4
	<i>Paralichthys squamilentus</i>	broad flounder	3	0.3	3	1.0
	<i>Opistognathus</i> spp.	jawfishes	3	0.0	1	0.3
	<i>Lactophrys quadricornis</i>	scrawled cowfish	3	0.4	2	0.7
	<i>Dibranchius atlanticus</i>	offshore batfish	3	0.0	1	0.3
	<i>Steindachneria argentea</i>	luminous hake	3	0.0	1	0.3
	<i>Myrophis punctatus</i>	speckled worm eel	3	0.1	3	1.0
	<i>Raja eglanteria</i>	clearnose skate	3	2.1	2	0.7
	<i>Umbrina coroides</i>	sand drum	3	0.5	2	0.7
	<i>Sphyræna guachancho</i>	guaguanche	2	0.1	2	0.7
	<i>Caulolatilus</i> spp.	tilefishes	2	0.5	1	0.3
	<i>Synagrops spinosa</i>	temperate bass	2	0.0	1	0.3
	<i>Mustelus canis</i>	smooth dogfish	2	1.6	2	0.7
	<i>Echiophis</i> spp.	snake eels	2	0.0	1	0.3
	<i>Hirundichthys rondeleti</i>	blackwing flyingfish	2	0.1	1	0.3
	<i>Fistularia tabacaria</i>	bluespotted cornetfish	2	0.6	1	0.3
	<i>Lonchopisthus micrognathus</i>	swordtail jawfish	2	0.0	1	0.3
	<i>Bothus</i> spp.	flounders	2	0.1	1	0.3
	<i>Chaetodon sedentarius</i>	reef butterflyfish	1	0.0	1	0.3
	<i>Callionymus agassizi</i>	spotfin dragonet	1	0.0	1	0.3
	Scorpaenidae	scorpionfishes	1	0.0	1	0.3
	<i>Gobionellus hastatus</i>	sharptail goby	1	0.0	1	0.3
	<i>Aluterus scriptus</i>	scrawled filefish	1	0.1	1	0.3
	<i>Sphoeroides dorsalis</i>	marbled puffer	1	0.0	1	0.3
	<i>Cantherhines macrocerus</i>	whitespotted filefish	1	0.0	1	0.3
	<i>Aluterus schoepfi</i>	orange filefish	1	0.0	1	0.3

Table 2. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
	<i>Sphoeroides nephelus</i>	southern puffer	1	0.0	1	0.3
	<i>Chilomycterus schoepfi</i>	striped burrfish	1	0.0	1	0.3
	<i>Hyporhamphus unifasciatus</i>	halfbeak	1	0.0	1	0.3
	<i>Ablennes hians</i>	flat needlefish	1	0.1	1	0.3
	<i>Ophichthus</i> spp.	eels	1	0.5	1	0.3
	<i>Ophichthus ocellatus</i>	palespotted eel	1	0.7	1	0.3
	<i>Gymnothorax ocellatus</i>	ocellated moray	1	0.1	1	0.3
	<i>Paraconger caudilimbatus</i>	margintail conger	1	0.1	1	0.3
	<i>Rhinobatos lentiginosus</i>	Atlantic guitarfish	1	0.5	1	0.3
	<i>Dasyatis sayi</i>	bluntnose stingray	1	1.5	1	0.3
	<i>Dasyatis americana</i>	southern stingray	1	0.2	1	0.3
	<i>Apogon pseudomaculatus</i>	twospot cardinalfish	1	0.0	1	0.3
	<i>Caranx hippos</i>	crevalle jack	1	0.0	1	0.3
	<i>Seriola dumerili</i>	greater amberjack	1	1.0	1	0.3
	<i>Menidia beryllina</i>	tidewater silverside	1	0.0	1	0.3
	<i>Rypticus maculatus</i>	whitespotted soapfish	1	0.0	1	0.3
	<i>Morone saxatilis</i>	striped bass	1	0.0	1	0.3
	<i>Calamus bajonado</i>	jolthead porgy	1	0.6	1	0.3
	<i>Equetus</i> spp.	drums	1	0.0	1	0.3
<u>Crustaceans</u>						
	<i>Trachypenaeus</i> spp.	roughneck shrimps	52140	229.8	178	61.8
	<i>Penaeus aztecus</i>	brown shrimp	30134	381.1	213	74.0
	<i>Callinectes similis</i>	lesser blue crab	25801	371.3	205	71.2
	<i>Portunus spinicarpus</i>	swimming crab	16452	82.8	74	25.7
	<i>Sicyonia brevirostris</i>	rock shrimp	13064	128.4	111	38.5
	<i>Squilla</i> spp.	mantis shrimps	8885	95.2	142	49.3
	<i>Sicyonia dorsalis</i>	rock shrimp	5443	18.2	99	34.4

Table 2. SEAMAP species composition (cont'd.)

<u>GENUS</u>	<u>SPECIES</u>	<u>COMMON NAME</u>	<u>TOTAL NUMBER CAUGHT</u>	<u>TOTAL WEIGHT CAUGHT (KG)</u>	<u>NUMBER OF TOWS WHERE CAUGHT</u>	<u>% FREQUENCY OF OCCURRENCE</u>
Solenocera	spp.	rareback shrimps	2560	11.4	48	16.7
Portunus	gibbesii	swimming crab	2168	13.4	83	28.8
Squilla	empusa	mantis shrimp	1104	12.1	50	17.4
Callinectes	sapidus	blue crab	1065	96.1	75	26.0
Penaeus	duorarum	pink shrimp	768	24.0	76	26.4
Xanthidae		mud crabs	705	3.3	5	1.7
Penaeus	setiferus	white shrimp	702	29.9	58	20.1
Xiphopenaeus	kroyeri	seabob	579	4.5	11	3.8
Parapenaeus	spp.	deepwater rose shrimps	504	4.0	5	1.7
Portunus	spinimanus	swimming crab	487	14.2	49	17.0
Calappa	sulcata	box crab	242	48.0	55	19.1
Sicyonia	spp.	rock shrimps	211	0.5	2	0.7
Squillidae		mantis shrimps	210	1.3	12	4.2
Ovalipes	guadulpensis	lady crab	193	1.9	15	5.2
Hepatus	epheliticus	calico crab	162	7.5	37	12.8
Anasimus	latus	spider crab	156	2.0	24	8.3
Sicyonia	typica	rock shrimp	100	0.3	7	2.4
Xiphopenaeus	spp.	seabobs	72	0.3	4	1.4
Libinia	dubia	spider crab	56	3.6	11	3.8
Metoporphaphis	calcarata	spider crab	39	0.0	6	2.1
Ovalipes	floridanus	oval lady crab	26	0.2	12	4.2
Parthenope	serrata	spider crab	23	0.0	7	2.4
Portunus	sayi	swimming crab	22	0.0	7	2.4
Libinia	emarginata	spider crab	20	6.8	11	3.8
Scyllarus	spp.	Spanish lobsters	19	0.2	3	1.0
Speocarcinus	lobatus	mud crab	17	0.0	1	0.3

Table 2. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Libinia	spp.	spider crab	17	7.6	5	1.7
Arenaeus	cribrarius	speckled crab	17	1.9	5	1.7
Plesionika	ensis	pandalid shrimp	14	0.1	2	0.7
Persephona	punctata	purse crab	12	0.0	4	1.4
Ovalipes	spp.	lady crabs	11	0.1	3	1.0
Calappa	flamma	box crab	11	2.9	5	1.7
Scyllarides	aequinoctialis	shovel-nosed lobster	9	0.1	3	1.0
Raninoides	louisianensis	frog crab	8	0.1	5	1.7
Scyllarus	nearctus	scaled slipper lobster	7	0.1	1	0.3
Pagurus	pollicaris	wary hermit crab	6	0.0	1	0.3
Squilla	neglecta	mantis shrimp	6	0.0	3	1.0
Trachypena	constrictus	roughneck shrimp	5	0.1	2	0.7
Petrochirus	diogenes	hermit crab	5	1.0	3	1.0
Podochela	sidneyi	inachid crab	5	0.0	3	1.0
Dromidia	spp.	dromid crabs	5	0.2	2	0.7
Leiolambrus	nitidus	parthenopid crab	4	0.0	3	1.0
Portunus	spp.	swimming crabs	4	0.0	2	0.7
Persephona	aquilonaris	purse crab	3	0.0	2	0.7
Acetes	americanus	sergistid shrimp	3	0.0	1	0.3
Chasmocarcinus	mississippiensis	goneplacid crab	3	0.0	1	0.3
Porcellana	spp.	porcellanid crabs	3	0.0	1	0.3
Stenorynchus	seticornis	spider crab	3	0.1	1	0.3
Scyllarides	nodifer	ridged slipper lobster	2	1.5	2	0.7
Scyllarides	spp.	Spanish lobsters	2	0.0	1	0.3
Scyllaridae		Spanish lobsters	2	1.4	1	0.3
Parthenopidae		parthenopid crabs	2	0.0	1	0.3

Table 2. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
			CAUGHT	CAUGHT	TOWS WHERE	OF OCCURRENCE
				(KG)	CAUGHT	
Heterocrypta	granulata	parthenopid crab	2	0.0	1	0.3
Caridea		caridean shrimps	2	0.0	1	0.3
Pagurus	longicarpus	hermit crab	2	0.0	2	0.7
Paguridae		hermit crabs	2	0.0	2	0.7
Pagurus	spp.	hermit crabs	1	0.0	1	0.3
Stenopus	scutellatus	stenopid shrimp	1	0.0	1	0.3
Sicyonia	stimpsoni	rock shrimp	1	0.0	1	0.3
Menippe	mercenaria	stone crab	1	0.0	1	0.3
Micropanope	nuttingi	xanthid crab	1	0.0	1	0.3
Raninidae		frog crabs	1	0.0	1	0.3
Porcellana	sayana	porcellanid crab	1	0.0	1	0.3
Lepidopa	websteri	albunid crab	1	0.0	1	0.3
Hepatus	pudibundus	calappid crab	1	0.0	1	0.3
Stenocionops	furcata	decorator crab	1	0.4	1	0.3
Stenocionops	spinosissima	majid crab	1	0.0	1	0.3
<u>Others</u>						
Argopecten	gibbus	calico scallop	9574	41.5	6	2.1
Loligo	pealei	common squid	7677	137.4	160	55.6
Amusium	papyraceum	paper scallop	2634	20.4	29	10.1
Lolliguncula	brevis	brief squid	2231	22.4	103	35.8
Doryteuthis	pleii	arrow squid	1147	27.9	43	14.9
Asteroidea		starfishes	279	2.6	22	7.6
Loligo	plei	arrow squid	266	4.5	1	0.3
Luidia	spp.	sea stars	185	2.1	10	3.5
Anthozoa		anthozoans	170	0.7	3	1.0
Aequipecten	spp.	scallops	113	0.5	1	0.3

Table 2. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Dactylometra	quinquecirrha	compass jellyfish	95	1.3	9	3.1
Scutellidae		sand dollars	89	10.4	10	3.5
Echinoidea		echinoderms	81	6.0	6	2.1
Aurelia	spp.	jellyfishes	69	1.3	9	3.1
Renilla	mulleri	short-stemmed sea pansy	42	0.1	3	1.0
Aplysia	spp.	sea hares	32	0.2	2	0.7
Scyphozoa		scyphozons	30	0.3	3	1.0
Luidia	clathrata	sea star	7	0.1	2	0.7
Ophiuroidea		brittlestars	7	0.1	3	1.0
Thais	haemastoma	oyster drill	5	0.0	1	0.3
Mercenaria	campechiensis	southern quahog	4	0.3	1	0.3
Porifera		sponges	4	1.4	1	0.3
Mellita	quinquesperforata	five-slotted sand dollar	4	0.0	1	0.3
Octopus	spp.	octopuses	3	0.1	1	0.3
Astropecten	spp.	sea stars	3	0.1	2	0.7
Polinices	duplicatus	shark eye	3	0.2	2	0.7
Anadara	baughmani	Baughman's ark	3	0.1	1	0.3
Fusinus	spp.	spindle shells	2	0.0	1	0.3
Myopsida		squids	2	0.0	1	0.3
Mercenaria	spp.	quahogs	2	0.0	1	0.3
Laevicardium	spp.	egg cockles	2	0.0	1	0.3
Octopoda		octopuses	2	0.5	1	0.3
Octopus	vulgaris	common octopus	2	0.6	2	0.7
Metridium	spp.	anemones	1	0.0	1	0.3
Ficus	communis	common fig shell	1	0.2	1	0.3
Busycon	contrarium	lightning whelk	1	1.0	1	0.3
Holothuroidea		sea cucumbers	1	0.0	1	0.3

Table 3
Statistical Zone 5

Summary of the mean of the environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp/Groundfish Survey by depth stratum. Temperature in °C, salinity in ppt and oxygen in ppm. No trawl sampling was done in statistical zone 5. Plankton station only. No plankton samples were collected below 11 fm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	0.0	0.00	0	0.0	0.00	0	31.3	0.00	1	27.7	0.01	2	28.1	0.00	1	27.6	0.00	1
Midwater temperature	0.0	0.00	0	0.0	0.00	0	30.3	0.00	1	25.2	1.28	2	23.7	0.00	1	23.6	0.00	1
Bottom temperature	0.0	0.00	0	0.0	0.00	0	29.3	0.00	1	19.9	0.06	2	19.8	0.00	1	20.7	0.00	1
Surface salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	0.0	0.00	0	0.0	0.00	0	6.4	0.00	1	6.1	0.10	2	5.7	0.00	1	5.9	0.00	1
Midwater oxygen	0.0	0.00	0	0.0	0.00	0	6.0	0.00	1	7.1	0.35	2	6.5	0.00	1	6.7	0.00	1
Bottom oxygen	0.0	0.00	0	0.0	0.00	0	5.6	0.00	1	5.5	0.20	2	6.2	0.00	1	5.6	0.00	1

Table 4
Statistical Zone 6

Summary of the mean of the environmental data (X), the standard error of the mean (SEM) and the number of samples taken (N) during the June-July 1985 SEAMAP Shrimp/Groundfish Survey by depth stratum. Temperature in °C, salinity in ppt and oxygen in ppm. No trawl sampling was done in statistical zone 6. Plankton station only. No plankton samples were collected over 30 fm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	29.8	0.00	1	29.8	0.00	1	28.9	0.44	3	29.1	0.75	2	0.0	0.00	0	0.0	0.00	0
Midwater temperature	29.8	0.00	1	29.0	0.00	1	26.8	0.29	3	23.4	0.32	2	0.0	0.00	0	0.0	0.00	0
Bottom temperature	29.7	0.00	1	27.0	0.00	1	22.1	1.03	3	19.5	0.25	2	0.0	0.00	0	0.0	0.00	0
Surface salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	7.2	0.00	1	0.0	0.00	0	7.1	0.62	3	7.4	1.50	2	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	7.2	0.00	1	0.0	0.00	0	8.2	0.90	3	7.4	0.70	2	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	7.2	0.00	1	0.0	0.00	0	7.7	0.74	3	6.5	0.80	2	0.0	0.00	0	0.0	0.00	0

Table 5
Statistical Zone 7

Summary of the mean of the environmental data (X), the standard error of the mean (SEM) and the number of samples taken (N) during the June-July 1985 SEAMAP Shrimp/Groundfish Survey by depth stratum. Temperature in °C, salinity in ppt and oxygen in ppm. No trawl sampling was done in statistical zone 7. Plankton station only. No plankton samples were collected over 20 fm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	27.9	0.00	1	28.7	0.00	1	27.7	0.25	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	29.6	0.00	1	27.4	0.00	1	25.0	1.07	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	28.6	0.00	1	25.6	0.00	1	21.7	0.99	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	33.2	0.00	1	35.4	0.00	1	35.1	0.37	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	33.9	0.00	1	35.3	0.00	1	35.8	0.12	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	33.3	0.00	1	35.7	0.00	1	36.0	0.43	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.9	0.00	1	0.0	0.00	0	1.1	0.04	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	7.2	0.00	1	7.4	0.00	1	7.5	0.11	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	7.0	0.00	1	7.3	0.00	1	7.9	0.15	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	6.9	0.00	1	8.0	0.00	1	8.2	0.14	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 6
Statistical Zone 8

Summary of the mean of the environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp/Groundfish Survey by depth stratum. Temperature in °C, salinity in ppt and oxygen in ppm. No trawl sampling was done in statistical zone 8. Plankton station only. No plankton samples were collected below 6 fm and between 21 and 30 fm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total																		
catch kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total																		
finfish kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total																		
crustacean kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total																		
others kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface																		
temperature	0.0	0.00	0	25.9	1.70	2	27.7	0.00	1	0.0	0.00	0	27.8	0.00	1	28.2	0.15	2
Midwater																		
temperature	0.0	0.00	0	24.1	0.75	2	21.0	0.00	1	0.0	0.00	0	23.0	0.00	1	20.3	1.25	2
Bottom																		
temperature	0.0	0.00	0	21.4	0.10	2	18.4	0.00	1	0.0	0.00	0	19.5	0.00	1	17.5	0.85	2
Surface																		
salinity	0.0	0.00	0	35.5	0.46	2	34.5	0.00	1	0.0	0.00	0	0.0	0.00	0	33.4	0.47	2
Midwater																		
salinity	0.0	0.00	0	35.8	0.10	2	36.1	0.00	1	0.0	0.00	0	0.0	0.00	0	36.6	0.00	1
Bottom																		
salinity	0.0	0.00	0	36.0	0.04	2	36.3	0.00	1	0.0	0.00	0	36.3	0.00	1	36.2	0.00	1
Surface																		
chlorophyll	0.0	0.00	0	1.1	0.04	2	1.1	0.00	1	0.0	0.00	0	1.2	0.00	1	0.0	0.00	0
Midwater																		
chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom																		
chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface																		
oxygen	0.0	0.00	0	8.8	0.00	1	8.3	0.00	1	0.0	0.00	0	7.4	0.00	1	7.8	0.20	2
Midwater																		
oxygen	0.0	0.00	0	8.9	0.00	1	8.5	0.00	1	0.0	0.00	0	8.2	0.00	1	7.5	0.05	2
Bottom																		
oxygen	0.0	0.00	0	8.9	0.00	1	7.6	0.00	1	0.0	0.00	0	7.4	0.00	1	5.8	0.00	1

Table 7
Statistical Zone 9

Summary of the mean of the environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp/Groundfish Survey by depth stratum. Temperature in °C, salinity in ppt and oxygen in ppm. No trawl sampling was done in statistical zone 9. Plankton station only. No plankton samples were collected below 11 fm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	0.0	0.00	0	0.0	0.00	0	25.5	0.00	1	29.7	0.00	1	27.3	0.05	2	28.1	0.19	4
Midwater temperature	0.0	0.00	0	0.0	0.00	0	20.3	0.00	1	22.8	0.00	1	24.9	1.10	2	19.1	0.27	4
Bottom temperature	0.0	0.00	0	0.0	0.00	0	19.3	0.00	1	19.7	0.00	1	18.2	1.11	2	15.5	0.28	4
Surface salinity	0.0	0.00	0	0.0	0.00	0	35.4	0.00	1	33.3	0.00	1	32.2	0.56	2	33.9	0.77	4
Midwater salinity	0.0	0.00	0	0.0	0.00	0	36.3	0.00	1	36.3	0.00	1	36.3	0.04	2	36.4	0.04	4
Bottom salinity	0.0	0.00	0	0.0	0.00	0	36.3	0.00	1	36.2	0.00	1	36.5	0.04	2	36.1	0.02	4
Surface chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.9	0.00	1	1.1	0.06	2
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	0.0	0.00	0	0.0	0.00	0	8.2	0.00	1	7.8	0.00	1	8.2	0.00	2	8.2	0.26	4
Midwater oxygen	0.0	0.00	0	0.0	0.00	0	8.4	0.00	1	8.4	0.00	1	8.3	0.30	2	7.5	0.25	4
Bottom oxygen	0.0	0.00	0	0.0	0.00	0	7.7	0.00	1	7.4	0.00	1	7.6	0.80	2	7.1	0.26	4

Table 8a
 Statistical Zone 10
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 10 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus spp.	0.0	0.00	0.0	0.00	0	126.1	84.34	0.6	0.31	3	10.8	10.77	0.1	0.07	6
Penaeus aztecus	0.0	0.00	0.0	0.00	0	20.0	20.00	0.6	0.65	3	3.1	3.08	0.1	0.10	6
Callinectes similis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	1.5	1.54	0.1	0.10	6
Portunus spinicarpus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	208.0	110.66	1.1	0.61	6
Sicyonia brevirostris	0.0	0.00	0.0	0.00	0	377.9	167.37	3.4	1.24	3	750.2	286.50	9.2	3.20	6
Squilla spp.	0.0	0.00	0.0	0.00	0	11.1	6.99	0.3	0.22	3	18.3	13.30	0.6	0.47	6
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	0.9	0.91	0.1	0.10	6
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	3549.5	1145.17	21.8	7.29	3	996.4	553.53	7.7	3.64	6
Prionotus rubio	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	3.1	3.08	0.1	0.14	6
Trichiurus lepturus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	1.5	1.54	0.1	0.07	6
Centropristis philadelphica	0.0	0.00	0.0	0.00	0	5.7	5.71	0.2	0.19	3	33.7	17.77	1.3	0.82	6
Stellifer lanceolatus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	6
Peprilus burtti	0.0	0.00	0.0	0.00	0	1.5	1.54	0.1	0.07	3	0.9	0.91	0.0	0.00	6
Upeneus parvus	0.0	0.00	0.0	0.00	0	23.8	11.50	0.3	0.18	3	74.1	74.09	1.0	1.01	6
Squid	0.0	0.00	0.0	0.00	0	565.3	171.39	5.9	2.18	3	214.7	74.50	5.3	2.00	6

Table 8b
 Statistical Zone 10
 40-ft trawls

Summary of dominant organisms taken within statistical zone 10 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Sicyonia															
<i>brevirostris</i>	0.0	0.00	0.0	0.00	0	377.9	167.37	3.4	1.24	3	750.2	286.50	9.2	3.20	6
Portunus															
<i>spinicarpus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	208.0	110.66	1.1	0.61	6
Penaeus															
<i>duorarum</i>	0.0	0.00	0.0	0.00	0	61.4	43.64	2.2	1.62	3	72.5	56.00	2.5	1.72	6
Trachypenaeus															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	126.1	84.34	0.6	0.31	3	10.8	10.77	0.1	0.07	6
Solenocera															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	21.3	21.33	0.1	0.06	3	65.3	47.91	0.1	0.11	6
Squilla															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	11.1	6.99	0.3	0.22	3	18.3	13.30	0.6	0.47	6
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	0	3549.5	1145.17	21.8	7.29	3	996.4	553.53	7.7	3.64	6
Syacium															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	54.5	2.77	2.2	0.79	3	206.9	106.92	6.1	3.19	6
Prionotus															
<i>scitulus</i>	0.0	0.00	0.0	0.00	0	132.2	90.20	1.3	0.79	3	49.7	47.37	0.6	0.55	6
Syacium															
<i>papillosum</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	123.3	93.89	7.2	4.92	6
Upeneus															
<i>parvus</i>	0.0	0.00	0.0	0.00	0	23.8	11.50	0.3	0.18	3	74.1	74.09	1.0	1.01	6
Etropus															
<i>crossotus</i>	0.0	0.00	0.0	0.00	0	126.0	56.11	1.4	0.41	3	64.7	50.09	1.1	0.58	6
Sphoeroides															
<i>parvus</i>	0.0	0.00	0.0	0.00	0	100.9	51.69	1.0	0.51	3	58.8	20.03	0.8	0.25	6
Diplectrum															
<i>bivittatum</i>	0.0	0.00	0.0	0.00	0	44.1	8.25	1.8	0.57	3	61.0	37.81	3.3	2.04	6
Squid															
	0.0	0.00	0.0	0.00	0	565.3	171.39	5.9	2.18	3	214.7	74.50	5.3	2.00	6

Table 8c
 Statistical Zone 10
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm. No samples were taken below 6 fm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm*			31-40 fm*			Over 40 fm*		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	64.6	17.89	3	96.2	24.96	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	0.0	0.00	0	37.4	5.23	3	50.7	10.76	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	0.0	0.00	0	7.6	2.64	3	15.3	5.42	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	0.0	0.00	0	20.3	15.30	3	30.4	19.76	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	0.0	0.00	0	28.0	0.39	4	28.1	0.46	6	27.9	0.65	2	28.6	0.58	2	27.8	0.61	3
Midwater temperature	0.0	0.00	0	25.3	1.13	4	23.3	0.81	6	23.0	0.00	2	23.6	1.88	2	20.5	1.80	3
Bottom temperature	0.0	0.00	0	21.0	0.59	4	21.6	0.16	6	20.8	0.75	2	19.8	0.49	2	16.6	1.64	3
Surface salinity	0.0	0.00	0	31.8	0.63	4	32.3	0.92	6	34.0	0.00	1	31.7	2.67	3	32.2	3.23	3
Midwater salinity	0.0	0.00	0	35.3	0.70	4	36.2	0.47	6	36.1	0.00	1	36.5	0.11	3	36.6	0.19	3
Bottom salinity	0.0	0.00	0	36.6	0.13	4	36.5	0.07	6	36.2	0.00	1	36.4	0.08	3	36.2	0.15	3
Surface chlorophyll	0.0	0.00	0	0.7	0.06	4	0.7	0.12	6	0.9	0.14	2	0.5	0.06	3	1.4	0.43	2
Midwater chlorophyll	0.0	0.00	0	0.7	0.16	4	0.7	0.38	2	0.2	0.06	2	0.4	0.14	3	0.5	0.00	1
Bottom chlorophyll	0.0	0.00	0	4.2	1.54	4	1.0	0.45	5	0.2	0.00	1	0.3	0.07	3	0.1	0.00	1
Surface oxygen	0.0	0.00	0	7.0	0.31	4	7.3	0.15	6	7.5	0.30	2	7.1	0.45	3	7.9	0.47	3
Midwater oxygen	0.0	0.00	0	7.3	0.28	4	7.2	0.18	6	7.5	0.45	2	6.6	0.30	2	7.2	0.61	3
Bottom oxygen	0.0	0.00	0	6.0	0.48	4	6.0	0.25	6	6.3	0.20	2	5.4	0.64	3	6.6	1.02	3

*Plankton and environmental stations only.

Table 9a
 Statistical Zone 11
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 11 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	97.5	44.45	0.4	0.21	11	346.6	148.03	1.1	0.40	11	930.3	153.96	4.6	0.83	23
Penaeus															
aztecus	86.5	44.60	1.2	0.49	11	61.5	26.25	1.0	0.37	11	66.1	19.27	1.5	0.48	23
Callinectes															
similis	59.9	26.07	1.0	0.56	11	48.2	18.97	0.7	0.44	11	194.3	71.87	2.4	0.76	23
Portunus															
spincarpus	15.6	11.79	0.1	0.11	11	18.0	13.04	0.0	0.03	11	270.7	146.90	1.6	0.92	23
Sicyonia															
brevirostris	0.0	0.00	0.0	0.00	11	71.7	45.68	0.7	0.48	11	146.1	59.04	1.3	0.43	23
Squilla															
spp.	164.9	91.35	1.3	0.71	11	38.1	18.23	0.5	0.29	11	145.7	35.12	1.4	0.25	23
Micropogonias															
undulatus	22.1	9.13	1.0	0.36	11	0.7	0.65	0.0	0.05	11	96.1	83.74	5.1	4.32	23
Stenotomus															
caprinus	20.3	6.88	0.2	0.06	11	553.7	290.73	5.1	3.11	11	928.2	229.07	10.8	3.20	23
Prionotus															
rubio	86.0	35.44	0.7	0.40	11	54.9	17.06	0.5	0.18	11	279.4	100.26	2.8	0.79	23
Trichiurus															
lepturus	2.1	1.81	0.0	0.00	11	1.2	1.21	0.2	0.19	11	6.7	3.08	0.3	0.19	23
Centropristis															
philadelphica	8.8	5.39	0.1	0.10	11	32.9	13.59	0.4	0.17	11	211.9	59.90	2.6	0.64	23
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	11	0.0	0.00	0.0	0.00	11	0.0	0.00	0.0	0.00	23
Peprilus															
burti	19.0	10.61	0.3	0.13	11	70.2	66.23	1.0	0.89	11	27.6	20.78	1.1	0.89	23
Upeneus															
parvus	0.0	0.00	0.0	0.00	11	0.9	0.62	0.0	0.02	11	1.5	0.98	0.1	0.03	23
Squid	84.0	23.55	1.1	0.43	11	204.1	82.84	2.8	1.24	11	293.9	68.86	5.2	1.32	23

Table 9a (cont'd.)
 Statistical Zone 11
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 11 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus spp.	790.8	249.75	4.0	1.15	11	137.0	102.47	0.8	0.62	3	8.6	8.57	0.1	0.06	2
Penaeus aztecus	69.8	19.28	1.8	0.51	11	50.1	4.30	2.1	0.11	3	17.3	14.14	1.2	1.03	2
Callinectes similis	124.7	57.18	1.8	0.84	11	0.0	0.00	0.0	0.00	3	55.7	55.71	1.2	1.23	2
Portunus spinicarpus	1260.3	548.93	3.9	1.37	11	664.3	262.47	2.7	0.20	3	2016.3	1943.68	18.4	17.56	2
Sicyonia brevirostris	137.7	51.08	1.9	0.88	11	505.7	227.47	5.9	2.34	3	64.8	23.76	1.1	0.05	2
Squilla spp.	165.7	46.52	1.5	0.46	11	10.7	6.52	0.1	0.08	3	8.6	8.57	0.1	0.13	2
Micropogonias undulatus	135.2	133.91	8.3	8.21	11	7.6	1.97	0.6	0.23	3	2441.1	2441.05	173.6	173.61	2
Stenotomus caprinus	336.6	238.95	15.9	12.45	11	39.9	7.24	1.6	0.45	3	1166.6	532.33	64.2	28.23	2
Prionotus rubio	61.4	15.38	2.3	0.64	11	23.8	6.22	1.1	0.26	3	13.8	5.19	1.2	0.33	2
Trichiurus lepturus	7.8	5.10	0.4	0.23	11	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Centropristis philadelphica	339.9	164.39	5.5	2.28	11	138.2	75.01	4.9	2.22	3	87.1	87.14	2.3	2.27	2
Stellifer lanceolatus	0.0	0.00	0.0	0.00	11	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Peprilus burtti	2.9	1.80	0.3	0.20	11	0.0	0.00	0.0	0.00	3	21.7	13.08	1.9	0.57	2
Upeneus parvus	1.2	1.17	0.0	0.04	11	0.0	0.00	0.0	0.00	3	15.7	15.71	1.8	1.82	2
Squid	137.3	37.51	3.2	0.78	11	16.9	6.58	0.5	0.20	3	0.0	0.00	0.0	0.00	2

Table 9b
 Statistical Zone 11
 40-ft trawls

Summary of dominant organisms taken within statistical zone 11 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus															
<i>spincarpus</i>	15.6	11.79	0.1	0.11	11	18.0	13.04	0.0	0.03	11	270.7	146.90	1.6	0.92	23
Trachypenaeus															
<i>spp.</i>	97.5	44.45	0.4	0.21	11	346.6	148.03	1.1	0.40	11	930.3	153.96	4.6	0.83	23
Sicyonia															
<i>brevirostris</i>	0.0	0.00	0.0	0.00	11	71.7	45.68	0.7	0.48	11	146.1	59.04	1.3	0.43	23
Squilla															
<i>spp.</i>	164.9	91.35	1.3	0.71	11	38.1	18.23	0.5	0.29	11	145.7	35.12	1.4	0.25	23
Callinectes															
<i>similis</i>	59.9	26.07	1.0	0.56	11	48.2	18.97	0.7	0.44	11	194.3	71.87	2.4	0.76	23
Solenocera															
<i>spp.</i>	0.8	0.82	0.0	0.00	11	0.9	0.91	0.0	0.00	11	101.2	37.02	0.4	0.17	23
Stenotomus															
<i>caprinus</i>	20.3	6.88	0.2	0.06	11	553.7	290.73	5.1	3.11	11	928.2	229.07	10.8	3.20	23
Centropristis															
<i>philadelphica</i>	8.8	5.39	0.1	0.10	11	32.9	13.59	0.4	0.17	11	211.9	59.90	2.6	0.64	23
Micropogonias															
<i>undulatus</i>	22.1	9.13	1.0	0.36	11	0.7	0.65	0.0	0.05	11	96.1	83.74	5.1	4.32	23
Prionotus															
<i>rubio</i>	86.0	35.44	0.7	0.40	11	54.9	17.06	0.5	0.18	11	279.4	100.26	2.8	0.79	23
Haliutichthys															
<i>aculeatus</i>	0.0	0.00	0.0	0.00	11	10.6	8.79	0.1	0.06	11	21.9	11.73	0.2	0.11	23
Serranus															
<i>atrobranchus</i>	0.5	0.31	0.0	0.00	11	0.3	0.30	0.0	0.00	11	37.4	14.25	0.5	0.13	23
Peprilus															
<i>burti</i>	19.0	10.61	0.3	0.13	11	70.2	66.23	1.0	0.89	11	27.6	20.78	1.1	0.89	23
Sphoeroides															
<i>parvus</i>	17.1	6.84	0.1	0.05	11	17.5	9.62	0.1	0.06	11	34.8	11.60	0.3	0.11	23
Squid															
	84.0	23.55	1.1	0.43	11	204.1	82.84	2.8	1.24	11	293.9	68.86	5.2	1.32	23

Table 9b (cont'd.)
 Statistical Zone 11
 40-ft trawls

Summary of dominant organisms taken within statistical zone 11 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus															
<i>spincarpus</i>	1260.3	548.93	3.9	1.37	11	664.3	262.47	2.7	0.20	3	2016.3	1943.68	18.4	17.56	2
Trachypenaeus															
<i>spp.</i>	790.8	249.75	4.0	1.15	11	137.0	102.47	0.8	0.62	3	8.6	8.57	0.1	0.06	2
Sicyonia															
<i>brevirostris</i>	137.7	51.08	1.9	0.88	11	505.7	227.47	5.9	2.34	3	64.8	23.76	1.1	0.05	2
Squilla															
<i>spp.</i>	165.7	46.52	1.5	0.46	11	10.7	6.52	0.1	0.08	3	8.6	8.57	0.1	0.13	2
Callinectes															
<i>similis</i>	124.7	57.18	1.8	0.84	11	0.0	0.00	0.0	0.00	3	55.7	55.71	1.2	1.23	2
Solenocera															
<i>spp.</i>	218.9	77.80	1.0	0.39	11	31.6	18.41	0.1	0.06	3	4.3	4.29	0.1	0.06	2
Stenotomus															
<i>caprinus</i>	336.6	238.95	15.9	12.45	11	39.9	7.24	1.6	0.45	3	1166.6	532.33	64.2	28.23	2
Centropristis															
<i>philadelphica</i>	339.9	164.39	5.5	2.28	11	138.2	75.01	4.9	2.22	3	87.1	87.14	2.3	2.27	2
Micropogonias															
<i>undulatus</i>	135.2	133.91	8.3	8.21	11	7.6	1.97	0.6	0.23	3	2441.1	2441.05	173.6	173.61	2
Prionotus															
<i>rubio</i>	61.4	15.38	2.3	0.64	11	23.8	6.22	1.1	0.26	3	13.8	5.19	1.2	0.33	2
Haliieutichthys															
<i>aculeatus</i>	14.6	12.60	0.1	0.10	11	57.7	16.74	0.4	0.20	3	611.1	377.44	6.1	2.83	2
Serranus															
<i>atrobranchus</i>	86.8	24.06	1.2	0.29	11	49.7	13.28	0.5	0.23	3	31.4	31.43	0.7	0.71	2
Peprilus															
<i>burti</i>	2.9	1.80	0.3	0.20	11	0.0	0.00	0.0	0.00	3	21.7	13.08	1.9	0.57	2
Sphoeroides															
<i>parvus</i>	14.2	10.90	0.2	0.15	11	20.7	1.29	0.2	0.03	3	0.0	0.00	0.0	0.00	2
Squid															
	137.3	37.51	3.2	0.78	11	16.9	6.58	0.5	0.20	3	0.0	0.00	0.0	0.00	2

Table 9c
 Statistical Zone 11
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	34.8	6.43	11	20.8	7.39	11	69.9	9.52	23	79.6	24.35	11	38.5	4.90	3	296.7	179.84	2
Total finfish kg	22.8	5.29	11	11.2	5.08	11	47.1	8.28	23	55.7	22.88	11	21.4	2.14	3	273.1	199.11	2
Total crustacean kg	9.9	3.31	11	6.4	2.13	11	16.6	2.61	23	18.8	2.72	11	13.7	3.80	3	22.9	19.99	2
Total others kg	2.1	0.48	11	3.6	1.17	11	6.3	1.55	23	5.3	1.54	11	3.4	0.92	3	0.7	0.72	2
Surface temperature	26.4	0.66	9	26.0	0.51	14	26.3	0.44	19	28.0	0.60	10	27.8	0.80	5	28.1	0.98	3
Midwater temperature	25.4	0.89	9	23.8	0.60	14	22.6	0.50	19	23.3	0.43	10	21.6	0.99	5	20.9	0.63	3
Bottom temperature	24.2	0.79	9	22.0	0.39	14	21.1	0.21	19	21.3	0.38	10	20.4	1.04	5	18.0	1.61	3
Surface salinity	29.8	1.44	9	30.5	1.04	14	29.9	1.16	18	27.9	0.98	10	26.1	2.02	5	28.9	1.41	3
Midwater salinity	32.4	0.92	9	33.4	0.56	14	35.0	0.31	18	36.3	0.30	10	36.3	0.34	5	36.9	0.28	3
Bottom salinity	33.9	0.67	9	35.8	0.16	14	36.2	0.10	18	36.4	0.19	10	36.7	0.09	5	36.6	0.35	3
Surface chlorophyll	1.5	0.36	6	4.0	1.76	13	2.5	0.77	13	1.2	0.39	9	2.5	1.40	2	2.3	1.59	3
Midwater chlorophyll	1.6	0.35	6	1.4	0.38	12	1.3	0.39	12	0.5	0.10	5	0.3	0.08	5	0.5	0.00	1
Bottom chlorophyll	3.5	0.52	9	3.7	0.41	13	2.7	0.57	17	2.2	0.61	10	1.1	0.76	5	0.6	0.35	3
Surface oxygen	7.5	0.72	9	7.3	0.51	14	7.0	0.33	18	6.9	0.24	10	7.9	0.82	4	8.7	0.61	3
Midwater oxygen	6.7	0.18	9	6.4	0.25	14	6.3	0.19	19	6.6	0.26	10	6.2	0.31	5	7.7	1.26	3
Bottom oxygen	6.1	0.20	9	5.7	0.33	14	5.2	0.25	19	5.1	0.29	10	5.2	0.38	5	5.7	0.55	3

Table 10a
 Statistical Zone 13
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 13 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 40 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
<i>spp.</i>	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	2470.0	1722.76	13.7	9.53	7
Penaeus															
<i>aztecus</i>	0.0	0.00	0.0	0.00	2	15.0	15.00	0.1	0.14	2	67.3	27.00	1.1	0.44	7
Callinectes															
<i>similis</i>	4.0	4.00	0.0	0.00	2	105.0	105.00	2.5	2.45	2	1085.4	643.05	24.3	15.43	7
Portunus															
<i>spincarpus</i>	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.6	0.57	0.0	0.00	7
Sicyonia															
<i>brevirostris</i>	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	1.2	1.22	0.0	0.00	7
Squilla															
<i>spp.</i>	0.0	0.00	0.0	0.00	2	672.0	618.00	6.7	6.41	2	713.7	329.14	8.5	4.23	7
Micropogonias															
<i>undulatus</i>	0.0	0.00	0.0	0.00	2	996.0	996.00	64.6	64.64	2	65.2	43.13	4.4	2.85	7
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	2	9.0	9.00	0.1	0.14	2	0.0	0.00	0.0	0.00	7
Prionotus															
<i>rubio</i>	0.0	0.00	0.0	0.00	2	297.0	297.00	1.9	1.91	2	925.7	395.25	13.9	5.07	7
Trichiurus															
<i>lepturus</i>	0.0	0.00	0.0	0.00	2	450.0	450.00	21.0	21.00	2	3583.2	3311.07	25.0	21.31	7
Centropristis															
<i>philadelphica</i>	0.0	0.00	0.0	0.00	2	39.0	39.00	0.3	0.27	2	78.9	52.86	1.5	1.03	7
Stellifer															
<i>lanceolatus</i>	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	7
Peprilus															
<i>burti</i>	0.0	0.00	0.0	0.00	2	3.0	3.00	0.1	0.14	2	14.7	9.89	0.8	0.47	7
Upeneus															
<i>parvus</i>	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	7
Squid															
	0.0	0.00	0.0	0.00	2	30.0	30.00	0.3	0.27	2	63.2	33.19	1.1	0.65	7

Table 10a (cont'd.)
 Statistical Zone 13
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 13 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 40 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
<i>spp.</i>	3432.0	780.00	22.4	7.59	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Penaeus															
<i>aztecus</i>	76.0	62.00	1.2	0.95	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Callinectes															
<i>similis</i>	1518.0	312.00	44.0	1.23	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Portunus															
<i>spinicarpus</i>	0.0	0.00	0.0	0.00	2	2760.0	0.00	22.4	0.00	1	0.0	0.00	0.0	0.00	0
Sicyonia															
<i>brevis</i>	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Squilla															
<i>spp.</i>	1328.0	76.00	13.8	1.00	2	25.7	0.00	0.4	0.00	1	0.0	0.00	0.0	0.00	0
Micropogonias															
<i>undulatus</i>	103.0	95.00	12.2	11.50	2	8.6	0.00	1.6	0.00	1	0.0	0.00	0.0	0.00	0
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Prionotus															
<i>rubio</i>	1181.0	1027.00	19.7	16.86	2	158.6	0.00	4.5	0.00	1	0.0	0.00	0.0	0.00	0
Trichiurus															
<i>lepturus</i>	11546.0	11530.00	151.4	150.50	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Centropristis															
<i>philadelphica</i>	233.0	35.00	6.4	2.86	2	248.6	0.00	26.3	0.00	1	0.0	0.00	0.0	0.00	0
Stellifer															
<i>lanceolatus</i>	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Peprilus															
<i>burti</i>	99.0	99.00	3.1	3.14	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Upeneus															
<i>parvus</i>	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Squid															
	649.0	551.00	7.5	6.18	2	77.1	0.00	1.6	0.00	1	0.0	0.00	0.0	0.00	0

Table 10b
 Statistical Zone 13
 40-ft trawls

Summary of dominant organisms taken within statistical zone 13 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 40 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus spp.	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	2470.0	1722.76	13.7	9.53	7
Callinectes similis	4.0	4.00	0.0	0.00	2	105.0	105.00	2.5	2.45	2	1085.4	643.05	24.3	15.43	7
Squilla spp.	0.0	0.00	0.0	0.00	2	672.0	618.00	6.7	6.41	2	713.7	329.14	8.5	4.23	7
Sicyonia dorsalis	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	207.8	127.91	0.8	0.44	7
Portunus spinicarpus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.6	0.57	0.0	0.00	7
Solenocera spp.	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	1.2	1.22	0.0	0.00	7
Trichiurus lepturus	0.0	0.00	0.0	0.00	2	450.0	450.00	21.0	21.00	2	3583.2	3311.07	25.0	21.31	7
Prionotus rubio	0.0	0.00	0.0	0.00	2	297.0	297.00	1.9	1.91	2	925.7	395.25	13.9	5.07	7
Cynoscion arenarius	1.0	1.00	0.1	0.09	2	48.0	48.00	3.4	3.41	2	127.0	117.95	5.0	3.86	7
Micropogonias undulatus	0.0	0.00	0.0	0.00	2	996.0	996.00	64.6	64.64	2	65.2	43.13	4.4	2.85	7
Centropristis philadelphica	0.0	0.00	0.0	0.00	2	39.0	39.00	0.3	0.27	2	78.9	52.86	1.5	1.03	7
Bollmannia communis	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	106.1	68.79	0.5	0.30	7
Chloroscombrus chrysurus	1.0	1.00	0.0	0.05	2	87.0	87.00	4.4	4.36	2	183.1	149.86	13.0	10.78	7
Antennarius radiusus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	6.4	4.33	0.1	0.03	7
Squid	0.0	0.00	0.0	0.00	2	30.0	30.00	0.3	0.27	2	63.2	33.19	1.1	0.65	7

Table 10b (cont'd.)
 Statistical Zone 13
 40-ft trawls

Summary of dominant organisms taken within statistical zone 13 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 40 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
<i>spp.</i>	3432.0	780.00	22.4	7.59	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Callinectes															
<i>similis</i>	1518.0	312.00	44.0	1.23	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Squilla															
<i>spp.</i>	1328.0	76.00	13.8	1.00	2	25.7	0.00	0.4	0.00	1	0.0	0.00	0.0	0.00	0
Sicyonia															
<i>dorsalis</i>	585.0	15.00	2.3	0.45	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Portunus															
<i>spincarpus</i>	0.0	0.00	0.0	0.00	2	2760.0	0.00	22.4	0.00	1	0.0	0.00	0.0	0.00	0
Solenocera															
<i>spp.</i>	69.0	69.00	0.2	0.18	2	1367.1	0.00	5.6	0.00	1	0.0	0.00	0.0	0.00	0
Trichiurus															
<i>lepturus</i>	11546.0	11530.00	151.4	150.50	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Prionotus															
<i>rubio</i>	1181.0	1027.00	19.7	16.86	2	158.6	0.00	4.5	0.00	1	0.0	0.00	0.0	0.00	0
Cynoscion															
<i>arenarius</i>	2315.0	2299.00	183.4	178.77	2	4.3	0.00	1.8	0.00	1	0.0	0.00	0.0	0.00	0
Micropogonias															
<i>undulatus</i>	103.0	95.00	12.2	11.50	2	8.6	0.00	1.6	0.00	1	0.0	0.00	0.0	0.00	0
Centropristis															
<i>philadelphica</i>	233.0	35.00	6.4	2.86	2	248.6	0.00	26.3	0.00	1	0.0	0.00	0.0	0.00	0
Bollmannia															
<i>communis</i>	176.0	22.00	1.8	0.91	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Chloroscombrus															
<i>chrysurus</i>	99.0	99.00	6.0	6.00	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Antennarius															
<i>radiosus</i>	224.0	224.00	1.9	1.86	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Squid															
	649.0	551.00	7.5	6.18	2	77.1	0.00	1.6	0.00	1	0.0	0.00	0.0	0.00	0

Table 10c
 Statistical Zone 13
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm*		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	26.0	21.29	2	350.5	132.27	2	133.5	55.47	7	617.7	489.55	2	138.3	0.00	1	0.0	0.00	0
Total finfish kg	26.0	21.29	2	298.6	88.64	2	81.4	35.01	7	504.1	458.64	2	107.1	0.00	1	0.0	0.00	0
Total crustacean kg	0.0	0.00	2	51.8	43.64	2	50.9	23.94	7	105.9	25.00	2	29.2	0.00	1	0.0	0.00	0
Total others kg	0.0	0.00	2	0.0	0.00	2	1.9	0.75	7	7.7	5.91	2	1.9	0.00	1	0.0	0.00	0
Surface temperature	28.4	0.30	2	29.0	0.00	2	28.0	0.33	7	28.4	0.75	2	0.0	0.00	0	27.3	0.00	1
Midwater temperature	27.3	0.83	2	28.7	0.27	2	25.9	0.90	7	24.5	2.49	2	0.0	0.00	0	18.9	0.00	1
Bottom temperature	26.2	0.29	2	26.5	0.07	2	22.8	0.69	7	22.4	2.30	2	0.0	0.00	0	15.9	0.00	1
Surface salinity	29.2	1.36	2	29.2	0.20	2	27.3	0.97	7	28.1	0.62	2	0.0	0.00	0	33.3	0.00	1
Midwater salinity	32.0	1.45	2	29.7	0.62	2	33.7	1.20	7	36.1	0.35	2	0.0	0.00	0	36.6	0.00	1
Bottom salinity	33.7	0.35	2	35.6	0.06	2	36.0	0.14	7	36.2	0.23	2	0.0	0.00	0	36.2	0.00	1
Surface chlorophyll	7.3	0.88	2	0.9	0.07	2	3.2	1.03	7	1.5	0.85	2	0.0	0.00	0	1.1	0.00	1
Midwater chlorophyll	5.0	1.01	2	0.8	0.17	2	0.4	0.05	3	0.4	0.00	1	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	3.5	0.77	2	0.7	0.00	2	1.0	0.17	7	0.5	0.17	2	0.0	0.00	0	0.1	0.00	1
Surface oxygen	4.9	0.20	2	6.5	0.15	2	6.8	0.11	7	7.4	0.00	2	0.0	0.00	0	6.3	0.00	1
Midwater oxygen	3.3	0.40	2	5.3	0.55	2	4.4	0.79	7	4.3	2.25	2	0.0	0.00	0	4.6	0.00	1
Bottom oxygen	1.6	0.55	2	4.8	0.00	2	2.6	0.67	7	3.7	1.35	2	0.0	0.00	0	4.4	0.00	1

*Plankton and environmental stations only.

Table 11a
 Statistical Zone 14
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 14 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	7.0	6.97	0.0	0.01	9	1.1	0.89	0.0	0.00	9	1390.4	391.94	6.1	1.68	18
Penaeus															
aztecus	151.2	89.86	1.2	0.64	9	0.3	0.30	0.0	0.00	9	143.4	60.67	1.9	0.75	18
Callinectes															
similis	182.4	104.81	1.6	0.84	9	1.2	0.77	0.1	0.10	9	1145.0	370.31	16.6	6.20	18
Portunus															
spinicarpus	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	18
Sicyonia															
brevirostris	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	9	3.1	2.63	0.0	0.03	18
Squilla															
spp.	5.9	3.50	0.1	0.05	9	5.5	4.83	0.0	0.02	9	264.4	124.12	1.5	0.53	18
Micropogonias															
undulatus	536.9	397.66	9.9	5.69	9	0.3	0.30	0.0	0.01	9	1317.0	1069.00	50.7	48.72	18
Stenotomus															
caprinus	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	9	293.7	72.65	2.4	0.69	18
Prionotus															
rubio	37.9	24.26	0.3	0.18	9	14.4	11.55	0.1	0.08	9	1509.2	640.66	14.7	5.83	18
Trichiurus															
lepturus	28.0	21.07	1.5	1.16	9	0.0	0.00	0.0	0.00	9	110.1	74.85	3.8	3.28	18
Centropristis															
philadelphica	0.2	0.22	0.0	0.00	9	0.0	0.00	0.0	0.00	9	166.6	116.88	1.1	0.69	18
Stellifer															
lanceolatus	31.2	24.99	0.5	0.34	9	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	18
Peprilus															
burti	36.0	35.05	1.4	1.39	9	0.3	0.30	0.0	0.01	9	243.2	161.00	10.3	9.14	18
Upeneus															
parvus	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	9	1.2	1.01	0.0	0.00	18
Squid	17.7	12.68	1.2	1.15	9	0.3	0.30	0.0	0.00	9	246.3	103.17	2.6	1.06	18

Table 11b
 Statistical Zone 14
 40-ft trawls

Summary of dominant organisms taken within statistical zone 14 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	182.4	104.81	1.6	0.84	9	1.2	0.77	0.1	0.10	9	1145.0	370.31	16.6	6.20	18
Trachypenaeus															
<i>spp.</i>	7.0	6.97	0.0	0.01	9	1.1	0.89	0.0	0.00	9	1390.4	391.94	6.1	1.68	18
Penaeus															
<i>aztecus</i>	151.2	89.86	1.2	0.64	9	0.3	0.30	0.0	0.00	9	143.4	60.67	1.9	0.75	18
Squilla															
<i>spp.</i>	5.9	3.50	0.1	0.05	9	5.5	4.83	0.0	0.02	9	264.4	124.12	1.5	0.53	18
Portunus															
<i>gibbesii</i>	3.5	2.54	0.0	0.01	9	1.3	1.33	0.0	0.01	9	108.2	30.55	0.8	0.34	18
Sicyonia															
<i>dorsalis</i>	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	9	36.4	11.75	0.1	0.06	18
Micropogonias															
<i>undulatus</i>	536.9	397.66	9.9	5.69	9	0.3	0.30	0.0	0.01	9	1317.0	1069.00	50.7	48.72	18
Prionotus															
<i>rubio</i>	37.9	24.26	0.3	0.18	9	14.4	11.55	0.1	0.08	9	1509.2	640.66	14.7	5.83	18
Peprilus															
<i>burti</i>	36.0	35.05	1.4	1.39	9	0.3	0.30	0.0	0.01	9	243.2	161.00	10.3	9.14	18
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	9	293.7	72.65	2.4	0.69	18
Etropus															
<i>crossotus</i>	14.4	13.89	0.6	0.58	9	1.2	0.84	0.0	0.01	9	305.3	81.13	4.8	1.38	18
Trichiurus															
<i>lepturus</i>	28.0	21.07	1.5	1.16	9	0.0	0.00	0.0	0.00	9	110.1	74.85	3.8	3.28	18
Chloroscombrus															
<i>chrysurus</i>	152.4	121.79	9.0	7.70	9	0.3	0.30	0.0	0.01	9	36.2	28.13	2.3	1.87	18
Centropristis															
<i>philadelphica</i>	0.2	0.22	0.0	0.00	9	0.0	0.00	0.0	0.00	9	166.6	116.88	1.1	0.69	18
Squid															
	17.7	12.68	1.2	1.15	9	0.3	0.30	0.0	0.00	9	246.3	103.17	2.6	1.06	18

Table 11c
 Statistical Zone 14
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

	0-5 fm			6-10 fm			11-20 fm			21-30 fm*			31-40 fm*			Over 40 fm*		
Environmental category	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total																		
catch kg	43.1	17.47	9	21.8	15.07	9	140.7	66.46	18	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total																		
finfish kg	36.2	15.36	9	21.4	15.14	9	105.8	67.69	18	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total																		
crustacean kg	5.4	2.03	9	0.5	0.29	9	31.9	7.76	18	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total																		
others kg	1.5	1.37	9	0.1	0.14	9	3.2	1.05	18	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface																		
temperature	28.1	0.27	10	28.4	0.47	9	28.0	0.23	18	27.1	0.00	1	0.0	0.00	0	27.3	0.00	1
Midwater																		
temperature	27.8	0.54	5	27.4	0.35	5	27.0	0.30	11	0.0	0.00	0	0.0	0.00	0	18.6	0.00	1
Bottom																		
temperature	25.9	0.64	5	23.7	0.38	5	22.0	0.25	11	0.0	0.00	0	0.0	0.00	0	15.0	0.00	1
Surface																		
salinity	27.6	0.66	8	25.5	0.77	7	26.4	0.76	14	25.1	0.00	1	0.0	0.00	0	33.1	1.75	2
Midwater																		
salinity	29.5	1.69	5	31.3	0.84	5	31.8	0.82	10	0.0	0.00	0	0.0	0.00	0	36.2	0.15	2
Bottom																		
salinity	33.4	0.73	5	35.4	0.13	5	35.6	0.44	10	0.0	0.00	0	0.0	0.00	0	36.2	0.18	2
Surface																		
chlorophyll	7.8	1.48	10	3.4	1.11	9	2.1	0.68	18	0.2	0.00	1	0.0	0.00	0	0.7	0.17	2
Midwater																		
chlorophyll	3.6	0.78	4	1.0	0.32	4	0.4	0.02	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom																		
chlorophyll	4.8	1.62	5	4.3	1.38	5	0.7	0.13	10	0.0	0.00	0	0.0	0.00	0	0.1	0.05	2
Surface																		
oxygen	6.2	0.49	10	5.4	0.77	9	6.3	0.37	18	6.7	0.00	1	0.0	0.00	0	6.4	0.00	2
Midwater																		
oxygen	3.9	0.95	5	3.0	1.03	5	4.8	0.70	11	0.0	0.00	0	0.0	0.00	0	5.6	0.40	2
Bottom																		
oxygen	1.7	0.76	5	0.2	0.07	5	2.0	0.49	11	0.0	0.00	0	0.0	0.00	0	5.0	0.00	2

*Plankton and environmental stations only.

Table 12a
 Statistical Zone 15
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 15 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus spp.	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	5.3	4.37	0.0	0.03	3
Penaeus aztecus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	7.3	7.33	0.1	0.09	3
Callinectes similis	0.0	0.00	0.0	0.00	0	2.5	1.02	0.1	0.04	5	27.4	20.35	0.2	0.11	3
Portunus spincarpus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Sicyonia brevirostris	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Squilla spp.	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	9.1	6.38	0.1	0.06	3
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	5.3	5.33	0.2	0.15	3
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	1.3	1.33	0.0	0.03	3
Prionotus rubio	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	104.7	103.67	1.2	1.15	3
Trichiurus lepturus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	1.3	1.33	0.0	0.03	3
Centropristis philadelphica	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	14.7	14.67	0.1	0.09	3
Stellifer lanceolatus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Peprilus burti	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	30.0	30.00	0.1	0.12	3
Upeneus parvus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Squid	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	315.1	304.49	3.4	3.09	3

Table 12a (cont'd.)
 Statistical Zone 15
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 15 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	1338.0	1254.00	8.8	8.05	2	22.9	13.90	0.2	0.16	3	0.0	0.00	0.0	0.00	2
Penaeus															
aztecus	226.0	4.00	6.2	2.09	2	97.1	39.14	4.1	1.39	3	56.1	26.11	3.0	1.77	2
Callinectes															
similis	1249.0	793.00	33.5	24.45	2	165.0	88.33	3.3	1.73	3	3.3	3.33	0.2	0.15	2
Portunus															
spinicarpus	118.0	92.00	0.8	0.23	2	1099.3	482.05	9.4	2.02	3	376.1	240.56	3.4	1.94	2
Sicyonia															
brevirostris	454.0	212.00	4.6	2.23	2	100.4	53.41	1.1	0.57	3	3.3	3.33	0.1	0.08	2
Squilla															
spp.	508.0	386.00	1.6	0.14	2	100.3	22.75	1.2	0.21	3	58.3	35.00	1.0	0.71	2
Micropogonias															
undulatus	6.0	6.00	0.6	0.59	2	17.8	4.36	1.9	0.38	3	0.0	0.00	0.0	0.00	2
Stenotomus															
caprinus	50.0	50.00	1.7	1.73	2	154.0	49.52	7.5	2.88	3	136.7	36.67	12.0	5.86	2
Prionotus															
rubio	462.0	240.00	8.9	4.50	2	101.4	32.60	4.2	0.71	3	83.9	39.44	5.3	2.15	2
Trichiurus															
lepturus	8.0	4.00	0.7	0.50	2	1.3	1.25	0.1	0.14	3	0.0	0.00	0.0	0.00	2
Centropristis															
philadelphica	135.0	71.00	6.8	3.86	2	112.2	46.78	6.8	2.44	3	87.2	43.89	5.2	2.60	2
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Peprilus															
burti	2.0	2.00	0.1	0.14	2	11.0	5.87	1.2	0.65	3	21.7	21.67	2.0	1.97	2
Upeneus															
parvus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	3	10.0	3.33	0.5	0.15	2
Squid	6.0	6.00	0.1	0.09	2	149.4	133.44	2.2	1.62	3	236.7	236.67	3.3	3.33	2

Table 12b
 Statistical Zone 15
 40-ft trawls

Summary of dominant organisms taken within statistical zone 15 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus spinicarpus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Callinectes similis	0.0	0.00	0.0	0.00	0	2.5	1.02	0.1	0.04	5	27.4	20.35	0.2	0.11	3
Trachypena spp.	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	5.3	4.37	0.0	0.03	3
Sicyonia dorsalis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	2.0	2.00	0.0	0.03	3
Squilla spp.	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	9.1	6.38	0.1	0.06	3
Sicyonia brevis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Prionotus rubio	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	104.7	103.67	1.2	1.15	3
Serranus atrobranchus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Porichthys plectrodon	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	4.0	4.00	0.1	0.12	3
Centropristis philadelphica	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	14.7	14.67	0.1	0.09	3
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	1.3	1.33	0.0	0.03	3
Prionotus paralatus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	0.7	0.67	0.0	0.03	3
Bollmannia communis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Urophycis floridanus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Squid	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	5	315.1	304.49	3.4	3.09	3

Table 12b (cont'd.)
 Statistical Zone 15
 40-ft trawls

Summary of dominant organisms taken within statistical zone 15 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus															
<u>spini</u> carpus	118.0	92.00	0.8	0.23	2	1099.3	482.05	9.4	2.02	3	376.1	240.56	3.4	1.94	2
Callinectes															
<u>similis</u>	1249.0	793.00	33.5	24.45	2	165.0	88.33	3.3	1.73	3	3.3	3.33	0.2	0.15	2
Trachypenaeus															
<u>spp.</u>	1338.0	1254.00	8.8	8.05	2	22.9	13.90	0.2	0.16	3	0.0	0.00	0.0	0.00	2
Sicyonia															
<u>dorsalis</u>	982.0	806.00	5.0	3.77	2	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Squilla															
<u>spp.</u>	508.0	386.00	1.6	0.14	2	100.3	22.75	1.2	0.21	3	58.3	35.00	1.0	0.71	2
Sicyonia															
<u>brevirostris</u>	454.0	212.00	4.6	2.23	2	100.4	53.41	1.1	0.57	3	3.3	3.33	0.1	0.08	2
Prionotus															
<u>rubio</u>	462.0	240.00	8.9	4.50	2	101.4	32.60	4.2	0.71	3	83.9	39.44	5.3	2.15	2
Serranus															
<u>atrobranchus</u>	166.0	52.00	2.3	1.09	2	211.8	107.51	3.6	1.52	3	246.7	20.00	3.5	0.45	2
Porichthys															
<u>plectrodon</u>	74.0	10.00	1.5	0.27	2	149.0	69.20	3.0	1.58	3	62.8	12.78	1.4	0.03	2
Centropristis															
<u>philadelphica</u>	135.0	71.00	6.8	3.86	2	112.2	46.78	6.8	2.44	3	87.2	43.89	5.2	2.60	2
Stenotomus															
<u>caprinus</u>	50.0	50.00	1.7	1.73	2	154.0	49.52	7.5	2.88	3	136.7	36.67	12.0	5.86	2
Prionotus															
<u>paralatus</u>	155.0	75.00	1.4	0.36	2	45.9	16.20	0.8	0.03	3	53.3	46.67	1.6	1.26	2
Bollmannia															
<u>communis</u>	153.0	153.00	0.9	0.86	2	2.0	2.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Urophycis															
<u>floridanus</u>	11.0	11.00	0.7	0.68	2	57.8	11.17	5.4	1.28	3	71.1	15.56	5.6	1.97	2
Squid															
	6.0	6.00	0.1	0.09	2	149.4	133.44	2.2	1.62	3	236.7	236.67	3.3	3.33	2

Table 12c
 Statistical Zone 15
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

	0-5 fm*			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
Environmental category	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	2.7	1.84	5	13.4	10.60	3	106.4	37.27	2	71.5	9.88	3	76.0	7.32	2
Total finfish kg	0.0	0.00	0	2.2	1.96	5	9.1	6.80	3	44.1	5.00	2	47.4	6.92	3	61.6	5.05	2
Total crustacean kg	0.0	0.00	0	0.7	0.34	5	1.6	0.33	3	62.3	32.27	2	19.4	5.38	3	9.3	1.77	2
Total others kg	0.0	0.00	0	0.2	0.20	5	4.0	3.06	3	0.5	0.45	2	4.4	1.24	3	5.1	4.04	2
Surface temperature	27.3	0.00	1	28.4	0.47	6	27.5	0.03	3	0.0	0.00	0	27.3	0.54	3	27.7	0.15	2
Midwater temperature	0.0	0.00	0	27.9	0.40	5	26.8	0.80	2	0.0	0.00	0	23.5	0.61	3	21.2	0.65	2
Bottom temperature	0.0	0.00	0	24.9	0.87	5	22.3	0.30	2	0.0	0.00	0	19.8	0.23	3	17.8	1.25	2
Surface salinity	29.1	0.00	1	24.0	2.61	6	30.1	0.82	2	29.5	0.00	1	28.6	0.39	3	34.9	0.00	1
Midwater salinity	0.0	0.00	0	29.2	0.78	5	31.9	2.64	2	32.1	0.00	1	36.2	0.18	3	36.3	0.00	1
Bottom salinity	0.0	0.00	0	34.5	0.48	5	35.8	0.26	2	36.1	0.00	1	36.2	0.12	3	36.2	0.00	1
Surface chlorophyll	8.5	0.00	1	5.3	2.34	6	1.7	0.72	4	0.8	0.00	1	1.3	0.14	3	0.5	0.18	2
Midwater chlorophyll	0.0	0.00	0	1.6	0.77	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	4.2	1.15	5	1.8	1.15	3	0.4	0.00	1	0.5	0.05	3	0.1	0.09	2
Surface oxygen	5.2	0.00	1	7.7	0.56	6	7.0	0.18	4	6.5	0.00	1	7.0	0.22	3	6.5	0.10	2
Midwater oxygen	0.0	0.00	0	5.3	1.10	5	6.8	0.06	3	5.8	0.00	1	7.2	0.24	3	6.6	0.50	2
Bottom oxygen	0.0	0.00	0	1.1	0.43	5	2.7	1.41	3	5.4	0.00	1	5.2	0.42	3	5.0	0.20	2

*Plankton and environmental stations only.

Table 13a
 Statistical Zone 16
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 16 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 40 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	768.9	399.50	4.4	2.29	5
Penaeus															
aztecus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	151.1	89.85	2.8	1.58	5
Callinectes															
similis	0.0	0.00	0.0	0.00	0	68.5	66.50	0.9	0.91	2	658.4	177.57	7.0	1.52	5
Portunus															
spincarpus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	5
Sicyonia															
brevirostris	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	1457.4	919.42	11.2	6.89	5
Squilla															
spp.	0.0	0.00	0.0	0.00	0	7.0	7.00	0.1	0.09	2	297.3	64.77	3.6	0.70	5
Micropogonias															
undulatus	0.0	0.00	0.0	0.00	0	4150.0	4150.00	110.9	110.91	2	42.2	29.07	1.4	0.72	5
Stenotomus															
caprinus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	585.6	189.49	6.6	2.97	5
Prionotus															
rubio	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	2318.0	761.61	12.1	2.96	5
Trichiurus															
lepturus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	7.4	7.38	0.6	0.63	5
Centropristis															
philadelphica	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	63.5	20.58	1.6	0.70	5
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	5
Peprilus															
burti	0.0	0.00	0.0	0.00	0	30.0	30.00	0.9	0.91	2	42.5	42.46	2.5	2.52	5
Upeneus															
parvus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	45.8	38.48	0.6	0.39	5
Squid	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	38.8	28.66	0.6	0.42	5

Table 13a (cont'd.)
 Statistical Zone 16
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 16 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 40 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	133.9	9.32	0.7	0.17	3	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Penaeus															
aztecus	739.1	347.97	7.8	0.21	3	61.3	21.36	3.0	1.08	3	0.0	0.00	0.0	0.00	0
Callinectes															
similis	1434.2	168.85	17.6	2.77	3	170.0	151.00	2.2	1.70	3	0.0	0.00	0.0	0.00	0
Portunus															
spincarpus	10.5	10.53	0.1	0.14	3	1512.7	512.11	7.0	2.34	3	0.0	0.00	0.0	0.00	0
Sicyonia															
brevirostris	2011.3	935.47	15.8	6.86	3	7.3	7.33	0.1	0.12	3	0.0	0.00	0.0	0.00	0
Squilla															
spp.	795.3	141.75	8.8	1.08	3	42.0	32.52	0.4	0.21	3	0.0	0.00	0.0	0.00	0
Micropogonias															
undulatus	7.3	7.33	0.9	0.88	3	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Stenotomus															
caprinus	200.8	137.27	6.6	3.52	3	356.7	92.39	19.8	6.41	3	0.0	0.00	0.0	0.00	0
Prionotus															
rubio	362.8	125.59	9.8	1.92	3	43.3	12.72	2.3	0.64	3	0.0	0.00	0.0	0.00	0
Trichiurus															
lepturus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Centropristis															
philadelphica	175.1	38.59	7.7	2.70	3	45.3	22.67	4.2	2.39	3	0.0	0.00	0.0	0.00	0
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Peprilus															
burti	0.0	0.00	0.0	0.00	3	28.0	14.19	1.8	0.99	3	0.0	0.00	0.0	0.00	0
Upeneus															
parvus	0.0	0.00	0.0	0.00	3	31.3	22.10	1.4	0.87	3	0.0	0.00	0.0	0.00	0
Squid	37.7	17.50	0.9	0.40	3	160.7	57.75	3.4	1.33	3	0.0	0.00	0.0	0.00	0

Table 13b
 Statistical Zone 16
 40-ft trawls

Summary of dominant organisms taken within statistical zone 16 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 40 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Sicyonia															
<i>brevirostris</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	1457.4	919.42	11.2	6.89	5
Callinectes															
<i>similis</i>	0.0	0.00	0.0	0.00	0	68.5	66.50	0.9	0.91	2	658.4	177.57	7.0	1.52	5
Portunus															
<i>spinicarpus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	5
Trachypenaeus															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	768.9	399.50	4.4	2.29	5
Squilla															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	7.0	7.00	0.1	0.09	2	297.3	64.77	3.6	0.70	5
Penaeus															
<i>aztecus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	151.1	89.85	2.8	1.58	5
Prionotus															
<i>rubio</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	2318.0	761.61	12.1	2.96	5
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	585.6	189.49	6.6	2.97	5
Micropogonias															
<i>undulatus</i>	0.0	0.00	0.0	0.00	0	4150.0	4150.00	110.9	110.91	2	42.2	29.07	1.4	0.72	5
Syacium															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	249.1	181.74	5.3	3.51	5
Centropristis															
<i>philadelphica</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	63.5	20.58	1.6	0.70	5
Serranus															
<i>atrobranchus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	5
Trachurus															
<i>lathami</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	80.6	77.94	1.5	1.46	5
Prionotus															
<i>paralatus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	4.9	4.91	0.1	0.10	5
Squid															
	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	38.8	28.66	0.6	0.42	5

Table 13b (cont'd.)
 Statistical Zone 16
 40-ft trawls

Summary of dominant organisms taken within statistical zone 16 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 40 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Sicyonia</i>															
<i>brevirostris</i>	2011.3	935.47	15.8	6.86	3	7.3	7.33	0.1	0.12	3	0.0	0.00	0.0	0.00	0
<i>Callinectes</i>															
<i>similis</i>	1434.2	168.85	17.6	2.77	3	170.0	151.00	2.2	1.70	3	0.0	0.00	0.0	0.00	0
<i>Portunus</i>															
<i>spinicarpus</i>	10.5	10.53	0.1	0.14	3	1512.7	512.11	7.0	2.34	3	0.0	0.00	0.0	0.00	0
<i>Trachypenaeus</i>															
<i>spp.</i>	133.9	9.32	0.7	0.17	3	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
<i>Squilla</i>															
<i>spp.</i>	795.3	141.75	8.8	1.08	3	42.0	32.52	0.4	0.21	3	0.0	0.00	0.0	0.00	0
<i>Penaeus</i>															
<i>aztecus</i>	739.1	347.97	7.8	0.21	3	61.3	21.36	3.0	1.08	3	0.0	0.00	0.0	0.00	0
<i>Prionotus</i>															
<i>rubio</i>	362.8	125.59	9.8	1.92	3	43.3	12.72	2.3	0.64	3	0.0	0.00	0.0	0.00	0
<i>Stenotomus</i>															
<i>caprinus</i>	200.8	137.27	6.6	3.52	3	356.7	92.39	19.8	6.41	3	0.0	0.00	0.0	0.00	0
<i>Micropogonias</i>															
<i>undulatus</i>	7.3	7.33	0.9	0.88	3	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
<i>Syacium</i>															
<i>spp.</i>	12.5	8.22	0.6	0.37	3	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
<i>Centropristis</i>															
<i>philadelphica</i>	175.1	38.59	7.7	2.70	3	45.3	22.67	4.2	2.39	3	0.0	0.00	0.0	0.00	0
<i>Serranus</i>															
<i>atrobranchus</i>	249.3	24.96	2.5	0.83	3	66.0	47.29	1.4	0.72	3	0.0	0.00	0.0	0.00	0
<i>Trachurus</i>															
<i>lathami</i>	5.7	2.89	0.2	0.12	3	130.7	99.51	2.5	1.85	3	0.0	0.00	0.0	0.00	0
<i>Prionotus</i>															
<i>paralatus</i>	107.6	16.96	1.1	0.18	3	70.7	4.37	3.2	1.11	3	0.0	0.00	0.0	0.00	0
<i>Squid</i>															
	37.7	17.50	0.9	0.40	3	160.7	57.75	3.4	1.33	3	0.0	0.00	0.0	0.00	0

Table 13c
 Statistical Zone 16
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

	0-5 fm*			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm*		
Environmental category	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	206.1	205.23	2	100.9	25.19	5	107.8	15.47	3	81.5	12.11	3	0.0	0.00	0
Total finfish kg	0.0	0.00	0	203.9	202.95	2	64.4	16.71	5	49.9	7.83	3	57.0	11.81	3	0.0	0.00	0
Total crustacean kg	0.0	0.00	0	1.6	0.68	2	36.0	10.10	5	56.1	7.77	3	13.9	5.28	3	0.0	0.00	0
Total others kg	0.0	0.00	0	1.6	0.68	2	0.7	0.43	5	2.3	0.31	3	10.6	2.64	3	0.0	0.00	0
Surface temperature	27.3	0.00	1	27.5	0.00	3	27.5	0.04	5	27.5	0.03	3	0.0	0.00	0	27.2	0.00	1
Midwater temperature	27.3	0.00	1	27.5	0.03	3	27.2	0.29	5	21.8	0.83	3	0.0	0.00	0	22.5	0.00	1
Bottom temperature	27.0	0.00	1	23.5	1.12	3	22.4	0.07	5	21.1	0.13	3	0.0	0.00	0	19.3	0.00	1
Surface salinity	20.0	0.00	1	29.5	0.19	3	30.0	0.36	5	30.7	0.39	3	0.0	0.00	0	32.6	0.00	1
Midwater salinity	19.6	0.00	1	29.5	0.20	3	30.2	0.35	5	33.5	0.92	3	0.0	0.00	0	35.3	0.00	1
Bottom salinity	22.3	0.00	1	33.3	1.78	3	35.4	0.15	5	35.1	0.92	3	0.0	0.00	0	36.1	0.00	1
Surface chlorophyll	5.0	0.00	1	1.5	0.04	3	1.1	0.06	5	0.8	0.20	3	0.0	0.00	0	0.5	0.00	1
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.4	0.00	1	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	4.3	0.00	1	3.6	1.72	3	1.2	0.16	5	0.7	0.08	3	0.0	0.00	0	0.4	0.00	1
Surface oxygen	5.4	0.00	1	7.0	0.06	3	6.9	0.16	5	7.0	0.15	3	0.0	0.00	0	6.9	0.00	1
Midwater oxygen	5.6	0.00	1	7.0	0.07	3	6.9	0.12	5	6.3	0.58	3	0.0	0.00	0	7.2	0.00	1
Bottom oxygen	5.3	0.00	1	3.7	1.73	3	2.2	0.78	5	6.1	0.31	3	0.0	0.00	0	5.6	0.00	1

*Plankton and environmental stations only.

Table 14a
 Statistical Zone 17
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 17 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 11 fm or above 40 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	61.6	46.50	0.4	0.26	3
Penaeus															
aztecus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	82.7	82.73	1.9	1.86	3
Callinectes															
similis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	619.6	468.60	7.2	5.99	3
Portunus															
spinicarpus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3
Sicyonia															
brevirostris	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	233.8	216.07	2.7	2.56	3
Squilla															
spp.	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	222.2	95.47	3.7	1.87	3
Micropogonias															
undulatus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	1623.6	1623.64	77.9	77.85	3
Stenotomus															
caprinus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	44.5	44.55	0.9	0.87	3
Prionotus															
rubio	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	377.2	197.17	2.8	1.90	3
Trichiurus															
lepturus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	6.4	6.36	0.6	0.58	3
Centropristis															
philadelphica	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	47.8	27.56	1.6	1.38	3
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3
Peprilus															
burti	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3
Upeneus															
parvus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3
Squid	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3

Table 14a (cont'd.)
 Statistical Zone 17
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 17 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 11 fm or above 40 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	19.1	0.00	0.1	0.00	1	51.2	43.41	0.2	0.19	3	0.0	0.00	0.0	0.00	0
Penaeus															
aztecus	57.3	0.00	2.9	0.00	1	62.2	12.13	3.6	0.16	3	0.0	0.00	0.0	0.00	0
Callinectes															
similis	0.0	0.00	0.0	0.00	1	40.0	40.00	0.8	0.80	3	0.0	0.00	0.0	0.00	0
Portunus															
spinicarpus	30.0	0.00	0.2	0.00	1	304.3	147.81	1.9	0.94	3	0.0	0.00	0.0	0.00	0
Sicyonia															
brevirostris	310.9	0.00	3.7	0.00	1	82.5	32.81	1.6	0.75	3	0.0	0.00	0.0	0.00	0
Squilla															
spp.	10.9	0.00	0.1	0.00	1	131.8	71.90	1.7	0.88	3	0.0	0.00	0.0	0.00	0
Micropogonias															
undulatus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Stenotomus															
caprinus	1006.4	0.00	37.1	0.00	1	725.3	404.39	33.4	18.95	3	0.0	0.00	0.0	0.00	0
Prionotus															
rubio	60.0	0.00	2.7	0.00	1	26.5	10.50	2.1	0.47	3	0.0	0.00	0.0	0.00	0
Trichiurus															
lepturus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Centropristis															
philadelphica	90.0	0.00	5.1	0.00	1	62.7	19.54	3.6	0.87	3	0.0	0.00	0.0	0.00	0
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Peprilus															
burti	0.0	0.00	0.0	0.00	1	18.7	14.85	1.6	1.18	3	0.0	0.00	0.0	0.00	0
Upeneus															
parvus	180.0	0.00	3.7	0.00	1	13.0	10.60	0.3	0.30	3	0.0	0.00	0.0	0.00	0
Squid	30.0	0.00	0.7	0.00	1	80.5	67.22	2.0	1.09	3	0.0	0.00	0.0	0.00	0

Table 14b
 Statistical Zone 17
 40-ft trawls

Summary of dominant organisms taken within statistical zone 17 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 11 fm or above 40 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	619.6	468.60	7.2	5.99	3
Sicyonia															
<i>brevirostris</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	233.8	216.07	2.7	2.56	3
Squilla															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	222.2	95.47	3.7	1.87	3
Portunus															
<i>spinicarpus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3
Penaeus															
<i>aztecus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	82.7	82.73	1.9	1.86	3
Trachypenaeus															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	61.6	46.50	0.4	0.26	3
Micropogonias															
<i>undulatus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	1623.6	1623.64	77.9	77.85	3
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	44.5	44.55	0.9	0.87	3
Prionotus															
<i>rubio</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	377.2	197.17	2.8	1.90	3
Lagodon															
<i>rhomboides</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	19.1	19.09	1.2	1.16	3
Leiostomus															
<i>xanthurus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	248.9	246.44	18.0	17.82	3
Serranus															
<i>atrobranchus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	6.4	6.36	0.3	0.29	3
Centropristis															
<i>philadelphica</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	47.8	27.56	1.6	1.38	3
Syacium															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	82.7	82.73	2.0	2.02	3
Squid															
	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3

Table 14b (cont'd.)
 Statistical Zone 17
 40-ft trawls

Summary of dominant organisms taken within statistical zone 17 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 11 fm or above 40 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	0.0	0.00	0.0	0.00	1	40.0	40.00	0.8	0.80	3	0.0	0.00	0.0	0.00	0
Sicyonia															
<i>brevirostris</i>	310.9	0.00	3.7	0.00	1	82.5	32.81	1.6	0.75	3	0.0	0.00	0.0	0.00	0
Squilla															
<i>spp.</i>	10.9	0.00	0.1	0.00	1	131.8	71.90	1.7	0.88	3	0.0	0.00	0.0	0.00	0
Portunus															
<i>spinicarpus</i>	30.0	0.00	0.2	0.00	1	304.3	147.81	1.9	0.94	3	0.0	0.00	0.0	0.00	0
Penaeus															
<i>aztecus</i>	57.3	0.00	2.9	0.00	1	62.2	12.13	3.6	0.16	3	0.0	0.00	0.0	0.00	0
Trachypenaeus															
<i>spp.</i>	19.1	0.00	0.1	0.00	1	51.2	43.41	0.2	0.19	3	0.0	0.00	0.0	0.00	0
Micropogonias															
<i>undulatus</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Stenotomus															
<i>caprinus</i>	1006.4	0.00	37.1	0.00	1	725.3	404.39	33.4	18.95	3	0.0	0.00	0.0	0.00	0
Prionotus															
<i>rubio</i>	60.0	0.00	2.7	0.00	1	26.5	10.50	2.1	0.47	3	0.0	0.00	0.0	0.00	0
Lagodon															
<i>rhomboides</i>	81.8	0.00	4.1	0.00	1	187.3	187.33	10.0	10.00	3	0.0	0.00	0.0	0.00	0
Leiostomus															
<i>xanthurus</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Serranus															
<i>atrobranchus</i>	0.0	0.00	0.0	0.00	1	126.3	30.59	2.8	0.48	3	0.0	0.00	0.0	0.00	0
Centropristis															
<i>philadelphica</i>	90.0	0.00	5.1	0.00	1	62.7	19.54	3.6	0.87	3	0.0	0.00	0.0	0.00	0
Syacium															
<i>spp.</i>	231.8	0.00	9.7	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Squid															
<i>spp.</i>	30.0	0.00	0.7	0.00	1	80.5	67.22	2.0	1.09	3	0.0	0.00	0.0	0.00	0

Table 14c
 Statistical Zone 17
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm. No samples were taken below 6 fm.

Environmental category	0-5 fm			6-10 fm*			11-20 fm			21-30 fm			31-40 fm			Over 40 fm*		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	0.0	0.00	0	129.1	121.41	3	117.8	0.00	1	96.7	24.56	3	0.0	0.00	0
Total finfish kg	0.0	0.00	0	0.0	0.00	0	110.6	107.69	3	102.9	0.00	1	82.9	27.20	3	0.0	0.00	0
Total crustacean kg	0.0	0.00	0	0.0	0.00	0	18.8	13.65	3	14.9	0.00	1	10.2	3.56	3	0.0	0.00	0
Total others kg	0.0	0.00	0	0.0	0.00	0	0.8	0.76	3	1.2	0.00	1	3.6	0.91	3	0.0	0.00	0
Surface temperature	0.0	0.00	0	28.1	0.25	2	27.8	0.10	3	27.5	0.12	5	28.0	0.00	1	27.8	0.00	1
Midwater temperature	0.0	0.00	0	27.7	0.10	2	27.5	0.20	3	23.9	1.59	5	20.2	0.00	1	21.0	0.00	1
Bottom temperature	0.0	0.00	0	27.3	0.30	2	24.7	1.55	3	22.5	0.72	5	20.5	0.00	1	18.5	0.00	1
Surface salinity	0.0	0.00	0	28.5	0.31	2	30.0	0.15	2	32.1	0.22	5	33.3	0.00	1	33.5	0.00	1
Midwater salinity	0.0	0.00	0	28.5	0.33	2	30.0	0.18	2	32.3	0.22	5	35.5	0.00	1	35.8	0.00	1
Bottom salinity	0.0	0.00	0	28.5	0.26	2	34.3	0.07	2	35.7	0.06	5	35.9	0.00	1	36.1	0.00	1
Surface chlorophyll	0.0	0.00	0	1.8	0.68	2	1.0	0.04	3	0.6	0.13	5	0.8	0.00	1	0.2	0.00	1
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.6	0.00	1	0.2	0.00	1	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	2.7	0.82	2	1.4	0.34	3	1.0	0.18	5	0.0	0.00	0	0.2	0.00	1
Surface oxygen	0.0	0.00	0	5.2	0.00	1	6.6	0.32	3	6.8	0.22	5	6.8	0.00	1	6.7	0.00	1
Midwater oxygen	0.0	0.00	0	5.3	0.00	1	6.6	0.26	3	6.9	0.20	5	7.4	0.00	1	7.0	0.00	1
Bottom oxygen	0.0	0.00	0	5.2	0.00	1	2.6	1.05	3	5.9	0.70	5	6.6	0.00	1	6.4	0.00	1

*Plankton and environmental stations only.

Table 15a
 Statistical Zone 18
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 18 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 30 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	0.0	0.00	0.0	0.00	2	92.9	37.67	0.4	0.22	7	2106.7	1424.71	11.8	8.29	2
Penaeus															
aztecus	178.0	178.00	1.3	1.32	2	504.8	285.50	4.5	2.72	7	205.4	177.43	3.3	2.18	2
Callinectes															
similis	232.0	226.00	3.3	3.27	2	350.4	120.53	5.8	2.01	7	270.6	186.57	3.2	1.96	2
Portunus															
spinicarpus	0.0	0.00	0.0	0.00	2	2.2	2.24	0.0	0.00	7	0.0	0.00	0.0	0.00	2
Sicyonia															
brevirostris	0.0	0.00	0.0	0.00	2	20.3	20.26	0.1	0.14	7	284.4	21.57	2.0	0.56	2
Squilla															
spp.	0.0	0.00	0.0	0.00	2	45.4	24.08	0.7	0.50	7	180.1	114.14	3.2	1.96	2
Micropogonias															
undulatus	2112.0	1866.00	43.3	40.00	2	1044.3	420.74	31.4	10.94	7	2.0	2.00	0.4	0.41	2
Stenotomus															
caprinus	0.0	0.00	0.0	0.00	2	181.8	177.91	2.4	2.33	7	946.9	561.14	3.6	2.68	2
Prionotus															
rubio	0.0	0.00	0.0	0.00	2	197.5	80.30	1.4	0.61	7	64.6	32.57	0.8	0.06	2
Trichiurus															
lepturus	6.0	6.00	0.4	0.41	2	26.3	20.11	1.3	0.80	7	0.0	0.00	0.0	0.00	2
Centropristis															
philadelphica	0.0	0.00	0.0	0.00	2	7.6	5.35	0.1	0.12	7	57.3	8.71	2.0	1.14	2
Stellifer															
lanceolatus	193.0	193.00	1.9	1.91	2	398.9	304.45	4.7	3.59	7	0.0	0.00	0.0	0.00	2
Peprilus															
burti	6.0	6.00	0.3	0.27	2	40.1	20.63	1.3	0.69	7	114.0	114.00	3.0	2.95	2
Upeneus															
parvus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	7	100.6	83.43	0.9	0.64	2
Squid	21.0	21.00	0.4	0.41	2	7.7	4.98	0.1	0.04	7	17.0	17.00	2.5	2.55	2

Table 15a (cont'd.)
 Statistical Zone 18
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 18 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 30 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
<u>spp.</u>	349.0	340.35	1.2	1.16	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Penaeus															
<u>aztecus</u>	40.2	6.51	1.8	0.29	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
<u>similis</u>	374.0	220.66	3.4	1.55	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Portunus															
<u>spincarpus</u>	1.5	1.50	0.0	0.02	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Sicyonia															
<u>brevirostris</u>	1262.5	441.05	13.7	5.02	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla															
<u>spp.</u>	76.7	28.62	1.6	0.63	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias															
<u>undulatus</u>	65.5	63.52	4.4	4.26	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus															
<u>caprinus</u>	797.5	255.39	19.7	4.72	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus															
<u>rubio</u>	20.8	14.93	1.5	0.89	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trichiurus															
<u>lepturus</u>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Centropristis															
<u>philadelphica</u>	55.2	14.18	3.1	0.84	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stellifer															
<u>lanceolatus</u>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Peprilus															
<u>burti</u>	22.1	22.11	1.5	1.54	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Upeneus															
<u>parvus</u>	173.1	64.91	2.5	1.46	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid															
	54.2	5.51	2.3	0.71	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 15b
 Statistical Zone 18
 40-ft trawls

Summary of dominant organisms taken within statistical zone 18 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 30 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Sicyonia															
<i>brevirostris</i>	0.0	0.00	0.0	0.00	2	20.3	20.26	0.1	0.14	7	284.4	21.57	2.0	0.56	2
Trachypenaeus															
spp.	0.0	0.00	0.0	0.00	2	92.9	37.67	0.4	0.22	7	2106.7	1424.71	11.8	8.29	2
Penaeus															
<i>aztecus</i>	178.0	178.00	1.3	1.32	2	504.8	285.50	4.5	2.72	7	205.4	177.43	3.3	2.18	2
Callinectes															
<i>similis</i>	232.0	226.00	3.3	3.27	2	350.4	120.53	5.8	2.01	7	270.6	186.57	3.2	1.96	2
Xiphopenaeus															
<i>kroyeri</i>	316.0	298.00	2.9	2.59	2	46.6	35.79	0.3	0.23	7	0.0	0.00	0.0	0.00	2
Squilla															
spp.	0.0	0.00	0.0	0.00	2	45.4	24.08	0.7	0.50	7	180.1	114.14	3.2	1.96	2
Micropogonias															
<i>undulatus</i>	2112.0	1866.00	43.3	40.00	2	1044.3	420.74	31.4	10.94	7	2.0	2.00	0.4	0.41	2
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	2	181.8	177.91	2.4	2.33	7	946.9	561.14	3.6	2.68	2
Stellifer															
<i>lanceolatus</i>	193.0	193.00	1.9	1.91	2	398.9	304.45	4.7	3.59	7	0.0	0.00	0.0	0.00	2
Arius															
<i>felis</i>	165.0	105.00	6.7	0.95	2	219.4	63.40	15.3	5.09	7	0.0	0.00	0.0	0.00	2
Prionotus															
<i>rubio</i>	0.0	0.00	0.0	0.00	2	197.5	80.30	1.4	0.61	7	64.6	32.57	0.8	0.06	2
Leiostomus															
<i>xanthurus</i>	120.0	120.00	1.5	1.50	2	192.5	143.92	17.1	14.59	7	0.0	0.00	0.0	0.00	2
Cynoscion															
<i>nothus</i>	150.0	6.00	5.0	0.14	2	218.2	161.15	7.8	5.80	7	0.0	0.00	0.0	0.00	2
Syacium															
spp.	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	7	289.6	127.57	4.4	2.00	2
Squid															
	21.0	21.00	0.4	0.41	2	7.7	4.98	0.1	0.04	7	17.0	17.00	2.5	2.55	2

Table 15b (cont'd.)
 Statistical Zone 18
 40-ft trawls

Summary of dominant organisms taken within statistical zone 18 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 30 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Sicyonia															
<i>brevirostris</i>	1262.5	441.05	13.7	5.02	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus															
<i>spp.</i>	349.0	340.35	1.2	1.16	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Penaeus															
<i>aztecus</i>	40.2	6.51	1.8	0.29	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
<i>similis</i>	374.0	220.66	3.4	1.55	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Xiphopenaeus															
<i>kroyeri</i>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla															
<i>spp.</i>	76.7	28.62	1.6	0.63	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias															
<i>undulatus</i>	65.5	63.52	4.4	4.26	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus															
<i>caprinus</i>	797.5	255.39	19.7	4.72	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stellifer															
<i>lanceolatus</i>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Arius															
<i>felis</i>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus															
<i>rubio</i>	20.8	14.93	1.5	0.89	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Leiostomus															
<i>xanthurus</i>	44.0	25.52	3.9	2.27	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion															
<i>nothus</i>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Syacium															
<i>spp.</i>	88.8	50.35	0.9	0.68	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid															
	54.2	5.51	2.3	0.71	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 15c
 Statistical Zone 18
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm*		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	82.7	55.45	2	119.2	32.00	7	67.8	2.34	2	103.9	13.37	4	0.0	0.00	0	0.0	0.00	0
Total finfish kg	71.4	44.09	2	98.0	27.37	7	34.0	13.25	2	76.8	20.27	4	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	11.4	11.36	2	20.9	7.62	7	31.5	17.86	2	24.2	7.60	4	0.0	0.00	0	0.0	0.00	0
Total others kg	0.0	0.00	2	0.3	0.34	7	3.4	2.08	2	3.3	0.71	4	0.0	0.00	0	0.0	0.00	0
Surface temperature	28.8	0.75	2	28.2	0.17	6	28.2	0.15	3	27.9	0.08	3	0.0	0.00	0	28.3	0.00	1
Midwater temperature	28.4	1.20	2	28.2	0.22	6	27.8	0.16	3	26.7	0.81	3	0.0	0.00	0	20.8	0.00	1
Bottom temperature	28.4	1.15	2	28.0	0.20	6	23.6	2.23	3	21.6	1.23	3	0.0	0.00	0	19.2	0.00	1
Surface salinity	24.8	2.16	2	26.9	1.36	4	32.0	0.32	3	33.2	0.58	3	0.0	0.00	0	34.2	0.00	1
Midwater salinity	26.2	0.88	2	27.4	1.20	4	32.3	0.54	3	33.5	0.42	3	0.0	0.00	0	36.4	0.00	1
Bottom salinity	27.5	0.51	2	29.0	0.85	4	34.3	1.42	3	36.0	0.18	3	0.0	0.00	0	36.3	0.00	1
Surface chlorophyll	4.3	2.96	2	3.9	1.19	4	0.5	0.06	3	0.8	0.26	2	0.0	0.00	0	0.0	0.00	1
Midwater chlorophyll	1.8	0.00	1	5.3	1.92	3	0.2	0.06	3	0.2	0.00	1	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	2.5	1.36	2	3.0	1.04	4	2.5	0.78	3	0.9	0.18	3	0.0	0.00	0	0.3	0.00	1
Surface oxygen	8.2	0.00	1	6.2	1.14	5	7.0	0.03	3	6.9	0.03	3	0.0	0.00	0	7.8	0.00	1
Midwater oxygen	7.4	0.00	1	6.2	1.13	5	7.0	0.12	3	7.1	0.25	3	0.0	0.00	0	8.1	0.00	1
Bottom oxygen	7.6	0.00	1	6.1	0.79	5	5.3	0.58	3	6.1	0.50	3	0.0	0.00	0	6.3	0.00	1

*Plankton and environmental stations only.

Table 16a
 Statistical Zone 19
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 19 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus spp.	23.6	18.45	0.0	0.04	3	432.3	173.14	1.6	0.75	7	1421.5	359.61	5.3	1.25	18
Penaeus aztecus	234.0	128.00	1.1	0.48	3	674.4	339.78	7.5	4.78	7	764.6	365.00	8.7	4.00	18
Callinectes similis	532.5	348.78	4.5	2.93	3	641.2	159.57	6.6	1.73	7	378.1	119.44	3.9	1.30	18
Portunus spincarpus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	7	0.5	0.51	0.0	0.00	18
Sicyonia brevirostris	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	7	7.3	6.86	0.1	0.09	18
Squilla spp.	1.8	1.82	0.0	0.00	3	88.6	36.36	0.9	0.52	7	83.8	26.01	1.1	0.37	18
Micropogonias undulatus	1120.8	532.23	20.7	10.39	3	3019.6	1418.76	41.3	16.76	7	10.6	6.69	0.3	0.19	18
Stenotomus caprinus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	7	375.7	123.87	1.0	0.30	18
Prionotus rubio	30.3	11.83	0.2	0.08	3	172.9	85.84	1.3	0.64	7	169.0	70.06	1.1	0.43	18
Trichiurus lepturus	1.8	1.82	0.1	0.08	3	48.6	25.94	1.4	0.65	7	1.9	1.03	0.1	0.06	18
Centropristis philadelphica	0.0	0.00	0.0	0.00	3	25.4	25.40	0.3	0.30	7	43.1	10.87	0.7	0.23	18
Stellifer lanceolatus	296.0	185.30	2.1	1.36	3	1185.0	464.62	11.9	4.76	7	2.6	2.58	0.0	0.04	18
Peprilus burti	12.7	6.50	0.5	0.31	3	9.7	8.08	0.4	0.33	7	111.7	57.30	1.8	0.76	18
Upeneus parvus	0.0	0.00	0.0	0.00	3	8.6	5.57	0.2	0.15	7	130.5	45.39	0.8	0.25	18
Squid	17.4	11.15	0.1	0.07	3	16.7	7.26	0.3	0.22	7	113.9	40.56	2.0	0.62	18

Table 16a (cont'd.)
 Statistical Zone 19
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 19 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
<u>spp.</u>	2925.3	1616.85	9.2	4.52	4	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Penaeus															
<u>aztecus</u>	61.7	32.10	2.0	0.99	4	75.5	20.21	3.9	0.97	3	19.3	14.69	1.2	1.03	2
Callinectes															
<u>similis</u>	112.0	28.93	2.2	0.89	4	2.7	2.67	0.1	0.12	3	0.0	0.00	0.0	0.00	2
Portunus															
<u>spinicarpus</u>	1.3	0.75	0.0	0.00	4	311.6	198.48	3.2	1.71	3	101.8	45.85	0.6	0.19	2
Sicyonia															
<u>brevirostris</u>	70.2	50.73	0.5	0.40	4	81.6	53.69	0.8	0.49	3	0.0	0.00	0.0	0.00	2
Squilla															
<u>spp.</u>	18.5	13.94	0.3	0.19	4	2.8	2.76	0.1	0.06	3	0.0	0.00	0.0	0.00	2
Micropogonias															
<u>undulatus</u>	0.0	0.00	0.0	0.00	4	1.9	1.90	0.4	0.43	3	3.0	3.00	0.3	0.27	2
Stenotomus															
<u>caprinus</u>	428.4	209.86	1.1	0.66	4	322.1	68.84	12.2	2.53	3	797.9	355.92	46.4	22.84	2
Prionotus															
<u>rubio</u>	8.2	2.40	0.2	0.09	4	2.8	2.76	0.3	0.34	3	0.0	0.00	0.0	0.00	2
Trichiurus															
<u>lepturus</u>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Centropristis															
<u>philadelphica</u>	64.7	22.90	0.8	0.16	4	21.6	8.90	2.4	1.10	3	31.5	5.46	4.0	1.02	2
Stellifer															
<u>lanceolatus</u>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Peprilus															
<u>burti</u>	165.9	105.73	1.5	0.97	4	6.0	6.00	0.7	0.67	3	16.9	3.08	1.4	0.53	2
Upeneus															
<u>parvus</u>	49.1	5.41	0.3	0.10	4	46.4	22.98	0.8	0.31	3	55.5	32.46	2.1	1.46	2
Squid															
	248.1	72.03	5.7	2.86	4	31.9	29.81	1.6	1.36	3	0.0	0.00	0.0	0.00	2

Table 16b
 Statistical Zone 19
 40-ft trawls

Summary of dominant organisms taken within statistical zone 19 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	23.6	18.45	0.0	0.04	3	432.3	173.14	1.6	0.75	7	1421.5	359.61	5.3	1.25	18
Penaeus															
aztecus	234.0	128.00	1.1	0.48	3	674.4	339.78	7.5	4.78	7	764.6	365.00	8.7	4.00	18
Callinectes															
similis	532.5	348.78	4.5	2.93	3	641.2	159.57	6.6	1.73	7	378.1	119.44	3.9	1.30	18
Sicyonia															
dorsalis	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	7	120.6	57.57	0.4	0.24	18
Squilla															
spp.	1.8	1.82	0.0	0.00	3	88.6	36.36	0.9	0.52	7	83.8	26.01	1.1	0.37	18
Xanthidae	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	7	77.6	77.56	0.4	0.35	18
Micropogonias															
undulatus	1120.8	532.23	20.7	10.39	3	3019.6	1418.76	41.3	16.76	7	10.6	6.69	0.3	0.19	18
Stenotomus															
caprinus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	7	375.7	123.87	1.0	0.30	18
Stellifer															
lanceolatus	296.0	185.30	2.1	1.36	3	1185.0	464.62	11.9	4.76	7	2.6	2.58	0.0	0.04	18
Prionotus															
rubio	30.3	11.83	0.2	0.08	3	172.9	85.84	1.3	0.64	7	169.0	70.06	1.1	0.43	18
Trachurus															
lathamii	0.0	0.00	0.0	0.00	3	4.2	3.25	0.1	0.07	7	154.6	101.27	1.6	1.02	18
Peprilus															
burti	12.7	6.50	0.5	0.31	3	9.7	8.08	0.4	0.33	7	111.7	57.30	1.8	0.76	18
Upeneus															
parvus	0.0	0.00	0.0	0.00	3	8.6	5.57	0.2	0.15	7	130.5	45.39	0.8	0.25	18
Leiostomus															
xanthurus	188.5	129.60	2.7	1.44	3	268.8	144.30	12.6	8.19	7	0.5	0.45	0.0	0.03	18
Squid	17.4	11.15	0.1	0.07	3	16.7	7.26	0.3	0.22	7	113.9	40.56	2.0	0.62	18

Table 16b (cont'd.)
 Statistical Zone 19
 40-ft trawls

Summary of dominant organisms taken within statistical zone 19 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	2925.3	1616.85	9.2	4.52	4	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Penaeus															
aztecus	61.7	32.10	2.0	0.99	4	75.5	20.21	3.9	0.97	3	19.3	14.69	1.2	1.03	2
Callinectes															
similis	112.0	28.93	2.2	0.89	4	2.7	2.67	0.1	0.12	3	0.0	0.00	0.0	0.00	2
Sicyonia															
dorsalis	664.0	297.39	1.3	0.44	4	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Squilla															
spp.	18.5	13.94	0.3	0.19	4	2.8	2.76	0.1	0.06	3	0.0	0.00	0.0	0.00	2
Xanthidae															
	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Micropogonias															
undulatus	0.0	0.00	0.0	0.00	4	1.9	1.90	0.4	0.43	3	3.0	3.00	0.3	0.27	2
Stenotomus															
caprinus	428.4	209.86	1.1	0.66	4	322.1	68.84	12.2	2.53	3	797.9	355.92	46.4	22.84	2
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Prionotus															
rubio	8.2	2.40	0.2	0.09	4	2.8	2.76	0.3	0.34	3	0.0	0.00	0.0	0.00	2
Trachurus															
lathamii	318.8	253.23	4.5	3.46	4	7.6	7.59	0.3	0.34	3	47.4	3.38	6.9	3.22	2
Peprilus															
burti	165.9	105.73	1.5	0.97	4	6.0	6.00	0.7	0.67	3	16.9	3.08	1.4	0.53	2
Upeneus															
parvus	49.1	5.41	0.3	0.10	4	46.4	22.98	0.8	0.31	3	55.5	32.46	2.1	1.46	2
Leiostomus															
xanthurus	0.0	0.00	0.0	0.00	4	1.0	0.95	0.2	0.22	3	3.0	3.00	0.2	0.23	2
Squid															
	248.1	72.03	5.7	2.86	4	31.9	29.81	1.6	1.36	3	0.0	0.00	0.0	0.00	2

Table 16c
 Statistical Zone 19
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	46.3	17.41	3	122.2	34.46	7	41.4	8.70	18	45.0	9.98	4	60.0	16.57	3	167.7	8.57	2
Total finfish kg	39.0	13.16	3	95.6	34.50	7	18.4	3.84	18	23.7	9.66	4	47.2	15.22	3	165.2	8.88	2
Total crustacean kg	7.3	5.01	3	26.1	7.78	7	21.0	6.18	18	15.7	2.97	4	10.2	2.04	3	2.4	0.31	2
Total others kg	0.0	0.00	3	0.5	0.22	7	2.2	0.63	18	5.6	2.71	4	3.1	1.72	3	0.5	0.45	2
Surface temperature	28.9	0.38	3	28.4	0.14	9	28.3	0.12	18	27.9	0.16	6	27.8	0.12	2	27.9	0.00	1
Midwater temperature	28.4	0.31	3	28.3	0.09	9	27.6	0.13	18	26.6	0.32	6	23.7	2.15	2	21.3	0.00	1
Bottom temperature	28.2	0.15	3	28.1	0.07	9	25.7	0.52	18	22.2	0.85	6	19.6	0.26	2	19.4	0.00	1
Surface salinity	27.0	0.00	1	31.9	0.60	7	33.3	0.22	16	34.3	0.47	5	35.0	0.72	2	34.3	0.00	1
Midwater salinity	27.0	0.00	1	32.2	0.58	7	34.0	0.26	16	36.0	0.20	4	36.1	0.59	2	35.5	0.00	1
Bottom salinity	27.1	0.00	1	32.4	0.57	7	35.1	0.24	16	35.9	0.17	5	36.1	0.28	2	36.2	0.00	1
Surface chlorophyll	3.4	0.86	3	1.7	0.47	9	0.6	0.09	16	0.4	0.09	5	0.4	0.14	2	0.5	0.00	1
Midwater chlorophyll	2.9	0.56	3	1.4	0.51	7	0.3	0.10	11	0.3	0.07	2	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	3.9	0.58	3	2.4	0.32	9	1.6	0.18	15	1.5	0.24	5	1.0	0.64	2	0.2	0.00	1
Surface oxygen	6.8	1.44	3	6.5	0.33	9	6.5	0.29	18	7.2	0.28	6	6.8	0.10	2	7.0	0.00	1
Midwater oxygen	5.9	0.58	3	6.5	0.31	9	6.4	0.26	18	7.4	0.30	6	6.4	0.80	2	6.3	0.00	1
Bottom oxygen	5.1	0.67	3	6.1	0.24	9	5.8	0.24	18	7.2	0.37	6	5.7	0.60	2	5.8	0.00	1

Table 17a
 Statistical Zone 20
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 20 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 40 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	72.0	72.00	0.3	0.27	2	426.6	259.60	1.4	0.91	4	1205.0	297.07	4.7	1.05	8
Penaeus															
aztecus	3.0	3.00	0.5	0.55	2	650.6	241.09	5.7	2.27	4	1328.8	478.66	17.8	6.36	8
Callinectes															
similis	333.0	285.00	7.4	6.82	2	59.9	12.02	0.5	0.12	4	295.1	71.69	3.9	1.13	8
Portunus															
spincarpus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8
Sicyonia															
brevirostris	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8
Squilla															
spp.	45.0	45.00	0.3	0.27	2	21.7	8.16	0.2	0.12	4	103.2	49.55	1.4	0.75	8
Micropogonias															
undulatus	804.0	804.00	22.8	22.77	2	2038.5	1823.17	53.6	50.08	4	180.4	105.59	4.8	2.77	8
Stenotomus															
caprinus	0.0	0.00	0.0	0.00	2	3.8	3.07	0.0	0.05	4	803.7	261.58	3.1	1.14	8
Prionotus															
rubio	6.0	6.00	0.0	0.00	2	37.7	10.33	0.3	0.07	4	145.6	51.19	1.0	0.30	8
Trichiurus															
lepturus	0.0	0.00	0.0	0.00	2	5.7	5.69	0.4	0.42	4	3.3	2.06	0.1	0.03	8
Centropristis															
philadelphica	0.0	0.00	0.0	0.00	2	6.9	5.06	0.1	0.05	4	48.6	12.85	0.6	0.20	8
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4	1.6	1.61	0.1	0.07	8
Peprilus															
burti	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4	69.5	52.99	1.2	0.62	8
Upeneus															
parvus	447.0	423.00	4.8	4.23	2	324.0	222.64	2.8	2.02	4	91.9	28.58	0.7	0.22	8
Squid	258.0	216.00	5.0	4.50	2	293.1	214.13	7.8	6.62	4	78.0	38.70	1.4	0.72	8

Table 17a (cont'd.)
 Statistical Zone 20
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 20 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 40 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus spp.	248.5	105.37	2.2	0.98	5	368.8	259.22	3.6	3.23	2	0.0	0.00	0.0	0.00	0
Penaeus aztecus	149.8	56.82	2.5	0.92	5	292.1	33.87	7.4	0.82	2	0.0	0.00	0.0	0.00	0
Callinectes similis	217.4	34.08	2.8	0.85	5	149.4	8.57	1.5	0.27	2	0.0	0.00	0.0	0.00	0
Portunus spinicarpus	0.0	0.00	0.0	0.00	5	19.0	19.00	0.1	0.09	2	0.0	0.00	0.0	0.00	0
Sicyonia brevirostris	0.0	0.00	0.0	0.00	5	2.6	2.61	0.1	0.06	2	0.0	0.00	0.0	0.00	0
Squilla spp.	26.5	11.77	0.2	0.05	5	6.6	1.39	0.2	0.03	2	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	0.8	0.80	0.0	0.04	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	136.9	50.21	0.9	0.54	5	45.0	45.00	0.2	0.18	2	0.0	0.00	0.0	0.00	0
Prionotus rubio	30.0	13.43	0.5	0.23	5	54.0	27.96	3.4	1.12	2	0.0	0.00	0.0	0.00	0
Trichiurus lepturus	0.5	0.52	0.0	0.02	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0
Centropristis philadelphica	39.8	12.09	1.6	0.67	5	55.6	9.61	2.5	0.95	2	0.0	0.00	0.0	0.00	0
Stellifer lanceolatus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0
Peprilus burti	6.9	5.07	0.1	0.07	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0
Upeneus parvus	17.2	4.69	0.1	0.04	5	49.0	15.04	0.3	0.02	2	0.0	0.00	0.0	0.00	0
Squid	18.9	6.80	0.2	0.10	5	59.6	5.61	0.9	0.38	2	0.0	0.00	0.0	0.00	0

Table 17b
 Statistical Zone 20
 40-ft trawls

Summary of dominant organisms taken within statistical zone 20 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 40 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus spp.	72.0	72.00	0.3	0.27	2	426.6	259.60	1.4	0.91	4	1205.0	297.07	4.7	1.05	8
Penaeus aztecus	3.0	3.00	0.5	0.55	2	650.6	241.09	5.7	2.27	4	1328.8	478.66	17.8	6.36	8
Callinectes similis	333.0	285.00	7.4	6.82	2	59.9	12.02	0.5	0.12	4	295.1	71.69	3.9	1.13	8
Sicyonia dorsalis	0.0	0.00	0.0	0.00	2	13.8	4.63	0.1	0.04	4	22.6	8.70	0.1	0.03	8
Squilla spp.	45.0	45.00	0.3	0.27	2	21.7	8.16	0.2	0.12	4	103.2	49.55	1.4	0.75	8
Solenocera spp.	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8
Micropogonias undulatus	804.0	804.00	22.8	22.77	2	2038.5	1823.17	53.6	50.08	4	180.4	105.59	4.8	2.77	8
Stenotomus caprinus	0.0	0.00	0.0	0.00	2	3.8	3.07	0.0	0.05	4	803.7	261.58	3.1	1.14	8
Upeneus parvus	447.0	423.00	4.8	4.23	2	324.0	222.64	2.8	2.02	4	91.9	28.58	0.7	0.22	8
Cynoscion nothus	36.0	36.00	0.8	0.82	2	139.8	115.00	4.9	4.00	4	142.4	50.95	4.3	1.58	8
Prionotus rubio	6.0	6.00	0.0	0.00	2	37.7	10.33	0.3	0.07	4	145.6	51.19	1.0	0.30	8
Serranus atrobranchus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4	28.0	27.24	0.1	0.10	8
Syacium spp.	15.0	15.00	0.1	0.14	2	9.6	9.64	0.1	0.10	4	131.6	48.36	2.2	0.78	8
Prionotus stearnsi	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8
Squid	258.0	216.00	5.0	4.50	2	293.1	214.13	7.8	6.62	4	78.0	38.70	1.4	0.72	8

Table 17b (cont'd.)
 Statistical Zone 20
 40-ft trawls

Summary of dominant organisms taken within statistical zone 20 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 40 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	248.5	105.37	2.2	0.98	5	368.8	259.22	3.6	3.23	2	0.0	0.00	0.0	0.00	0
Penaeus															
aztecus	149.8	56.82	2.5	0.92	5	292.1	33.87	7.4	0.82	2	0.0	0.00	0.0	0.00	0
Callinectes															
similis	217.4	34.08	2.8	0.85	5	149.4	8.57	1.5	0.27	2	0.0	0.00	0.0	0.00	0
Sicyonia															
dorsalis	191.0	57.55	0.3	0.11	5	62.0	62.00	0.1	0.14	2	0.0	0.00	0.0	0.00	0
Squilla															
spp.	26.5	11.77	0.2	0.05	5	6.6	1.39	0.2	0.03	2	0.0	0.00	0.0	0.00	0
Solenocera															
spp.	77.1	33.22	0.2	0.09	5	11.0	11.00	0.1	0.09	2	0.0	0.00	0.0	0.00	0
Micropogonias															
undulatus	0.8	0.80	0.0	0.04	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0
Stenotomus															
caprinus	136.9	50.21	0.9	0.54	5	45.0	45.00	0.2	0.18	2	0.0	0.00	0.0	0.00	0
Upeneus															
parvus	17.2	4.69	0.1	0.04	5	49.0	15.04	0.3	0.02	2	0.0	0.00	0.0	0.00	0
Cynoscion															
nothus	0.9	0.86	0.0	0.00	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0
Prionotus															
rubio	30.0	13.43	0.5	0.23	5	54.0	27.96	3.4	1.12	2	0.0	0.00	0.0	0.00	0
Serranus															
atrobranchus	89.2	38.91	0.7	0.30	5	329.4	85.39	5.5	1.54	2	0.0	0.00	0.0	0.00	0
Syacium															
spp.	70.7	41.64	0.8	0.71	5	21.0	21.00	0.4	0.36	2	0.0	0.00	0.0	0.00	0
Prionotus															
stearnsi	42.1	32.29	0.2	0.09	5	430.8	158.78	3.9	1.75	2	0.0	0.00	0.0	0.00	0
Squid	18.9	6.80	0.2	0.10	5	59.6	5.61	0.9	0.38	2	0.0	0.00	0.0	0.00	0

Table 17c
 Statistical Zone 20
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm*		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	77.7	9.55	2	100.3	58.76	4	56.9	16.50	8	22.6	7.61	5	47.1	6.23	2	0.0	0.00	0
Total finfish kg	57.3	8.18	2	83.1	57.87	4	26.6	8.12	8	10.6	3.59	5	32.1	9.39	2	0.0	0.00	0
Total crustacean kg	16.4	13.64	2	8.8	2.62	4	28.6	8.35	8	11.2	3.93	5	13.5	2.85	2	0.0	0.00	0
Total others kg	5.5	5.45	2	7.9	6.47	4	1.8	0.84	8	1.0	0.51	5	1.5	0.32	2	0.0	0.00	0
Surface temperature	27.0	0.00	1	27.7	0.33	5	27.8	0.15	10	27.6	0.35	6	27.9	0.00	1	27.9	0.00	1
Midwater temperature	27.8	0.00	1	27.8	0.22	5	27.7	0.16	10	27.2	0.35	6	25.1	0.00	1	20.9	0.00	1
Bottom temperature	26.9	0.00	1	27.7	0.27	5	27.3	0.30	10	23.2	0.73	6	21.3	0.00	1	17.3	0.00	1
Surface salinity	32.5	0.00	1	33.9	0.30	5	34.0	0.24	10	34.6	0.40	6	36.1	0.00	1	36.3	0.00	1
Midwater salinity	33.6	0.00	1	34.0	0.34	5	34.2	0.21	10	35.7	0.24	6	36.5	0.00	1	36.4	0.00	1
Bottom salinity	34.5	0.00	1	34.5	0.46	5	34.9	0.24	10	36.1	0.17	6	36.3	0.00	1	36.4	0.00	1
Surface chlorophyll	3.0	0.00	1	1.1	0.31	4	1.1	0.23	10	0.7	0.19	4	0.5	0.00	1	0.1	0.00	1
Midwater chlorophyll	2.9	0.00	1	1.0	0.27	3	0.4	0.18	5	0.3	0.17	2	0.0	0.00	0	0.3	0.00	1
Bottom chlorophyll	1.9	0.00	1	1.0	0.21	5	1.0	0.19	10	0.9	0.11	5	0.2	0.00	1	0.0	0.00	1
Surface oxygen	7.0	0.00	1	6.6	0.18	5	6.6	0.15	10	6.8	0.33	6	7.6	0.00	1	6.8	0.00	1
Midwater oxygen	6.8	0.00	1	6.6	0.24	5	6.4	0.14	10	6.6	0.32	6	8.2	0.00	1	5.8	0.00	1
Bottom oxygen	7.2	0.00	1	6.4	0.16	5	6.0	0.16	10	6.6	0.35	6	7.4	0.00	1	4.4	0.00	1

*Plankton and environmental stations only.

Table 18a
 Statistical Zone 21
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 21 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	6.0	0.00	0.0	0.00	1	267.7	132.76	1.4	0.51	4	783.2	298.63	2.6	1.07	12
Penaeus															
aztecus	270.0	0.00	1.9	0.00	1	327.6	197.60	3.0	1.64	4	2474.6	614.11	27.7	7.12	12
Callinectes															
similis	0.0	0.00	0.0	0.00	1	66.1	52.45	0.7	0.48	4	288.8	130.24	3.8	1.28	12
Portunus															
spinicarpus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	12
Sicyonia															
brevirostris	0.0	0.00	0.0	0.00	1	1.5	1.50	0.0	0.02	4	29.6	13.62	0.3	0.12	12
Squilla															
spp.	24.0	0.00	0.3	0.00	1	9.6	3.11	0.1	0.07	4	73.1	25.62	0.8	0.29	12
Micropogonias															
undulatus	2508.0	0.00	57.0	0.00	1	1101.0	576.39	21.1	9.60	4	548.1	470.50	18.8	16.46	12
Stenotomus															
caprinus	0.0	0.00	0.0	0.00	1	155.3	63.69	1.0	0.50	4	1239.8	306.44	6.2	1.36	12
Prionotus															
rubio	48.0	0.00	0.5	0.00	1	66.0	39.57	0.3	0.11	4	32.8	14.38	0.3	0.11	12
Trichiurus															
lepturus	12.0	0.00	0.5	0.00	1	27.0	27.00	0.5	0.55	4	0.6	0.31	0.1	0.03	12
Centropristis															
philadelphica	0.0	0.00	0.0	0.00	1	5.8	5.15	0.0	0.04	4	61.7	31.59	0.6	0.25	12
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	12
Peprilus															
burti	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	4	8.3	4.62	0.2	0.12	12
Upeneus															
parvus	0.0	0.00	0.0	0.00	1	30.4	16.03	0.5	0.37	4	164.2	56.33	1.5	0.49	12
Squid	0.0	0.00	0.0	0.00	1	140.5	77.78	2.9	1.64	4	91.8	25.08	1.6	0.42	12

Table 18a (cont'd.)
 Statistical Zone 21
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 21 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
<i>spp.</i>	350.0	0.00	1.9	0.00	1	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Penaeus															
<i>aztecus</i>	944.0	0.00	13.0	0.00	1	35.5	35.45	2.5	2.48	2	36.0	0.00	2.1	0.00	1
Callinectes															
<i>similis</i>	126.0	0.00	1.9	0.00	1	0.0	0.00	0.0	0.00	2	10.0	0.00	0.1	0.00	1
Portunus															
<i>spinicarpus</i>	0.0	0.00	0.0	0.00	1	78.6	8.64	0.5	0.02	2	16.0	0.00	0.2	0.00	1
Sicyonia															
<i>brevirostris</i>	0.0	0.00	0.0	0.00	1	1.0	1.00	0.0	0.05	2	0.0	0.00	0.0	0.00	1
Squilla															
<i>spp.</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	2	22.0	0.00	0.7	0.00	1
Micropogonias															
<i>undulatus</i>	0.0	0.00	0.0	0.00	1	1.0	1.00	0.1	0.09	2	6.0	0.00	1.1	0.00	1
Stenotomus															
<i>caprinus</i>	46.0	0.00	0.3	0.00	1	191.5	59.45	9.2	3.24	2	98.0	0.00	5.2	0.00	1
Prionotus															
<i>rubio</i>	20.0	0.00	0.8	0.00	1	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Trichiurus															
<i>lepturus</i>	4.0	0.00	0.4	0.00	1	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Centropristis															
<i>philadelphica</i>	4.0	0.00	0.1	0.00	1	63.7	1.73	3.8	0.69	2	26.0	0.00	3.7	0.00	1
Stellifer															
<i>lanceolatus</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Peprilus															
<i>burti</i>	8.0	0.00	0.4	0.00	1	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Upeneus															
<i>parvus</i>	56.0	0.00	0.4	0.00	1	54.1	15.91	2.2	0.07	2	36.0	0.00	1.5	0.00	1
Squid	330.0	0.00	5.1	0.00	1	126.5	64.45	6.7	3.75	2	156.0	0.00	3.0	0.00	1

Table 18b
 Statistical Zone 21
 40-ft trawls

Summary of dominant organisms taken within statistical zone 21 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Penaeus aztecus</i>	270.0	0.00	1.9	0.00	1	327.6	197.60	3.0	1.64	4	2474.6	614.11	27.7	7.12	12
<i>Trachypenaeus spp.</i>	6.0	0.00	0.0	0.00	1	267.7	132.76	1.4	0.51	4	783.2	298.63	2.6	1.07	12
<i>Callinectes similis</i>	0.0	0.00	0.0	0.00	1	66.1	52.45	0.7	0.48	4	288.8	130.24	3.8	1.28	12
<i>Sicyonia dorsalis</i>	0.0	0.00	0.0	0.00	1	6.0	3.46	0.0	0.02	4	70.7	24.76	0.2	0.06	12
<i>Squilla spp.</i>	24.0	0.00	0.3	0.00	1	9.6	3.11	0.1	0.07	4	73.1	25.62	0.8	0.29	12
<i>Penaeus duorarum</i>	0.0	0.00	0.0	0.00	1	31.5	10.78	1.0	0.32	4	28.4	14.54	0.7	0.39	12
<i>Stenotomus caprinus</i>	0.0	0.00	0.0	0.00	1	155.3	63.69	1.0	0.50	4	1239.8	306.44	6.2	1.36	12
<i>Micropogonias undulatus</i>	2508.0	0.00	57.0	0.00	1	1101.0	576.39	21.1	9.60	4	548.1	470.50	18.8	16.46	12
<i>Upeneus parvus</i>	0.0	0.00	0.0	0.00	1	30.4	16.03	0.5	0.37	4	164.2	56.33	1.5	0.49	12
<i>Trachurus lathami</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	4	52.5	49.20	1.0	0.91	12
<i>Serranus atrobranchus</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	4	70.9	36.11	0.4	0.24	12
<i>Saurida brasiliensis</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	4	46.9	31.29	0.3	0.15	12
<i>Leiostomus xanthurus</i>	12.0	0.00	0.8	0.00	1	356.9	184.99	9.4	4.16	4	20.8	10.47	1.2	0.77	12
<i>Centropristis philadelphica</i>	0.0	0.00	0.0	0.00	1	5.8	5.15	0.0	0.04	4	61.7	31.59	0.6	0.25	12
Squid	0.0	0.00	0.0	0.00	1	140.5	77.78	2.9	1.64	4	91.8	25.08	1.6	0.42	12

Table 18b (cont'd.)
 Statistical Zone 21
 40-ft trawls

Summary of dominant organisms taken within statistical zone 21 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
<u>aztecus</u>	944.0	0.00	13.0	0.00	1	35.5	35.45	2.5	2.48	2	36.0	0.00	2.1	0.00	1
Trachypenaeus															
<u>spp.</u>	350.0	0.00	1.9	0.00	1	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Callinectes															
<u>similis</u>	126.0	0.00	1.9	0.00	1	0.0	0.00	0.0	0.00	2	10.0	0.00	0.1	0.00	1
Sicyonia															
<u>dorsalis</u>	122.0	0.00	0.4	0.00	1	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Squilla															
<u>spp.</u>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	2	22.0	0.00	0.7	0.00	1
Penaeus															
<u>duorarum</u>	0.0	0.00	0.0	0.00	1	13.0	13.00	0.7	0.73	2	0.0	0.00	0.0	0.00	1
Stenotomus															
<u>caprinus</u>	46.0	0.00	0.3	0.00	1	191.5	59.45	9.2	3.24	2	98.0	0.00	5.2	0.00	1
Micropogonias															
<u>undulatus</u>	0.0	0.00	0.0	0.00	1	1.0	1.00	0.1	0.09	2	6.0	0.00	1.1	0.00	1
Upeneus															
<u>parvus</u>	56.0	0.00	0.4	0.00	1	54.1	15.91	2.2	0.07	2	36.0	0.00	1.5	0.00	1
Trachurus															
<u>lathami</u>	858.0	0.00	11.5	0.00	1	1.0	1.00	0.0	0.05	2	16.0	0.00	0.3	0.00	1
Serranus															
<u>atrobranchus</u>	126.0	0.00	1.5	0.00	1	55.1	16.91	1.0	0.05	2	264.0	0.00	6.7	0.00	1
Saurida															
<u>brasiliensis</u>	386.0	0.00	2.7	0.00	1	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Leiostomus															
<u>xanthurus</u>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Centropristis															
<u>philadelphica</u>	4.0	0.00	0.1	0.00	1	63.7	1.73	3.8	0.69	2	26.0	0.00	3.7	0.00	1
Squid															
	330.0	0.00	5.1	0.00	1	126.5	64.45	6.7	3.75	2	156.0	0.00	3.0	0.00	1

Table 18c
 Statistical Zone 21
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	103.6	0.00	1	61.8	16.96	4	76.2	21.01	12	55.5	0.00	1	52.1	14.83	2	55.5	0.00	1
Total finfish kg	79.1	0.00	1	49.3	15.99	4	37.0	18.01	12	33.6	0.00	1	38.1	9.01	2	48.2	0.00	1
Total crustacean kg	24.5	0.00	1	9.6	3.34	4	37.9	8.91	12	17.3	0.00	1	3.8	1.12	2	3.6	0.00	1
Total others kg	0.0	0.00	1	2.9	1.56	4	1.6	0.45	12	5.5	0.00	1	10.6	4.26	2	3.6	0.00	1
Surface temperature	27.0	0.00	1	27.0	0.29	5	27.2	0.10	13	27.8	0.00	1	27.4	0.24	2	27.5	0.06	3
Midwater temperature	27.0	0.00	1	27.2	0.21	5	27.0	0.17	13	21.1	0.00	1	27.3	0.40	2	23.5	0.67	3
Bottom temperature	27.0	0.00	1	27.3	0.17	5	24.8	0.51	13	21.4	0.00	1	22.1	0.04	2	19.5	0.09	3
Surface salinity	36.1	0.00	1	36.0	0.09	5	35.9	0.08	13	35.5	0.00	1	36.0	0.01	2	36.2	0.01	3
Midwater salinity	36.0	0.00	1	36.0	0.06	5	35.9	0.07	13	36.2	0.00	1	36.2	0.09	2	36.7	0.17	3
Bottom salinity	36.0	0.00	1	36.1	0.04	5	36.2	0.12	13	36.1	0.00	1	36.4	0.00	2	36.5	0.05	3
Surface chlorophyll	1.7	0.00	1	1.4	0.51	5	0.8	0.09	13	0.4	0.00	1	0.8	0.13	2	0.7	0.09	3
Midwater chlorophyll	0.4	0.00	1	0.3	0.11	2	0.2	0.02	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	1.3	0.00	1	1.0	0.45	5	1.4	0.22	13	1.4	0.00	1	0.3	0.12	2	0.5	0.08	3
Surface oxygen	6.3	0.00	1	6.4	0.05	5	6.4	0.08	13	6.6	0.00	1	6.5	0.25	2	7.3	0.41	3
Midwater oxygen	6.3	0.00	1	6.3	0.09	5	6.3	0.10	13	6.7	0.00	1	6.6	0.30	2	7.3	0.07	3
Bottom oxygen	6.3	0.00	1	6.4	0.04	5	5.9	0.16	13	6.2	0.00	1	6.5	0.25	2	5.3	0.03	3

Table 19a
 Statistical Zone 10
 16-ft trawls

Summary of dominant organisms, combined for all zone sampled, shrimp statistical zone 10, taken during June-July 1985 SEAMAP Shrimp and Bottomfish Survey, out to 20 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken in that zone are given.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
<u>aztecus</u>	9.0	5.20	0.0	0.00	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Callinectes															
<u>similis</u>	9.0	5.74	0.1	0.07	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Trachypenaeus															
<u>spp.</u>	1.5	1.50	0.0	0.00	4	1.5	1.50	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Callinectes															
<u>sapidus</u>	3.0	3.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Portunus															
<u>gibbesii</u>	5.1	3.05	0.0	0.00	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Sicyonia															
<u>brevirostris</u>	1.1	1.07	0.0	0.00	4	15.9	12.77	0.0	0.00	4	3.0	3.00	0.0	0.00	2
Anchoa															
<u>mitchilli</u>	651.0	651.00	0.5	0.55	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Micropogonias															
<u>undulatus</u>	82.5	80.51	3.0	3.00	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Stenotomus															
<u>caprinus</u>	74.1	68.19	0.4	0.28	4	284.7	259.28	0.7	0.67	4	0.0	0.00	0.0	0.00	2
Symphurus															
<u>plagiusa</u>	9.0	5.74	0.1	0.07	4	1.5	1.50	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Etropus															
<u>crossotus</u>	22.1	6.57	0.1	0.07	4	54.0	42.50	0.5	0.22	4	0.0	0.00	0.0	0.00	2
Stellifer															
<u>lanceolatus</u>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Prionotus															
<u>rubio</u>	51.0	28.41	0.3	0.16	4	1.5	1.50	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Cynoscion															
<u>arenarius</u>	4.5	4.50	0.0	0.00	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Squid															
	14.4	4.85	0.1	0.07	4	13.8	7.42	0.0	0.00	4	3.0	3.00	0.0	0.00	2

Table 19b
 Statistical Zone 10
 16-ft trawls

Summary of dominant organisms taken within shrimp statistical zone 10 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey out to 20 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus															
<i>sayi</i>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Sicyonia															
<i>brevirostris</i>	1.1	1.07	0.0	0.00	4	15.9	12.77	0.0	0.00	4	3.0	3.00	0.0	0.00	2
Metoporphaphis															
<i>calcarata</i>	12.0	12.00	0.0	0.00	4	1.5	1.50	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Penaeus															
<i>duorarum</i>	10.5	8.62	0.0	0.00	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Penaeus															
<i>aztecus</i>	9.0	5.20	0.0	0.00	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Parthenope															
<i>serrata</i>	0.0	0.00	0.0	0.00	4	1.5	1.50	0.0	0.00	4	15.0	9.00	0.0	0.00	2
Anchoa															
<i>mitchilli</i>	651.0	651.00	0.5	0.55	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Stenotomus															
<i>caprinus</i>	74.1	68.19	0.4	0.28	4	284.7	259.28	0.7	0.67	4	0.0	0.00	0.0	0.00	2
Anchoa															
<i>nasuta</i>	88.5	78.82	0.1	0.07	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Micropogonias															
<i>undulatus</i>	82.5	80.51	3.0	3.00	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Selene															
<i>setapinnis</i>	79.5	77.51	0.3	0.27	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Etropus															
<i>crossotus</i>	22.1	6.57	0.1	0.07	4	54.0	42.50	0.5	0.22	4	0.0	0.00	0.0	0.00	2
Prionotus															
<i>rubio</i>	51.0	28.41	0.3	0.16	4	1.5	1.50	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Chloroscombrus															
<i>chrysurus</i>	47.8	32.65	0.1	0.07	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	2
Squid	14.4	4.85	0.1	0.07	4	13.8	7.42	0.0	0.00	4	3.0	3.00	0.0	0.00	2

Table 19c
 Statistical Zone 10
 16-ft trawls; 0-20 fathoms

Summary of the mean total catch (kg/hr) and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey for shrimp statistical zone 10. Catch values in kg, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	8.7	6.20	4	2.4	0.28	4	2.7	0.00	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	7.3	5.78	4	2.4	0.28	4	1.4	1.36	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	0.7	0.68	4	0.7	0.68	4	0.0	0.00	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	0.7	0.68	4	0.0	0.00	4	0.0	0.00	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	25.6	0.48	5	25.5	0.50	3	25.5	0.41	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	23.3	0.93	5	21.5	0.58	3	20.9	0.72	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	22.5	0.88	5	21.5	0.29	3	20.4	0.38	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	32.2	0.73	5	33.3	1.67	3	31.3	0.48	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	33.4	0.40	5	34.0	1.00	3	33.5	0.65	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	33.4	0.40	5	34.3	1.20	3	33.5	0.65	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.7	0.15	5	0.5	0.30	3	0.2	0.04	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	1.0	0.07	3	1.7	0.00	1	0.3	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	2.5	0.28	3	4.6	0.00	1	1.2	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	5.2	0.62	5	6.0	0.35	3	5.5	0.88	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	5.6	0.51	5	5.1	1.54	3	5.1	0.68	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	5.0	0.89	5	4.3	0.24	3	4.8	0.33	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 20a
 Statistical Zone 11
 16-ft trawls

Summary of dominant organisms, combined for all zone sampled, shrimp statistical zone 11, taken during June-July 1985 SEAMAP Shrimp and Bottomfish Survey, out to 20 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken in that zone are given.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
<u>aztecus</u>	1.5	1.50	0.1	0.07	4	68.1	46.17	0.7	0.47	5	0.0	0.00	0.0	0.00	2
Callinectes															
<u>similis</u>	1.5	1.50	0.1	0.07	4	436.8	339.27	4.5	3.66	5	0.0	0.00	0.0	0.00	2
Trachypenaeus															
<u>spp.</u>	0.0	0.00	0.0	0.00	4	97.7	73.97	0.1	0.05	5	0.0	0.00	0.0	0.00	2
Callinectes															
<u>sapidus</u>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	2
Portunus															
<u>gibbesii</u>	0.0	0.00	0.0	0.00	4	52.4	41.66	0.1	0.11	5	30.0	30.00	0.2	0.23	2
Sicyonia															
<u>brevirostris</u>	0.0	0.00	0.0	0.00	4	46.1	30.76	0.2	0.16	5	23.0	13.00	0.0	0.00	2
Anchoa															
<u>mitchilli</u>	0.0	0.00	0.0	0.00	4	49.0	41.94	0.1	0.08	5	0.0	0.00	0.0	0.00	2
Micropogonias															
<u>undulatus</u>	0.0	0.00	0.0	0.00	4	1.2	1.24	0.0	0.04	5	0.0	0.00	0.0	0.00	2
Stenotomus															
<u>caprinus</u>	0.0	0.00	0.0	0.00	4	68.4	55.40	0.3	0.33	5	35.5	30.50	0.1	0.14	2
Symphurus															
<u>plagiusa</u>	0.0	0.00	0.0	0.00	4	141.0	96.96	1.6	0.95	5	0.0	0.00	0.0	0.00	2
Etropus															
<u>crossotus</u>	0.0	0.00	0.0	0.00	4	98.9	59.28	0.4	0.20	5	56.5	21.50	0.4	0.16	2
Stellifer															
<u>lanceolatus</u>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	2
Prionotus															
<u>rubio</u>	1.5	1.50	0.0	0.00	4	90.3	35.54	0.4	0.20	5	0.0	0.00	0.0	0.00	2
Cynoscion															
<u>arenarius</u>	1.5	1.50	0.2	0.20	4	2.0	1.28	0.1	0.09	5	0.0	0.00	0.0	0.00	2
Squid															
	27.0	25.04	0.2	0.13	4	408.2	205.98	1.0	0.44	5	3.0	3.00	0.0	0.00	2

Table 20b
 Statistical Zone 11
 16-ft trawls

Summary of dominant organisms taken within shrimp statistical zone 11 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey out to 20 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	1.5	1.50	0.1	0.07	4	436.8	339.27	4.5	3.66	5	0.0	0.00	0.0	0.00	2
Trachypenaeus															
<i>spp.</i>	0.0	0.00	0.0	0.00	4	97.7	73.97	0.1	0.05	5	0.0	0.00	0.0	0.00	2
Penaeus															
<i>aztecus</i>	1.5	1.50	0.1	0.07	4	68.1	46.17	0.7	0.47	5	0.0	0.00	0.0	0.00	2
Portunus															
<i>gibbesii</i>	0.0	0.00	0.0	0.00	4	52.4	41.66	0.1	0.11	5	30.0	30.00	0.2	0.23	2
Sicyonia															
<i>brevirostris</i>	0.0	0.00	0.0	0.00	4	46.1	30.76	0.2	0.16	5	23.0	13.00	0.0	0.00	2
Squilla															
<i>empusa</i>	0.0	0.00	0.0	0.00	4	47.3	36.30	0.2	0.15	5	0.0	0.00	0.0	0.00	2
Symphurus															
<i>plagiusa</i>	0.0	0.00	0.0	0.00	4	141.0	96.96	1.6	0.95	5	0.0	0.00	0.0	0.00	2
Etropus															
<i>crossotus</i>	0.0	0.00	0.0	0.00	4	98.9	59.28	0.4	0.20	5	56.5	21.50	0.4	0.16	2
Prionotus															
<i>rubio</i>	1.5	1.50	0.0	0.00	4	90.3	35.54	0.4	0.20	5	0.0	0.00	0.0	0.00	2
Anchoa															
<i>mitchilli</i>	0.0	0.00	0.0	0.00	4	49.0	41.94	0.1	0.08	5	0.0	0.00	0.0	0.00	2
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	4	68.4	55.40	0.3	0.33	5	35.5	30.50	0.1	0.14	2
Anchoa															
<i>hepsetus</i>	58.5	58.50	0.1	0.14	4	13.9	8.56	0.1	0.06	5	0.0	0.00	0.0	0.00	2
Saurida															
<i>brasiliensis</i>	0.0	0.00	0.0	0.00	4	1.6	1.17	0.0	0.00	5	144.0	144.00	0.3	0.27	2
Sphoeroides															
<i>parvus</i>	0.0	0.00	0.0	0.00	4	29.7	12.69	0.1	0.05	5	2.5	2.50	0.0	0.00	2
Squid															
	27.0	25.04	0.2	0.13	4	408.2	205.98	1.0	0.44	5	3.0	3.00	0.0	0.00	2

Table 20c
 Statistical Zone 11
 16-ft trawls; 0-20 fathoms

Summary of the mean total catch (kg/hr) and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey for shrimp statistical zone 11. Catch values in kg, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	2.7	0.00	4	14.4	6.09	5	3.6	0.91	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	1.4	0.79	4	5.3	1.01	5	2.5	0.23	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	1.4	0.79	4	8.0	4.85	5	1.1	1.14	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	1.4	0.79	4	1.1	0.68	5	0.0	0.00	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	29.2	0.74	4	24.6	0.80	5	25.3	0.75	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	26.5	0.00	1	20.8	0.73	5	21.0	0.50	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	27.5	1.85	4	20.5	0.42	5	20.5	0.50	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	29.4	0.32	4	31.6	0.75	5	31.0	1.00	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	30.0	0.00	1	33.4	0.40	5	32.5	0.50	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	31.3	0.71	4	33.0	0.45	5	33.0	1.00	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.8	0.10	4	1.3	0.11	5	0.8	0.22	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	2.4	0.00	1	2.2	0.90	2	3.0	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	4.8	0.00	1	4.1	0.50	2	4.3	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	6.3	0.04	4	5.2	0.75	5	4.2	0.00	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	6.2	0.00	1	3.8	0.52	5	4.1	0.70	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	5.5	0.84	4	3.6	0.37	5	5.3	0.30	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 21a
 Statistical Zone 12
 16-ft trawls

Summary of dominant organisms, combined for all zone sampled, shrimp statistical zone 12, taken during June-July 1985 SEAMAP Shrimp and Bottomfish Survey, in the 0-5 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken in that zone are given.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Penaeus</i>															
<i>aztecus</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Callinectes</i>															
<i>similis</i>	2.0	2.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Trachypenaeus</i>															
<i>spp.</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Callinectes</i>															
<i>sapidus</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Portunus</i>															
<i>gibbesii</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Sicyonia</i>															
<i>brevirostris</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Anchoa</i>															
<i>mitchilli</i>	254.0	201.91	0.3	0.16	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Micropogonias</i>															
<i>undulatus</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Stenotomus</i>															
<i>caprinus</i>	2.0	2.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Symphurus</i>															
<i>plagiusa</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Etropus</i>															
<i>crossotus</i>	2.0	2.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Stellifer</i>															
<i>lanceolatus</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Prionotus</i>															
<i>rubio</i>	2.0	2.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Cynoscion</i>															
<i>arenarius</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Squid</i>	16.0	13.11	0.2	0.18	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 21b
 Statistical Zone 12
 16-ft trawls

Summary of dominant organisms taken within shrimp statistical zone 12 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey in the 0-5 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
setiferus	8.0	8.00	0.4	0.36	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
similis	2.0	2.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Pagurus															
longicarpus	2.0	2.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Anchoa															
mitchilli	254.0	201.91	0.3	0.16	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Menticirrhus															
americanus	54.0	54.00	0.5	0.55	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Anchoa															
nasuta	12.0	9.17	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Selene															
setapinnis	6.0	3.46	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Larimus															
fasciatus	4.0	4.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Leiostomus															
xanthurus	2.0	2.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus															
caprinus	2.0	2.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus															
rubio	2.0	2.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid	16.0	13.11	0.2	0.18	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 21c
 Statistical Zone 12
 16-ft trawls; 0-5 fathoms

Summary of the mean total catch (kg/hr) and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey for shrimp statistical zone 12. Catch values in kg, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	2.7	0.00	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	2.7	0.00	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	0.9	0.91	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	2.7	0.00	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	23.1	0.33	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	20.6	0.55	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	30.9	0.15	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	35.0	0.72	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	5.3	2.10	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	7.4	0.49	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	5.9	0.84	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 22a
 Statistical Zone 13
 16-ft trawls

Summary of dominant organisms, combined for all zone sampled, shrimp statistical zone 13, taken during June-July 1985 SEAMAP Shrimp and Bottomfish Survey, in the 0-5 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken in that zone are given.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
<u>aztecus</u>	674.0	440.05	6.0	3.82	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
<u>similis</u>	164.0	158.00	0.3	0.27	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus															
<u>spp.</u>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
<u>sapidus</u>	8.0	5.29	1.0	0.55	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Portunus															
<u>gibbesii</u>	12.0	12.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Sicyonia															
<u>brevirostris</u>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Anchoa															
<u>mitchilli</u>	316.0	98.06	0.5	0.24	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias															
<u>undulatus</u>	280.0	121.31	2.9	1.41	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus															
<u>caprinus</u>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Symphurus															
<u>plagiusa</u>	178.0	175.01	1.1	1.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Etropus															
<u>crossotus</u>	2.0	2.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stellifer															
<u>lanceolatus</u>	14.0	7.21	0.2	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus															
<u>rubio</u>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion															
<u>arenarius</u>	32.0	15.62	0.9	0.64	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid															
<u>Squid</u>	14.0	8.72	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 22b
 Statistical Zone 13
 16-ft trawls

Summary of dominant organisms taken within shrimp statistical zone 13 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey in the 0-5 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Penaeus</i>															
<i>aztecus</i>	674.0	440.05	6.0	3.82	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Callinectes</i>															
<i>similis</i>	164.0	158.00	0.3	0.27	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Portunus</i>															
<i>gibbesii</i>	12.0	12.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Callinectes</i>															
<i>sapidus</i>	8.0	5.29	1.0	0.55	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Squilla</i>															
<i>empusa</i>	2.0	2.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Anchoa</i>															
<i>mitchilli</i>	316.0	98.06	0.5	0.24	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Micropogonias</i>															
<i>undulatus</i>	280.0	121.31	2.9	1.41	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Symphurus</i>															
<i>plagiusa</i>	178.0	175.01	1.1	1.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Cynoscion</i>															
<i>arenarius</i>	32.0	15.62	0.9	0.64	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Leiostomus</i>															
<i>xanthurus</i>	28.0	25.06	0.7	0.60	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Trichiurus</i>															
<i>lepturus</i>	26.0	26.00	0.4	0.36	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Polydactylus</i>															
<i>octonemus</i>	24.0	15.87	0.5	0.24	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Stellifer</i>															
<i>lanceolatus</i>	14.0	7.21	0.2	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Squid</i>	14.0	8.72	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 22c
 Statistical Zone 13
 16-ft trawls; 0-5 fathoms

Summary of the mean total catch (kg/hr) and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey for shrimp statistical zone 13. Catch values in kg, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	13.6	3.15	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	8.2	1.57	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	7.3	3.28	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	1.8	0.91	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	27.4	0.20	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	27.2	0.12	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	20.9	0.83	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	21.2	1.02	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	6.4	0.06	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	5.7	0.47	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 23a
 Statistical Zone 14
 16-ft trawls

Summary of dominant organisms, combined for all zone sampled, shrimp statistical zone 14, taken during June-July 1985 SEAMAP Shrimp and Bottomfish Survey in the 0-5 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken in that zone are given.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
<u>aztecus</u>	79.0	40.85	0.7	0.42	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
<u>similis</u>	23.0	18.36	0.1	0.06	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus															
<u>spp.</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
<u>sapidus</u>	39.0	23.22	7.1	3.96	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Portunus															
<u>gibbesii</u>	5.0	5.00	0.0	0.05	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Sicyonia															
<u>brevirostris</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Anchoa															
<u>mitchilli</u>	2154.0	2056.05	0.9	0.70	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias															
<u>undulatus</u>	96.0	42.45	2.0	0.82	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus															
<u>caprinus</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Symphurus															
<u>plagiusa</u>	1.0	1.00	0.0	0.05	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Etropus															
<u>crossotus</u>	2.0	2.00	0.0	0.05	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stellifer															
<u>lanceolatus</u>	10.0	10.00	0.1	0.14	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus															
<u>rubio</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion															
<u>arenarius</u>	5.0	2.41	0.3	0.17	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid															
<u></u>	5.0	2.41	0.1	0.06	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 23b
 Statistical Zone 14
 16-ft trawls

Summary of dominant organisms taken within shrimp statistical zone 14 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey in the 0-5 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Penaeus</i>															
<i>aztecus</i>	79.0	40.85	0.7	0.42	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Callinectes</i>															
<i>sapidus</i>	39.0	23.22	7.1	3.96	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Callinectes</i>															
<i>similis</i>	23.0	18.36	0.1	0.06	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Ovalipes</i>															
<i>floridanus</i>	6.0	4.10	0.1	0.06	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Portunus</i>															
<i>gibbesii</i>	5.0	5.00	0.0	0.05	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Trachypenaeus</i>															
<i>constrictus</i>	5.0	3.92	0.1	0.06	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Anchoa</i>															
<i>mitchilli</i>	2154.0	2056.05	0.9	0.70	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Micropogonias</i>															
<i>undulatus</i>	96.0	42.45	2.0	0.82	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Anchoa</i>															
<i>hepsetus</i>	20.0	14.09	0.1	0.06	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Chloroscombrus</i>															
<i>chrysurus</i>	18.0	14.53	0.1	0.06	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Leiostomus</i>															
<i>xanthurus</i>	14.0	14.00	0.2	0.18	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Stellifer</i>															
<i>lanceolatus</i>	10.0	10.00	0.1	0.14	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Polydactylus</i>															
<i>octonemus</i>	8.0	3.69	0.1	0.06	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Cynoscion</i>															
<i>arenarius</i>	5.0	2.41	0.3	0.17	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Squid</i>	5.0	2.41	0.1	0.06	6	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 23c
 Statistical Zone 14
 16-ft trawls; 0-5 fathoms

Summary of the mean total catch (kg/hr) and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey for shrimp statistical zone 14. Catch values in kg, temperature in °C, salinity in ppt, and oxygen in ppm.

	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
Environmental category	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	32.7	18.78	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	24.5	19.72	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	8.6	4.19	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	1.4	0.61	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	29.1	0.53	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	28.4	0.71	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	22.3	0.94	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	23.8	0.87	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	7.2	0.40	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	5.8	0.72	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 24a
 Statistical Zone 16
 16-ft trawls

Summary of dominant organisms, combined for all zone sampled, shrimp statistical zone 16, taken during June-July 1985 SEAMAP Shrimp and Bottomfish Survey in the 0-5 fm depth stratum; no sampling was done in zone 15. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken in that zone are given.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
<u>aztecus</u>	124.0	57.38	0.7	0.24	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
<u>similis</u>	76.0	47.03	0.8	0.47	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus															
<u>spp.</u>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
<u>sapidus</u>	16.0	7.21	3.0	2.20	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Portunus															
<u>gibbesii</u>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Sicyonia															
<u>brevirostris</u>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Anchoa															
<u>mitchilli</u>	184.0	82.15	0.3	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias															
<u>undulatus</u>	98.0	34.70	1.5	0.64	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus															
<u>caprinus</u>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Symphurus															
<u>plagiusa</u>	6.0	6.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Etropus															
<u>crossotus</u>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stellifer															
<u>lanceolatus</u>	24.0	24.00	0.3	0.27	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus															
<u>rubio</u>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion															
<u>arenarius</u>	116.0	116.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid															
<u>Squid</u>	6.0	3.46	0.2	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 24b
 Statistical Zone 16
 16-ft trawls

Summary of dominant organisms taken within shrimp statistical zone 16 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey in the 0-5 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
<u>aztecus</u>	124.0	57.38	0.7	0.24	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
<u>similis</u>	76.0	47.03	0.8	0.47	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
<u>sapidus</u>	16.0	7.21	3.0	2.20	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla															
<u>empusa</u>	10.0	10.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Libinia															
<u>emarginata</u>	2.0	2.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Anchoa															
<u>mitchilli</u>	184.0	82.15	0.3	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion															
<u>arenarius</u>	116.0	116.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias															
<u>undulatus</u>	98.0	34.70	1.5	0.64	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Chloroscombrus															
<u>chrysurus</u>	26.0	23.07	0.2	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Selene															
<u>setapinnis</u>	24.0	24.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stellifer															
<u>lanceolatus</u>	24.0	24.00	0.3	0.27	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus															
<u>tribulus</u>	10.0	10.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Peprilus															
<u>paru</u>	6.0	0.00	0.3	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid															
<u> </u>	6.0	3.46	0.2	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 24c
 Statistical Zone 16
 16-ft trawls; 0-5 fathoms

Summary of the mean total catch (kg/hr) and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey for shrimp statistical zone 16. Catch values in kg, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	9.1	3.64	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	3.6	0.91	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	5.5	2.73	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	1.8	0.91	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	27.7	0.24	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	27.7	0.22	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	19.1	7.13	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	19.1	7.34	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	6.8	0.56	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	6.7	0.50	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 25a
 Statistical Zone 17
 16-ft trawls

Summary of dominant organisms, combined for all zone sampled, shrimp statistical zone 17, taken during June-July 1985 SEAMAP Shrimp and Bottomfish Survey in the 0-5 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken in that zone are given.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Penaeus</i>															
<i>aztecus</i>	250.0	144.18	1.5	0.81	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Callinectes</i>															
<i>similis</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Trachypenaeus</i>															
<i>spp.</i>	68.0	68.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Callinectes</i>															
<i>sapidus</i>	110.0	16.00	7.3	1.73	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Portunus</i>															
<i>gibbesii</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Sicyonia</i>															
<i>brevirostris</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Anchoa</i>															
<i>mitchilli</i>	174.0	162.15	0.3	0.16	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Micropogonias</i>															
<i>undulatus</i>	142.0	68.79	2.0	1.02	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Stenotomus</i>															
<i>caprinus</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Symphurus</i>															
<i>plagiusa</i>	34.0	25.53	0.3	0.16	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Etropus</i>															
<i>crossotus</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Stellifer</i>															
<i>lanceolatus</i>	248.0	115.12	0.9	0.51	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Prionotus</i>															
<i>rubio</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Cynoscion</i>															
<i>arenarius</i>	24.0	24.00	0.4	0.36	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
<i>Squid</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 25b
 Statistical Zone 17
 16-ft trawls

Summary of dominant organisms taken within shrimp statistical zone 17 during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey in the 0-5 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
<u>aztecus</u>	250.0	144.18	1.5	0.81	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Xiphopenaeus															
<u>spp.</u>	112.0	17.78	0.3	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
<u>sapidus</u>	110.0	16.00	7.3	1.73	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Penaeus															
<u>setiferus</u>	96.0	75.50	0.3	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus															
<u>spp.</u>	68.0	68.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Acetes															
<u>americanus</u>	6.0	6.00	0.1	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stellifer															
<u>lanceolatus</u>	248.0	115.12	0.9	0.51	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Anchoa															
<u>mitchilli</u>	174.0	162.15	0.3	0.16	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias															
<u>undulatus</u>	142.0	68.79	2.0	1.02	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Polydactylus															
<u>octonemus</u>	70.0	19.70	0.7	0.33	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Arius															
<u>felis</u>	40.0	21.17	1.1	0.55	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion															
<u>spp.</u>	40.0	20.00	0.4	0.24	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion															
<u>nothus</u>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Symphurus															
<u>plagiusa</u>	34.0	25.53	0.3	0.16	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Peprilus															
<u>paru</u>	26.0	20.00	0.4	0.09	3	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 25c
 Statistical Zone 17
 16-ft trawls; 0-5 fathoms

Summary of the mean total catch (kg/hr) and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the June-July 1985 SEAMAP Shrimp and Bottomfish Survey for shrimp statistical zone 17. Catch values in kg, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	18.2	2.41	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	9.1	2.41	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	10.0	1.82	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	0.0	0.00	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	28.3	0.03	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	28.5	0.12	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	13.1	0.67	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	16.7	2.01	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	3.7	0.18	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	6.8	0.09	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	6.5	0.50	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 26. SEAMAP Summer Squid/Butterfish Trawl Survey species composition list, 141 trawl stations. Species with a total weight of less than .05 lb (22.7 g) are indicated on table as 0.0 kg.

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
			CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OF OCCURRENCE
<u>Finfishes</u>						
Steindachneria	argentea	luminous hake	17427	347.7	56	39.7
Peprilus	burti	gulf butterfish	8106	525.9	41	29.1
Polymixia	lowei	beardfish	7515	329.8	63	44.7
Trachurus	lathami	rough scad	6129	275.9	40	28.4
Coelorinchus	caribbaeus	blackfin grenadier	6120	275.7	50	35.5
Pontinus	longispinis	longspine scorpionfish	2928	206.3	35	24.8
Pristipomoides	aquilonaris	wenchman	2865	307.2	55	39.0
Stenotomus	caprinus	longspine porgy	2451	130.8	28	19.9
Epigonus	pandionis	cardinalfish	2448	52.0	46	32.6
Macrorhamphosus	scolopax	longspine snipefish	2404	14.4	28	19.9
Urophycis	cirrata	gulf hake	2318	534.3	88	62.4
Prionotus	stearnsi	shortwing searobin	2240	41.3	47	33.3
Synagrops	bellus	blackmouth bass	2102	126.3	51	36.2
Brosmiculus	imberbis	morid cod	1924	37.9	33	23.4
Chauliodus	sloani	deepsea viperfish	1813	34.1	24	17.0
Merluccius	albidus	offshore hake	1568	235.8	55	39.0
Parasudis	truculenta	longnose greeneye	1504	53.0	46	32.6
Bembrops	anatirostris	duckbill flathead	1418	66.7	44	31.2
Trichiurus	lepturus	Atlantic cutlassfish	1342	83.7	22	15.6
Synagrops	spinosus	temperate bass	1280	28.1	22	15.6
Zenion	hololepis	dory	972	7.7	5	3.5
Serranus	atrobranchus	blackear bass	950	18.8	28	19.9
Saurida	braziliensis	largescale lizardfish	914	29.6	36	25.5
Setarches	guentheri	scorpionfish	896	21.0	29	20.6
Bembrops	gobioides	goby flathead	881	68.4	47	33.3
Coelorinchus	coelorhynchus carminatus	saddled grenadier	876	42.5	25	17.7

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Micropogonias	undulatus	Atlantic croaker	866	51.9	8	5.7
Upeneus	parvus	dwarf goatfish	795	26.1	17	12.1
Peristedion	gracile	slender searobin	764	19.2	32	22.7
Epinnula	americana	snake mackerel	721	53.5	29	20.6
Scorpaena	spp.	scorpionfishes	692	34.9	10	7.1
Chlorophthalmus	agassizi	shortnose greeneye	668	20.5	29	20.6
Yarella	blackfordi	bristlemouth	628	21.5	8	5.7
Synodus	foetens	inshore lizardfish	604	63.0	25	17.7
Antigonia	capros	deepbody boarfish	578	27.1	13	9.2
Ariomma	bondi	silver-rag	572	33.0	22	15.6
Ogcocephalus	spp.	batfishes	567	10.0	34	24.1
Urophycis	floridana	southern hake	546	107.1	66	46.8
Neomerinthe	hemingwayi	spinycheek scorpionfish	545	44.2	22	15.6
Ventrifossa	occidentalis	grenadier	523	33.5	27	19.1
Dibranchius	atlanticus	offshore batfish	467	12.5	35	24.8
Lagodon	rhomboides	pinfish	397	26.4	17	12.1
Prionotus	paralatus	Mexican searobin	378	16.2	26	18.4
Trichopsetta	ventralis	sash flounder	377	13.0	28	19.9
Apogon	spp.	cardinalfishes	366	2.0	1	0.7
Laemonema	sp.	morid cods	344	22.2	15	10.6
Poecilopsetta	beani	offshore flounder	318	5.3	23	16.3
Etrumeus	teres	round herring	287	8.0	7	5.0
Bothidae		lefteye founders	253	3.3	7	5.0
Centropristis	philadelphica	rock sea bass	250	15.2	20	14.2
Antigonia	combatia	shortspine boarfish	234	13.2	1	0.7
Bembrops	spp.	flatheads	233	6.5	2	1.4

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Myctophidae		lantern fishes	232	2.4	20	14.2
Halieutichthys	aculeatus	pancake batfish	228	2.6	17	12.1
Prionotus	rubio	blackfin searobin	195	6.2	11	7.8
Etmopterus	gracilispinis	broadband dogfish	195	10.5	12	8.5
Paralichthys	squamilentus	broad flounder	183	121.5	21	14.9
Mullus	auratus	red goatfish	178	4.8	6	4.3
Antennarius	radiosus	singlespot frogfish	176	5.7	23	16.3
Argentina	striata	striated argentine	175	7.0	22	15.6
Ariomma	melanum	brown driftfish	173	10.1	18	12.8
Xenolepidichthys	dalgleishi	spotted tinselfish	169	3.8	14	9.9
Ancylopsetta	dilecta	three-eye flounder	169	11.4	29	20.6
Apogonidae		cardinalfishes	163	3.0	3	2.1
Epigonus	macrops	cardinalfish	160	4.5	8	5.7
Scomber	japonicus	chub mackerel	147	10.2	5	3.5
Benthodesmus	tenuis	cutlassfish	145	6.9	5	3.5
Gnathagnus	egregius	freckled stargazer	143	30.0	25	17.7
Pikea	mexicana	yellowtail bass	126	3.4	16	11.3
Sternoptychidae		hatchetfishes	126	0.9	7	5.0
Chauliodus	spp.	viperfishes	126	1.9	3	2.1
Centropristis	spp.	sea basses	120	1.2	1	0.7
Physiculus	fulvus	morid codlet	119	5.0	11	7.8
Prionotus	roseus	bluespotted searobin	114	4.2	9	6.4
Anchoa	hepsetus	striped anchovy	111	2.7	4	2.8
Kathetostoma	albigutta	lancer stargazer	110	9.4	16	11.3
Peristedion	spp.	searobins	106	3.5	8	5.7
Monolene	sessilicauda	deepwater flounder	105	1.9	12	8.5

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
			CAUGHT	CAUGHT	TOWS WHERE	OF OCCURRENCE
				(KG)	CAUGHT	
Citharichthys	cornutus	horned whiff	102	0.9	8	5.7
Cyttopsis	rosea	red dory	96	2.2	14	9.9
Citharichthys	spilopterus	bay whiff	95	1.8	2	1.4
Bathygadus	macrops	grenadier	94	3.6	2	1.4
Gymnachirus	texae	fringed sole	87	0.9	4	2.8
Peristedion	truncatum	armored searobin	86	7.3	8	5.7
Hymenocephalus	aterrimus	macrourid	82	0.5	5	3.5
Hoplostethus	occidentalis	slimehead	76	4.0	20	14.2
Bellator	egretta	streamer searobin	73	3.6	7	5.0
Breviraja	sinusmexicana	speckled skate	72	7.9	16	11.3
Argentinidae		argentinines	66	2.0	2	1.4
Caulolatilus	intermedius	anchor tilefish	64	12.9	18	12.8
Hemanthias	vivanus	red barbier	60	16.4	9	6.4
Gempylidae		snake mackerels	59	4.6	2	1.4
Nezumia	spp.	grenadiers	51	1.1	2	1.4
Malacoctenus	macropus	rosy blenny	50	1.9	1	0.7
Lepophidium	graellsii	blackedge cusk-eel	48	2.6	4	2.8
Monolene	megalepis	deepwater flounder	46	1.3	7	5.0
Epigonus	spp.	cardinalfishes	45	1.6	1	0.7
Monolene	spp.	flounders	43	1.2	6	4.3
Selar	crumenophthalmus	bigeye scad	40	7.6	7	5.0
Polyipnus	asteroides	star hatchetfish	40	0.1	4	2.8
Hydrolagus	alberti	chimaera	39	5.5	7	5.0
Squatina	dumerili	Atlantic angel shark	38	183.0	21	14.9
Harengula	jaguana	scaled sardine	37	1.8	3	2.1
Urophycis	regia	spotted hake	37	7.3	5	3.5

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
			CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OF OCCURRENCE
	<i>Sphoeroides parvus</i>	least puffer	36	1.4	6	4.3
	<i>Lophiodes reticulatus</i>	reticulate goosefish	34	21.7	12	8.5
	<i>Scorpaena calcarata</i>	smoothhead scorpionfish	34	1.5	4	2.8
	<i>Raja garmani</i>	rosette skate	33	1.8	5	3.5
	<i>Paralichthys albigutta</i>	gulf flounder	32	1.9	6	4.3
	<i>Cyclopsetta chittendeni</i>	Mexican flounder	31	4.0	5	3.5
	<i>Centropristis striata</i>	black sea bass	31	2.2	2	1.4
	<i>Rhomboplites aurorubens</i>	vermilion snapper	30	5.2	4	2.8
	Ophichthidae	snake eels	30	1.5	2	1.4
	<i>Hildebrandia flava</i>	yellow conger	30	3.5	8	5.7
	<i>Chaunax pictus</i>	gaper	29	4.6	6	4.3
	<i>Porichthys plectrodon</i>	Atlantic midshipman	27	0.6	6	4.3
	<i>Paralichthys lethostigma</i>	southern flounder	27	12.7	7	5.0
	<i>Benthodesmus</i> spp.	cutlassfishes	24	1.1	6	4.3
	<i>Syacium papillosum</i>	dusky flounder	23	2.0	4	2.8
	<i>Scyliorhinus retifer</i>	chain dogfish	23	4.0	8	5.7
	<i>Argentina</i> spp.	argentinines	22	1.8	2	1.4
	<i>Diaphus taaningi</i>	lanternfish	21	0.1	2	1.4
	<i>Synodus poeyi</i>	offshore lizardfish	20	0.1	2	1.4
	<i>Symphurus</i> spp.	tonguefishes	20	0.5	6	4.3
	<i>Lestrolepis intermedia</i>	barracudina	19	1.2	6	4.3
	<i>Hoplunnis macrurus</i>	freckled pike-conger	19	0.1	3	2.1
	<i>Zenopsis conchifera</i>	buckler dory	19	0.8	7	5.0
	<i>Neoscopelus</i> spp.	blackchins	18	0.5	2	1.4
	<i>Saurida caribbaea</i>	smallscale lizardfish	18	0.5	1	0.7
	Scorpaenidae	scorpionfishes	18	7.8	5	3.5

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
			CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OF OCCURRENCE
Xenolepidichthys sp.		tinselifishes	18	0.2	1	0.7
Nealotus tripes		black snake mackerel	17	1.1	3	2.1
Synodus intermedius		sand diver	17	1.5	5	3.5
Squalus cubensis		Cuban dogfish	16	4.8	7	5.0
Epinnula sp.		snake mackerel	16	0.9	2	1.4
Serranus phoebe		tattler	16	0.2	3	2.1
Symphurus civitatus		offshore tonguefish	16	0.4	2	1.4
Symphurus plagiusa		blackcheek tonguefish	16	0.7	1	0.7
Etropus crossotus		fringed flounder	16	0.2	3	2.1
Selene setapinnis		Atlantic moonfish	15	0.6	7	5.0
Brotula barbata		bearded brotula	15	12.2	6	4.3
Diaphus spp.		lanternfishes	15	0.1	2	1.4
Argyropelecus gigas		hatchetfish	15	0.3	7	5.0
Neobythites gillii		cusck-eel	14	0.3	5	3.5
Pagrus pagrus		red porgy	14	5.4	5	3.5
Hemanthias leptus		longtail bass	13	1.5	3	2.1
Zalieutes mcgintyi		tricorn batfish	13	0.1	1	0.7
Gonostomatidae		lightfishes	13	0.1	3	2.1
Raja spp.		skates	12	1.6	3	2.1
Labridae		wrasses	12	0.7	2	1.4
Astroscopus y-graecum		southern stargazer	12	1.0	6	4.3
Peristedion greyae		prickly searobin	12	0.5	2	1.4
Prionotus salmonicolor		blackwing searobin	11	0.7	4	2.8
Scorpaena brasiliensis		barbfish	11	0.9	2	1.4
Ogcocephalus parvus		roughback batfish	11	0.8	2	1.4

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
			CAUGHT	CAUGHT	TOWS WHERE	OF OCCURRENCE
				(KG)	CAUGHT	
Ogcocephalus	nasutus	shortnose batfish	11	0.2	1	0.7
Tetraodontidae		puffers	11	0.6	3	2.1
Thalassophryne	nattereri	toadfish	10	1.5	2	1.4
Synchiropus	agassizii	dragonet	10	0.5	3	2.1
Cynoscion	arenarius	sand seatrout	10	4.1	5	3.5
Raja	olseni	spreadfin skate	10	4.7	8	5.7
Ariosoma	spp.	conger eels	10	0.2	1	0.7
Sternoptyx	pseudobscura	hatchetfish	9	0.1	1	0.7
Xenodermichthys	socialis	slickhead	9	0.4	1	0.7
Etmopterus	virens	dogfish shark	9	0.3	3	2.1
Antigonia	spp.	boarfishes	9	0.2	1	0.7
Serranidae		sea basses	8	0.4	5	3.5
Synagrops	spp.	temperate basses	8	0.4	1	0.7
Lepophidium	spp.	cusks-eels	8	0.5	2	1.4
Chaetodon	aya	bank butterflyfish	8	0.3	2	1.4
Lagocephalus	laevigatus	smooth puffer	8	0.6	2	1.4
Lophius	gastrophysus	blackfin goosefish	8	10.5	5	3.5
Bellator	militaris	horned searobin	8	0.4	3	2.1
Engyophrys	senta	spiny flounder	8	0.0	1	0.7
Polymetme	corythaeola	bristlemouth	8	0.1	6	4.3
Lestidium	atlanticum	barracudina	7	0.4	2	1.4
Breviraja	spinosa	skate	7	2.1	2	1.4
Springeria	folirostris	skate	7	1.4	3	2.1
Symphurus	diomedianus	spottedfin tonguefish	7	0.1	1	0.7
Monacanthus	hispidus	planehead filefish	7	0.3	5	3.5
Lophius	spp.	goosefishes	7	1.8	3	2.1

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Epinnula	orientalis	sackfish	7	0.8	1	0.7
Lepidopus	sp.	cutlassfish	7	0.9	3	2.1
Priacanthus	arenatus	bigeye	7	1.4	6	4.3
Zenion	spp.	dories	7	0.1	2	1.4
Zenopsis	sp.	dories	7	0.5	3	2.1
Decodon	puellaris	red hogfish	6	0.5	3	2.1
Sphoeroides	sp.	puffers	6	0.3	3	2.1
Parahollardia	lineata	jambeau	6	0.3	3	2.1
Monolene	atrima	deepwater flounder	6	0.1	1	0.7
Hoplunnis	diomedianus	blacktail pike-conger	6	0.3	1	0.7
Myrophis	punctatus	speckled worm eel	6	0.1	1	0.7
Gymnothorax	nigromarginatus	blackedge moray	5	0.4	3	2.1
Melanostomias	spp.	scaleless dragonfishes	5	0.2	2	1.4
Syacium	spp.	flounders	5	0.3	2	1.4
Ogcocephalus	pumilus	batfish	5	0.1	1	0.7
Synchirus	gilli	cottid	5	0.1	2	1.4
Neobythites	marginatus	brotula	5	0.1	1	0.7
Promethichthys	prometheus	rabbitfish	5	0.6	1	0.7
Prionotus	spp.	searobins	4	0.2	1	0.7
Hemipteronotus	novacula	pearly razorfish	4	0.5	2	1.4
Hymenocephalus	italicus	grenadier	4	0.3	1	0.7
Priacanthus	cruentatus	glasseye snapper	4	0.2	1	0.7
Pogonias	cromis	black drum	4	0.3	3	2.1
Bellator	brachychir	shortfin searobin	4	0.2	1	0.7
Neoscopelus	macrolepidotus	blackchin	4	0.1	3	2.1
Anguilliformes		eels	4	0.5	2	1.4

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
			CAUGHT	CAUGHT	TOWS WHERE	OF OCCURRENCE
				(KG)	CAUGHT	
Ophichthus	ocellatus	palespotted eel	4	0.6	3	2.1
Nemichthys	scolopaceus	slender snipe eel	4	0.2	1	0.7
Melanonidae		melanonids	4	0.0	1	0.7
Etrumeus	spp.	round herrings	4	0.1	1	0.7
Sardinella	aurita	Spanish sardine	4	0.1	1	0.7
Squalidae		dogfish sharks	4	2.5	1	0.7
Squalus	blainville	Blainville's dogfish	4	2.5	1	0.7
Squaliolus	laticaudus	sleeper shark	4	0.0	1	0.7
Raja	clarkii	skate	3	0.6	1	0.7
Raja	texana	roundel skate	3	0.9	2	1.4
Ijimaia	antillarum	ateleopod	3	4.9	1	0.7
Gonostoma	elongatum	bristlemouth	3	0.1	1	0.7
Syacium	gunteri	shoal flounder	3	0.2	3	2.1
Monacanthus	ciliatus	fringed filefish	3	0.4	2	1.4
Stellifer	lanceolatus	star drum	3	0.3	1	0.7
Lopholatilus	chamaeleonticeps	tilefish	3	0.6	3	2.1
Nezumia	aequalis	grenadier	3	0.2	2	1.4
Pikea	sp.	seabass	3	0.2	1	0.7
Mulloidichthys	martinicus	yellow goatfish	3	0.2	2	1.4
Ophidion	welshi	crested cusk-eel	3	0.1	1	0.7
Nesiarchus	nasutus	snake mackerel	3	0.5	1	0.7
Ruvettus	pretiosus	oilfish	3	1.4	1	0.7
Pontinus	rathbuni	highfin scorpionfish	3	0.2	2	1.4
Hyperoglyphe	perciformis	barrelfish	2	11.4	1	0.7

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
			CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OF OCCURRENCE
Brotula	sp.	brotula	2	0.1	1	0.7
Diplectrum	formosum	sand perch	2	0.7	2	1.4
Epinephelus	morio	red grouper	2	30.9	1	0.7
Epinephelus	flavolimbatus	yellowedge grouper	2	0.0	2	1.4
Chilomycterus	schoepfi	striped burrfish	2	0.4	2	1.4
Melanostomiidae		dragonfishes	2	0.0	1	0.7
Sternoptyx	sp.	hatchetfish	2	0.0	1	0.7
Holplunnis	tenuis	spotted pike conger	2	0.0	1	0.7
Paraconger	caudilimbatus	margintail conger	2	0.2	2	1.4
Laemonema	barbatulum	morid cod	2	0.2	1	0.7
Mustelus	canis	smooth dogfish	2	2.6	2	1.4
Rhizoprionodon	terraenovae	Atlantic sharpnose shark	1	3.9	1	0.7
Etmopterus	pusillus	dogfish shark	1	0.0	1	0.7
Raja	eglanteria	clearnose skate	1	0.3	1	0.7
Torpedo	nobiliana	Atlantic torpedo	1	5.5	1	0.7
Odontognathus	spp.	longfin herrings	1	0.1	1	0.7
Anchoviella	spp.	anchovies	1	0.0	1	0.7
Anchoa	spp.	anchovies	1	0.0	1	0.7
Heptranchias	perlo	sharpnose sevengill shark	1	0.2	1	0.7
Myxinidae		hagfishes	1	0.1	1	0.7
Bregmaceros	atlanticus	antenna codlet	1	0.0	1	0.7
Bathygadus	spp.	grenadiers	1	0.0	1	0.7
Poeciliidae		livebearers	1	0.0	1	0.7
Ophichthus	rex	giant snake eel	1	8.0	1	0.7
Ophichthus	ophis	spotted snake eel	1	0.2	1	0.7

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Ophichthus spp.		snake eels	1	0.0	1	0.7
Argyropelecus spp.		hatchetfishes	1	0.0	1	0.7
Paralepis atlantica		duckbill barracudina	1	0.0	1	0.7
Leptostomias spp.		scaleless dragonfishes	1	0.0	1	0.7
Bathyclupea schroederi		bathyclupeid	1	0.0	1	0.7
Sphoeroides spengleri		bandtail puffer	1	0.1	1	0.7
Lophiomus spp.		goosefishes	1	0.1	1	0.7
Halieutichthys aculeatus		pancake batfish	1	0.0	1	0.7
Balistes capriscus		gray triggerfish	1	0.0	1	0.7
Gastropsetta frontalis		shrimp flounder	1	0.2	1	0.7
Zeidae		dories	1	0.0	1	0.7
Coelorinchus spp.		grenadiers	1	0.0	1	0.7
Decapterus punctatus		round scad	1	0.0	1	0.7
Caulolatilus spp.		tilefishes	1	0.1	1	0.7
Seriola dumerili		greater amberjack	1	1.3	1	0.7
Selene vomer		lookdown	1	0.0	1	0.7
Leiostomus xanthurus		spot	1	0.1	1	0.7
Lachnolaimus maximus		hogfish	1	0.0	1	0.7
Trichiuridae		cutlassfishes	1	0.0	1	0.7
Prionotus ophryas		bandtail searobin	1	0.0	1	0.7

Crustaceans

Penaeopsis megalops		penaeid shrimp	20157	158.4	43	30.5
Parapenaeus spp.		deepwater rose shrimps	10554	28.1	20	14.2
Caridea		caridian shrimps	4793	4.5	7	5.0
Hymenopenaeus robustus		royal red shrimp	3632	115.4	36	25.5
Portunus spinicarpus		swimming crab	3416	22.0	30	21.3
Hymenopenaeus spp.		deepwater shrimps	2927	2.6	2	1.4

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Euphausiacea		euphausid	1689	1.0	2	1.4
Pandalidae		pandalid shrimps	1351	3.8	7	5.0
Benthoascon	schmitti	portunid crab	1174	34.5	31	22.0
Trachypenaeus	spp.	roughneck shrimps	1144	5.4	8	5.7
Callinectes	similis	lesser blue crab	818	14.8	11	7.8
Aristeus	antillensis	aristid shrimp	610	9.4	9	6.4
Portunidae		swimming crabs	432	3.5	5	3.5
Squilla	spp.	mantis shrimps	291	4.3	22	15.6
Acanthocarpus	alexandri	box crab	250	6.4	23	16.3
Solenocera	spp.	rareback shrimps	200	1.8	10	7.1
Stereomastis	sculpta	polychelid lobster	160	7.6	19	13.5
Aristaeomorpha	foliacea	aristeid shrimp	142	2.9	11	7.8
Penaeus	aztecus	brown shrimp	137	4.6	13	9.2
Paguridae		hermit crabs	136	4.2	10	7.1
Raninoides	louisianensis	frog crab	133	2.0	18	12.8
Plesionika	acanthonotus	lesser striped shrimp	132	0.5	1	0.7
Plesionika	spp.	pandalid shrimps	125	0.9	4	2.8
Anasimus	latus	majid crab	102	1.9	13	9.2
Munida	spp.	galatheid	100	1.0	16	11.3
Sicyonia	spp.	rock shrimps	96	1.6	5	3.5
Nephropsis	aculeata	Florida lobsterette	88	3.1	14	9.9
Parapagurus	spp.	hermit crabs	85	1.4	3	2.1
Plesiopenaeus	edwardsianus	scarlet shrimp	70	1.1	1	0.7
Pyromaia	spp.	spider crabs	58	0.9	10	7.1
Munidopsis	spp.	galatheids	55	0.6	9	6.4
Raninoides	spp.	frog crabs	54	1.2	8	5.7

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Pasiphaeidae		pasiphaeid shrimps	43	0.1	2	1.4
Rochinia	crassa	majid crab	41	8.5	17	12.1
Xanthidae		mud crabs	40	1.0	11	7.8
Myropsis	quinespinosa	purse crab	36	1.3	10	7.1
Portunus	spp.	swimming crabs	35	0.5	2	1.4
Ethusa	spp.	dorippid crabs	32	1.2	5	3.5
Polycheles	typhlops	polychelid lobster	30	0.5	3	2.1
Sicyonia	brevirostris	rock shrimp	30	0.3	4	2.8
Cirripedia		barnacles	22	1.4	2	1.4
Majidae		spider crabs	20	0.9	12	8.5
Munidopsis	robusta	galatheid	16	0.4	6	4.3
Pasiphaea	sp.	pasiphaeid shrimp	15	0.1	2	1.4
Ethusa	microphthalma	dorippid crab	14	0.2	4	2.8
Rochinia	spp.	majid crab	12	2.9	2	1.4
Penaeidae		penaeid shrimps	12	0.1	1	0.7
Sicyonia	dorsalis	rock shrimp	10	0.1	3	2.1
Penaeus	spp.	penaeid shrimps	9	0.6	2	1.4
Oplophoridae		oplophorid shrimps	9	0.3	4	2.8
Calappa	sulcata	box crab	9	2.0	2	1.4
Bathynomus	giganteus	giant isopod	8	2.0	2	1.4
Squilla	empusa	mantis shrimp	6	0.2	2	1.4
Squilla	lijdingi	mantis shrimp	6	0.1	2	1.4
Heterocarpus	ensifer	armed nylon shrimp	6	0.0	2	1.4
Sergia	spp.	sergistid shrimp	6	0.0	1	0.7
Dardanus	spp.	hermit crabs	6	1.0	2	1.4
Tetraxanthus	spp.	mud crabs	5	0.1	2	1.4

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE	
	<i>Stenocionops</i>	<i>furcata</i>	decorator crab	5	1.9	2	1.4
	<i>Parthenope</i>	<i>serrata</i>	spider crab	5	0.1	2	1.4
	<i>Libinia</i>	spp.	spider crabs	4	1.5	2	1.4
	<i>Oplophorus</i>	<i>gracilirostris</i>	oplophorid shrimp	4	0.0	2	1.4
	<i>Squilla</i>	<i>brasiliensis</i>	mantis shrimp	4	0.2	1	0.7
	<i>Glyphocrangon</i>	<i>spenicarpus</i>	glyphocrangonid shrimp	3	0.0	2	1.4
	<i>Libinia</i>	<i>emarginata</i>	spider crab	3	0.9	2	1.4
	<i>Stenocionops</i>	<i>spinosissima</i>	spider crab	3	0.2	1	0.7
	<i>Stenorhynchus</i>	<i>seticornis</i>	arrow crab	3	0.0	2	1.4
	<i>Calappa</i>	spp.	box crabs	3	0.1	1	0.7
	<i>Calappa</i>	<i>flammea</i>	box crab	2	1.4	1	0.7
	<i>Calappidae</i>		box crabs	2	0.1	1	0.7
	<i>Libinia</i>	<i>dubia</i>	spider crabs	2	0.5	1	0.7
	<i>Portunus</i>	<i>spinimanus</i>	swimming crab	2	0.0	1	0.7
	<i>Pontocaris</i>	sp.	crangonid shrimp	2	0.0	1	0.7
	<i>Scalpellidae</i>		barnacles	2	0.1	1	0.7
	<i>Glyphocrangon</i>	<i>neglecta</i>	glyphocrangonid shrimp	1	0.0	1	0.7
	<i>Glyphocrangon</i>	spp.	glyphocrangonid shrimp	1	0.0	1	0.7
	<i>Plesionika</i>	<i>edwardsii</i>	striped soldier shrimp	1	0.0	1	0.7
	<i>Acetes</i>	<i>americanus</i>	sergestid shrimp	1	0.0	1	0.7
	<i>Penaeus</i>	<i>duorarum</i>	pink shrimp	1	0.1	1	0.7
	<i>Portunus</i>	<i>gibbesii</i>	swimming crab	1	0.0	1	0.7
	<i>Pagurus</i>	spp.	hermit crabs	1	0.1	1	0.7
	<i>Dromidia</i>	spp.	dromid crab	1	0.0	1	0.7
	<i>Porcellana</i>	<i>sigsbeiana</i>	porcellanid crab	1	0.0	1	0.7
	<i>Porcellana</i>	spp.	porcellanid crabs	1	0.0	1	0.7

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Trichophoxus	sp.	amphipod	1	0.1	1	0.7
Polycheles	spp.	polychelid lobsters	1	0.0	1	0.7
Geryon	spp.	geryonid crabs	1	0.1	1	0.7
<u>Others</u>						
	Spatangidae	heart urchins	28997	1764.1	16	11.3
	Loligo pealei	common squid	12533	304.0	92	65.2
	Anthozoa	anthozoans	688	38.0	18	12.8
	Pyrosomida	ascidians	530	12.6	17	12.1
	Asteroidea	starfishes	484	25.8	43	30.5
	Doryteuthis pleii	arrow squid	414	10.2	12	8.5
	Illex spp.	shortfin squids	392	35.5	32	22.7
	Holothuroidea	sea cucumbers	351	57.6	23	16.3
	Illex coindetii	Caribbean shortfin squid	302	33.7	32	22.7
	Amusium papyraceum	paper scallop	264	5.2	13	9.2
	Zoraster spp.	sea stars	237	0.9	1	0.7
	Cidaris spp.	sea urchins	206	0.7	1	0.7
	Echinodermata	echinoderms	144	3.6	4	2.8
	Pectinidae	scallops	97	2.7	5	3.5
	Loligo plei	arrow squid	93	1.2	2	1.4
	Lolliguncula brevis	brief squid	78	0.7	5	3.5
	Salpa spp.	tunicates	73	1.9	6	4.3
	Loligo spp.	squids	65	2.3	2	1.4
	Abralia spp.	squids	65	0.2	9	6.4
	Gorgonidae	gorgons	61	0.9	1	0.7
	Ophiuroidea	brittlestars	58	0.2	3	2.1
	Ornithoteuthis antillarum	bird squid	54	0.1	3	2.1
	Amusium dalli	paper scallop	41	0.2	4	2.8

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Astropecten	spp.	sea stars	37	0.1	3	2.1
Pecten	spp.	scallops	33	0.5	2	1.4
Porosporidae		sponges	30	0.1	1	0.7
Echinoidea		echinoderms	28	1.4	9	6.4
Myopsida		squids	27	0.1	2	1.4
Illex illecebrosus		northern shortfin squid	26	1.4	1	0.7
Octopus	spp.	octopuses	21	1.2	3	2.1
Amygdalum	politum	mussel	21	0.2	1	0.7
Murex	spp.	murexes	21	0.6	7	5.0
Sinum	spp.	baby's ears	21	0.2	2	1.4
Tugurium	longleyi	Longley's carrier-shell	20	0.2	4	2.8
Aurelia	spp.	jellyfishes	19	1.1	7	5.0
Abralia	veranyi	Verany's abralia	14	0.4	5	3.5
Rossia	spp.	bob-tailed squids	13	0.0	5	3.5
Pitar	cordatus	Schwengel's venus	11	0.3	1	0.7
Clypeaster	spp.	cake urchins	11	0.9	3	2.1
Moira	atropos	heart-urchin	10	0.5	4	2.8
Xenophoridae		carrier-shells	10	0.3	2	1.4
Fasciolaria	spp.	tulip shells	8	0.1	3	2.1
Scaphella	spp.	volutes	8	0.8	3	2.1
Rossia	bullisi	bob-tailed squid	7	0.3	2	1.4
Porifera		sponges	6	0.1	2	1.4
Octopodidae		octopuses	6	0.6	3	2.1
Polystira	spp.	turret shells	6	0.0	1	0.7
Mytilidae		mussels	6	0.1	2	1.4
Moira	spp.	heart-urchins	6	0.1	2	1.4

Table 26. SEAMAP Species Composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Cranchia	scabra	squid	4	0.1	2	1.4
Octopus	joubini	Joubin's octopus	3	0.5	1	0.7
Physalia	pelagica	Portuguese man-o-war	3	0.2	1	0.7
Pholidoteuthis	adami	scaled squid	3	4.2	3	2.1
Crepidula	spp.	slipper-shells	3	0.0	1	0.7
Scaphander	nobilis	noble canoe-bubble	2	0.0	1	0.7
Aequipecten	glyptus	Tyron's scallop	2	0.0	1	0.7
Scyphozoa		jellyfishes	2	0.3	1	0.7
Octopus	burryi	Burry's octopus	2	0.0	1	0.7
Octopus	vulgaris	common octopus	1	0.4	1	0.7
Histioteuthis	meleagroteuthis	squid	1	0.1	1	0.7
Histioteuthis	corona corona	squid	1	0.0	1	0.7
Doryteuthis	spp.	squid	1	0.2	1	0.7
Murex	oregon	deepwater murex	1	0.0	1	0.7
Linckia	spp.	sea stars	1	0.1	1	0.7

Table 27

Summary of dominant organisms taken between 84°00.0'W and 87°14.0'W during the July-August 1985 SEAMAP Squid and Butterfish Survey. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	20-49 FM					50-79 FM					80-109 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeopsis															
<i>megalops</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4
Hymenopenaeus															
<i>robustus</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4
Plesionika															
<i>acanthonotus</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4
Pandalidae															
<i>Pandalidae</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4
Parapenaeus															
<i>Parapenaeus</i>	0.0	0.00	0.0	0.00	3	33.5	33.50	0.1	0.11	4	22.5	15.52	0.2	0.12	4
Portunus															
<i>spinicarpus</i>	43.3	43.33	0.4	0.42	3	13.0	9.43	0.1	0.09	4	1.0	0.58	0.0	0.03	4
Steindachneria															
<i>argentea</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4
Pontinus															
<i>longispinis</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4
Bembrops															
<i>anatirostris</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4	350.0	165.98	10.3	4.24	4
Merluccius															
<i>albidus</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4	1.5	1.50	0.1	0.09	4
Epigonus															
<i>pandionis</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4
Coelorhynchus															
<i>caribbaeus</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4
Synagrops															
<i>bella</i>	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	4
Prionotus															
<i>stearnsi</i>	0.0	0.00	0.0	0.00	3	155.5	154.83	3.0	2.99	4	141.5	99.42	1.9	0.96	4
Squid															
<i>Squid</i>	71.3	37.49	1.2	0.77	3	106.0	91.41	4.0	3.01	4	349.0	176.28	7.6	3.82	4

Table 27 (cont'd.)

Summary of dominant organisms taken between 84°00.0'W and 87°14.0'W during the July-August 1985 SEAMAP Squid and Butterfish Survey. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	110-149 FM					150-199 FM					200-269 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeopsis															
<u>megalops</u>	0.0	0.00	0.0	0.00	6	365.3	339.89	3.6	2.11	4	657.1	256.26	4.4	1.55	9
Hymenopenaeus															
<u>robustus</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	4	47.8	22.31	1.5	0.72	9
Plesionika															
<u>acanthonotus</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	4	14.7	14.67	0.1	0.06	9
Pandalidae															
<u>Parapenaeus</u>	0.5	0.50	0.0	0.02	6	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	9
Portunus															
<u>spinicarpus</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	9
Steindachneria															
<u>argentea</u>	0.0	0.00	0.0	0.00	6	470.3	253.60	16.5	8.74	4	188.2	76.75	4.5	1.67	9
Pontinus															
<u>longispinis</u>	127.8	80.85	8.7	5.15	6	306.3	58.13	23.8	3.82	4	0.7	0.67	0.1	0.08	9
Bembrops															
<u>anatirostris</u>	50.5	45.14	2.5	2.14	6	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	9
Merluccius															
<u>albidus</u>	4.7	2.97	0.7	0.56	6	61.3	30.09	10.3	4.92	4	76.9	21.24	9.3	3.02	9
Epigonus															
<u>pandionis</u>	77.7	38.57	1.5	0.78	6	10.8	3.77	0.2	0.10	4	50.3	24.22	0.6	0.26	9
Coelorhynchus															
<u>caribbaeus</u>	42.2	30.37	1.0	0.71	6	145.8	61.33	7.4	3.09	4	12.7	8.10	0.7	0.44	9
Synagrops															
<u>bella</u>	20.2	14.99	0.8	0.52	6	59.3	20.67	2.5	1.20	4	47.8	19.57	2.2	0.87	9
Prionotus															
<u>stearnsi</u>	13.8	13.05	0.6	0.55	6	7.5	7.50	0.1	0.09	4	0.0	0.00	0.0	0.00	9
Squid															
	237.7	80.35	7.9	3.47	6	67.8	12.89	3.2	0.45	4	23.7	6.98	2.1	0.45	9

Table 28

Summary of dominant organisms taken between 87°15.0'W and 89°14.0'W during the July-August 1985 SEAMAP Squid and Butterfish Survey. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	20-49 FM					50-79 FM					80-109 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Penaeopsis megalops</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6
<i>Caridea</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6
<i>Hymenopenaeus debilis</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6
<i>Hymenopenaeus robustus</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6
<i>Parapenaeus</i>	133.6	133.60	0.3	0.27	5	188.7	178.47	0.4	0.32	6	30.7	17.96	0.2	0.16	6
<i>Trachypenaeus</i>	8.0	6.60	0.0	0.02	5	384.5	243.60	1.9	1.24	6	5.0	5.00	0.0	0.03	6
<i>Steindachneria argentea</i>	120.0	120.00	0.9	0.87	5	977.9	812.79	2.8	1.67	6	73.7	26.78	1.5	0.60	6
<i>Peprilus burti</i>	1480.0	1418.90	52.2	47.26	5	209.4	163.75	24.1	20.14	6	210.3	207.55	24.0	23.57	6
<i>Coelorhynchus caribbaeus</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	6	23.0	16.24	0.4	0.24	6
<i>Brosmiculus imberbis</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6
<i>Polymixia lowei</i>	1.6	1.60	0.0	0.04	5	156.0	156.00	2.7	2.70	6	44.0	44.00	1.4	1.44	6
<i>Chauliodus sloani</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6
<i>Urophycis cirratus</i>	0.0	0.00	0.0	0.00	5	3.1	1.69	0.5	0.30	6	13.8	6.39	2.8	1.30	6
<i>Stenotomus caprinus</i>	302.0	201.43	15.2	13.06	5	6.0	3.79	0.4	0.28	6	0.0	0.00	0.0	0.00	6
<i>Squid</i>	131.2	57.70	2.4	0.99	5	413.2	210.85	10.6	5.60	6	223.2	98.59	7.0	3.43	6

Table 28 (cont'd.)

Summary of dominant organisms taken between 87°15.0'W and 89°14.0'W during the July-August 1985 SEAMAP Squid and Butterfish Survey. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	110-149 FM					150-199 FM					200-269 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Penaeopsis megalops</i>	27.5	27.50	0.2	0.23	4	1212.9	1013.61	6.8	4.09	6	50.7	49.27	1.8	1.72	10
<i>Caridea</i>	0.0	0.00	0.0	0.00	4	94.0	94.00	0.1	0.09	6	581.9	483.32	0.5	0.44	10
<i>Hymenopenaeus debilis</i>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	6	389.5	389.46	0.4	0.35	10
<i>Hymenopenaeus robustus</i>	0.3	0.25	0.0	0.01	4	117.9	72.58	3.8	2.33	6	240.0	51.59	8.1	1.82	10
<i>Parapenaeus</i>	0.5	0.50	0.0	0.01	4	75.8	65.45	0.7	0.65	6	0.0	0.00	0.0	0.00	10
<i>Trachypenaeus</i>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	10
<i>Steindachneria argentea</i>	100.8	80.79	3.3	2.88	4	644.7	331.36	16.2	6.72	6	94.9	89.20	4.3	4.06	10
<i>Peprilus burti</i>	0.5	0.50	0.0	0.05	4	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	10
<i>Coelorhynchus caribbaeus</i>	150.5	130.36	4.6	4.16	4	276.1	158.95	11.3	4.88	6	177.5	85.25	9.6	4.54	10
<i>Brosmiculus imberbis</i>	2.8	2.75	0.1	0.13	4	44.0	14.93	1.6	0.52	6	194.8	132.51	2.6	0.70	10
<i>Polymixia lowei</i>	229.3	207.47	16.1	12.78	4	15.1	4.64	0.8	0.29	6	2.9	1.44	0.2	0.08	10
<i>Chauliodus sloani</i>	0.0	0.00	0.0	0.00	4	111.1	69.47	3.2	2.36	6	100.0	35.35	1.5	0.51	10
<i>Urophycis cirratus</i>	0.8	0.75	0.2	0.17	4	55.2	23.93	11.2	4.79	6	118.4	22.93	27.1	4.21	10
<i>Stenotomus caprinus</i>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	10
<i>Squid</i>	57.0	40.54	2.3	1.26	4	20.6	11.47	1.1	0.29	6	7.4	1.15	1.9	0.72	10

Table 29

Summary of dominant organisms taken between 89°15.0'W and 92°14.0'W during the July-August 1985 SEAMAP Squid and Butterfish Survey. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	20-49 FM					50-79 FM					80-109 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Parapenaeus															
<u>Parapenaeus</u>	2293.3	2293.25	5.4	5.39	8	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	8
Penaeopsis															
<u>megalops</u>	1.3	1.29	0.0	0.00	8	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	8
Portunus															
<u>spincarpus</u>	417.0	417.00	1.9	1.90	8	46.6	42.63	0.3	0.24	7	19.3	16.05	0.1	0.11	8
Euphausiacea															
Callinectes															
<u>similis</u>	186.5	113.35	3.0	1.67	8	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	8
Portunidae															
<u>argentea</u>	81.5	81.47	0.6	0.56	8	4.4	4.42	0.1	0.05	7	0.0	0.00	0.0	0.00	8
Steindachneria															
<u>argentea</u>	1159.0	1159.00	7.2	7.20	8	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	8
Polymixia															
<u>lowei</u>	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	7	69.5	69.21	1.2	1.18	8
Peprilus															
<u>burti</u>	397.5	286.33	31.5	21.50	8	67.0	44.97	8.9	6.78	7	57.3	44.21	4.3	3.38	8
Coelorhynchus															
<u>caribbaeus</u>	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	8
Trachurus															
<u>lathamii</u>	31.0	15.91	1.2	0.60	8	123.0	63.89	6.3	2.94	7	92.1	48.36	6.5	3.37	8
Prionotus															
<u>stearnsi</u>	27.0	10.63	0.5	0.19	8	21.6	8.39	0.3	0.07	7	152.3	109.91	2.8	2.13	8
Trichiurus															
<u>lepturus</u>	247.4	125.08	16.2	8.24	8	13.4	13.43	0.3	0.26	7	0.0	0.00	0.0	0.00	8
Pristipomoides															
<u>aquilonaris</u>	8.6	3.64	0.6	0.26	8	233.1	125.18	18.6	8.67	7	25.6	11.70	3.8	1.74	8
Squid															
	193.4	93.70	3.3	1.01	8	242.5	85.71	3.2	1.00	7	447.2	317.22	5.0	2.84	8

Table 29 (cont'd.)

Summary of dominant organisms taken between 89°15.0'W and 92°14.0'W during the July-August 1985 SEAMAP Squid and Butterfish Survey. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	110-149 FM					150-199 FM					200-269 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Parapenaeus</i>	0.5	0.53	0.0	0.01	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	10
<i>Penaeopsis megalops</i>	0.0	0.00	0.0	0.00	5	176.2	110.52	1.1	0.70	4	373.1	222.85	3.8	2.10	10
<i>Portunus spinicarpus</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	10
<i>Euphausiacea</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	4	254.3	249.34	0.2	0.14	10
<i>Callinectes similis</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	10
<i>Portunidae</i>	0.3	0.27	0.0	0.04	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	10
<i>Steindachneria argentea</i>	65.6	65.60	1.6	1.64	5	60.6	43.02	2.1	1.36	4	62.3	27.18	2.9	1.29	10
<i>Polymixia lowei</i>	266.5	169.85	8.2	4.57	5	204.3	76.97	9.5	4.24	4	49.7	25.80	3.1	1.66	10
<i>Peprilus burti</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	10
<i>Coelorhynchus caribbaeus</i>	4.5	4.53	0.1	0.12	5	202.2	96.17	7.9	4.30	4	64.2	40.63	3.1	1.79	10
<i>Trachurus lathami</i>	34.8	33.81	2.5	2.39	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	10
<i>Prionotus stearnsi</i>	49.0	49.00	0.8	0.75	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	10
<i>Trichiurus lepturus</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	4	0.3	0.27	0.0	0.02	10
<i>Pristipomoides aquilonaris</i>	1.6	1.60	0.3	0.29	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	10
<i>Squid</i>	258.1	177.09	7.2	4.57	5	41.1	7.51	1.8	0.56	4	13.9	5.78	1.0	0.48	10

Table 30

Summary of dominant organisms taken between 92°15.0'W and 97°00.0'W during the July-August 1985 SEAMAP Squid and Butterfish Survey. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	20-49 FM					50-79 FM					80-109 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Penaeopsis megalops</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	6
<i>Portunus spinicarpus</i>	118.8	112.34	1.0	0.99	5	52.7	52.67	0.5	0.55	3	129.0	73.61	1.2	0.57	6
<i>Pandalidae</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	6
<i>Hymenopenaeus robustus</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	6
<i>Acanthocarpus alexandri</i>	0.0	0.00	0.0	0.00	5	1.3	1.33	0.1	0.09	3	2.8	2.13	0.1	0.07	6
<i>Raninoides louisianensis</i>	2.4	2.40	0.0	0.04	5	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	6
<i>Trachurus lathami</i>	765.2	427.92	17.3	10.67	5	254.9	161.38	9.0	5.54	3	631.7	295.42	27.7	12.20	6
<i>Polymixia lowei</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	6
<i>Pristipomoides aquilonaris</i>	57.6	26.88	4.0	1.91	5	267.3	104.14	27.0	11.46	3	262.4	47.82	36.0	8.28	6
<i>Macrorhamphosus scolopax</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3	10.7	10.67	0.2	0.18	6
<i>Steindachneria argentea</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	6
<i>Peprilus burti</i>	168.0	124.24	11.2	8.43	5	375.5	344.97	26.6	24.77	3	1.7	1.67	0.2	0.15	6
<i>Zenion hololepis</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	6
<i>Synagrops spinosa</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	6
<i>Squid</i>	142.0	53.90	3.6	1.38	5	303.1	104.00	5.0	1.32	3	432.4	253.52	11.2	6.48	6

Table 30 (cont'd.)

Summary of dominant organisms taken between 92°15.0'W and 97°00.0'W during the July-August 1985 SEAMAP Squid and Butterfish Survey. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	110-149 FM					150-199 FM					200-269 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Penaeopsis megalops</i>	0.8	0.80	0.0	0.00	5	210.0	184.64	1.2	1.05	5	309.2	111.30	2.4	0.70	8
<i>Portunus spinicarpus</i>	12.1	7.82	0.1	0.06	5	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8
<i>Pandalidae</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	5	92.8	58.68	0.4	0.28	8
<i>Hymenopenaeus robustus</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	5	48.8	15.59	1.6	0.52	8
<i>Acanthocarpus alexandri</i>	28.7	16.26	0.6	0.38	5	1.6	1.60	0.0	0.04	5	0.0	0.00	0.0	0.00	8
<i>Raninoides louisianensis</i>	3.7	1.76	0.1	0.04	5	10.0	5.33	0.1	0.06	5	5.3	4.23	0.0	0.02	8
<i>Trachurus lathami</i>	10.0	8.01	0.5	0.50	5	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8
<i>Polymixia lowei</i>	186.9	73.59	4.9	2.23	5	264.4	46.20	12.2	2.08	5	112.0	32.48	7.7	2.12	8
<i>Pristipomoides aquilonaris</i>	44.2	27.09	4.3	3.32	5	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8
<i>Macrorhamphosus scolopax</i>	267.9	262.55	1.2	1.10	5	2.7	2.67	0.0	0.01	5	0.0	0.00	0.0	0.00	8
<i>Steindachneria argentea</i>	92.0	92.00	3.6	3.63	5	82.6	29.13	3.2	1.12	5	52.5	28.87	1.9	1.02	8
<i>Peprilus burti</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8
<i>Zenion hololepis</i>	188.4	188.40	1.5	1.46	5	5.0	3.69	0.1	0.03	5	0.7	0.46	0.0	0.01	8
<i>Synagrops spinosa</i>	38.3	26.84	0.5	0.28	5	64.5	26.08	1.0	0.37	5	75.6	60.20	1.4	1.05	8
<i>Squid</i>	245.3	111.92	8.6	3.93	5	87.8	22.47	3.5	0.83	5	9.1	3.64	0.7	0.23	8

Table 31. SEAMAP Fall Groundfish Trawl Survey species composition list, 373 trawl stations. Species with a total weight of less than .05 lb (22.7 g) are indicated on table as 0.0 kg.

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
<u>Finfishes</u>						
	<i>Micropogonias undulatus</i>	Atlantic croaker	39495	2308.5	248	66.5
	<i>Stenotomus caprinus</i>	longspine porgy	17712	488.3	191	51.2
	<i>Leiostomus xanthurus</i>	spot	6738	673.1	154	41.3
	<i>Prionotus rubio</i>	blackfin searobin	6638	217.4	174	46.6
	<i>Arius felis</i>	sea catfish	6188	636.7	163	43.7
	<i>Cynoscion nothus</i>	silver seatrout	5307	106.1	182	48.8
	<i>Chloroscombrus chrysurus</i>	Atlantic bumper	5207	144.3	107	28.7
	<i>Serranus atrobranchus</i>	blackear bass	3916	61.0	113	30.3
	<i>Cynoscion arenarius</i>	sand seatrout	3320	328.9	204	54.7
	<i>Centropristis philadelphica</i>	rock sea bass	3195	155.9	193	51.7
	<i>Anchoa hepsetus</i>	striped anchovy	2999	41.3	88	23.6
	<i>Peprilus burti</i>	gulf butterflyfish	2739	204.3	134	35.9
	<i>Stellifer lanceolatus</i>	star drum	2218	23.9	98	26.3
	<i>Trachurus lathami</i>	rough scad	2079	100.2	92	24.7
	<i>Trichiurus lepturus</i>	Atlantic cutlassfish	2005	84.5	134	35.9
	<i>Pristipomoides aquilonaris</i>	wenchman	1693	113.6	86	23.1
	<i>Prionotus paralatus</i>	Mexican searobin	1538	50.2	71	19.0
	<i>Synodus foetens</i>	inshore lizardfish	1514	164.5	197	52.8
	<i>Etropus crossotus</i>	fringed flounder	1463	24.8	165	44.2
	<i>Sphoeroides parvus</i>	least puffer	1226	12.2	143	38.3
	<i>Porichthys plectrodon</i>	Atlantic midshipman	1199	24.0	127	34.1
	<i>Lepophidium graellsii</i>	blackedge cusk-eel	1179	59.8	53	14.2
	<i>Halieutichthys aculeatus</i>	pancake batfish	1140	13.3	135	36.2
	<i>Chaetodipterus faber</i>	Atlantic spadefish	1136	46.8	79	21.2
	<i>Harengula jaguana</i>	scaled sardine	1114	30.3	90	24.1
	<i>Diplectrum bivittatum</i>	dwarf sand perch	830	19.8	94	25.2

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Syacium	spp.	lefteye flounders	784	18.3	64	17.2
Syacium	papillosum	dusky flounder	729	37.3	45	12.1
Upeneus	parvus	dwarf goatfish	723	22.7	67	18.0
Cynoscion	spp.	seatrouts	723	4.1	29	7.8
Anchoa	mitchilli	bay anchovy	707	3.3	44	11.8
Syacium	gunteri	shoal flounder	678	9.9	61	16.4
Steindachneria	argentea	luminous hake	631	6.0	15	4.0
Trichopsetta	ventralis	sash flounder	606	18.5	66	17.7
Symphurus	plagiusa	blackcheek tonguefish	572	11.5	93	24.9
Lagodon	rhomboides	pinfish	545	40.9	91	24.4
Prionotus	stearnsi	shortwing searobin	516	7.9	32	8.6
Saurida	brasiliensis	largescale lizardfish	499	3.6	49	13.1
Prionotus	salmonicolor	blackwing searobin	409	22.7	58	15.5
Brevoortia	patronus	gulf menhaden	347	31.8	48	12.9
Citharichthys	spilopterus	bay whiff	326	4.4	74	19.8
Menticirrhus	americanus	southern kingfish	322	28.4	53	14.2
Lutjanus	campechanus	red snapper	319	23.8	76	20.4
Larimus	fasciatus	banded drum	291	11.2	54	14.5
Cyclopsetta	chittendeni	Mexican flounder	273	20.2	68	18.2
Etrumeus	teres	round herring	260	5.8	25	6.7
Pontinus	longispinis	longspine scorpionfish	256	8.4	18	4.8
Bagre	marinus	gafftopsail catfish	232	7.5	14	3.8
Centropristis	ocyrus	bank sea bass	226	12.0	13	3.5
Scorpaena	calcarata	smoothhead scorpionfish	219	5.6	37	9.9
Synagrops	spinosus	temperate bass	218	4.4	10	2.7
Mulloidichthys	martinicus	yellow goatfish	217	10.5	9	2.4

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
			CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OF OCCURRENCE
Lepophidium	jeannae	mottled cusk-eel	202	10.9	12	3.2
Ogcocephalus	spp.	batfishes	163	6.8	43	11.5
Hilderbrandia	flava	yellow conger	154	19.2	42	11.3
Prionotus	tribulus	bighead searobin	138	9.1	52	13.9
Monacanthus	hispidus	planehead filefish	135	5.7	21	5.6
Antennarius	radiusus	singlespot frogfish	127	4.2	24	6.4
Brotula	barbata	bearded brotula	120	29.4	46	12.3
Bollmannia	communis	ragged goby	120	1.4	19	5.1
Anchoa	spp.	anchovies	115	0.2	4	1.1
Prionotus	martis	barred searobin	109	4.0	7	1.9
Gymnachirus	texae	fringed sole	102	4.1	32	8.6
Eucinostomus	gula	silver jenny	97	3.1	24	6.4
Ophidion	holbrookii	bank cusk-eel	92	9.1	10	2.7
Synodus	poeyi	offshore lizardfish	92	1.0	22	5.9
Urophycis	cirrata	gulf hake	90	8.5	19	5.1
Bellator	militaris	horned searobin	88	1.0	12	3.2
Caulolatilus	intermedius	anchor tilefish	85	13.7	24	6.4
Paralichthys	lethostigma	southern flounder	82	30.1	46	12.3
Urophycis	floridana	southern hake	79	13.8	27	7.2
Selene	setapinnis	Atlantic moonfish	77	2.9	32	8.6
Prionotus	roseus	bluespotted searobin	77	3.8	11	2.9
Ancylopsetta	dilecta	three-eye flounder	75	5.8	31	8.3
Orthopristis	chrysoptera	pigfish	72	6.7	26	7.0
Pikea	mexicana	yellowtail bass	70	1.8	14	3.8
Trachinocephalus	myops	snakefish	70	5.3	13	3.5

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
			CAUGHT	CAUGHT	TOWS WHERE	OF OCCURRENCE
				(KG)	CAUGHT	
	<i>Prionotus</i>	leopard searobin	65	2.1	12	3.2
	<i>Kathetostoma</i>	lancer stargazer	63	6.0	21	5.6
	<i>Pagrus</i>	red porgy	61	13.8	10	2.7
	<i>Ophidion</i>	crested cusk-eel	59	2.8	28	7.5
	<i>Scorpaena</i>	barbfish	54	1.0	3	0.8
	<i>Peprilus</i>	harvestfish	51	3.8	30	8.0
	<i>Rhizoprionodon</i>	Atlantic sharpnose shark	50	83.5	26	7.0
	<i>Caranx</i>	blue runner	48	5.6	18	4.8
	<i>Trinectes</i>	hogchoker	47	1.5	19	5.1
	<i>Lagocephalus</i>	smooth puffer	41	6.5	16	4.3
	<i>Hoplunnis</i>	freckled pike-conger	41	1.5	14	3.8
	<i>Diplectrum</i>	sand perch	40	5.1	10	2.7
	<i>Opisthonema</i>	Atlantic thread herring	40	2.8	18	4.8
	<i>Anchoa</i>	longnose anchovy	39	0.3	10	2.7
	<i>Lutjanus</i>	lane snapper	39	5.6	18	4.8
	<i>Anchoa</i>	Cuban anchovy	38	0.1	1	0.3
	<i>Prionotus</i>	bandtail searobin	34	1.1	12	3.2
	<i>Lepophidium</i>	cusk-eels	33	1.3	8	2.1
	<i>Neomerinthe</i>	spinycheek scorpionfish	32	10.4	6	1.6
	<i>Equetus</i>	cubbyu	31	2.0	11	2.9
	<i>Mullus</i>	red goatfish	30	1.3	4	1.1
	<i>Balistes</i>	gray triggerfish	29	4.2	15	4.0
	<i>Sphyraena</i>	guaguanche	29	3.3	12	3.2
	<i>Coelorinchus</i>	blackfin grenadier	28	0.4	1	0.3
	<i>Monolene</i>	lefteye flounders	28	0.8	6	1.6
	<i>Rhomboplites</i>	vermillion snapper	26	3.6	2	0.5

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
	<i>Selar crumenophthalmus</i>	bigeye scad	21	2.7	8	2.1
	<i>Sphoeroides nephelus</i>	southern puffer	21	1.0	9	2.4
	<i>Caranx hippos</i>	crevalle jack	20	2.0	9	2.4
	<i>Monolene antillarum</i>	slim flounder	17	0.5	1	0.3
	<i>Ancylopsetta quadrocellata</i>	ocellated flounder	17	2.9	10	2.7
	<i>Bembrops anatirostris</i>	duckbill flathead	17	1.0	4	1.1
	<i>Ariomma bondi</i>	silver-rag	16	1.0	2	0.5
	<i>Equetus</i> spp.	drums	16	3.2	6	1.6
	<i>Selene vomer</i>	lookdown	16	0.3	10	2.7
	<i>Mustelus norrisi</i>	Florida smoothhound	15	22.5	9	2.4
	<i>Citharichthys macrops</i>	spotted whiff	15	0.5	10	2.7
	<i>Symphurus civitatus</i>	offshore tonguefish	14	0.3	7	1.9
	<i>Scomberomorus maculatus</i>	Spanish mackerel	14	2.2	9	2.4
	<i>Dasyatis sabina</i>	Atlantic stringray	14	2.5	9	2.4
	Apogonidae	cardinalfishes	14	0.0	3	0.8
	<i>Paralichthys squamilentus</i>	broad flounder	13	4.8	9	2.4
	<i>Peristedion</i> spp.	searobins	12	0.4	3	0.8
	<i>Cyclopsetta</i> spp.	lefteye flounders	11	0.8	1	0.3
	<i>Bothus robinsi</i>	twospot flounder	11	0.2	2	0.5
	<i>Synodus intermedius</i>	sand diver	11	0.9	2	0.5
	<i>Raja texana</i>	roundel skate	10	5.0	7	1.9
	<i>Neobythites gilli</i>	cusck-eel	10	0.3	6	1.6
	<i>Decapterus punctatus</i>	round scad	9	0.5	2	0.5
	<i>Holoplunnis diomedianus</i>	blacktail pike-conger	9	0.2	4	1.1
	<i>Polydactylus octonemus</i>	Atlantic threadfin	8	0.9	5	1.3
	<i>Hemicaranx amblyrhynchus</i>	bluntnose jack	8	4.0	4	1.1

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Raja	eglanteria	clearnose skate	8	3.7	6	1.6
Ophidion	grayi	blotched cusk-eel	8	0.5	5	1.3
Bairdiella	chrysourea	silver perch	7	0.3	6	1.6
Narcine	brasiliensis	lesser electric ray	7	3.3	4	1.1
Rypticus	maculatus	whitespotted soapfish	7	0.8	4	1.1
Echeneis	naucrates	sharksucker	7	3.7	6	1.6
Macrorhamphosus	scolopax	longspine snipefish	7	0.1	3	0.8
Serranus	phoebe	tattler	7	0.4	1	0.3
Ophichthus	gomesi	shrimp eel	7	0.9	3	0.8
Argentina	silus	Atlantic argentine	6	0.0	4	1.1
Bellator	egretta	streamer searobin	6	0.2	2	0.5
Achirus	lineatus	lined sole	6	0.0	5	1.3
Aluterus	schoepfi	orange filefish	5	2.6	3	0.8
Citharichthys	cornutus	horned whiff	5	0.1	3	0.8
Scomberomorus	cavalla	king mackerel	5	0.3	4	1.1
Dasyatis	sayi	bluntnose stringray	5	3.0	3	0.8
Priacanthus	arenatus	bigeye	5	1.9	4	1.1
Anthias	spp.	temperate basses	5	0.1	1	0.3
Hemanthias	leptus	longtail bass	5	0.4	2	0.5
Pomatomus	saltatrix	bluefish	4	2.5	2	0.5
Hemanthias	spp.	basses	4	0.3	2	0.5
Epinephelus	flavolimbatus	yellowedge grouper	4	0.7	4	1.1
Pogonias	cromis	black drum	4	22.7	4	1.1
Engyophrys	senta	spiny flounder	4	0.0	2	0.5
Ogcocephalus	pumilus	batfish	4	0.2	1	0.3
Chilomycterus	schoepfi	striped burrfish	3	0.6	3	0.8

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Aluterus	heudeloti	dotterel filefish	3	0.1	3	0.8
Etropus	microstomus	smallmouth flounder	3	0.1	2	0.5
Haemulon	aurolineatum	tomtate	3	0.4	1	0.3
Hemipteronotus	novacula	pearly razorfish	3	0.4	3	0.8
Archosargus	probatoccephalus	sheepshead	3	3.0	3	0.8
Peristedion	gracile	slender searobin	3	0.1	2	0.5
Otophidium	omostigmum	polka-dot cusk-eel	3	0.0	1	0.3
Gymnothorax	ocellatus	ocellated moray	3	1.5	2	0.5
Gymnothorax	nigromarginatus	blackedge moray	3	0.3	2	0.5
Ophichthus	ocellatus	palespotted eel	3	0.5	2	0.5
Raja	olseni	spreadfin skate	3	1.5	3	0.8
Raja	garmani	rosette skate	3	0.5	2	0.5
Anguilliformes		eels	3	0.5	1	0.3
Squatina	dumerili	Atlantic angel shark	2	1.6	2	0.5
Sphyrna	tiburo	bonnethead	2	0.9	2	0.5
Rhinoptera	bonasus	cownose ray	2	3.1	2	0.5
Physiculus	fulvus	morid cod	2	0.0	1	0.3
Paranthias	furcifer	creole-fish	2	0.0	1	0.3
Fistularia	tabacaria	bluespotted cornetfish	2	0.9	1	0.3
Seriola	dumerili	greater amberjack	2	1.4	1	0.3
Euthynnus	alletteratus	little tunny	2	0.0	1	0.3
Bembrops	spp.	flatheads	2	0.1	1	0.3
Astroscopus	y-graecum	southern stargazer	2	0.2	1	0.3
Gobionellus	hastatus	sharptail goby	2	0.0	2	0.5
Calamus	leucosteus	whitebone porgy	2	0.2	1	0.3
Decodon	puellaris	red hogfish	2	0.1	2	0.5

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
<i>Eucinostomus</i>	<i>argenteus</i>	spotfin mojarra	2	0.0	2	0.5
<i>Opsanus</i>	<i>pardus</i>	leopard toadfish	2	0.0	1	0.3
<i>Zalieutes</i>	<i>mcgintyi</i>	tricorn batfish	2	0.1	1	0.3
<i>Ogcocephalus</i>	<i>radiatus</i>	polka-dot batfish	1	0.0	1	0.3
<i>Ogcocephalus</i>	<i>parvus</i>	roughback batfish	1	0.0	1	0.3
<i>Ogcocephalidae</i>		batfishes	1	0.0	1	0.3
<i>Opsanus</i>	<i>beta</i>	gulf toadfish	1	0.0	1	0.3
<i>Lophiodes</i>	<i>reticulatus</i>	reticulate goosefish	1	0.2	1	0.3
<i>Antennarius</i>	<i>scaber</i>	splitlure frogfish	1	0.0	1	0.3
<i>Monacanthus</i>	<i>setifer</i>	pygmy filefish	1	0.0	1	0.3
<i>Sphoeroides</i>	<i>dorsalis</i>	marbled puffer	1	0.2	1	0.3
<i>Sphoeroides</i>	<i>spp.</i>	puffers	1	0.7	1	0.3
<i>Etropus</i>	<i>rimosus</i>	gray flounder	1	0.0	1	0.3
<i>Gastropsetta</i>	<i>frontalis</i>	shrimp flounder	1	0.1	1	0.3
<i>Paralichthys</i>	<i>albigutta</i>	gulf flounder	1	0.3	1	0.3
<i>Monolene</i>	<i>megalepis</i>	deepwater flounder	1	0.0	1	0.3
<i>Cyclopsetta</i>	<i>fimbriata</i>	spotfin flounder	1	0.0	1	0.3
<i>Haemulon</i>	<i>plumieri</i>	white grunt	1	0.1	1	0.3
<i>Lonchopisthus</i>	<i>lindneri</i>	swordtail jawfish	1	0.0	1	0.3
<i>Chaetodon</i>	<i>ocellatus</i>	spotfin butterflyfish	1	0.0	1	0.3
<i>Chaetodipterus</i>	<i>faber</i>	Atlantic spadefish	1	0.5	1	0.3
<i>Calamus</i>	<i>nodosus</i>	knobbed porgy	1	0.5	1	0.3
<i>Bembrops</i>	<i>gobioides</i>	goby flathead	1	0.1	1	0.3
<i>Chasmodes</i>	<i>saburrae</i>	Florida blenny	1	0.0	1	0.3
<i>Lutjanus</i>	<i>griseus</i>	grey snapper	1	0.0	1	0.3
<i>Oligoplites</i>	<i>saurus</i>	leatherjacket	1	0.0	1	0.3

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Decapterus	tabl	redtail scad	1	0.0	1	0.3
Epigonus	pandionis	cardinalfish	1	0.0	1	0.3
Rachycentron	canadum	cobia	1	1.1	1	0.3
Caranx	spp.	jacks	1	0.0	1	0.3
Hemanthias	vivanus	red barbier	1	0.0	1	0.3
Serraniculus	pumilio	pygmy sea bass	1	0.0	1	0.3
Apogon	maculatus	flamefish	1	0.0	1	0.3
Polymixia	lowei	beardfish	1	0.0	1	0.3
Syngnathus	louisianae	chain pipefish	1	0.0	1	0.3
Brosmiculus	imberbis	morid cod	1	0.1	1	0.3
Hirundichthys	rondeleti	blackwing flyingfish	1	0.1	1	0.3
Gymnothorax	spp.	morays	1	0.5	1	0.3
Hoplunnis	spp.	pike-congers	1	0.0	1	0.3
Dasyatis	centroura	rougthead stingray	1	90.9	1	0.3
Rhinobatos	lentiginosus	Atlantic guitarfish	1	0.9	1	0.3
Dasyatis	americana	southern stingray	1	0.7	1	0.3
Muraenidae		morays	1	0.1	1	0.3
<u>Crustaceans</u>						
Callinectes	similis	lesser blue crab	8311	205.7	263	70.5
Penaeus	aztecus	brown shrimp	7562	156.2	240	64.3
Squilla	spp.	mantis shrimps	5849	84.0	214	57.4
Portunus	spinicarpus	swimming crab	5583	71.5	69	18.5
Penaeus	setiferus	white shrimp	4833	104.6	167	44.8
Portunus	gibbesii	swimming crab	3829	26.6	201	53.9
Trachypenaeus	spp.	roughneck shrimps	3359	12.0	178	47.7
Solenocera	spp.	rareback shrimps	1541	10.1	49	13.1

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER	TOTAL WEIGHT	NUMBER OF	% FREQUENCY
			CAUGHT	CAUGHT (KG)	TOWS WHERE CAUGHT	OF OCCURRENCE
	<i>Sicyonia brevirostris</i>	rock shrimp	1197	22.4	77	20.6
	<i>Anasimus latus</i>	spider crab	872	11.1	28	7.5
	<i>Squilla empusa</i>	mantis shrimp	747	10.2	61	16.4
	<i>Parapenaeus</i> spp.	deepwater rose shrimps	641	4.5	17	4.6
	<i>Penaeus duorarum</i>	pink shrimp	536	12.3	80	21.4
	<i>Xiphopenaeus kroyeri</i>	seabob	300	1.1	11	2.9
	<i>Sicyonia dorsalis</i>	rock shrimp	197	1.3	52	13.9
	<i>Portunus spinimanus</i>	swimming crab	149	5.8	37	9.9
	<i>Pagurus pollicaris</i>	wary hermit crab	118	1.0	15	4.0
	<i>Calappa sulcata</i>	box crab	65	22.6	42	11.3
	Squillidae	mantis shrimps	61	0.5	7	1.9
	<i>Callinectes sapidus</i>	blue crab	51	7.5	34	9.1
	<i>Acetes americanus</i>	sergestid shrimp	44	0.0	1	0.3
	<i>Parapandalus willisi</i>	pandalid shrimp	35	0.2	1	0.3
	<i>Hepatus epheliticus</i>	calico crab	31	1.7	16	4.3
	<i>Portunus sayi</i>	swimming crab	30	1.5	12	3.2
	<i>Libinia emarginata</i>	spider crab	28	6.5	11	2.9
	Pandalidae	pandalid shrimps	26	0.2	4	1.1
	<i>Raninoides louisianensis</i>	frog crab	22	0.8	9	2.4
	Majidae	spider crabs	21	0.5	2	0.5
	<i>Pagurus</i> spp.	hermit crabs	15	0.5	3	0.8
	<i>Persephona aquilonarius</i>	purse crab	14	0.0	6	1.6
	Paguridae	hermit crabs	11	0.2	5	1.3
	<i>Plesionika</i> spp.	pandalid shrimps	8	0.1	1	0.3
	<i>Myropsis quinquespinosa</i>	purse crab	8	0.2	4	1.1

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Libinia	dubia	spider crab	7	0.4	7	1.9
Xanthidae		mud crabs	6	0.2	5	1.3
Stenorynchus	seticornis	spider crab	6	0.1	4	1.1
Scyllarus	chacei	Spanish lobster	5	0.2	1	0.3
Arenaeus	cribrarius	speckled crab	5	0.3	4	1.1
Sicyonia	spp.	rock shrimps	5	0.0	2	0.5
Raninoides	spp.	frog crabs	5	0.1	2	0.5
Speocarcinus	lobatus	mud crab	4	0.0	2	0.5
Parthenope	pourtalesii	spider crab	4	0.1	1	0.3
Trachypenaeus	similis	roughneck shrimp	4	0.0	1	0.3
Scyllaridae		Spanish lobsters	4	0.1	2	0.5
Porcellanidae		porcellanid crabs	4	0.0	2	0.5
Scyllarus	depressus	Spanish lobster	3	0.1	1	0.3
Petrochirus	diogenes	hermit crab	3	0.0	1	0.3
Parthenope	agona	spider crab	3	0.1	3	0.8
Cirripedia		barnacles	3	0.1	2	0.5
Parthenope	serrata	spider crab	2	0.0	2	0.5
Parthenopidae		spider crabs	2	0.1	2	0.5
Persephona	crinata	purse crab	2	0.0	2	0.5
Libinia	spp.	spider crabs	2	0.5	1	0.3
Clibanarius	vittatus	striped hermit crab	2	0.0	1	0.3
Scyllarus	spp.	Spanish lobsters	2	0.1	2	0.5
Stenocionops	spp.	spider crabs	2	0.1	2	0.5
Porcellana	sayana	porcellanid crab	2	0.0	1	0.3
Acanthocarpus	alexandri	calappid crab	2	0.1	2	0.5
Calappa	flammea	box crab	2	0.4	2	0.5

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Tetraxanthus	rathbunae	mud crab	2	0.0	1	0.3
Ovalipes	guadulpensis	lady crab	1	0.0	1	0.3
Ovalipes	spp.	lady crabs	1	0.0	1	0.3
Cronius	ruber	swimming crab	1	0.0	1	0.3
Scyllarides	delfosi	three-spot slipper lobster	1	0.2	1	0.3
Scyllarides	nodifer	ridged slipper lobster	1	0.0	1	0.3
Porcellana	sigsbeiana	porcellanid crab	1	0.0	1	0.3
Galatheididae		galatheid crabs	1	0.0	1	0.3
Podochela	sidneyi	inachid crab	1	0.0	1	0.3
Pagurus	longicarpus	hermit crab	1	0.0	1	0.3
Squilla	brasiliensis	mantis shrimp	1	0.0	1	0.3
Homola	barbata	homolid crab	1	0.0	1	0.3
<u>Others</u>						
Amusium	papyraceum	paper scallop	2827	22.5	37	9.9
Lolliguncula	brevis	brief squid	1394	18.8	132	35.4
Doryteuthis	pleii	arrow squid	895	8.0	36	9.7
Mellita	quinqüesperforata	five-slotted sand dollar	840	0.8	8	2.1
Loligo	pealei	common squid	759	21.6	96	25.7
Aurelia	spp.	jellyfishes	742	56.7	29	7.8
Asteroidea		starfishes	312	3.3	33	8.8
Myopsida		squids	257	1.0	9	2.4
Spatangidae		heart urchins	223	8.5	3	0.8
Pitar	cordatus	Schwengel's venus	214	5.2	9	2.4
Renilla	mulleri	short-stemmed sea pansy	183	0.5	5	1.3
Calliactris	tricolor	common sea anemone	153	0.4	9	2.4
Argopecten	gibbus	calico scallop	132	3.6	7	1.9

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
Tellina	spp.	tellin shells	100	1.1	1	0.3
Anadara	spp.	ark shells	44	0.7	7	1.9
Anthozoa		anthozoans	31	1.0	4	1.1
Echinodermata		echinoderms	30	3.3	7	1.9
Aequipecten	glyptus	Tyron's scallop	18	0.7	4	1.1
Coelenterata		coelenterates	15	1.6	1	0.3
Sconsia	striata	royal bonnet	14	0.2	2	0.5
Luidia	clathrata	sea star	14	0.1	2	0.5
Thais	haemastoma	oyster drill	12	0.3	8	2.1
Cantharus	cancellarius	cancellate cantharus	11	0.2	5	1.3
Busycon	perversum	perverse whelk	9	0.7	3	0.8
Polystira	spp.	turret shells	8	0.0	1	0.3
Pyrosomida		ascidians	8	0.5	3	0.8
Tunicata		tunicates	7	0.1	2	0.5
Pecten	raveneli	Ravenel's scallop	7	0.0	1	0.3
Polinices	duplicatus	shark eye	6	0.2	4	1.1
Astrangia	spp.	corals	6	0.0	1	0.3
Bryozoa		moss animals	6	0.5	1	0.3
Leptogorgia	spp.	sea whips	5	0.0	1	0.3
Porifera		sponges	5	0.8	4	1.1
Mollusca		molluscs	5	0.2	1	0.3
Phalium	granulatum	scotch bonnet	4	0.0	1	0.3
Crinoidea		crinoids	4	0.1	3	0.8
Cantharus	spp.	cantharus whelk	3	0.0	1	0.3
Pennatulidae		sea-pens	3	0.1	1	0.3
Gorgonidae		gorgons	2	0.1	2	0.5

Table 31. SEAMAP species composition (cont'd.)

GENUS	SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OF OCCURRENCE
	<i>Dactylometra quinquecirrha</i>	compass jellyfish	2	0.0	1	0.3
	<i>Octopus vulgaris</i>	common octopus	2	0.0	1	0.3
	<i>Rossia</i> spp.	bob-tailed squids	2	0.1	2	0.5
	<i>Luidia alternata</i>	sea star	2	0.0	2	0.5
	<i>Gorgonocephalus</i> spp.	basket stars	2	0.2	1	0.3
	Ophiuroidea	brittlestars	1	0.0	1	0.3
	Holothuroidea	sea cucumbers	1	0.0	1	0.3
	<i>Clypeaster subdepressus</i>	cake urchin	1	0.1	1	0.3
	<i>Luidia</i> spp.	sea stars	1	0.0	1	0.3
	<i>Coniaster americanus</i>	sea star	1	0.1	1	0.3
	<i>Astropecten articulatus</i>	sea star	1	0.0	1	0.3
	<i>Macrocallista nimbosa</i>	sunray venus	1	0.1	1	0.3
	<i>Spisula solidissima</i>	Atlantic surf clam	1	0.0	1	0.3
	<i>Laevicardium laevigatum</i>	common egg cockle	1	0.1	1	0.3
	<i>Lepidochitona</i> spp.	chitons	1	4.3	1	0.3
	Cubomedusae	sea wasps	1	0.2	1	0.3
	Actinidae	anemones	1	0.0	1	0.3
	<i>Limulus polyphemus</i>	horseshoe crab	1	1.3	1	0.3
	<i>Cancellaria reticulata</i>	common nutmeg	1	0.0	1	0.3
	<i>Fusinus</i> spp.	spindle shell	1	0.0	1	0.3
	<i>Fasciolaria</i> spp.	tulip shells	1	0.0	1	0.3
	<i>Branchidontes exustus</i>	scorched mussel	1	0.0	1	0.3
	<i>Anadara ovalis</i>	blood ark	1	0.0	1	0.3
	<i>Anadara baughmani</i>	Baughman's ark	1	0.0	1	0.3
	<i>Terebra salleana</i>	Salle's augur	1	0.0	1	0.3
	<i>Compsodrilla</i> spp.	drillia shell	1	0.0	1	0.3
	<i>Crepidula fornicata</i>	common Atlantic slipper-shell	1	0.0	1	0.3
	<i>Tonna galea</i>	giant tun	1	0.4	1	0.3
	<i>Murex fulvescens</i>	giant eastern murex	1	0.1	1	0.3
	<i>Murex beauii</i>	beau's murex	1	0.1	1	0.3

Table 32a
 Statistical Zone 10
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 10 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	3.6	3.64	0.1	0.07	11
Penaeus															
<i>aztecus</i>	4.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	11
Portunus															
<i>spinicarpus</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	11
Squilla															
<i>spp.</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.4	0.36	0.0	0.02	11
Penaeus															
<i>setiferus</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.4	0.36	0.0	0.03	11
Portunus															
<i>gibbesii</i>	20.0	0.00	0.7	0.00	1	5.3	3.53	0.2	0.12	3	0.4	0.36	0.0	0.02	11
Micropogonias															
<i>undulatus</i>	40.0	0.00	2.7	0.00	1	14.7	10.91	1.5	1.09	3	33.8	33.42	2.1	2.10	11
Stenotomus															
<i>caprinus</i>	8.0	0.00	0.2	0.00	1	13.3	9.61	0.3	0.16	3	274.2	148.87	5.5	2.92	11
Leiostomus															
<i>xanthurus</i>	0.0	0.00	0.0	0.00	1	1.3	1.33	0.1	0.12	3	0.0	0.00	0.0	0.00	11
Prionotus															
<i>rubio</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	6.5	6.55	0.2	0.20	11
Arius															
<i>felis</i>	244.0	0.00	30.9	0.00	1	62.7	32.36	11.0	5.54	3	10.2	7.22	3.4	2.48	11
Cynoscion															
<i>nothus</i>	0.0	0.00	0.0	0.00	1	1.3	1.33	0.1	0.06	3	0.0	0.00	0.0	0.00	11
Chloroscombrus															
<i>chrysurus</i>	0.0	0.00	0.0	0.00	1	4.0	4.00	0.1	0.06	3	1.8	0.83	0.1	0.06	11
Serranus															
<i>atrobranchus</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	11
Squid	784.0	0.00	3.6	0.00	1	769.3	37.55	3.0	0.58	3	113.8	41.88	0.6	0.23	11

Table 32a (cont'd.)
 Statistical Zone 10
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 10 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<u>similis</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	9
Penaeus															
<u>aztecus</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	6.2	5.30	0.5	0.46	9
Portunus															
<u>spinicarpus</u>	6.0	6.00	0.1	0.06	6	0.0	0.00	0.0	0.00	1	73.8	32.10	0.8	0.28	9
Squilla															
<u>spp.</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	0.4	0.44	0.0	0.02	9
Penaeus															
<u>setiferus</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	9
Portunus															
<u>gibbesii</u>	0.7	0.67	0.0	0.03	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	9
Micropogonias															
<u>undulatus</u>	0.0	0.00	0.0	0.00	6	960.0	0.00	77.5	0.00	1	128.9	116.20	9.9	8.59	9
Stenotomus															
<u>caprinus</u>	0.7	0.67	0.1	0.09	6	0.0	0.00	0.0	0.00	1	320.0	223.86	14.9	12.61	9
Leiostomus															
<u>xanthurus</u>	0.0	0.00	0.0	0.00	6	8184.0	0.00	891.3	0.00	1	20.0	14.39	2.2	1.61	9
Prionotus															
<u>rubio</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	15.1	15.11	0.6	0.59	9
Arius															
<u>felis</u>	2.0	0.89	0.7	0.36	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	9
Cynoscion															
<u>nothus</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	9
Chloroscombrus															
<u>chrysurus</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	3.6	3.56	0.0	0.02	9
Serranus															
<u>atrobranchus</u>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	9.3	9.33	0.2	0.24	9
Squid															
	2.0	2.00	0.2	0.15	6	0.0	0.00	0.0	0.00	1	48.9	44.46	0.4	0.21	9

Table 32b
 Statistical Zone 10
 40-ft trawls

Summary of dominant organisms taken within statistical zone 10 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Sicyonia															
<i>brevirostris</i>	0.0	0.00	0.0	0.00	1	2.7	1.33	0.1	0.06	3	2.9	2.54	0.1	0.08	11
Portunus															
<i>spincarpus</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	11
Solenocera															
<i>spp.</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	6.9	6.91	0.0	0.02	11
Trachypenaeus															
<i>spp.</i>	0.0	0.00	0.0	0.00	1	44.0	44.00	0.3	0.30	3	1.5	1.45	0.0	0.02	11
Parapandalus															
<i>spp.</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	11
Pandalidae															
<i>spp.</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	11
Leiostomus															
<i>xanthurus</i>	0.0	0.00	0.0	0.00	1	1.3	1.33	0.1	0.12	3	0.0	0.00	0.0	0.00	11
Stenotomus															
<i>caprinus</i>	8.0	0.00	0.2	0.00	1	13.3	9.61	0.3	0.16	3	274.2	148.87	5.5	2.92	11
Micropogonias															
<i>undulatus</i>	40.0	0.00	2.7	0.00	1	14.7	10.91	1.5	1.09	3	33.8	33.42	2.1	2.10	11
Syacium															
<i>papillosum</i>	0.0	0.00	0.0	0.00	1	9.3	5.81	1.3	1.07	3	12.4	6.77	1.2	0.66	11
Prionotus															
<i>paralatus</i>	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	11
Centropristis															
<i>ocyura</i>	0.0	0.00	0.0	0.00	1	68.0	68.00	1.6	1.58	3	21.5	17.51	1.9	1.50	11
Pristipomoides															
<i>aquilonaris</i>	0.0	0.00	0.0	0.00	1	33.3	33.33	2.8	2.79	3	0.0	0.00	0.0	0.00	11
Arius															
<i>felis</i>	244.0	0.00	30.9	0.00	1	62.7	32.36	11.0	5.54	3	10.2	7.22	3.4	2.48	11
Squid															
<i>spp.</i>	784.0	0.00	3.6	0.00	1	769.3	37.55	3.0	0.58	3	113.8	41.88	0.6	0.23	11

Table 32b (cont'd.)
 Statistical Zone 10
 40-ft trawls

Summary of dominant organisms taken within statistical zone 10 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Sicyonia															
<i>brevirostris</i>	62.0	51.62	1.9	1.54	6	0.0	0.00	0.0	0.00	1	36.9	26.68	0.7	0.48	9
Portunus															
<i>spincarpus</i>	6.0	6.00	0.1	0.06	6	0.0	0.00	0.0	0.00	1	73.8	32.10	0.8	0.28	9
Solenocera															
spp.	1.3	0.84	0.1	0.04	6	0.0	0.00	0.0	0.00	1	26.7	18.17	0.1	0.07	9
Trachypenaeus															
spp.	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	5.8	5.78	0.1	0.10	9
Parapandalus	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	15.6	15.56	0.1	0.08	9
Pandalidae	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	10.2	7.69	0.0	0.03	9
Leiostomus															
<i>xanthurus</i>	0.0	0.00	0.0	0.00	6	8184.0	0.00	891.3	0.00	1	20.0	14.39	2.2	1.61	9
Stenotomus															
<i>caprinus</i>	0.7	0.67	0.1	0.09	6	0.0	0.00	0.0	0.00	1	320.0	223.86	14.9	12.61	9
Micropogonias															
<i>undulatus</i>	0.0	0.00	0.0	0.00	6	960.0	0.00	77.5	0.00	1	128.9	116.20	9.9	8.59	9
Syacium															
<i>papillosum</i>	40.7	18.57	4.1	1.85	6	0.0	0.00	0.0	0.00	1	134.2	83.40	5.8	3.17	9
Prionotus															
<i>paralatus</i>	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	1	109.3	31.42	3.2	1.17	9
Centropristis															
<i>ocyura</i>	48.0	45.64	1.8	1.65	6	32.0	0.00	1.5	0.00	1	10.7	6.50	0.6	0.37	9
Pristipomoides															
<i>aquilonaris</i>	0.0	0.00	0.0	0.00	6	92.0	0.00	5.6	0.00	1	49.8	26.61	2.1	1.04	9
Arius															
<i>felis</i>	2.0	0.89	0.7	0.36	6	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	9
Squid	2.0	2.00	0.2	0.15	6	0.0	0.00	0.0	0.00	1	48.9	44.46	0.4	0.21	9

Table 32c
 Statistical Zone 10
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	98.2	0.00	1	34.5	15.25	3	29.1	8.76	11	24.5	8.59	6	1018.2	0.00	1	75.4	35.27	9
Total finfish kg	40.0	0.00	1	30.9	14.20	3	24.6	8.32	11	18.8	7.46	6	1018.2	0.00	1	69.7	35.59	9
Total crustacean kg	1.8	0.00	1	1.8	0.00	3	1.2	0.51	11	2.7	1.74	6	0.0	0.00	1	3.2	0.79	9
Total others kg	56.4	0.00	1	3.0	0.61	3	3.3	1.06	11	3.3	2.63	6	0.0	0.00	1	3.0	1.69	9
Surface temperature	26.0	0.00	1	25.6	0.22	3	26.3	0.14	8	26.0	0.26	8	26.2	0.16	3	26.6	0.18	10
Midwater temperature	26.0	0.00	1	26.7	0.93	3	26.2	0.12	8	26.3	0.13	8	26.2	0.22	3	26.1	0.28	10
Bottom temperature	26.0	0.00	1	25.5	0.29	3	26.1	0.12	8	25.9	0.19	7	21.5	0.27	3	20.0	0.38	10
Surface salinity	32.5	0.00	1	32.2	1.02	3	33.4	0.47	7	34.6	0.10	8	34.7	0.02	3	34.8	0.09	10
Midwater salinity	31.4	0.00	1	33.0	0.44	3	33.8	0.26	8	34.6	0.11	8	34.7	0.02	3	35.6	0.15	10
Bottom salinity	33.2	0.00	1	34.1	0.23	3	34.7	0.06	7	35.0	0.17	8	36.3	0.01	3	36.4	0.02	10
Surface chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	7.1	0.00	1	7.5	0.49	3	7.2	0.16	8	6.9	0.04	8	6.7	0.07	3	7.3	0.18	10
Midwater oxygen	7.1	0.00	1	7.4	0.50	3	7.1	0.16	8	6.8	0.04	8	6.3	0.35	3	7.0	0.14	10
Bottom oxygen	6.2	0.00	1	7.0	0.64	3	6.6	0.31	8	6.7	0.08	8	4.8	0.12	3	5.1	0.15	10

Table 33a
 Statistical Zone 11
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 11 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	36.5	9.06	0.7	0.18	22	94.5	29.80	1.6	0.44	27	31.8	17.52	1.2	0.53	22
Penaeus															
<i>aztecus</i>	6.9	2.46	0.1	0.05	22	34.4	10.82	0.8	0.21	27	51.3	17.81	1.3	0.45	22
Portunus															
<i>spinicarpus</i>	0.0	0.00	0.0	0.00	22	1.6	1.63	0.0	0.03	27	8.5	8.55	0.0	0.05	22
Squilla															
<i>spp.</i>	271.5	63.70	3.7	0.83	22	31.3	14.71	0.5	0.23	27	19.5	12.95	0.4	0.21	22
Penaeus															
<i>setiferus</i>	132.7	11.77	3.0	0.26	22	29.2	7.94	1.0	0.28	27	4.9	3.18	0.2	0.11	22
Portunus															
<i>gibbesii</i>	146.9	27.78	0.9	0.17	22	43.1	10.06	0.5	0.09	27	18.0	10.39	0.3	0.09	22
Micropogonias															
<i>undulatus</i>	969.3	148.59	50.4	7.39	22	603.1	162.80	33.3	9.05	27	148.2	83.47	9.9	5.38	22
Stenotomus															
<i>caprinus</i>	0.2	0.18	0.0	0.00	22	4.1	1.84	0.1	0.05	27	767.3	241.84	16.4	5.27	22
Leiostomus															
<i>xanthurus</i>	3.3	1.82	0.3	0.22	22	31.9	12.48	3.8	1.45	27	9.3	5.99	1.1	0.68	22
Prionotus															
<i>rubio</i>	2.2	0.94	0.0	0.01	22	0.0	0.00	0.0	0.00	27	29.3	14.44	0.9	0.42	22
Arius															
<i>felis</i>	116.7	67.76	2.4	0.89	22	189.6	89.25	20.6	6.71	27	16.9	8.52	3.4	1.69	22
Cynoscion															
<i>nothus</i>	180.4	48.18	1.3	0.27	22	15.3	7.07	0.4	0.21	27	19.5	13.23	0.3	0.14	22
Chloroscombrus															
<i>chrysurus</i>	7.6	3.33	0.0	0.01	22	252.7	117.04	6.7	3.84	27	226.5	123.86	6.5	3.39	22
Serranus															
<i>atrobranchus</i>	0.0	0.00	0.0	0.00	22	0.0	0.00	0.0	0.00	27	4.7	2.88	0.1	0.08	22
Squid															
<i>Squid</i>	27.3	10.69	0.3	0.10	22	15.4	5.96	0.3	0.11	27	24.2	10.67	0.3	0.11	22

Table 33a (cont'd.)
 Statistical Zone 11
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 11 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	6.4	4.49	0.5	0.30	5	56.0	40.00	2.7	2.00	2	0.0	0.00	0.0	0.00	7
Penaeus															
<i>aztecus</i>	4.0	3.10	0.2	0.14	5	108.0	12.00	4.9	0.55	2	51.4	22.05	2.7	1.08	7
Portunus															
<i>spinicarpus</i>	17.6	12.94	0.3	0.18	5	104.0	104.00	1.1	1.09	2	483.4	202.14	3.9	1.96	7
Squilla															
<i>spp.</i>	4.0	4.00	0.1	0.11	5	50.0	42.00	0.5	0.18	2	18.9	12.55	0.3	0.16	7
Penaeus															
<i>setiferus</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	7
Portunus															
<i>gibbesii</i>	4.0	4.00	0.1	0.11	5	0.0	0.00	0.0	0.00	2	5.7	5.71	0.1	0.05	7
Micropogonias															
<i>undulatus</i>	136.8	126.90	9.1	8.41	5	80.0	72.00	6.0	5.09	2	65.7	61.17	4.5	4.11	7
Stenotomus															
<i>caprinus</i>	717.6	422.76	17.7	10.43	5	888.0	680.00	30.7	24.00	2	212.0	63.49	12.1	4.36	7
Leiostomus															
<i>xanthurus</i>	4.0	3.10	0.4	0.35	5	0.0	0.00	0.0	0.00	2	7.4	5.05	1.0	0.63	7
Prionotus															
<i>rubio</i>	5.6	4.66	0.4	0.36	5	0.0	0.00	0.0	0.00	2	65.7	52.53	2.6	1.99	7
Arius															
<i>felis</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	2	0.6	0.57	0.1	0.08	7
Cynoscion															
<i>nothus</i>	0.8	0.80	0.1	0.11	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	7
Chloroscombrus															
<i>chrysurus</i>	221.6	132.29	13.1	7.84	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	7
Serranus															
<i>atrobranchus</i>	4.0	2.53	0.1	0.07	5	228.0	160.00	4.1	2.45	2	61.1	23.20	1.3	0.45	7
Squid															
	6.4	3.25	0.3	0.17	5	0.0	0.00	0.0	0.00	2	6.9	2.42	0.4	0.16	7

Table 33b
 Statistical Zone 11
 40-ft trawls

Summary of dominant organisms taken within statistical zone 11 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Squilla															
spp.	271.5	63.70	3.7	0.83	22	31.3	14.71	0.5	0.23	27	19.5	12.95	0.4	0.21	22
Portunus															
gibbesii	146.9	27.78	0.9	0.17	22	43.1	10.06	0.5	0.09	27	18.0	10.39	0.3	0.09	22
Callinectes															
similis	36.5	9.06	0.7	0.18	22	94.5	29.80	1.6	0.44	27	31.8	17.52	1.2	0.53	22
Portunus															
spincarpus	0.0	0.00	0.0	0.00	22	1.6	1.63	0.0	0.03	27	8.5	8.55	0.0	0.05	22
Penaeus															
setiferus	132.7	11.77	3.0	0.26	22	29.2	7.94	1.0	0.28	27	4.9	3.18	0.2	0.11	22
Penaeus															
aztecus	6.9	2.46	0.1	0.05	22	34.4	10.82	0.8	0.21	27	51.3	17.81	1.3	0.45	22
Micropogonias															
undulatus	969.3	148.59	50.4	7.39	22	603.1	162.80	33.3	9.05	27	148.2	83.47	9.9	5.38	22
Stenotomus															
caprinus	0.2	0.18	0.0	0.00	22	4.1	1.84	0.1	0.05	27	767.3	241.84	16.4	5.27	22
Chloroscombrus															
chrysurus	7.6	3.33	0.0	0.01	22	252.7	117.04	6.7	3.84	27	226.5	123.86	6.5	3.39	22
Anchoa															
hepsetus	14.5	3.55	0.2	0.06	22	173.5	128.32	2.7	2.07	27	154.5	108.61	1.9	1.29	22
Arius															
felis	116.7	67.76	2.4	0.89	22	189.6	89.25	20.6	6.71	27	16.9	8.52	3.4	1.69	22
Cynoscion															
nothus	180.4	48.18	1.3	0.27	22	15.3	7.07	0.4	0.21	27	19.5	13.23	0.3	0.14	22
Cynoscion															
arenarius	110.4	31.34	7.1	1.93	22	30.4	10.07	3.1	0.94	27	8.0	3.94	1.3	0.63	22
Chaetodipterus															
faber	1.1	0.47	0.0	0.01	22	129.9	110.84	4.3	2.83	27	1.1	0.75	0.1	0.10	22
Squid	27.3	10.69	0.3	0.10	22	15.4	5.96	0.3	0.11	27	24.2	10.67	0.3	0.11	22

Table 33b (cont'd.)
 Statistical Zone 11
 40-ft trawls

Summary of dominant organisms taken within statistical zone 11 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Squilla															
spp.	4.0	4.00	0.1	0.11	5	50.0	42.00	0.5	0.18	2	18.9	12.55	0.3	0.16	7
Portunus															
gibbesii	4.0	4.00	0.1	0.11	5	0.0	0.00	0.0	0.00	2	5.7	5.71	0.1	0.05	7
Callinectes															
similis	6.4	4.49	0.5	0.30	5	56.0	40.00	2.7	2.00	2	0.0	0.00	0.0	0.00	7
Portunus															
spincarpus	17.6	12.94	0.3	0.18	5	104.0	104.00	1.1	1.09	2	483.4	202.14	3.9	1.96	7
Penaeus															
setiferus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	7
Penaeus															
aztecus	4.0	3.10	0.2	0.14	5	108.0	12.00	4.9	0.55	2	51.4	22.05	2.7	1.08	7
Micropogonias															
undulatus	136.8	126.90	9.1	8.41	5	80.0	72.00	6.0	5.09	2	65.7	61.17	4.5	4.11	7
Stenotomus															
caprinus	717.6	422.76	17.7	10.43	5	888.0	680.00	30.7	24.00	2	212.0	63.49	12.1	4.36	7
Chloroscombrus															
chrysurus	221.6	132.29	13.1	7.84	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	7
Anchoa															
hepsetus	10.4	10.40	0.2	0.18	5	0.0	0.00	0.0	0.00	2	0.6	0.57	0.0	0.03	7
Arius															
felis	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	2	0.6	0.57	0.1	0.08	7
Cynoscion															
nothus	0.8	0.80	0.1	0.11	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	7
Cynoscion															
arenarius	0.0	0.00	0.0	0.00	5	34.0	2.00	5.4	0.27	2	19.4	7.92	4.1	1.61	7
Chaetodipterus															
faber	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	7
Squid	6.4	3.25	0.3	0.17	5	0.0	0.00	0.0	0.00	2	6.9	2.42	0.4	0.16	7

Table 33c
 Statistical Zone 11
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	90.4	9.08	22	97.9	11.59	27	63.1	10.51	22	64.0	17.61	5	93.6	48.18	2	132.7	49.60	7
Total finfish kg	79.6	9.62	22	87.9	11.65	27	56.9	10.07	22	61.1	17.94	5	78.2	43.64	2	122.6	49.62	7
Total crustacean kg	9.6	1.23	22	5.5	0.81	27	5.3	1.24	22	2.5	0.45	5	14.5	5.45	2	10.1	4.16	7
Total others kg	1.3	0.27	22	4.8	1.87	27	1.7	0.48	22	1.1	0.45	5	0.0	0.00	2	1.0	0.37	7
Surface temperature	21.3	0.13	22	24.9	0.40	32	26.1	0.11	17	26.2	0.18	8	26.5	0.00	2	26.2	0.12	9
Midwater temperature	0.0	0.00	0	25.9	0.11	21	26.1	0.10	17	26.1	0.20	8	26.5	0.00	2	26.0	0.16	8
Bottom temperature	21.6	0.12	22	24.6	0.33	31	25.9	0.09	17	25.8	0.19	8	24.3	0.75	2	21.8	0.59	9
Surface salinity	31.1	0.49	22	31.5	0.33	27	32.4	0.40	14	33.9	0.34	5	34.0	0.17	2	34.2	0.52	7
Midwater salinity	0.0	0.00	0	31.5	0.28	17	33.2	0.22	14	34.1	0.13	5	34.6	0.06	2	35.3	0.13	7
Bottom salinity	32.5	0.24	22	32.5	0.25	27	34.2	0.17	14	35.3	0.15	5	35.8	0.22	2	36.2	0.06	7
Surface chlorophyll	2.7	0.30	19	1.6	0.45	10	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	8.4	0.17	4	6.7	0.06	23	6.8	0.06	17	6.9	0.11	8	6.7	0.09	3	6.6	0.25	9
Midwater oxygen	0.0	0.00	0	6.7	0.05	23	6.8	0.07	17	6.8	0.09	8	6.5	0.03	3	6.5	0.22	9
Bottom oxygen	7.7	0.27	4	6.3	0.13	23	6.2	0.13	17	5.6	0.16	8	5.4	0.19	3	5.1	0.32	9

Table 34a
 Statistical Zone 12
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 12 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 10 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	32.3	11.18	0.5	0.17	15	20.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0
Penaeus															
<i>aztecus</i>	25.3	4.90	0.4	0.07	15	112.0	0.00	1.6	0.00	1	0.0	0.00	0.0	0.00	0
Portunus															
<i>spincarpus</i>	0.0	0.00	0.0	0.00	15	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Squilla															
<i>spp.</i>	405.6	139.99	7.2	2.74	15	20.0	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	0
Penaeus															
<i>setiferus</i>	93.9	17.46	2.1	0.40	15	4.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0
Portunus															
<i>gibbesii</i>	200.0	75.00	0.9	0.34	15	80.0	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	0
Micropogonias															
<i>undulatus</i>	332.3	69.18	18.8	3.86	15	220.0	0.00	11.8	0.00	1	0.0	0.00	0.0	0.00	0
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	15	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Leiostomus															
<i>xanthurus</i>	0.5	0.36	0.1	0.05	15	12.0	0.00	1.3	0.00	1	0.0	0.00	0.0	0.00	0
Prionotus															
<i>rubio</i>	2.1	1.40	0.0	0.02	15	48.0	0.00	0.7	0.00	1	0.0	0.00	0.0	0.00	0
Arius															
<i>felis</i>	19.2	15.48	3.4	2.62	15	236.0	0.00	40.0	0.00	1	0.0	0.00	0.0	0.00	0
Cynoscion															
<i>nothus</i>	193.3	50.56	1.1	0.26	15	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Chloroscombrus															
<i>chrysurus</i>	29.6	27.92	0.5	0.47	15	108.0	0.00	1.3	0.00	1	0.0	0.00	0.0	0.00	0
Serranus															
<i>atrobranchus</i>	0.0	0.00	0.0	0.00	15	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Squid															
	81.1	14.11	1.2	0.21	15	4.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0

Table 34b
 Statistical Zone 12
 40-ft trawls

Summary of dominant organisms taken within statistical zone 12 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 10 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Squilla spp.	405.6	139.99	7.2	2.74	15	20.0	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	0
Portunus gibbesii	200.0	75.00	0.9	0.34	15	80.0	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	0
Penaeus setiferus	93.9	17.46	2.1	0.40	15	4.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0
Callinectes similis	32.3	11.18	0.5	0.17	15	20.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0
Penaeus aztecus	25.3	4.90	0.4	0.07	15	112.0	0.00	1.6	0.00	1	0.0	0.00	0.0	0.00	0
Penaeus duorarum	0.0	0.00	0.0	0.00	15	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	332.3	69.18	18.8	3.86	15	220.0	0.00	11.8	0.00	1	0.0	0.00	0.0	0.00	0
Cynoscion nothus	193.3	50.56	1.1	0.26	15	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Cynoscion arenarius	138.7	32.24	6.6	1.49	15	8.0	0.00	0.9	0.00	1	0.0	0.00	0.0	0.00	0
Anchoa hepsetus	68.5	41.18	1.0	0.54	15	72.0	0.00	1.5	0.00	1	0.0	0.00	0.0	0.00	0
Anchoa mitchilli	48.3	19.52	0.1	0.06	15	8.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0
Harengula jaguana	42.7	17.02	0.7	0.34	15	16.0	0.00	0.4	0.00	1	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	29.6	27.92	0.5	0.47	15	108.0	0.00	1.3	0.00	1	0.0	0.00	0.0	0.00	0
Etropus crossotus	35.2	9.30	0.5	0.12	15	4.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0
Squid	81.1	14.11	1.2	0.21	15	4.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0

Table 34c
 Statistical Zone 12
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm. No samples were taken above 10 fm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	51.6	5.47	15	89.1	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	37.1	4.49	15	63.6	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	12.1	3.23	15	3.6	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	2.5	0.61	15	21.8	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	21.2	0.53	17	26.5	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	27.2	0.00	1	27.0	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	21.5	0.46	17	26.5	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	28.7	0.87	16	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	30.6	0.50	16	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	3.8	0.50	15	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	8.0	0.14	4	6.9	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	7.0	0.00	1	7.3	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	7.5	0.38	4	6.7	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 35b
 Statistical Zone 13
 40-ft trawls

Summary of dominant organisms taken within statistical zone 13 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus															
<i>spini</i> carpus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8
Callinectes															
<i>similis</i>	5.8	2.86	0.0	0.00	4	17.0	9.09	0.3	0.18	5	268.6	112.43	6.3	4.12	8
Solenocera															
<i>spp.</i>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8
Penaeus															
<i>setiferus</i>	378.6	215.36	7.4	4.29	4	61.2	38.51	0.8	0.41	5	88.2	37.50	2.1	0.80	8
Squilla															
<i>spp.</i>	0.0	0.00	0.0	0.00	4	37.4	23.47	0.2	0.18	5	61.6	26.25	0.4	0.22	8
Penaeus															
<i>aztecus</i>	48.5	27.63	0.2	0.13	4	117.8	74.95	1.3	0.86	5	99.3	81.40	1.4	1.13	8
Micropogonias															
<i>undulatus</i>	387.5	245.48	14.4	8.72	4	675.8	409.53	29.7	19.66	5	711.2	300.81	48.1	22.91	8
Arius															
<i>felis</i>	265.5	157.19	6.6	4.15	4	517.5	400.40	21.8	9.03	5	17.8	6.22	3.7	1.09	8
Porichthys															
<i>plectrodon</i>	0.0	0.00	0.0	0.00	4	3.2	3.20	0.1	0.07	5	19.5	16.19	0.3	0.25	8
Centropristis															
<i>philadelphica</i>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	5	13.0	11.90	0.3	0.29	8
Leiostomus															
<i>xanthurus</i>	122.8	66.61	7.5	4.33	4	7.3	6.31	1.0	0.87	5	61.5	26.01	5.3	2.51	8
Trichiurus															
<i>lepturus</i>	30.8	23.07	0.5	0.38	4	15.0	7.66	0.1	0.09	5	69.1	25.10	4.6	3.30	8
Steindachneria															
<i>argentea</i>	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	4	93.0	66.40	2.0	1.57	5	43.7	26.11	0.8	0.49	8
Squid	25.1	7.90	0.1	0.06	4	16.2	11.12	0.3	0.19	5	15.6	11.33	0.1	0.05	8

Table 35b (cont'd.)
 Statistical Zone 13
 40-ft trawls

Summary of dominant organisms taken within statistical zone 13 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus															
<u>spinicarpus</u>	0.0	0.00	0.0	0.00	4	1.3	1.33	0.1	0.06	3	1641.3	854.65	24.4	13.25	9
Callinectes															
<u>similis</u>	336.9	70.18	10.4	4.20	4	566.7	323.38	17.6	11.18	3	3.6	3.09	0.1	0.10	9
Solenocera															
<u>spp.</u>	0.0	0.00	0.0	0.00	4	318.7	183.60	0.8	0.79	3	386.2	115.60	2.9	0.77	9
Penaeus															
<u>setiferus</u>	38.7	22.69	0.6	0.36	4	12.0	12.00	0.2	0.18	3	0.0	0.00	0.0	0.00	9
Squilla															
<u>spp.</u>	186.0	31.43	1.7	0.42	4	230.7	167.07	1.6	1.01	3	105.8	56.77	1.5	0.91	9
Penaeus															
<u>aztecus</u>	38.1	26.09	0.9	0.91	4	190.7	21.83	4.7	0.40	3	53.8	34.56	1.5	0.95	9
Micropogonias															
<u>undulatus</u>	751.6	436.46	54.0	29.68	4	429.3	405.39	34.8	32.04	3	97.3	88.14	8.6	7.64	9
Arius															
<u>felis</u>	11.4	5.95	2.3	1.03	4	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	9
Porichthys															
<u>plectrodon</u>	0.0	0.00	0.0	0.00	4	45.3	17.33	1.9	1.31	3	223.6	106.33	3.9	1.79	9
Centropristis															
<u>philadelphica</u>	27.5	19.09	0.8	0.60	4	121.3	27.06	6.6	2.23	3	174.2	93.17	11.3	4.93	9
Leiostomus															
<u>xanthurus</u>	102.7	99.12	10.8	10.47	4	86.7	86.67	9.4	9.39	3	1.8	1.35	0.3	0.20	9
Trichiurus															
<u>lepturus</u>	75.0	51.00	2.2	2.09	4	8.0	2.31	0.4	0.10	3	84.9	62.21	6.9	4.43	9
Steindachneria															
<u>argentea</u>	0.0	0.00	0.0	0.00	4	14.7	7.42	0.1	0.06	3	190.7	71.47	1.4	0.38	9
Stenotomus															
<u>caprinus</u>	40.8	25.48	0.9	0.62	4	12.0	6.11	0.5	0.26	3	86.7	86.67	1.3	1.31	9
Squid															
	28.7	16.54	0.2	0.13	4	0.0	0.00	0.0	0.00	3	23.6	12.69	0.3	0.20	9

Table 36a (cont'd.)
 Statistical Zone 14
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 14 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	406.0	44.95	12.7	1.08	8	209.0	56.93	5.7	2.00	4	18.7	6.82	0.3	0.09	6
Penaeus															
<i>aztecus</i>	252.0	72.25	5.9	2.03	8	50.0	6.63	2.1	0.44	4	9.3	5.13	0.5	0.29	6
Portunus															
<i>spinicarpus</i>	12.5	10.89	0.1	0.05	8	55.0	42.72	0.3	0.32	4	120.0	49.57	1.2	0.62	6
Squilla															
<i>spp.</i>	34.0	7.52	0.5	0.11	8	14.0	8.08	0.1	0.05	4	24.7	14.77	0.4	0.29	6
Penaeus															
<i>setiferus</i>	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	6
Portunus															
<i>gibbesii</i>	6.0	3.02	0.1	0.06	8	0.0	0.00	0.0	0.00	4	9.3	7.84	0.1	0.09	6
Micropogonias															
<i>undulatus</i>	756.5	168.42	51.4	11.41	8	311.0	119.51	24.6	8.93	4	106.0	87.48	10.1	7.97	6
Stenotomus															
<i>caprinus</i>	148.5	39.36	2.8	0.66	8	403.0	182.45	11.5	4.80	4	156.7	49.21	6.8	1.91	6
Leiostomus															
<i>xanthurus</i>	283.0	149.79	26.3	13.39	8	271.0	122.09	26.1	11.26	4	3.3	1.91	0.5	0.25	6
Prionotus															
<i>rubio</i>	275.0	95.87	10.7	3.28	8	135.0	73.46	6.1	2.57	4	50.0	22.95	4.2	1.78	6
Arius															
<i>felis</i>	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	6
Cynoscion															
<i>nothus</i>	5.5	3.11	0.5	0.28	8	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	6
Chloroscombrus															
<i>chrysurus</i>	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	6
Serranus															
<i>atrobranchus</i>	99.5	39.56	1.3	0.47	8	89.0	25.16	0.8	0.35	4	162.0	34.45	3.8	0.69	6
Squid															
	10.0	6.68	0.3	0.16	8	9.0	9.00	0.3	0.27	4	56.0	24.57	2.4	0.73	6

Table 36b
 Statistical Zone 14
 40-ft trawls

Summary of dominant organisms taken within statistical zone 14 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Callinectes</i>															
<i>similis</i>	40.3	30.95	0.2	0.13	8	13.9	6.73	0.1	0.08	11	159.9	53.94	3.5	1.11	20
<i>Penaeus</i>															
<i>aztecus</i>	7.9	4.87	0.0	0.02	8	68.3	38.86	0.8	0.47	11	120.5	37.70	1.8	0.52	20
<i>Penaeus</i>															
<i>setiferus</i>	179.5	28.16	3.0	0.55	8	88.2	30.98	1.8	0.52	11	32.9	20.70	0.7	0.46	20
<i>Trachypenaeus</i>															
<i>spp.</i>	95.7	59.44	0.1	0.10	8	72.6	31.81	0.1	0.07	11	42.3	19.47	0.2	0.11	20
<i>Anasimus</i>															
<i>latus</i>	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	11	0.4	0.40	0.0	0.00	20
<i>Squilla</i>															
<i>spp.</i>	0.7	0.71	0.0	0.02	8	8.1	5.42	0.1	0.05	11	43.9	15.49	0.4	0.21	20
<i>Micropogonias</i>															
<i>undulatus</i>	1344.5	737.77	76.8	36.16	8	434.6	126.09	30.4	9.89	11	737.3	162.56	44.3	9.81	20
<i>Prionotus</i>															
<i>rubio</i>	37.3	23.80	0.5	0.43	8	18.9	7.35	0.4	0.15	11	195.1	75.78	4.6	1.28	20
<i>Stenotomus</i>															
<i>caprinus</i>	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	11	93.0	34.31	1.5	0.55	20
<i>Leiostomus</i>															
<i>xanthurus</i>	34.5	18.51	1.6	0.81	8	13.7	6.79	1.3	0.68	11	61.1	21.11	6.3	2.07	20
<i>Arius</i>															
<i>felis</i>	165.2	32.18	6.3	1.46	8	97.3	48.76	12.7	7.61	11	98.9	71.66	14.0	9.76	20
<i>Stellifer</i>															
<i>lanceolatus</i>	279.5	205.81	3.6	2.93	8	15.3	8.27	0.2	0.13	11	1.0	0.70	0.0	0.03	20
<i>Centropristis</i>															
<i>philadelphica</i>	0.0	0.00	0.0	0.00	8	5.1	3.15	0.0	0.02	11	29.0	9.03	0.6	0.17	20
<i>Serranus</i>															
<i>atrobranchus</i>	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	11	0.6	0.60	0.0	0.02	20
<i>Squid</i>															
<i>Squid</i>	18.0	10.96	0.3	0.18	8	11.4	3.30	0.1	0.04	11	6.6	2.22	0.1	0.03	20

Table 37a
 Statistical Zone 15
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 15 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	0.0	0.00	0.0	0.00	0	42.3	24.96	0.8	0.66	10	288.8	60.29	8.5	1.79	16
Penaeus															
<i>aztecus</i>	0.0	0.00	0.0	0.00	0	22.5	13.30	0.5	0.37	10	341.8	92.60	4.6	1.27	16
Portunus															
<i>spinicarpus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	10	0.0	0.00	0.0	0.00	16
Squilla															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	18.0	11.40	0.1	0.08	10	67.3	14.39	0.9	0.20	16
Penaeus															
<i>setiferus</i>	0.0	0.00	0.0	0.00	0	54.4	20.72	1.2	0.45	10	148.0	40.25	3.6	0.92	16
Portunus															
<i>gibbesii</i>	0.0	0.00	0.0	0.00	0	39.2	17.30	0.2	0.10	10	91.3	23.74	0.7	0.20	16
Micropogonias															
<i>undulatus</i>	0.0	0.00	0.0	0.00	0	1356.2	601.40	70.1	29.48	10	1212.3	197.23	65.4	9.90	16
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	0	226.0	98.09	3.9	1.64	10	217.3	52.51	3.7	0.89	16
Leiostomus															
<i>xanthurus</i>	0.0	0.00	0.0	0.00	0	19.0	11.47	1.5	0.92	10	25.8	13.06	2.0	0.87	16
Prionotus															
<i>rubio</i>	0.0	0.00	0.0	0.00	0	206.1	87.23	4.5	1.76	10	368.8	27.66	9.6	0.55	16
Arius															
<i>felis</i>	0.0	0.00	0.0	0.00	0	67.7	27.84	9.0	3.37	10	34.0	7.05	6.9	1.72	16
Cynoscion															
<i>nothus</i>	0.0	0.00	0.0	0.00	0	68.8	28.67	5.1	2.29	10	78.0	22.41	4.7	0.77	16
Chloroscombrus															
<i>chrysurus</i>	0.0	0.00	0.0	0.00	0	72.8	62.60	4.2	3.57	10	3.8	1.84	0.2	0.08	16
Serranus															
<i>atrobranchus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	10	77.3	31.32	0.8	0.32	16
Squid	0.0	0.00	0.0	0.00	0	16.7	7.22	0.8	0.30	10	18.8	6.03	0.6	0.22	16

Table 37a (cont'd.)
 Statistical Zone 15
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 15 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	414.0	119.44	10.5	2.63	8	63.3	18.15	1.7	0.48	11	17.2	9.67	0.5	0.34	13
Penaeus															
<i>aztecus</i>	479.0	91.39	11.5	3.73	8	93.1	16.98	3.9	0.66	11	35.1	13.03	1.8	0.66	13
Portunus															
<i>spinicarpus</i>	0.0	0.00	0.0	0.00	8	6.2	4.65	0.1	0.05	11	40.4	15.15	0.4	0.13	13
Squilla															
<i>spp.</i>	23.5	8.12	0.3	0.12	8	28.0	13.38	0.4	0.19	11	4.9	2.72	0.1	0.03	13
Penaeus															
<i>setiferus</i>	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	11	0.0	0.00	0.0	0.00	13
Portunus															
<i>gibbesii</i>	8.0	6.46	0.0	0.03	8	1.5	1.45	0.0	0.02	11	0.0	0.00	0.0	0.00	13
Micropogonias															
<i>undulatus</i>	642.5	215.41	43.6	13.56	8	17.8	6.91	2.0	0.74	11	0.3	0.31	0.1	0.06	13
Stenotomus															
<i>caprinus</i>	381.0	72.30	8.8	2.07	8	395.3	68.83	14.0	2.38	11	223.8	35.34	10.0	1.81	13
Leiostomus															
<i>xanthurus</i>	367.5	196.46	29.9	15.76	8	160.7	69.88	17.4	7.56	11	3.1	2.45	0.4	0.31	13
Prionotus															
<i>rubio</i>	341.0	73.53	12.7	2.07	8	74.9	18.91	3.3	0.72	11	47.6	12.12	3.4	0.83	13
Arius															
<i>felis</i>	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	11	0.0	0.00	0.0	0.00	13
Cynoscion															
<i>nothus</i>	17.5	5.40	2.0	0.64	8	1.5	0.98	0.4	0.33	11	0.0	0.00	0.0	0.00	13
Chloroscombrus															
<i>chrysurus</i>	21.0	12.53	1.4	0.90	8	0.0	0.00	0.0	0.00	11	0.0	0.00	0.0	0.00	13
Serranus															
<i>atrobranchus</i>	170.0	34.13	1.8	0.44	8	126.2	42.40	1.5	0.41	11	288.9	66.82	4.7	1.01	13
Squid															
<i>Squid</i>	11.5	5.47	0.3	0.23	8	22.2	12.60	1.0	0.28	11	24.0	12.34	1.3	0.57	13

Table 37b
 Statistical Zone 15
 40-ft trawls

Summary of dominant organisms taken within statistical zone 15 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
<u>aztecus</u>	0.0	0.00	0.0	0.00	0	22.5	13.30	0.5	0.37	10	341.8	92.60	4.6	1.27	16
Callinectes															
<u>similis</u>	0.0	0.00	0.0	0.00	0	42.3	24.96	0.8	0.66	10	288.8	60.29	8.5	1.79	16
Penaeus															
<u>setiferus</u>	0.0	0.00	0.0	0.00	0	54.4	20.72	1.2	0.45	10	148.0	40.25	3.6	0.92	16
Trachypenaeus															
<u>spp.</u>	0.0	0.00	0.0	0.00	0	38.5	33.56	0.1	0.08	10	116.3	37.00	0.4	0.15	16
Portunus															
<u>gibbesii</u>	0.0	0.00	0.0	0.00	0	39.2	17.30	0.2	0.10	10	91.3	23.74	0.7	0.20	16
Squilla															
<u>spp.</u>	0.0	0.00	0.0	0.00	0	18.0	11.40	0.1	0.08	10	67.3	14.39	0.9	0.20	16
Micropogonias															
<u>undulatus</u>	0.0	0.00	0.0	0.00	0	1356.2	601.40	70.1	29.48	10	1212.3	197.23	65.4	9.90	16
Stenotomus															
<u>caprinus</u>	0.0	0.00	0.0	0.00	0	226.0	98.09	3.9	1.64	10	217.3	52.51	3.7	0.89	16
Prionotus															
<u>rubio</u>	0.0	0.00	0.0	0.00	0	206.1	87.23	4.5	1.76	10	368.8	27.66	9.6	0.55	16
Serranus															
<u>atrobranchus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	10	77.3	31.32	0.8	0.32	16
Leiostomus															
<u>xanthurus</u>	0.0	0.00	0.0	0.00	0	19.0	11.47	1.5	0.92	10	25.8	13.06	2.0	0.87	16
Centropristis															
<u>philadelphica</u>	0.0	0.00	0.0	0.00	0	17.9	15.03	0.3	0.31	10	74.3	15.03	1.6	0.36	16
Cynoscion															
<u>arenarius</u>	0.0	0.00	0.0	0.00	0	87.2	36.29	9.8	4.10	10	99.3	17.17	12.1	1.93	16
Pristipomoides															
<u>aquilonaris</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	10	0.0	0.00	0.0	0.00	16
Squid															
	0.0	0.00	0.0	0.00	0	16.7	7.22	0.8	0.30	10	18.8	6.03	0.6	0.22	16

Table 37b (cont'd.)
 Statistical Zone 15
 40-ft trawls

Summary of dominant organisms taken within statistical zone 15 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
<u>aztecus</u>	479.0	91.39	11.5	3.73	8	93.1	16.98	3.9	0.66	11	35.1	13.03	1.8	0.66	13
Callinectes															
<u>similis</u>	414.0	119.44	10.5	2.63	8	63.3	18.15	1.7	0.48	11	17.2	9.67	0.5	0.34	13
Penaeus															
<u>setiferus</u>	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	11	0.0	0.00	0.0	0.00	13
Trachypenaeus															
<u>spp.</u>	39.5	14.11	0.1	0.06	8	2.2	1.25	0.0	0.02	11	0.3	0.31	0.0	0.00	13
Portunus															
<u>gibbesii</u>	8.0	6.46	0.0	0.03	8	1.5	1.45	0.0	0.02	11	0.0	0.00	0.0	0.00	13
Squilla															
<u>spp.</u>	23.5	8.12	0.3	0.12	8	28.0	13.38	0.4	0.19	11	4.9	2.72	0.1	0.03	13
Micropogonias															
<u>undulatus</u>	642.5	215.41	43.6	13.56	8	17.8	6.91	2.0	0.74	11	0.3	0.31	0.1	0.06	13
Stenotomus															
<u>caprinus</u>	381.0	72.30	8.8	2.07	8	395.3	68.83	14.0	2.38	11	223.8	35.34	10.0	1.81	13
Prionotus															
<u>rubio</u>	341.0	73.53	12.7	2.07	8	74.9	18.91	3.3	0.72	11	47.6	12.12	3.4	0.83	13
Serranus															
<u>atrobranchus</u>	170.0	34.13	1.8	0.44	8	126.2	42.40	1.5	0.41	11	288.9	66.82	4.7	1.01	13
Leiostomus															
<u>xanthurus</u>	367.5	196.46	29.9	15.76	8	160.7	69.88	17.4	7.56	11	3.1	2.45	0.4	0.31	13
Centropristis															
<u>philadelphica</u>	102.0	17.66	4.4	1.03	8	89.5	14.88	5.2	1.20	11	50.2	16.15	4.5	1.47	13
Cynoscion															
<u>arenarius</u>	67.5	17.49	9.8	2.42	8	2.9	1.63	0.6	0.42	11	4.0	1.28	1.2	0.41	13
Pristipomoides															
<u>aquilonaris</u>	1.0	1.00	0.0	0.00	8	65.5	27.39	0.6	0.25	11	142.5	32.34	12.0	3.45	13
Squid															
	11.5	5.47	0.3	0.23	8	22.2	12.60	1.0	0.28	11	24.0	12.34	1.3	0.57	13

Table 37c
 Statistical Zone 15
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	123.2	37.86	10	147.7	11.60	16	167.7	33.81	8	88.9	8.38	11	68.2	7.92	13
Total finfish kg	0.0	0.00	0	119.1	37.36	10	126.8	11.05	16	142.0	30.94	8	75.0	9.45	11	59.3	7.54	13
Total crustacean kg	0.0	0.00	0	3.6	1.37	10	20.1	2.61	16	24.8	4.98	8	8.3	1.13	11	3.9	0.88	13
Total others kg	0.0	0.00	0	1.0	0.29	10	1.4	0.26	16	1.4	0.45	8	5.8	2.11	11	5.5	1.53	13
Surface temperature	0.0	0.00	0	22.5	1.13	9	21.7	0.42	16	23.9	0.20	8	24.6	0.05	9	24.7	0.02	17
Midwater temperature	0.0	0.00	0	22.8	1.03	9	23.2	0.20	16	24.4	0.06	8	24.6	0.06	9	24.5	0.25	17
Bottom temperature	0.0	0.00	0	24.2	0.77	9	23.9	0.16	16	24.7	0.12	8	24.1	0.16	9	20.2	0.66	17
Surface salinity	0.0	0.00	0	28.8	1.62	9	28.7	1.64	16	34.5	0.19	8	34.8	0.13	9	34.8	0.09	17
Midwater salinity	0.0	0.00	0	30.5	0.68	9	33.1	0.41	16	35.1	0.13	8	35.4	0.04	9	35.3	0.09	17
Bottom salinity	0.0	0.00	0	32.8	0.35	9	34.5	0.14	16	35.7	0.06	8	35.9	0.11	9	36.5	0.04	17
Surface chlorophyll	0.0	0.00	0	4.2	1.23	7	2.7	0.58	11	1.2	0.23	8	0.5	0.06	8	0.6	0.05	6
Midwater chlorophyll	0.0	0.00	0	1.1	0.23	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.9	0.03	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	0.0	0.00	0	7.8	0.51	8	7.6	0.23	16	7.3	0.26	8	6.7	0.17	9	6.9	0.10	17
Midwater oxygen	0.0	0.00	0	7.1	0.33	8	6.8	0.13	16	6.9	0.28	8	6.7	0.18	8	6.7	0.16	17
Bottom oxygen	0.0	0.00	0	6.4	0.14	8	6.3	0.12	16	6.3	0.20	8	6.0	0.12	9	5.3	0.15	16

Table 38a
 Statistical Zone 16
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 16 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<u>similis</u>	0.0	0.00	0.0	0.00	0	12.0	6.11	0.3	0.16	3	244.0	73.13	6.0	1.76	11
Penaeus															
<u>aztecus</u>	0.0	0.00	0.0	0.00	0	38.7	19.37	0.4	0.26	3	299.3	89.69	4.8	1.36	11
Portunus															
<u>spinicarpus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	11
Squilla															
<u>spp.</u>	0.0	0.00	0.0	0.00	0	2.7	2.67	0.1	0.06	3	37.1	8.90	0.5	0.11	11
Penaeus															
<u>setiferus</u>	0.0	0.00	0.0	0.00	0	133.3	79.41	3.3	1.00	3	20.7	15.41	0.7	0.44	11
Portunus															
<u>gibbesii</u>	0.0	0.00	0.0	0.00	0	10.7	7.06	0.1	0.06	3	27.3	10.34	0.2	0.05	11
Micropogonias															
<u>undulatus</u>	0.0	0.00	0.0	0.00	0	108.0	30.55	5.7	1.99	3	745.5	107.39	40.1	6.78	11
Stenotomus															
<u>caprinus</u>	0.0	0.00	0.0	0.00	0	334.7	174.58	5.3	2.84	3	537.5	201.93	12.5	5.01	11
Leiostomus															
<u>xanthurus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	55.3	22.34	4.3	1.69	11
Prionotus															
<u>rubio</u>	0.0	0.00	0.0	0.00	0	68.0	32.33	1.6	0.73	3	148.0	25.28	5.6	0.87	11
Arius															
<u>felis</u>	0.0	0.00	0.0	0.00	0	84.0	82.01	14.7	14.64	3	39.3	20.15	7.5	3.31	11
Cynoscion															
<u>nothus</u>	0.0	0.00	0.0	0.00	0	118.7	92.85	1.7	1.07	3	84.7	16.12	6.4	1.25	11
Chloroscombrus															
<u>chrysurus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	5.1	2.65	0.2	0.11	11
Serranus															
<u>atrobranchus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	150.5	71.82	1.8	0.77	11
Squid															
<u>Squid</u>	0.0	0.00	0.0	0.00	0	208.0	21.17	3.2	0.32	3	20.7	11.23	0.5	0.23	11

Table 38a (cont'd.)
 Statistical Zone 16
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 16 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
similis	190.4	38.94	4.9	0.75	5	62.0	27.30	1.9	0.77	6	0.4	0.44	0.0	0.02	9
Penaeus															
aztecus	180.0	18.93	6.6	0.90	5	73.3	23.04	3.1	1.16	6	6.2	3.06	0.3	0.19	9
Portunus															
spincarpus	0.0	0.00	0.0	0.00	5	18.7	11.44	0.1	0.06	6	132.9	61.91	1.1	0.52	9
Squilla															
spp.	17.6	9.68	0.2	0.11	5	12.0	7.59	0.1	0.08	6	3.6	2.70	0.0	0.04	9
Penaeus															
setiferus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	9
Portunus															
gibbesii	1.6	1.60	0.0	0.04	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	9
Micropogonias															
undulatus	80.8	27.98	7.5	1.91	5	1.3	1.33	0.2	0.21	6	0.0	0.00	0.0	0.00	9
Stenotomus															
caprinus	988.0	152.75	34.9	6.33	5	420.0	122.77	17.2	3.92	6	119.6	36.66	6.6	2.01	9
Leiostomus															
xanthurus	259.2	109.64	22.9	9.28	5	444.7	300.71	51.6	35.02	6	1.8	1.78	0.3	0.30	9
Prionotus															
rubio	159.2	35.29	7.2	1.13	5	103.3	57.52	5.7	2.38	6	6.7	3.94	0.6	0.36	9
Arius															
felis	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	9
Cynoscion															
nothus	28.8	11.69	3.5	1.50	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	9
Chloroscombrus															
chrysurus	1.6	1.60	0.1	0.11	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	9
Serranus															
atrobranchus	71.2	19.49	0.8	0.25	5	88.7	64.38	1.0	0.74	6	66.7	28.98	1.7	1.09	9
Squid	9.6	6.01	0.7	0.53	5	11.3	6.57	1.1	0.62	6	30.7	13.71	1.7	0.68	9

Table 38b
 Statistical Zone 16
 40-ft trawls

Summary of dominant organisms taken within statistical zone 16 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Penaeus aztecus</i>	0.0	0.00	0.0	0.00	0	38.7	19.37	0.4	0.26	3	299.3	89.69	4.8	1.36	11
<i>Callinectes similis</i>	0.0	0.00	0.0	0.00	0	12.0	6.11	0.3	0.16	3	244.0	73.13	6.0	1.76	11
<i>Portunus spinicarpus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	11
<i>Sicyonia brevis</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	9.8	6.41	0.2	0.10	11
<i>Penaeus setiferus</i>	0.0	0.00	0.0	0.00	0	133.3	79.41	3.3	1.00	3	20.7	15.41	0.7	0.44	11
<i>Squilla spp.</i>	0.0	0.00	0.0	0.00	0	2.7	2.67	0.1	0.06	3	37.1	8.90	0.5	0.11	11
<i>Stenotomus caprinus</i>	0.0	0.00	0.0	0.00	0	334.7	174.58	5.3	2.84	3	537.5	201.93	12.5	5.01	11
<i>Micropogonias undulatus</i>	0.0	0.00	0.0	0.00	0	108.0	30.55	5.7	1.99	3	745.5	107.39	40.1	6.78	11
<i>Peprilus burti</i>	0.0	0.00	0.0	0.00	0	196.0	66.49	11.5	4.37	3	154.5	99.91	10.1	6.23	11
<i>Leiostomus xanthurus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	55.3	22.34	4.3	1.69	11
<i>Trachurus lathamii</i>	0.0	0.00	0.0	0.00	0	1.3	1.33	0.1	0.06	3	22.9	9.69	1.2	0.57	11
<i>Prionotus rubio</i>	0.0	0.00	0.0	0.00	0	68.0	32.33	1.6	0.73	3	148.0	25.28	5.6	0.87	11
<i>Serranus atrobranchus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	150.5	71.82	1.8	0.77	11
<i>Trichiurus lepturus</i>	0.0	0.00	0.0	0.00	0	312.0	150.96	7.0	3.80	3	90.5	70.46	2.4	1.79	11
<i>Squid</i>	0.0	0.00	0.0	0.00	0	208.0	21.17	3.2	0.32	3	20.7	11.23	0.5	0.23	11

Table 38b (cont'd.)
 Statistical Zone 16
 40-ft trawls

Summary of dominant organisms taken within statistical zone 16 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm.

SPECIES	21-30 FM					31-40 FM					Over 40 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Penaeus</i>															
<i>aztecus</i>	180.0	18.93	6.6	0.90	5	73.3	23.04	3.1	1.16	6	6.2	3.06	0.3	0.19	9
<i>Callinectes</i>															
<i>similis</i>	190.4	38.94	4.9	0.75	5	62.0	27.30	1.9	0.77	6	0.4	0.44	0.0	0.02	9
<i>Portunus</i>															
<i>spinicarpus</i>	0.0	0.00	0.0	0.00	5	18.7	11.44	0.1	0.06	6	132.9	61.91	1.1	0.52	9
<i>Sicyonia</i>															
<i>brevirostris</i>	75.2	43.72	1.4	0.78	5	120.0	87.35	1.9	1.26	6	1.8	1.35	0.1	0.04	9
<i>Penaeus</i>															
<i>setiferus</i>	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	9
<i>Squilla</i>															
<i>spp.</i>	17.6	9.68	0.2	0.11	5	12.0	7.59	0.1	0.08	6	3.6	2.70	0.0	0.04	9
<i>Stenotomus</i>															
<i>caprinus</i>	988.0	152.75	34.9	6.33	5	420.0	122.77	17.2	3.92	6	119.6	36.66	6.6	2.01	9
<i>Micropogonias</i>															
<i>undulatus</i>	80.8	27.98	7.5	1.91	5	1.3	1.33	0.2	0.21	6	0.0	0.00	0.0	0.00	9
<i>Peprilus</i>															
<i>burti</i>	216.8	115.52	14.1	7.23	5	196.0	182.56	13.1	11.95	6	69.3	55.72	5.0	3.88	9
<i>Leiostomus</i>															
<i>xanthurus</i>	259.2	109.64	22.9	9.28	5	444.7	300.71	51.6	35.02	6	1.8	1.78	0.3	0.30	9
<i>Trachurus</i>															
<i>lathami</i>	192.8	83.53	6.1	2.45	5	106.7	54.64	3.2	1.48	6	186.7	98.68	10.1	6.80	9
<i>Prionotus</i>															
<i>rubio</i>	159.2	35.29	7.2	1.13	5	103.3	57.52	5.7	2.38	6	6.7	3.94	0.6	0.36	9
<i>Serranus</i>															
<i>atrobranchus</i>	71.2	19.49	0.8	0.25	5	88.7	64.38	1.0	0.74	6	66.7	28.98	1.7	1.09	9
<i>Trichiurus</i>															
<i>lepturus</i>	53.6	43.11	7.6	6.57	5	0.7	0.67	0.0	0.00	6	8.9	7.42	0.4	0.27	9
<i>Squid</i>	9.6	6.01	0.7	0.53	5	11.3	6.57	1.1	0.62	6	30.7	13.71	1.7	0.68	9

Table 38c
 Statistical Zone 16
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm*			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	72.1	19.65	3	140.3	8.79	11	152.4	15.81	5	130.9	31.62	6	55.4	9.50	9
Total finfish kg	0.0	0.00	0	62.4	21.67	3	124.6	8.79	11	138.2	16.94	5	120.0	32.26	6	50.1	9.31	9
Total crustacean kg	0.0	0.00	0	7.3	2.10	3	14.7	2.95	11	13.8	2.20	5	8.5	2.88	6	2.6	0.53	9
Total others kg	0.0	0.00	0	3.0	0.61	3	1.3	0.26	11	1.5	0.36	5	3.0	0.90	6	3.2	0.79	9
Surface temperature	18.7	0.72	3	23.2	0.25	3	23.3	0.32	11	23.1	0.13	4	24.0	0.18	6	24.3	0.14	11
Midwater temperature	0.0	0.00	0	23.0	0.29	3	23.7	0.19	11	23.6	0.14	4	24.1	0.10	6	23.7	0.51	11
Bottom temperature	20.0	1.34	3	23.0	0.06	3	24.2	0.16	11	22.5	0.43	4	21.8	0.31	6	19.0	0.36	11
Surface salinity	22.2	6.71	3	27.0	0.72	3	29.7	0.62	11	34.4	0.15	4	35.3	0.14	6	35.1	0.02	11
Midwater salinity	0.0	0.00	0	27.2	0.62	3	31.3	0.67	11	35.0	0.16	4	35.5	0.10	6	35.6	0.13	11
Bottom salinity	23.8	7.46	3	29.0	0.15	3	32.2	0.60	11	36.3	0.28	4	36.4	0.07	6	36.5	0.04	11
Surface chlorophyll	1.2	0.23	3	1.5	0.67	3	2.5	0.53	10	1.3	0.19	4	0.3	0.08	4	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	7.8	0.38	3	7.2	0.64	3	7.5	0.16	11	7.5	0.15	4	7.8	0.16	6	6.9	0.09	11
Midwater oxygen	0.0	0.00	0	7.5	0.80	3	7.0	0.13	11	7.2	0.21	4	7.8	0.22	6	6.7	0.15	11
Bottom oxygen	7.1	0.29	3	6.3	0.63	3	6.2	0.26	11	5.6	0.09	4	5.6	0.22	6	5.2	0.09	11

*Plankton and environmental stations only.

Table 39a
 Statistical Zone 17
 40-ft trawls

Summary of dominant organisms, combined for all zones, taken in shrimp statistical zone 17 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Callinectes															
<i>similis</i>	0.0	0.00	0.0	0.00	0	108.7	47.20	1.4	0.49	6	16.7	5.00	0.6	0.25	6
Penaeus															
<i>aztecus</i>	0.0	0.00	0.0	0.00	0	116.7	62.64	1.5	0.76	6	301.3	136.25	3.5	1.53	6
Portunus															
<i>spinicarpus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	1.3	1.33	0.1	0.06	6
Squilla															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	192.7	119.51	3.4	2.09	6	0.0	0.00	0.0	0.00	6
Penaeus															
<i>setiferus</i>	0.0	0.00	0.0	0.00	0	256.0	111.65	6.0	2.10	6	0.7	0.67	0.0	0.03	6
Portunus															
<i>gibbesii</i>	0.0	0.00	0.0	0.00	0	362.0	113.18	1.9	0.69	6	11.3	4.31	0.2	0.06	6
Micropogonias															
<i>undulatus</i>	0.0	0.00	0.0	0.00	0	150.7	105.98	8.2	5.70	6	53.3	25.04	2.5	1.53	6
Stenotomus															
<i>caprinus</i>	0.0	0.00	0.0	0.00	0	102.0	65.59	2.1	1.36	6	232.7	88.53	4.6	1.60	6
Leiostomus															
<i>xanthurus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	4.0	2.53	0.2	0.15	6
Prionotus															
<i>rubio</i>	0.0	0.00	0.0	0.00	0	71.3	48.81	2.2	1.46	6	41.3	12.12	1.6	0.46	6
Arius															
<i>felis</i>	0.0	0.00	0.0	0.00	0	40.7	25.05	4.7	3.08	6	550.7	314.61	93.4	57.00	6
Cynoscion															
<i>nothus</i>	0.0	0.00	0.0	0.00	0	1011.3	476.35	5.7	2.34	6	6.7	6.67	0.5	0.45	6
Chloroscombrus															
<i>chrysurus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	5.3	3.53	0.2	0.16	6
Serranus															
<i>atrobranchus</i>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6
Squid															
	0.0	0.00	0.0	0.00	0	92.0	37.32	0.8	0.40	6	56.0	12.44	0.4	0.12	6

Table 39b
 Statistical Zone 17
 40-ft trawls

Summary of dominant organisms taken within statistical zone 17 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus															
aztecus	0.0	0.00	0.0	0.00	0	116.7	62.64	1.5	0.76	6	301.3	136.25	3.5	1.53	6
Portunus															
gibbesii	0.0	0.00	0.0	0.00	0	362.0	113.18	1.9	0.69	6	11.3	4.31	0.2	0.06	6
Penaeus															
setiferus	0.0	0.00	0.0	0.00	0	256.0	111.65	6.0	2.10	6	0.7	0.67	0.0	0.03	6
Squilla															
spp.	0.0	0.00	0.0	0.00	0	192.7	119.51	3.4	2.09	6	0.0	0.00	0.0	0.00	6
Trachypenaeus															
spp.	0.0	0.00	0.0	0.00	0	108.0	33.19	0.3	0.10	6	42.0	19.56	0.2	0.11	6
Callinectes															
similis	0.0	0.00	0.0	0.00	0	108.7	47.20	1.4	0.49	6	16.7	5.00	0.6	0.25	6
Cynoscion															
nothus	0.0	0.00	0.0	0.00	0	1011.3	476.35	5.7	2.34	6	6.7	6.67	0.5	0.45	6
Arius															
felis	0.0	0.00	0.0	0.00	0	40.7	25.05	4.7	3.08	6	550.7	314.61	93.4	57.00	6
Stenotomus															
caprinus	0.0	0.00	0.0	0.00	0	102.0	65.59	2.1	1.36	6	232.7	88.53	4.6	1.60	6
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	0	204.0	123.43	1.0	0.64	6	0.0	0.00	0.0	0.00	6
Micropogonias															
undulatus	0.0	0.00	0.0	0.00	0	150.7	105.98	8.2	5.70	6	53.3	25.04	2.5	1.53	6
Peprilus															
burti	0.0	0.00	0.0	0.00	0	80.0	79.20	5.1	4.99	6	100.0	60.77	6.6	3.96	6
Cynoscion															
arenarius	0.0	0.00	0.0	0.00	0	57.3	19.99	4.4	2.10	6	79.3	63.84	8.3	6.45	6
Diplectrum															
bivittatum	0.0	0.00	0.0	0.00	0	45.3	20.54	1.3	0.92	6	82.7	30.53	1.1	0.42	6
Squid															
	0.0	0.00	0.0	0.00	0	92.0	37.32	0.8	0.40	6	56.0	12.44	0.4	0.12	6

Table 39c
 Statistical Zone 17
 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm*			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	70.6	16.26	6	142.1	59.87	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	0.0	0.00	0	53.3	18.78	6	135.5	61.30	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	0.0	0.00	0	16.1	4.41	6	6.1	2.03	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	0.0	0.00	0	1.8	0.47	6	1.8	0.00	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	18.0	0.33	3	23.1	0.14	5	23.7	0.13	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	0.0	0.00	0	23.0	0.06	5	23.7	0.12	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	18.7	0.52	3	22.8	0.12	5	23.5	0.15	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	14.6	1.77	3	27.3	0.27	5	30.1	0.37	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	27.7	0.34	5	30.3	0.28	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	19.9	3.67	3	28.2	0.35	5	30.6	0.23	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	1.4	0.69	3	2.7	0.37	5	0.5	0.11	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	7.1	0.23	3	7.3	0.09	5	7.6	0.14	7	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	0.0	0.00	0	7.2	0.10	5	7.5	0.10	7	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	6.1	1.30	3	6.8	0.13	5	7.2	0.09	7	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

*Plankton and environmental stations only

Table 40a
 Statistical Zone 18
 20-ft trawls

Summary of dominant organisms, combined for zones 18-21, taken in shrimp statistical zone 18 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Squilla															
spp.	0.0	0.00	0.0	0.00	0	120.5	42.00	1.9	0.58	8	0.0	0.00	0.0	0.00	1
Trachypenaeus															
spp.	0.0	0.00	0.0	0.00	0	55.0	28.45	0.1	0.05	8	8.0	0.00	0.0	0.00	1
Portunus															
gibbesii	0.0	0.00	0.0	0.00	0	101.5	50.94	0.5	0.33	8	24.0	0.00	0.2	0.00	1
Callinectes															
similis	0.0	0.00	0.0	0.00	0	55.5	24.30	0.4	0.16	8	36.0	0.00	0.4	0.00	1
Penaeus															
setiferus	0.0	0.00	0.0	0.00	0	48.5	12.25	0.5	0.10	8	0.0	0.00	0.0	0.00	1
Portunus															
spinimanus	0.0	0.00	0.0	0.00	0	31.0	20.70	0.3	0.22	8	0.0	0.00	0.0	0.00	1
Syacium															
gunteri	0.0	0.00	0.0	0.00	0	15.0	5.22	0.1	0.06	8	40.0	0.00	0.5	0.00	1
Cynoscion															
nothus	0.0	0.00	0.0	0.00	0	68.0	20.81	0.5	0.18	8	224.0	0.00	1.5	0.00	1
Symphurus															
plagiusa	0.0	0.00	0.0	0.00	0	78.0	25.55	1.4	0.46	8	0.0	0.00	0.0	0.00	1
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	0	70.5	47.33	0.4	0.31	8	0.0	0.00	0.0	0.00	1
Haliectichthys															
aculeatus	0.0	0.00	0.0	0.00	0	1.0	0.65	0.0	0.00	8	0.0	0.00	0.0	0.00	1
Etropus															
crossotus	0.0	0.00	0.0	0.00	0	14.0	5.01	0.2	0.09	8	4.0	0.00	0.2	0.00	1
Citharichthys															
spilopterus	0.0	0.00	0.0	0.00	0	5.0	1.81	0.0	0.03	8	0.0	0.00	0.0	0.00	1
Centropristis															
philadelphica	0.0	0.00	0.0	0.00	0	4.0	2.51	0.1	0.05	8	0.0	0.00	0.0	0.00	1
Squid	0.0	0.00	0.0	0.00	0	26.0	7.48	0.2	0.06	8	44.0	0.00	0.4	0.00	1

Table 40b
 Statistical Zone 18
 20-ft trawls

Summary of dominant organisms taken within statistical zone 18 during the September-December 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Squilla															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	120.5	42.00	1.9	0.58	8	0.0	0.00	0.0	0.00	1
Portunus															
<i>gibbesii</i>	0.0	0.00	0.0	0.00	0	101.5	50.94	0.5	0.33	8	24.0	0.00	0.2	0.00	1
Callinectes															
<i>similis</i>	0.0	0.00	0.0	0.00	0	55.5	24.30	0.4	0.16	8	36.0	0.00	0.4	0.00	1
Trachypena															
<i>spp.</i>	0.0	0.00	0.0	0.00	0	55.0	28.45	0.1	0.05	8	8.0	0.00	0.0	0.00	1
Penaeus															
<i>setiferus</i>	0.0	0.00	0.0	0.00	0	48.5	12.25	0.5	0.10	8	0.0	0.00	0.0	0.00	1
Portunus															
<i>spinimanus</i>	0.0	0.00	0.0	0.00	0	31.0	20.70	0.3	0.22	8	0.0	0.00	0.0	0.00	1
Cynoscion															
<i>nothus</i>	0.0	0.00	0.0	0.00	0	68.0	20.81	0.5	0.18	8	224.0	0.00	1.5	0.00	1
Symphurus															
<i>plagiusa</i>	0.0	0.00	0.0	0.00	0	78.0	25.55	1.4	0.46	8	0.0	0.00	0.0	0.00	1
Stellifer															
<i>lanceolatus</i>	0.0	0.00	0.0	0.00	0	70.5	47.33	0.4	0.31	8	0.0	0.00	0.0	0.00	1
Syacium															
<i>gunteri</i>	0.0	0.00	0.0	0.00	0	15.0	5.22	0.1	0.06	8	40.0	0.00	0.5	0.00	1
Etropus															
<i>crossotus</i>	0.0	0.00	0.0	0.00	0	14.0	5.01	0.2	0.09	8	4.0	0.00	0.2	0.00	1
Citharichthys															
<i>spilopterus</i>	0.0	0.00	0.0	0.00	0	5.0	1.81	0.0	0.03	8	0.0	0.00	0.0	0.00	1
Centropristis															
<i>philadelphica</i>	0.0	0.00	0.0	0.00	0	4.0	2.51	0.1	0.05	8	0.0	0.00	0.0	0.00	1
Cynoscion															
<i>arenarius</i>	0.0	0.00	0.0	0.00	0	3.5	0.91	0.2	0.08	8	0.0	0.00	0.0	0.00	1
Squid															
	0.0	0.00	0.0	0.00	0	26.0	7.48	0.2	0.06	8	44.0	0.00	0.4	0.00	1

Table 40c
 Statistical Zone 18
 20-ft trawls and Environmental Data from OREGON II 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm. No samples were taken below 6 fm or above 20 fm.

	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
Environmental category	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	8.9	1.70	8	3.6	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	0.0	0.00	0	3.4	0.64	8	1.8	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	0.0	0.00	0	4.8	1.57	8	1.8	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	0.0	0.00	0	1.8	0.00	8	1.8	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	0.0	0.00	0	22.6	0.09	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	0.0	0.00	0	22.6	0.08	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	0.0	0.00	0	22.2	0.18	17	22.0	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	0.0	0.00	0	22.8	0.88	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	23.8	0.87	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	0.0	0.00	0	26.5	0.72	17	33.0	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.0	0.00	0	3.6	0.44	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	0.0	0.00	0	7.7	0.11	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	0.0	0.00	0	7.4	0.18	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	0.0	0.00	0	8.5	0.49	16	9.0	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 41a
 Statistical Zone 19
 20-ft trawls

Summary of dominant organisms, combined for zones 18-21, taken in shrimp statistical zone 19 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Squilla															
spp.	0.0	0.00	0.0	0.00	0	44.0	7.00	0.5	0.08	6	23.0	11.82	0.2	0.13	4
Trachypenaeus															
spp.	0.0	0.00	0.0	0.00	0	25.3	6.25	0.1	0.04	6	17.0	9.98	0.0	0.05	4
Portunus															
gibbesii	0.0	0.00	0.0	0.00	0	9.3	2.23	0.0	0.03	6	6.0	3.83	0.0	0.05	4
Callinectes															
similis	0.0	0.00	0.0	0.00	0	6.0	1.71	0.1	0.04	6	54.0	28.91	0.4	0.24	4
Penaeus															
setiferus	0.0	0.00	0.0	0.00	0	75.3	42.63	0.9	0.38	6	8.0	6.73	0.2	0.17	4
Portunus															
spinimanus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	4
Syacium															
gunteri	0.0	0.00	0.0	0.00	0	20.7	11.97	0.2	0.10	6	40.0	9.93	0.5	0.20	4
Cynoscion															
nothus	0.0	0.00	0.0	0.00	0	26.0	14.63	0.2	0.09	6	43.0	23.91	0.4	0.19	4
Symphurus															
plagiusa	0.0	0.00	0.0	0.00	0	19.3	10.45	0.4	0.20	6	11.0	5.00	0.2	0.07	4
Stellifer															
lanceolatus	0.0	0.00	0.0	0.00	0	21.3	8.24	0.4	0.15	6	0.0	0.00	0.0	0.00	4
Halieutichthys															
aculeatus	0.0	0.00	0.0	0.00	0	12.0	10.43	0.1	0.06	6	4.0	2.83	0.0	0.00	4
Etropus															
crossotus	0.0	0.00	0.0	0.00	0	2.0	1.37	0.0	0.03	6	4.0	4.00	0.0	0.05	4
Citharichthys															
spilopterus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	4
Centropristis															
philadelphica	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	4
Squid	0.0	0.00	0.0	0.00	0	5.3	2.23	0.0	0.03	6	19.0	6.40	0.2	0.07	4

Table 41b
 Statistical Zone 19
 20-ft trawls

Summary of dominant organisms taken within statistical zone 19 during the September-December 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<i>Squilla</i> spp.	0.0	0.00	0.0	0.00	0	44.0	7.00	0.5	0.08	6	23.0	11.82	0.2	0.13	4
<i>Callinectes</i> similis	0.0	0.00	0.0	0.00	0	6.0	1.71	0.1	0.04	6	54.0	28.91	0.4	0.24	4
<i>Trachypena</i> spp.	0.0	0.00	0.0	0.00	0	25.3	6.25	0.1	0.04	6	17.0	9.98	0.0	0.05	4
<i>Portunus</i> gibbesii	0.0	0.00	0.0	0.00	0	9.3	2.23	0.0	0.03	6	6.0	3.83	0.0	0.05	4
<i>Penaeus</i> aztecus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	6.0	6.00	0.0	0.05	4
<i>Calappa</i> sulcata	0.0	0.00	0.0	0.00	0	2.0	1.37	0.4	0.23	6	0.0	0.00	0.0	0.00	4
<i>Cynoscion</i> nothus	0.0	0.00	0.0	0.00	0	26.0	14.63	0.2	0.09	6	43.0	23.91	0.4	0.19	4
<i>Syacium</i> gunteri	0.0	0.00	0.0	0.00	0	20.7	11.97	0.2	0.10	6	40.0	9.93	0.5	0.20	4
<i>Symphurus</i> plagiusa	0.0	0.00	0.0	0.00	0	19.3	10.45	0.4	0.20	6	11.0	5.00	0.2	0.07	4
<i>Stellifer</i> lanceolatus	0.0	0.00	0.0	0.00	0	21.3	8.24	0.4	0.15	6	0.0	0.00	0.0	0.00	4
<i>Haliutichthys</i> aculeatus	0.0	0.00	0.0	0.00	0	12.0	10.43	0.1	0.06	6	4.0	2.83	0.0	0.00	4
<i>Etropus</i> crossotus	0.0	0.00	0.0	0.00	0	2.0	1.37	0.0	0.03	6	4.0	4.00	0.0	0.05	4
<i>Trachurus</i> lathamii	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	6.0	6.00	0.1	0.14	4
<i>Micropogonias</i> undulatus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	5.0	3.00	0.3	0.16	4
<i>Squid</i>	0.0	0.00	0.0	0.00	0	5.3	2.23	0.0	0.03	6	19.0	6.40	0.2	0.07	4

Table 42b
 Statistical Zone 20
 20-ft trawls

Summary of dominant organisms taken within statistical zone 20 during the September-December 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 6 fm or above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
<u>spp.</u>	0.0	0.00	0.0	0.00	0	46.7	3.53	0.2	0.06	3	113.6	13.30	0.3	0.04	5
Callinectes															
<u>similis</u>	0.0	0.00	0.0	0.00	0	9.3	5.81	0.1	0.06	3	64.0	11.93	0.4	0.07	5
Squilla															
<u>spp.</u>	0.0	0.00	0.0	0.00	0	17.3	11.85	0.2	0.10	3	52.8	7.42	0.6	0.11	5
Portunus															
<u>gibbesii</u>	0.0	0.00	0.0	0.00	0	48.0	16.17	0.2	0.06	3	8.0	6.07	0.0	0.04	5
Penaeus															
<u>setiferus</u>	0.0	0.00	0.0	0.00	0	24.0	6.93	0.2	0.06	3	12.8	3.88	0.2	0.06	5
Portunus															
<u>spinimanus</u>	0.0	0.00	0.0	0.00	0	5.3	3.53	0.4	0.34	3	1.6	1.60	0.0	0.04	5
Syacium															
<u>gunteri</u>	0.0	0.00	0.0	0.00	0	25.3	21.46	0.2	0.18	3	148.8	47.34	1.1	0.37	5
Symphurus															
<u>plagiusa</u>	0.0	0.00	0.0	0.00	0	13.3	13.33	0.2	0.24	3	54.4	23.68	1.0	0.42	5
Stellifer															
<u>lanceolatus</u>	0.0	0.00	0.0	0.00	0	49.3	20.83	0.4	0.26	3	16.0	5.93	0.2	0.06	5
Cynoscion															
<u>nothus</u>	0.0	0.00	0.0	0.00	0	13.3	4.81	0.1	0.06	3	32.8	9.41	0.2	0.09	5
Etropus															
<u>crossotus</u>	0.0	0.00	0.0	0.00	0	6.7	3.53	0.1	0.06	3	10.4	3.49	0.2	0.06	5
Citharichthys															
<u>spilopterus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	8.8	4.08	0.1	0.04	5
Haliutichthys															
<u>aculeatus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	8.0	2.83	0.0	0.00	5
Menticirrhus															
<u>americanus</u>	0.0	0.00	0.0	0.00	0	6.7	2.67	0.7	0.30	3	2.4	1.60	0.3	0.19	5
Renilla															
<u>mulleri</u>	0.0	0.00	0.0	0.00	0	60.0	58.01	0.1	0.12	3	110.4	106.42	0.4	0.36	5

Table 42c
 Statistical Zone 20
 20-ft trawls and Environmental Data from OREGON II 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm. No samples were taken below 6 fm or above 20 fm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	3.0	0.61	3	5.5	1.00	5	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	0.0	0.00	0	2.4	0.61	3	3.6	1.00	5	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	0.0	0.00	0	1.8	0.00	3	1.8	0.00	5	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	0.0	0.00	0	1.8	0.00	3	1.8	0.00	5	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	0.0	0.00	0	21.3	0.44	3	21.5	0.33	10	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	0.0	0.00	0	21.4	0.00	1	21.8	0.20	4	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	0.0	0.00	0	21.5	0.02	3	21.8	0.30	10	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	0.0	0.00	0	28.5	0.46	3	29.3	0.33	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	29.5	0.00	1	30.0	0.27	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	0.0	0.00	0	28.7	0.70	3	29.9	0.45	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.0	0.00	0	1.9	0.00	1	1.4	0.20	2	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	0.0	0.00	0	5.8	1.40	3	6.5	0.56	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	0.0	0.00	0	7.4	0.00	1	7.5	0.20	3	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	0.0	0.00	0	5.8	1.39	3	6.3	0.42	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 43a
 Statistical Zone 21
 20-ft trawls

Summary of dominant organisms, combined for zones 18-21, taken in shrimp statistical zone 21 during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 11 fm or above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
<u>Squilla</u>															
<u>spp.</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	16.0	6.96	0.1	0.07	9
<u>Trachypenaeus</u>															
<u>spp.</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	22.7	7.39	0.0	0.02	9
<u>Portunus</u>															
<u>gibbesii</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	26.7	9.57	0.1	0.07	9
<u>Callinectes</u>															
<u>similis</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	20.4	8.37	0.2	0.14	9
<u>Penaeus</u>															
<u>setiferus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	9
<u>Portunus</u>															
<u>spinimanus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	9
<u>Syacium</u>															
<u>gunteri</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	56.4	23.63	0.5	0.21	9
<u>Cynoscion</u>															
<u>nothus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	39.6	15.14	0.5	0.27	9
<u>Symphurus</u>															
<u>plagiusa</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	9
<u>Stellifer</u>															
<u>lanceolatus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	2.7	1.15	0.0	0.02	9
<u>Halieutichthys</u>															
<u>aculeatus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	53.8	23.32	0.3	0.12	9
<u>Etropus</u>															
<u>crossotus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	11.6	5.35	0.1	0.06	9
<u>Citharichthys</u>															
<u>spilopterus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	3.6	3.56	0.0	0.04	9
<u>Centropristis</u>															
<u>philadelphica</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	3.1	2.65	0.1	0.10	9
<u>Squid</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	6.2	3.53	0.0	0.03	9

Table 43b
 Statistical Zone 21
 20-ft trawls

Summary of dominant organisms taken within statistical zone 21 during the September-December 1985 SEAMAP Shrimp and Bottomfish Survey by depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken below 11 fm or above 20 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus															
<u>gibbesii</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	26.7	9.57	0.1	0.07	9
Trachypenaeus															
<u>spp.</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	22.7	7.39	0.0	0.02	9
Penaeus															
<u>aztecus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	22.2	7.60	0.3	0.11	9
Callinectes															
<u>similis</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	20.4	8.37	0.2	0.14	9
Squilla															
<u>spp.</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	16.0	6.96	0.1	0.07	9
Penaeus															
<u>duorarum</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	9
Syacium															
<u>gunteri</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	56.4	23.63	0.5	0.21	9
Haliutichthys															
<u>aculeatus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	53.8	23.32	0.3	0.12	9
Cynoscion															
<u>nothus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	39.6	15.14	0.5	0.27	9
Etropus															
<u>crossotus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	11.6	5.35	0.1	0.06	9
Symphurus															
<u>civitatum</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	5.8	2.22	0.1	0.04	9
Porichthys															
<u>plectrodon</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	4.0	2.00	0.1	0.07	9
Citharichthys															
<u>spilopterus</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	3.6	3.56	0.0	0.04	9
Centropristis															
<u>philadelphia</u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	3.1	2.65	0.1	0.10	9
Squid															
<u></u>	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	6.2	3.53	0.0	0.03	9

Table 43c
 Statistical Zone 21
 20-ft trawls and Environmental Data from OREGON II 40-ft trawls

Summary of the mean total catch and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the September-December 1985 SEAMAP Groundfish Survey by depth stratum. Catch values in kg per hour, temperature in °C, salinity in ppt, and oxygen in ppm. No samples were taken below 11 fm or above 30 fm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	0.0	0.00	0	0.0	0.00	0	3.8	0.83	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	0.0	0.00	0	0.0	0.00	0	3.0	0.61	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	0.0	0.00	0	0.0	0.00	0	1.8	0.00	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	0.0	0.00	0	0.0	0.00	0	1.4	0.27	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	0.0	0.00	0	0.0	0.00	0	23.2	0.23	17	24.0	0.00	1	0.0	0.00	0	0.0	0.00	0
Midwater temperature	0.0	0.00	0	0.0	0.00	0	23.3	0.34	9	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	0.0	0.00	0	0.0	0.00	0	23.8	0.19	17	25.0	0.00	1	0.0	0.00	0	0.0	0.00	0
Surface salinity	0.0	0.00	0	0.0	0.00	0	31.5	0.36	10	31.0	0.00	1	0.0	0.00	0	0.0	0.00	0
Midwater salinity	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	0.0	0.00	0	0.0	0.00	0	31.4	0.42	8	34.0	0.00	1	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.0	0.00	0	0.0	0.00	0	0.7	0.05	7	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	0.0	0.00	0	0.0	0.00	0	8.2	0.32	13	9.0	0.00	1	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	0.0	0.00	0	0.0	0.00	0	8.0	0.27	8	7.0	0.00	1	0.0	0.00	0	0.0	0.00	0

Table 44
16-ft trawls

Summary of dominant organisms, combined for all zones sampled, shrimp statistical zones 10-11, taken during September-December 1985 SEAMAP Groundfish Survey. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken in that zone are given.

SPECIES	STATISTICAL ZONE 10					STATISTICAL ZONE 11									
	0-5 FM		6-10 FM			0-5 FM									
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	80.5	58.09	0.1	0.03	8
Pagurus															
pollicaris	2.0	2.00	0.1	0.09	2	0.0	0.00	0.0	0.00	1	43.5	18.35	0.3	0.10	8
Callinectes															
similis	0.0	0.00	0.0	0.00	2	4.0	0.00	0.2	0.00	1	17.5	4.84	0.3	0.07	8
Penaeus															
setiferus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	9.5	3.62	0.4	0.15	8
Squilla															
spp.	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	8.5	5.47	0.1	0.09	8
Hepatus															
epheliticus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	5.5	3.20	0.1	0.05	8
Chloroscombrus															
chrysurus	2.0	2.00	0.1	0.09	2	0.0	0.00	0.0	0.00	1	383.0	211.09	0.6	0.27	8
Anchoa															
mitchilli	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	142.5	141.36	0.1	0.11	8
Anchoa															
hepsetus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	90.0	30.78	0.3	0.12	8
Arius															
felis	0.0	0.00	0.0	0.00	2	4.0	0.00	0.2	0.00	1	50.0	27.52	2.8	1.35	8
Symphurus															
plagiusa	0.0	0.00	0.0	0.00	2	4.0	0.00	0.2	0.00	1	46.5	23.51	0.7	0.34	8
Micropogonias															
undulatus	2.0	2.00	0.2	0.18	2	0.0	0.00	0.0	0.00	1	34.0	19.71	1.7	0.94	8
Menticirrhus															
americanus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	18.5	11.41	0.7	0.37	8
Larimus															
fasciatus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1	17.0	5.89	0.2	0.02	8
Squid	8.0	4.00	0.2	0.00	2	0.0	0.00	0.0	0.00	1	26.0	9.17	0.1	0.03	8

Table 45
 Statistical Zone 10
 16-ft trawls

Summary of dominant organisms taken within shrimp statistical zone 10 during the September-December 1985 SEAMAP Groundfish Survey. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken. No samples were taken above 10 fm.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Pagurus															
pollicaris	2.0	2.00	0.1	0.09	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Callinectes															
similus	0.0	0.00	0.0	0.00	2	4.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0
Callinectes															
sapidus	2.0	2.00	0.6	0.60	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Portunus															
gibbesii	0.0	0.00	0.0	0.00	2	4.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0
Cronius															
ruber	2.0	2.00	0.2	0.20	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Stenotomus															
caprinus	8.0	8.00	0.1	0.09	2	72.0	0.00	1.3	0.00	1	0.0	0.00	0.0	0.00	0
Peprilus															
burti	14.0	10.00	0.2	0.00	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Synodus															
foetens	12.0	4.00	0.5	0.36	2	4.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0
Prionotus															
scitulus	8.0	4.00	0.3	0.09	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Prionotus															
rubio	2.0	2.00	0.1	0.09	2	8.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0
Etropus															
crossotus	2.0	2.00	0.1	0.09	2	4.0	0.00	0.2	0.00	1	0.0	0.00	0.0	0.00	0
Peprilus															
paru	4.0	4.00	0.1	0.09	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Etropus															
microstomus	4.0	4.00	0.1	0.09	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Squid	8.0	4.00	0.2	0.00	2	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0

Table 46
 Statistical Zone 11
 16-ft trawls

Summary of dominant organisms taken within shrimp statistical zone 11 during the September-December 1985 SEAMAP Groundfish Survey in the 0-5 fm depth stratum. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight in kg per hour, the SEM of weight and the number (N) of samples taken.

SPECIES	0-5 FM					6-10 FM					11-20 FM				
	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus															
spp.	80.5	58.09	0.1	0.03	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Pagurus															
pollicaris	43.5	18.35	0.3	0.10	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes															
similis	17.5	4.84	0.3	0.07	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Penaeus															
setiferus	9.5	3.62	0.4	0.15	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla															
spp.	8.5	5.47	0.1	0.09	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Hepatus															
epheliticus	5.5	3.20	0.1	0.05	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Chloroscombrus															
chrysurus	383.0	211.09	0.6	0.27	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Anchoa															
mitchilli	142.5	141.36	0.1	0.11	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Anchoa															
hepsetus	90.0	30.78	0.3	0.12	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Arius															
felis	50.0	27.52	2.8	1.35	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Symphurus															
plagiusa	46.5	23.51	0.7	0.34	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias															
undulatus	34.0	19.71	1.7	0.94	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Menticirrhus															
americanus	18.5	11.41	0.7	0.37	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Larimus															
fasciatus	17.0	5.89	0.2	0.02	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid															
	26.0	9.17	0.1	0.03	8	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 47
16-ft trawls
0-10 fathoms

Summary of the mean total catch (kg/hr) and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the September-December 1985 SEAMAP Groundfish Survey for shrimp statistical zone 10. Catch values in kg, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	2.7	0.91	2	3.6	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	1.8	0.00	2	1.8	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	1.8	0.00	2	1.8	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	1.8	0.00	2	1.8	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	25.3	0.25	2	25.0	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	24.8	0.25	2	25.0	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	24.8	0.75	2	25.0	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	31.0	1.00	2	31.0	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	32.0	0.00	2	32.0	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	32.0	0.00	2	32.0	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	5.9	0.50	2	3.8	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	4.3	1.50	2	4.4	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	5.7	0.30	2	6.8	0.00	1	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

Table 48
16-ft trawls
0-5 fathoms

Summary of the mean total catch (kg/hr) and environmental data (X), the standard error of the mean (SEM) and the number of samples taken (n) during the September-December 1985 SEAMAP Groundfish Survey for shrimp statistical zone 11. Catch values in kg, temperature in °C, salinity in ppt, and oxygen in ppm.

Environmental category	0-5 fm			6-10 fm			11-20 fm			21-30 fm			31-40 fm			Over 40 fm		
	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n	X	SEM	n
Total catch kg	13.2	2.52	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total finfish kg	10.5	2.22	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total crustacean kg	2.3	0.30	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Total others kg	1.8	0.00	8	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface temperature	26.0	0.13	6	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater temperature	25.1	0.21	7	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom temperature	25.1	0.09	7	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface salinity	28.3	0.36	7	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater salinity	30.1	0.26	7	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom salinity	30.4	0.40	5	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom chlorophyll	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Surface oxygen	4.6	0.51	7	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Midwater oxygen	4.5	0.57	7	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0
Bottom oxygen	4.2	0.51	7	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0	0.0	0.00	0

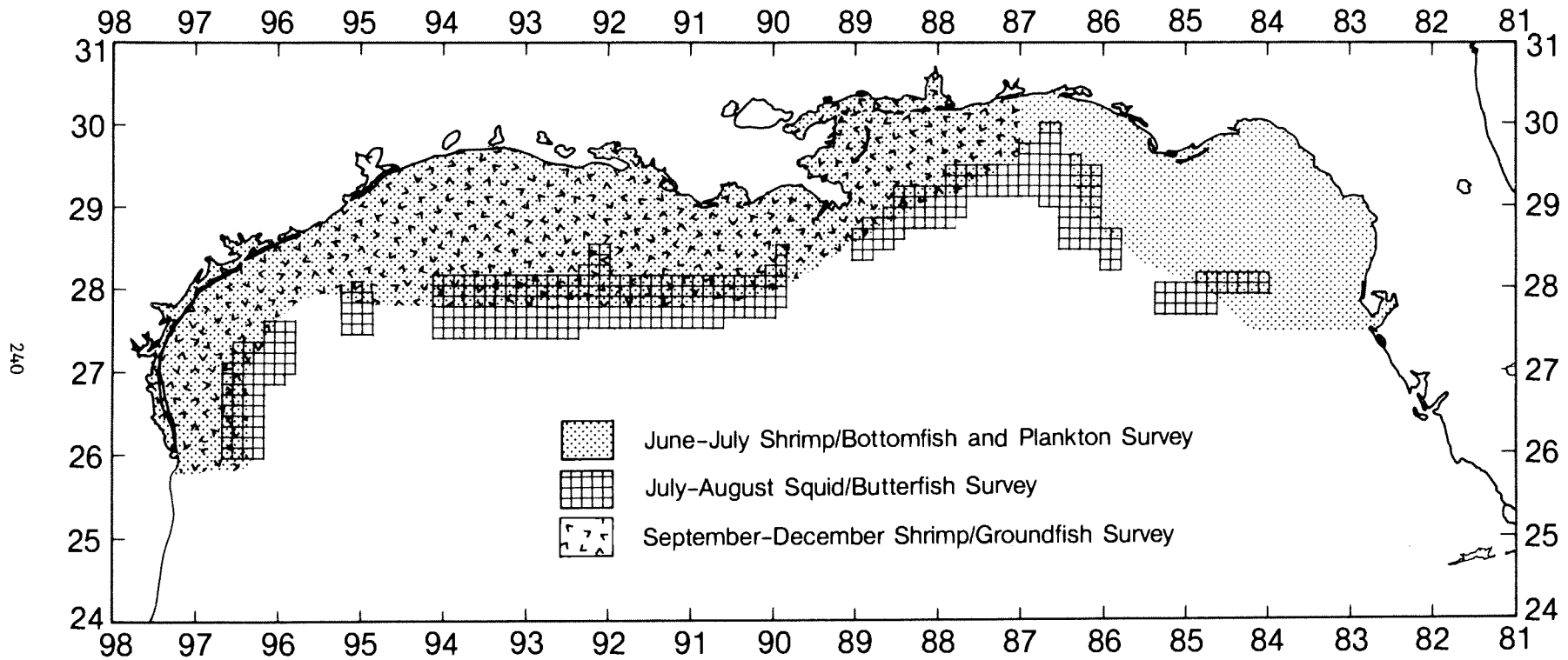


Figure 1. 1985 SEAMAP Surveys, Gulf of Mexico.

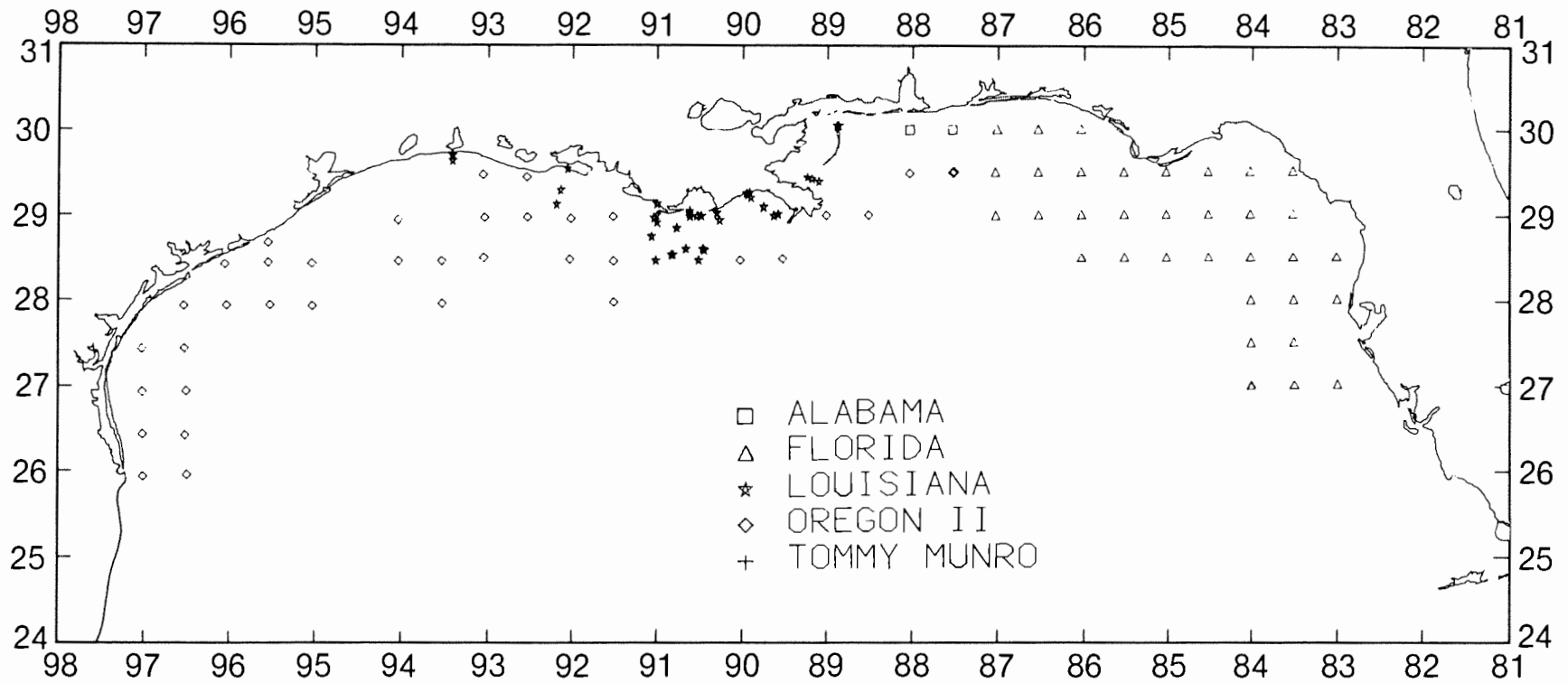


Figure 2. Locations of plankton stations during SEAMAP Summer Shrimp/Bottomfish Survey, June-July 1985.

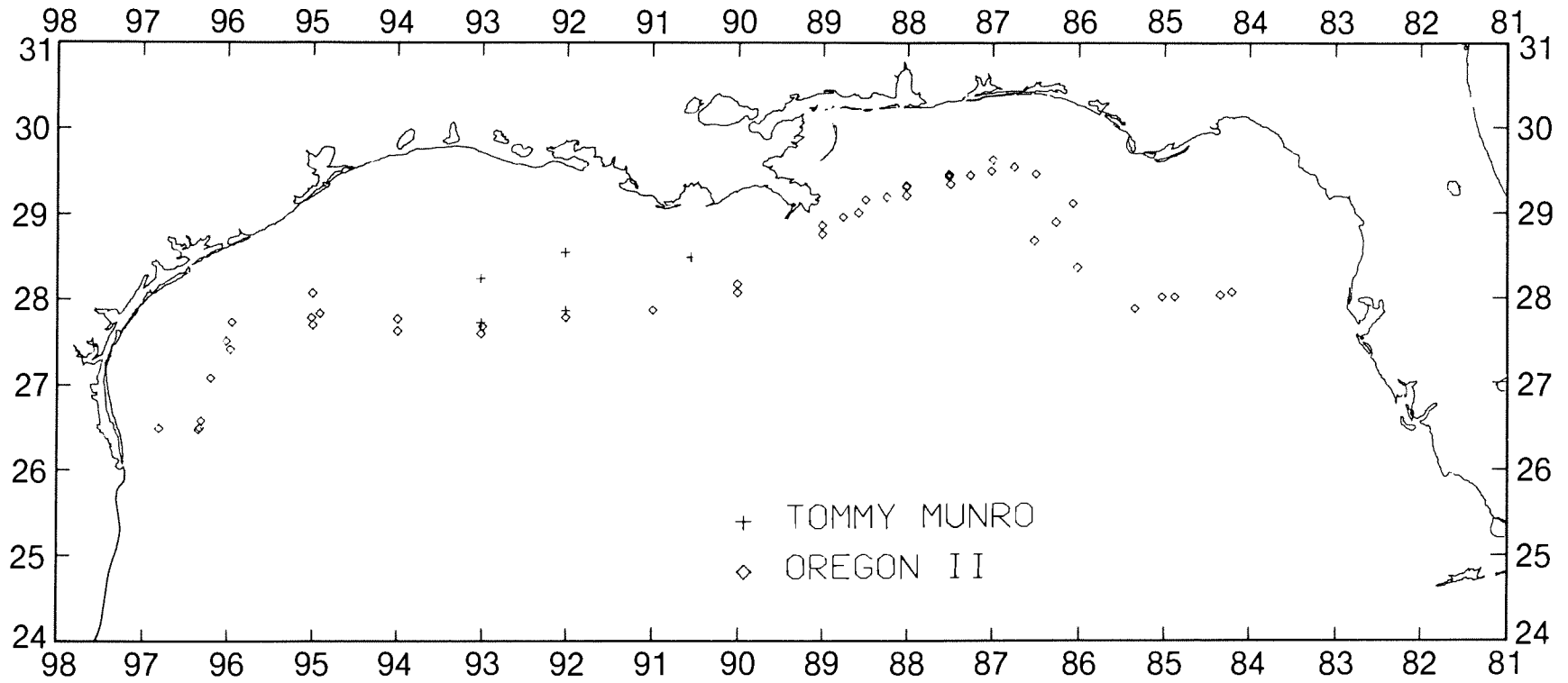


Figure 3. Locations of plankton stations during SEAMAP Squid/Butterfish Survey, July-August 1985.

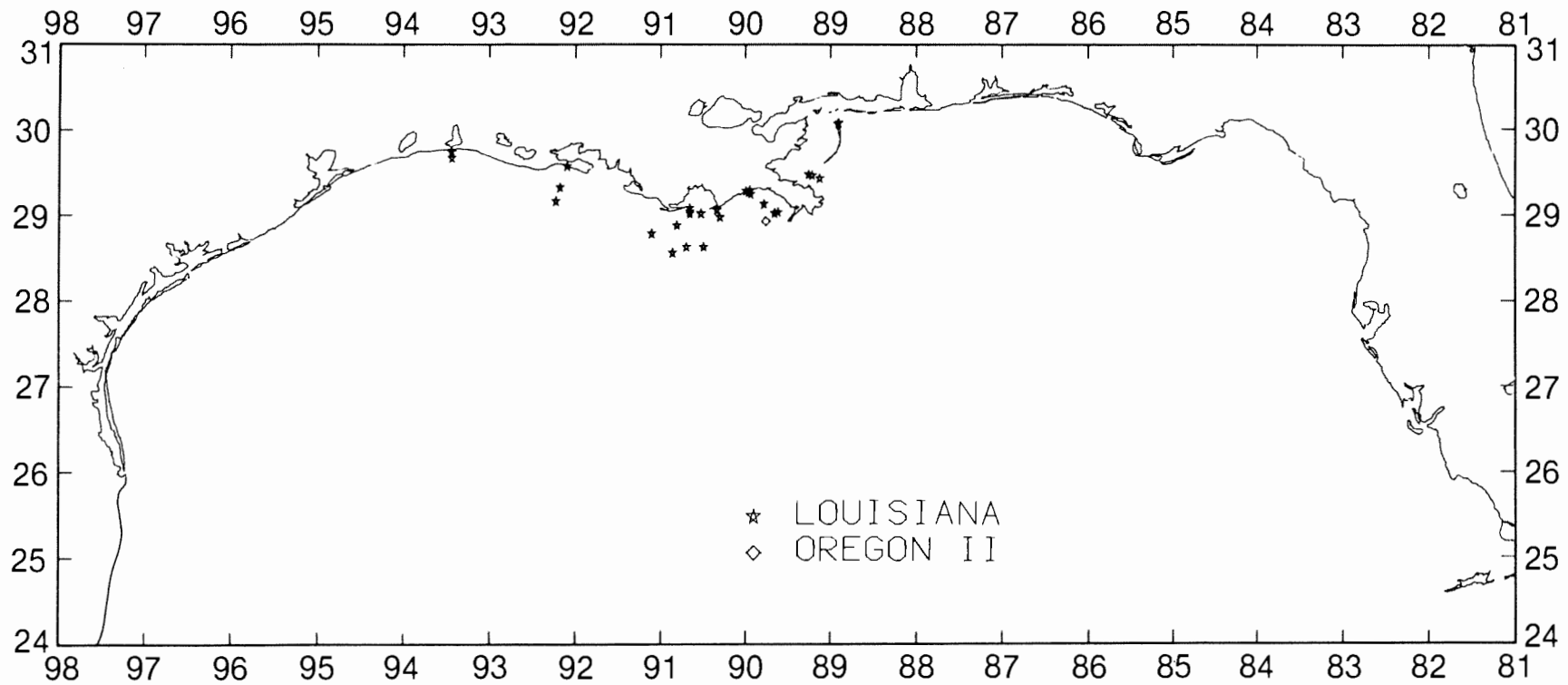


Figure 4. Locations of plankton stations during SEAMAP Fall Shrimp/Groundfish Survey, September-December 1985.

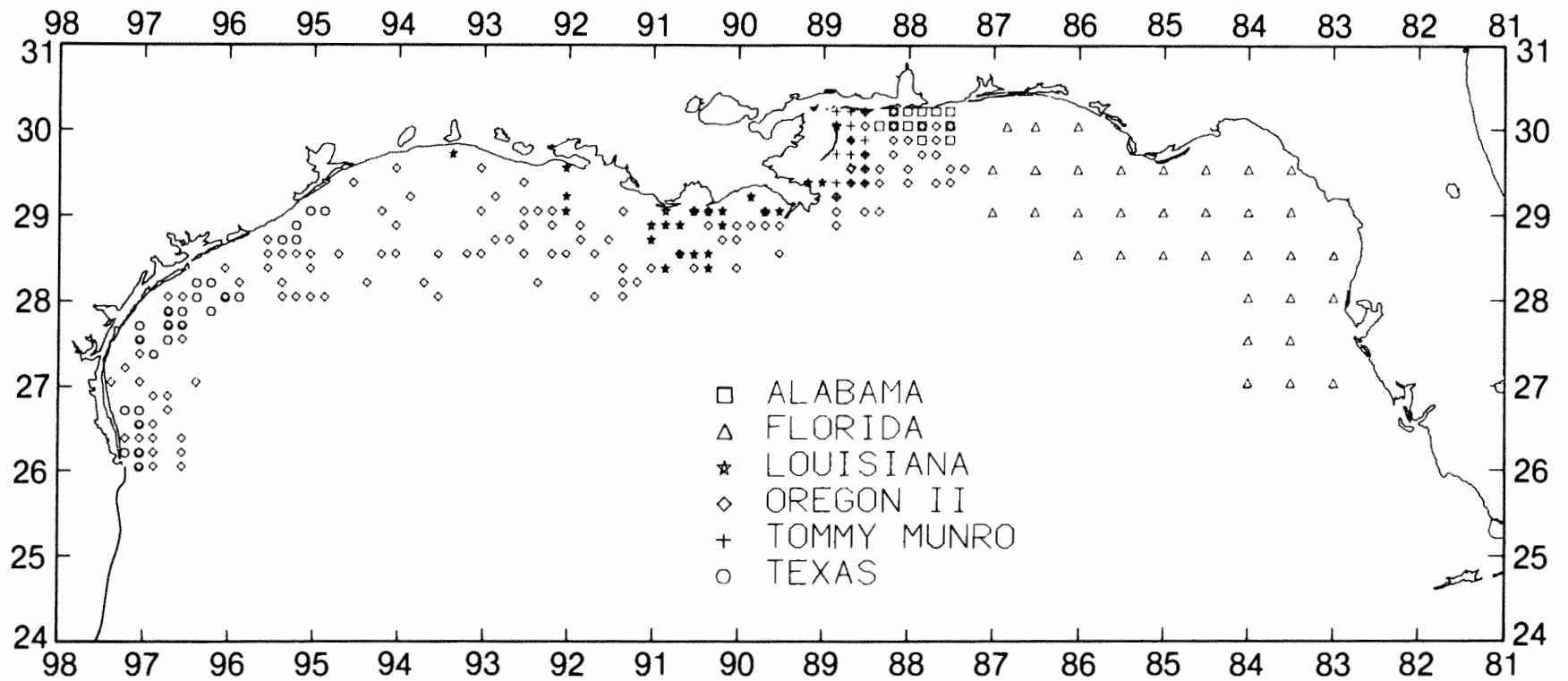


Figure 5. Locations of SEAMAP Summer Shrimp/Bottomfish environmental stations, summarized by 10-minute squares, June-July 1985.

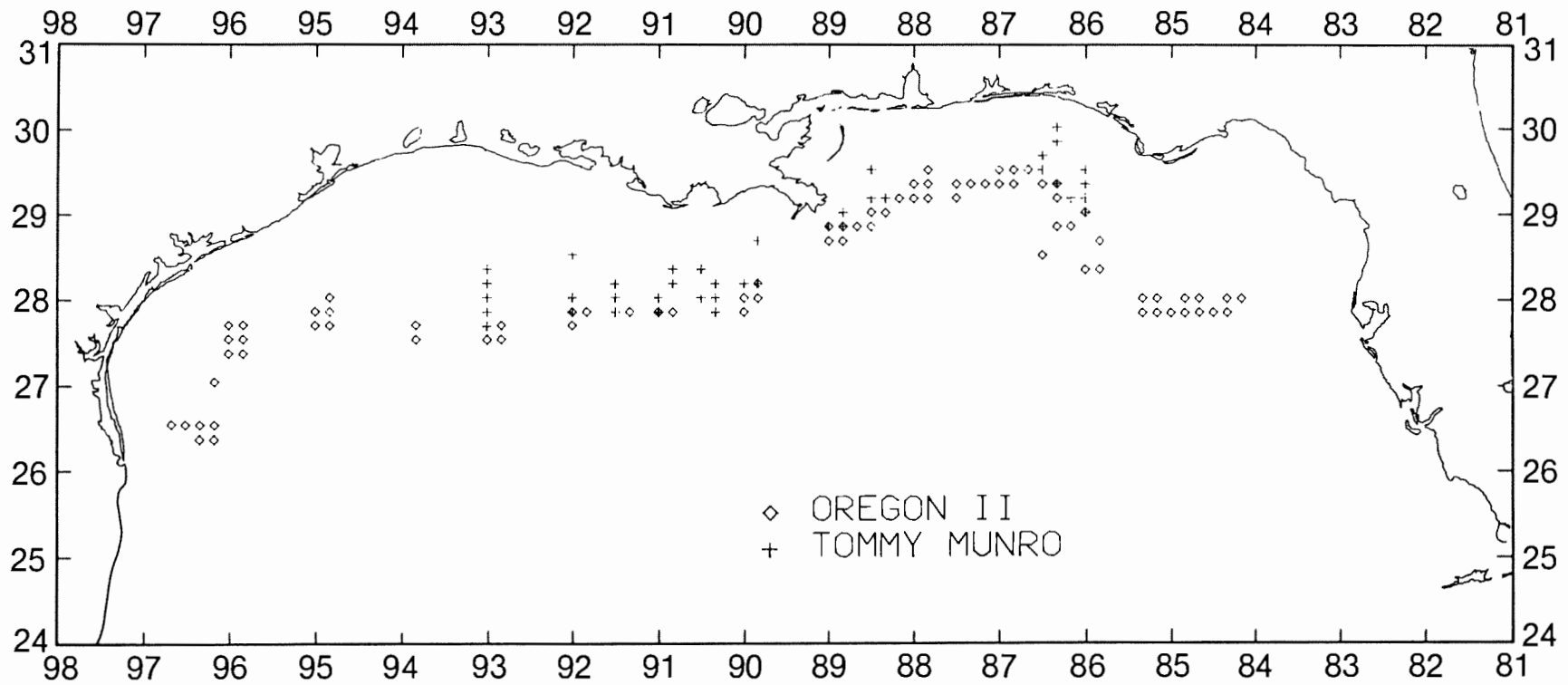


Figure 6. Locations of SEAMAP Squid/Butterfish environmental stations, July-August 1985.

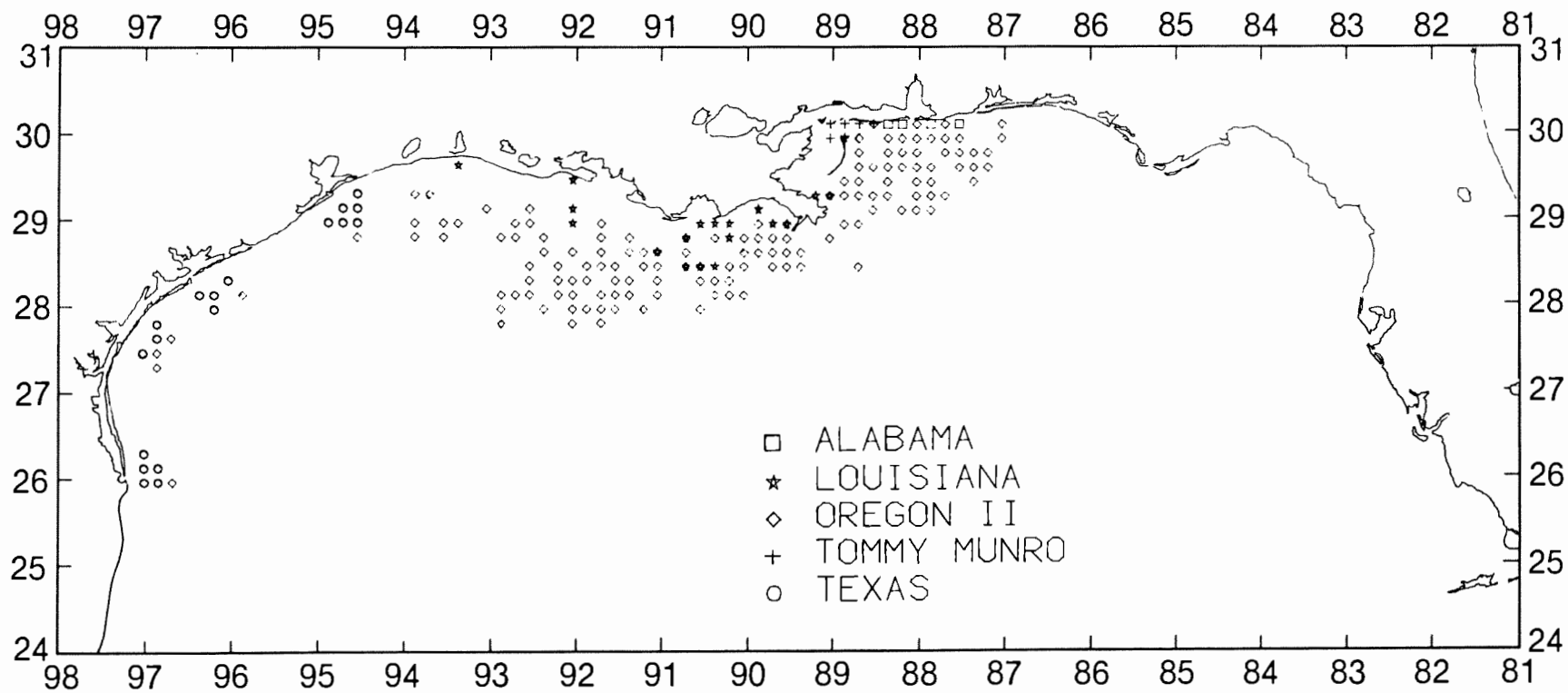


Figure 7. Locations of SEAMAP Fall Shrimp/Groundfish survey environmental stations, summarized by 10-minute squares, September-December 1985.

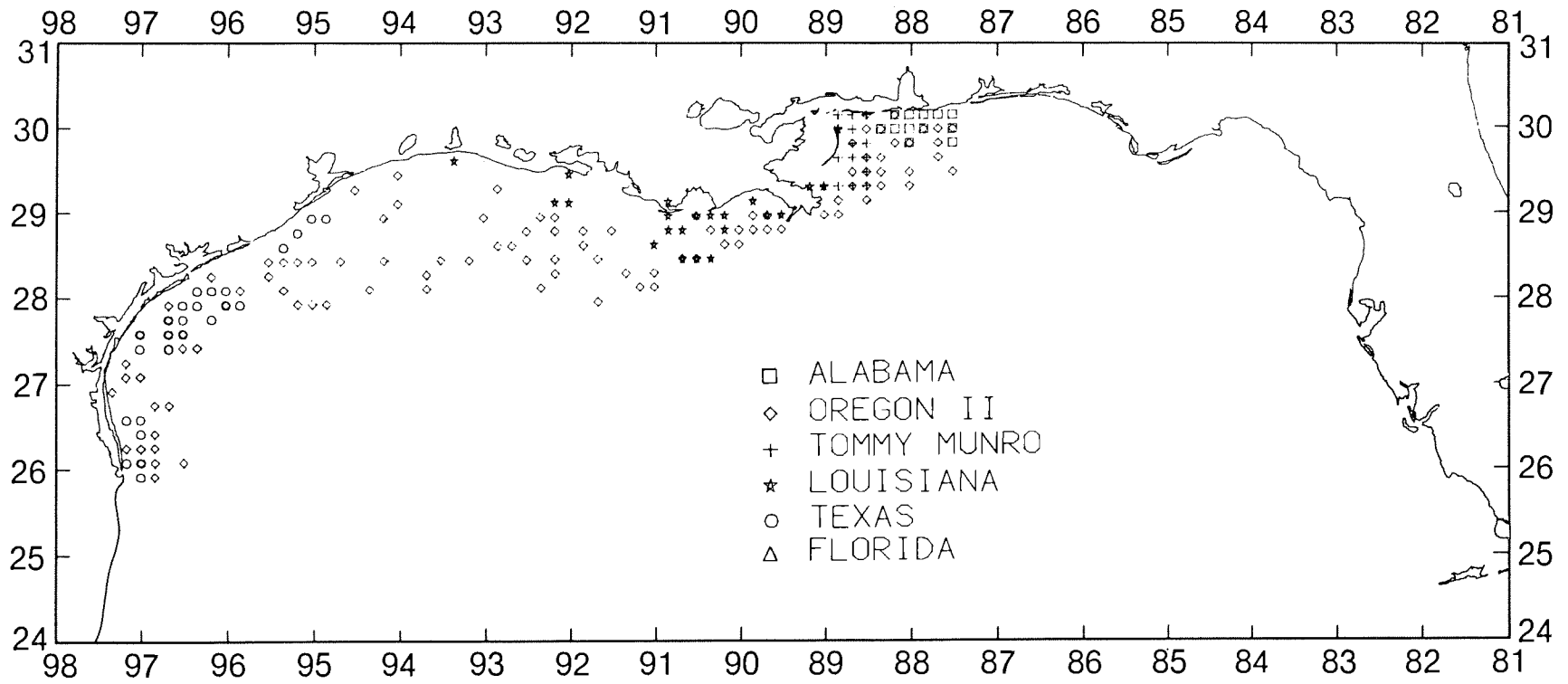


Figure 8. Locations of SEAMAP Summer Shrimp/Bottomfish Survey trawl stations, summarized by 10-minute squares, June-July 1985.

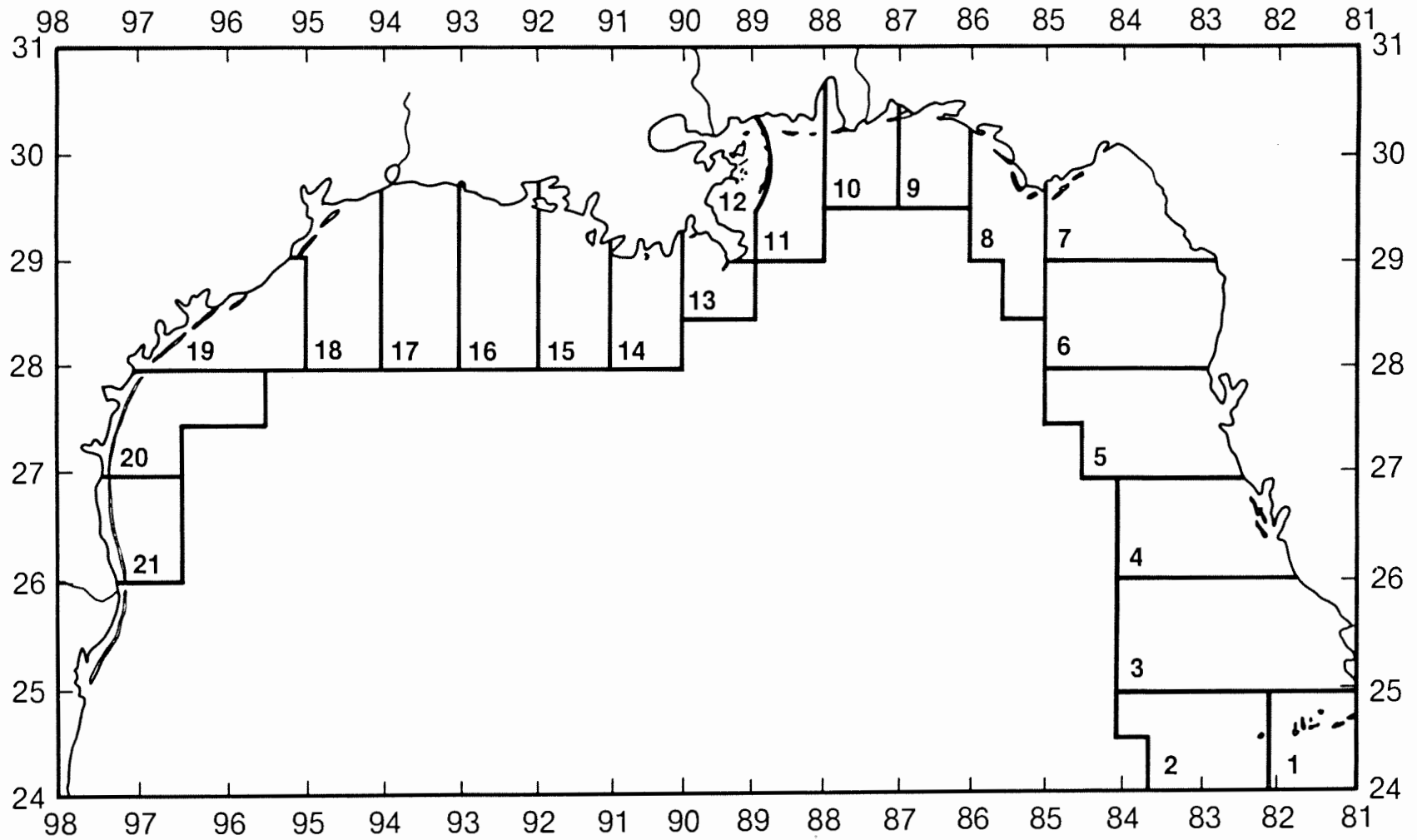


Figure 9. Statistical zones for shrimp in the Gulf of Mexico.

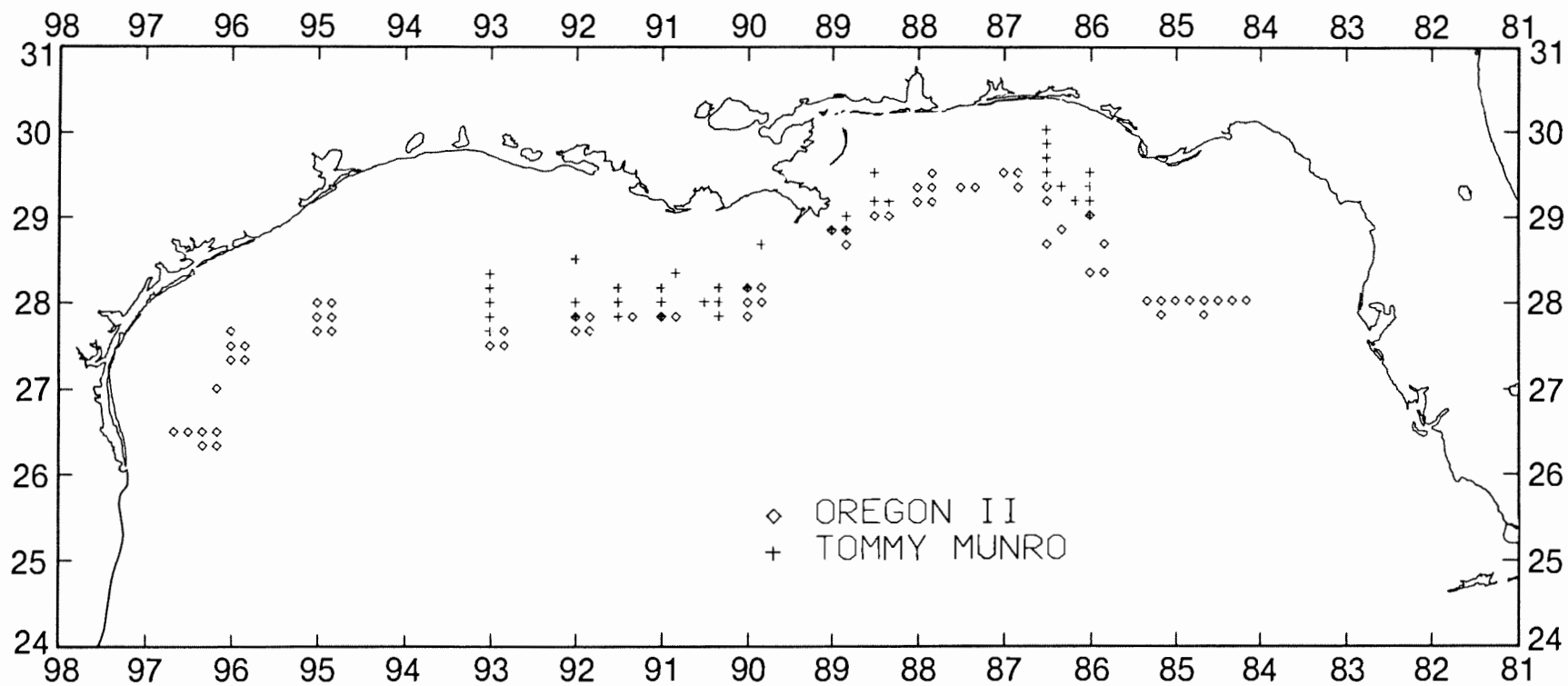


Figure 10. Locations of SEAMAP Squid/Butterfish trawl stations, summarized by 10-minute squares, July-August 1985.

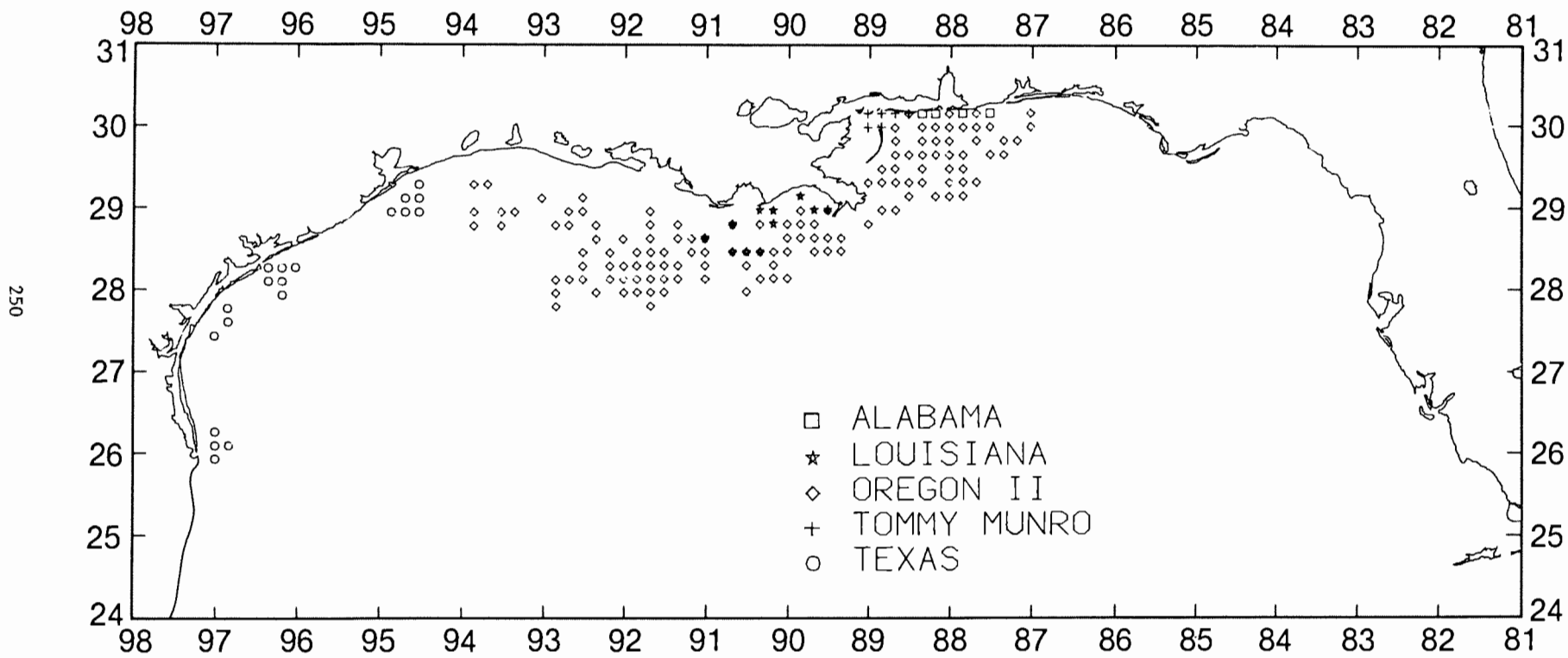


Figure 11. Locations of SEAMAP Fall Shrimp/Groundfish trawl stations, summarized by 10-minute squares, September-December 1985.

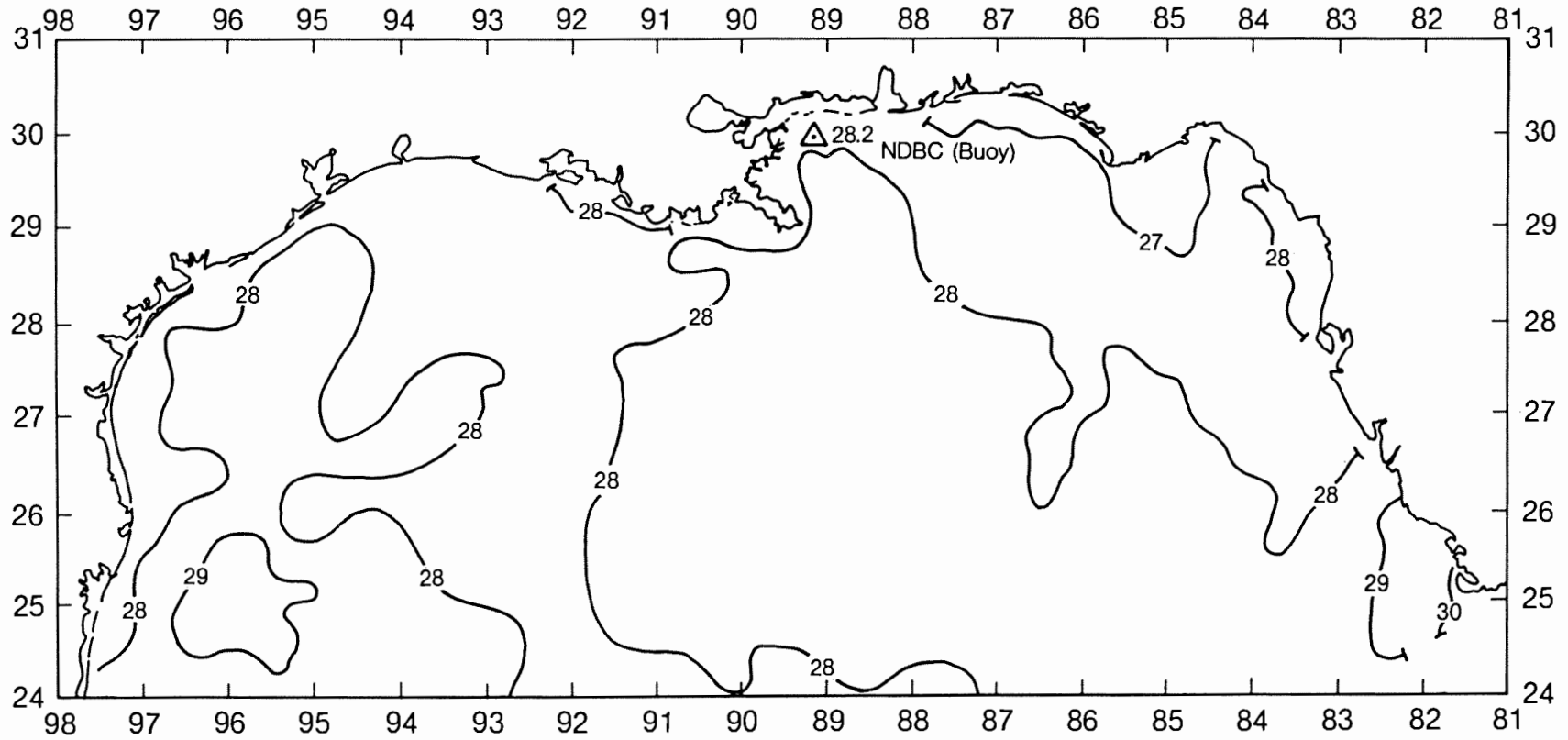


Figure 12. Satellite measurement of surface temperature ($^{\circ}\text{C}$) in the Gulf of Mexico, June 1985 (modified from NWS/NESS Sea Surface Thermal Analysis).

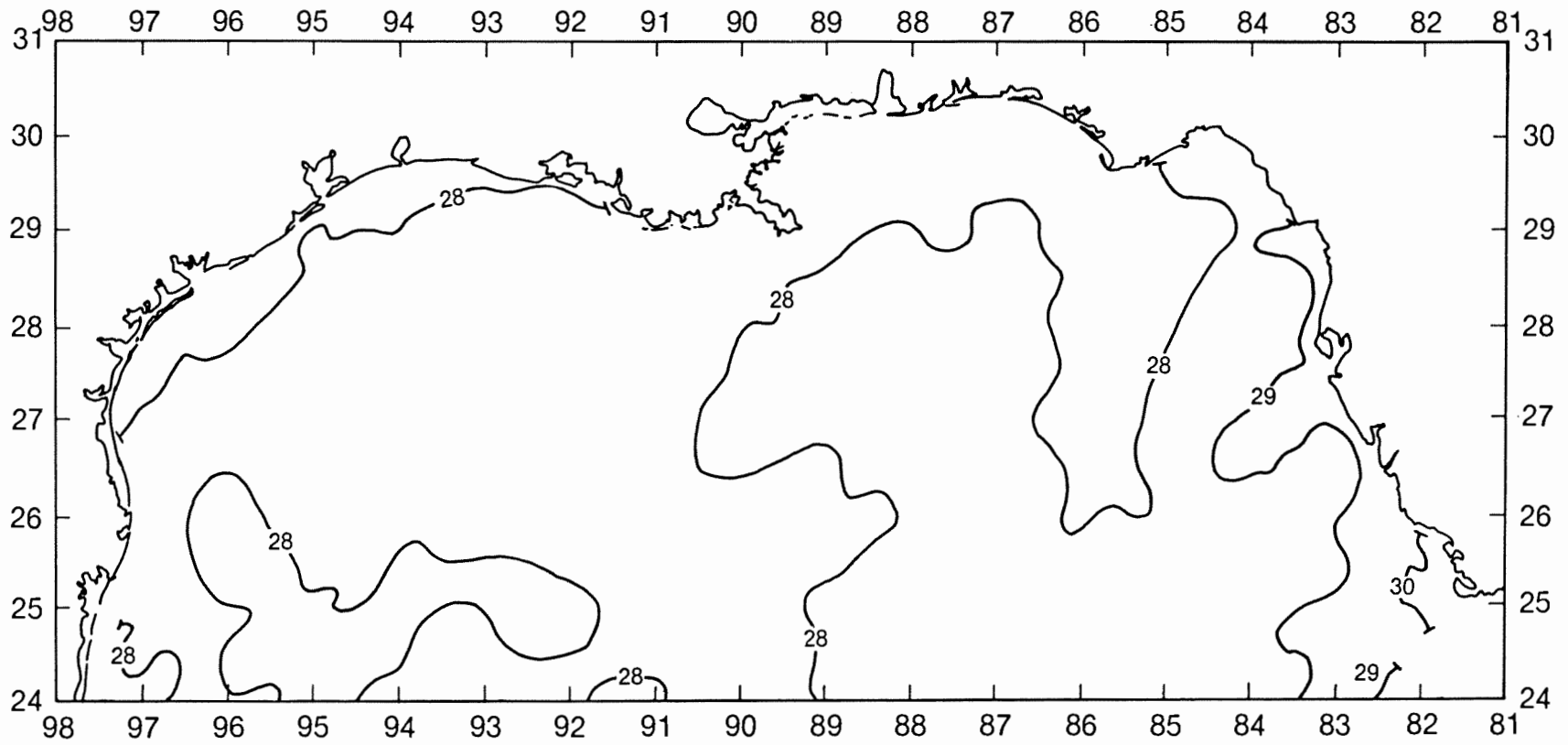


Figure 13. Satellite measurement of surface temperature ($^{\circ}\text{C}$) in the Gulf of Mexico, July 1985 (modified from NWS/NESS Sea Surface Thermal Analysis).

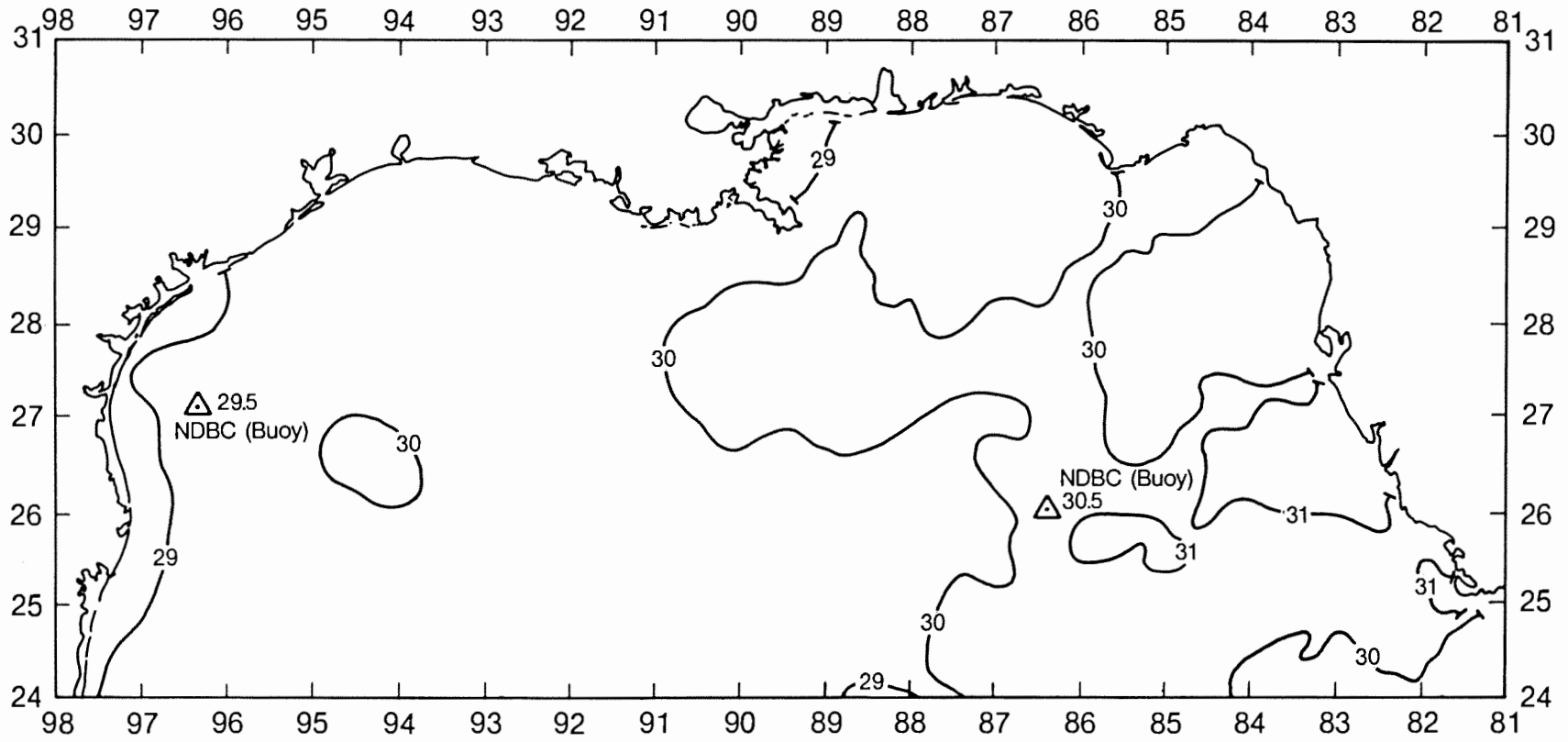


Figure 14. Satellite measurement of surface temperature (°C) in the Gulf of Mexico, August 1985 (modified from NWS/NESS Sea Surface Thermal Analysis).

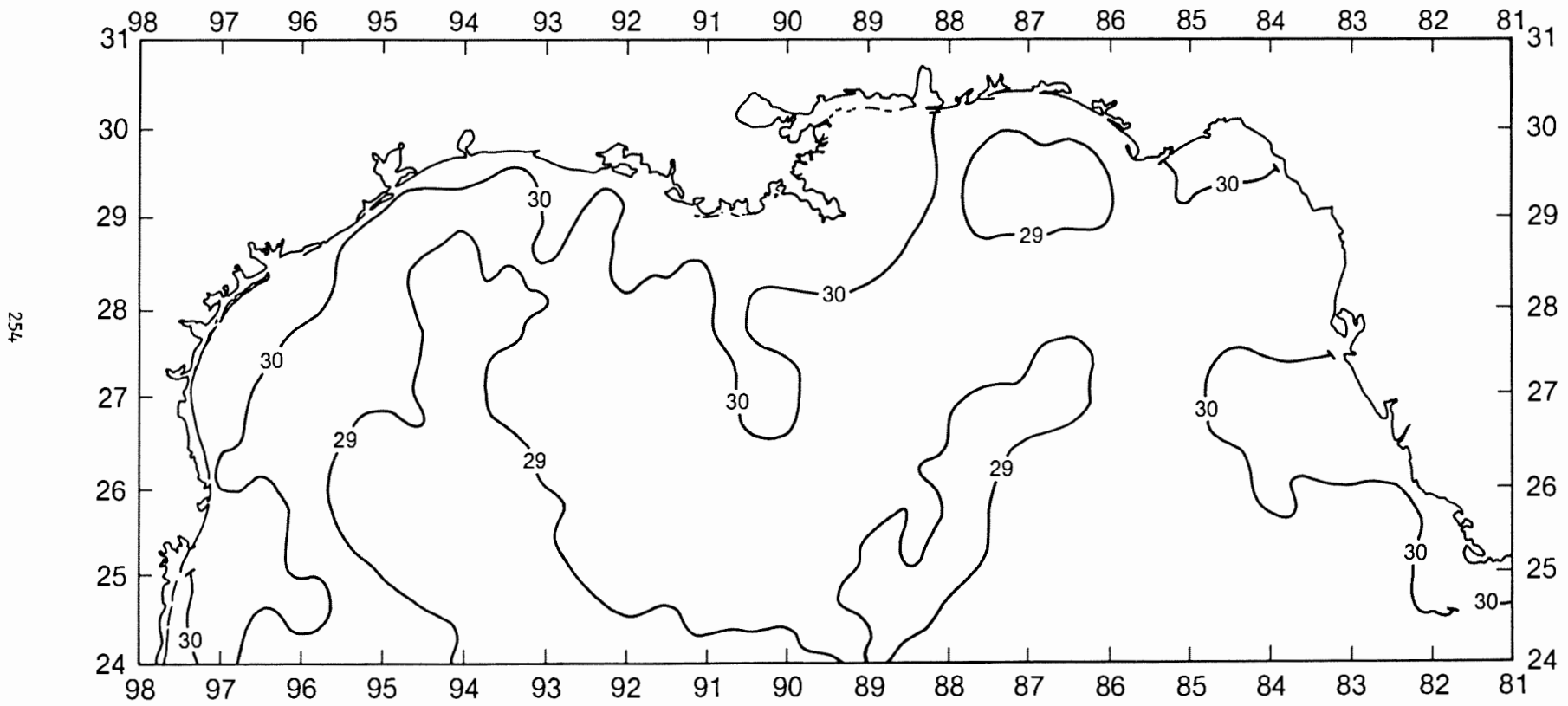


Figure 15. Satellite measurement of surface temperature ($^{\circ}\text{C}$) in the Gulf of Mexico, September 1985 (modified from NWS/NESS Sea Surface Thermal Analysis).

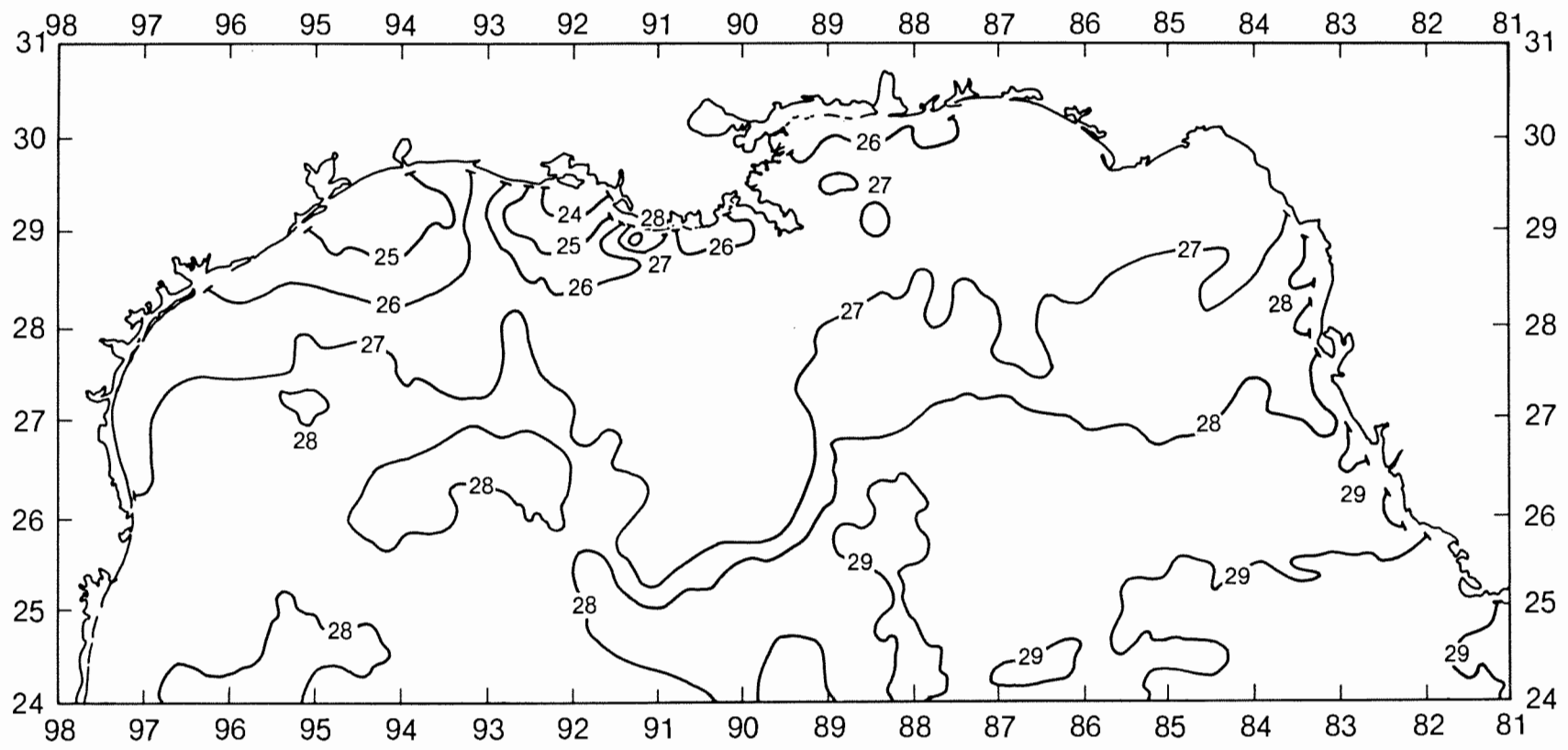


Figure 16. Satellite measurement of surface temperature (°C) in the Gulf of Mexico, October 1985 (modified from NWS/NESS Sea Surface Thermal Analysis).

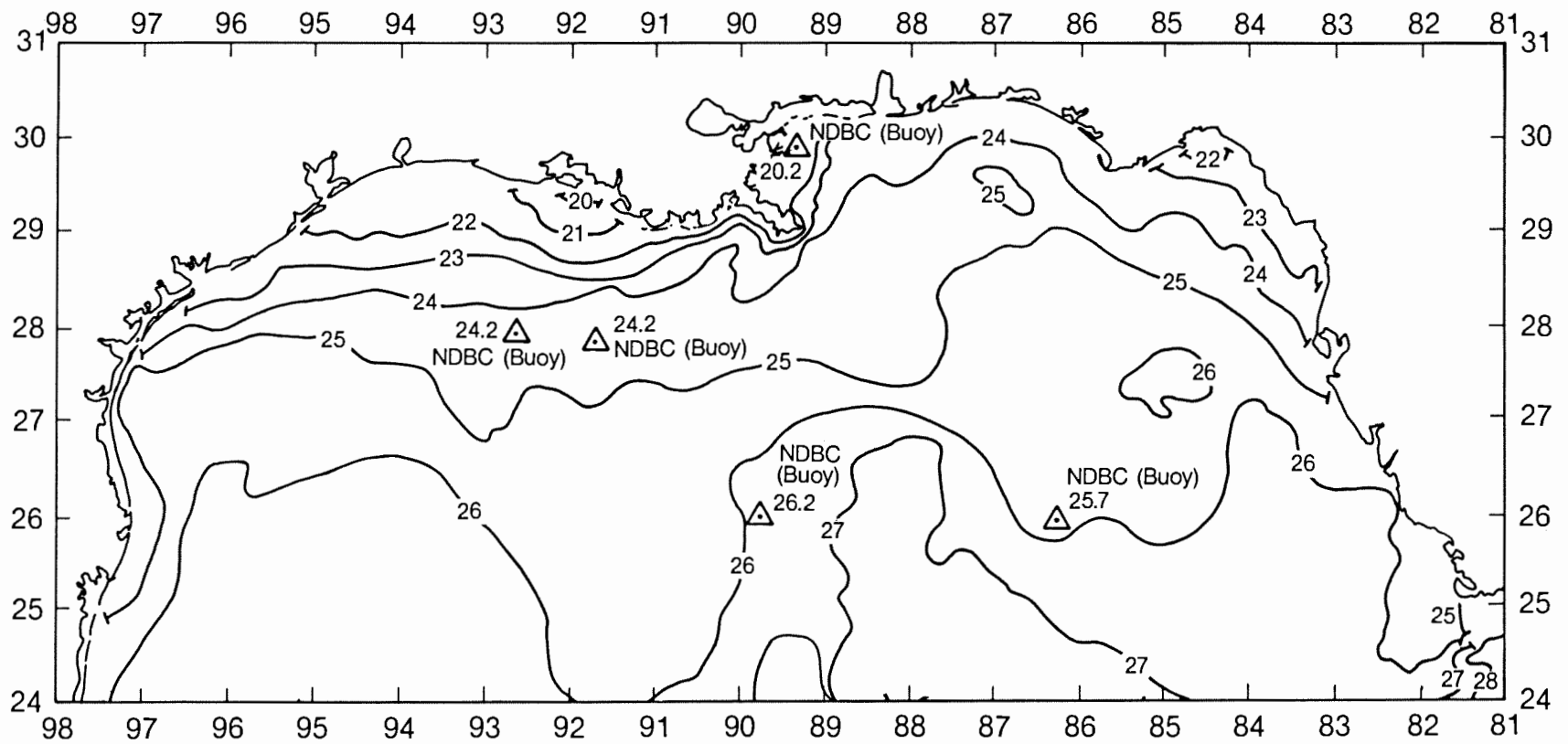


Figure 17. Satellite measurement of surface temperature ($^{\circ}\text{C}$) in the Gulf of Mexico, November 1985 (modified from NWS/NESS Sea Surface Thermal Analysis).

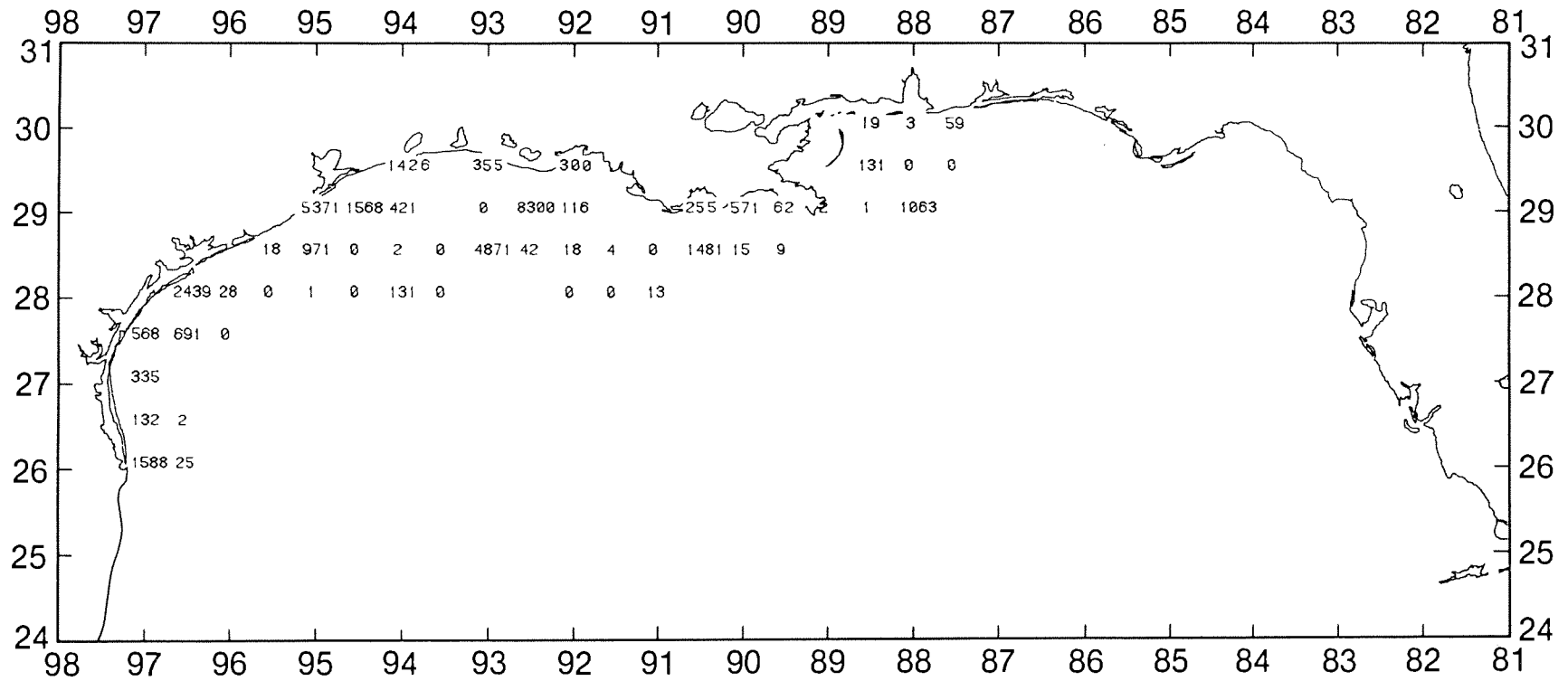


Figure 18. Atlantic croaker, *Micropogonias undulatus*, number/hour for June-July 1985.

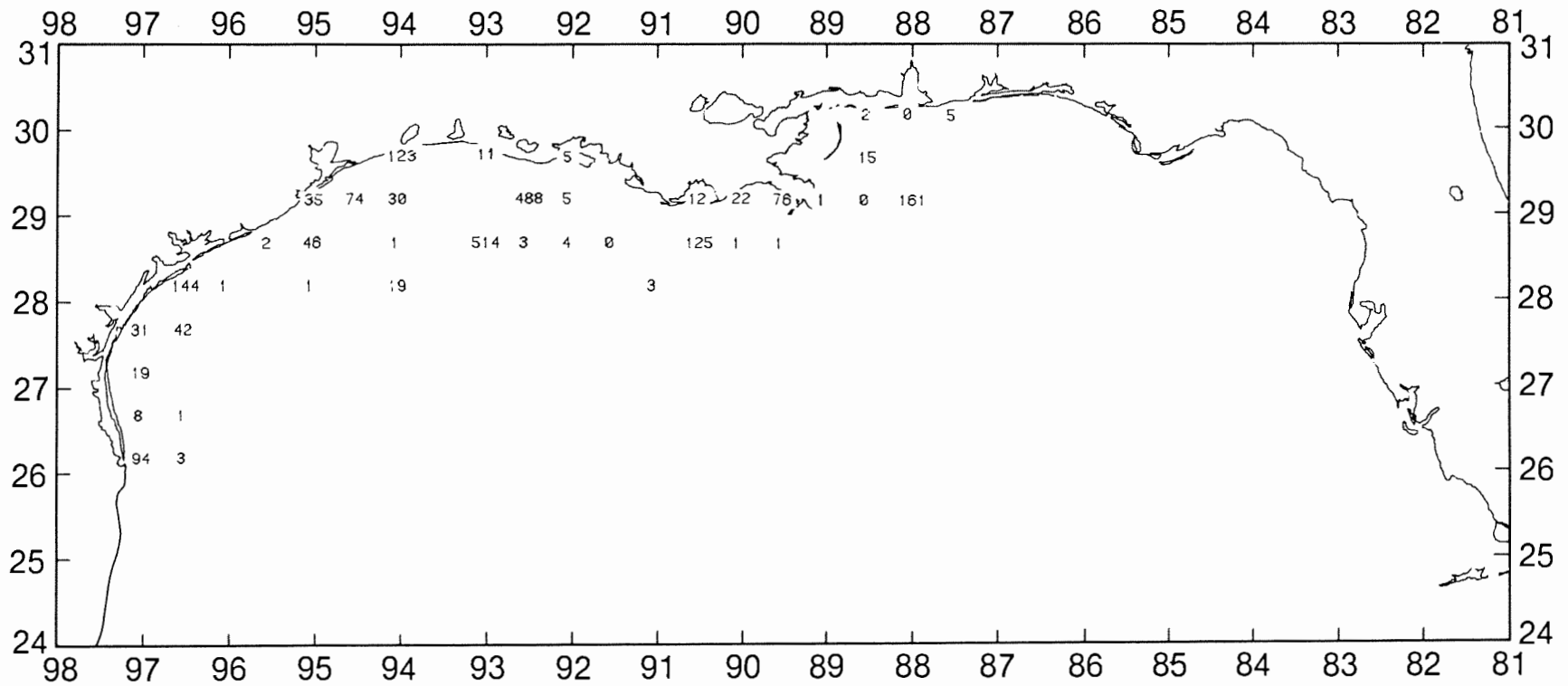


Figure 19. Atlantic croaker, *Micropogonias undulatus*, lb/hour for June-July 1985.

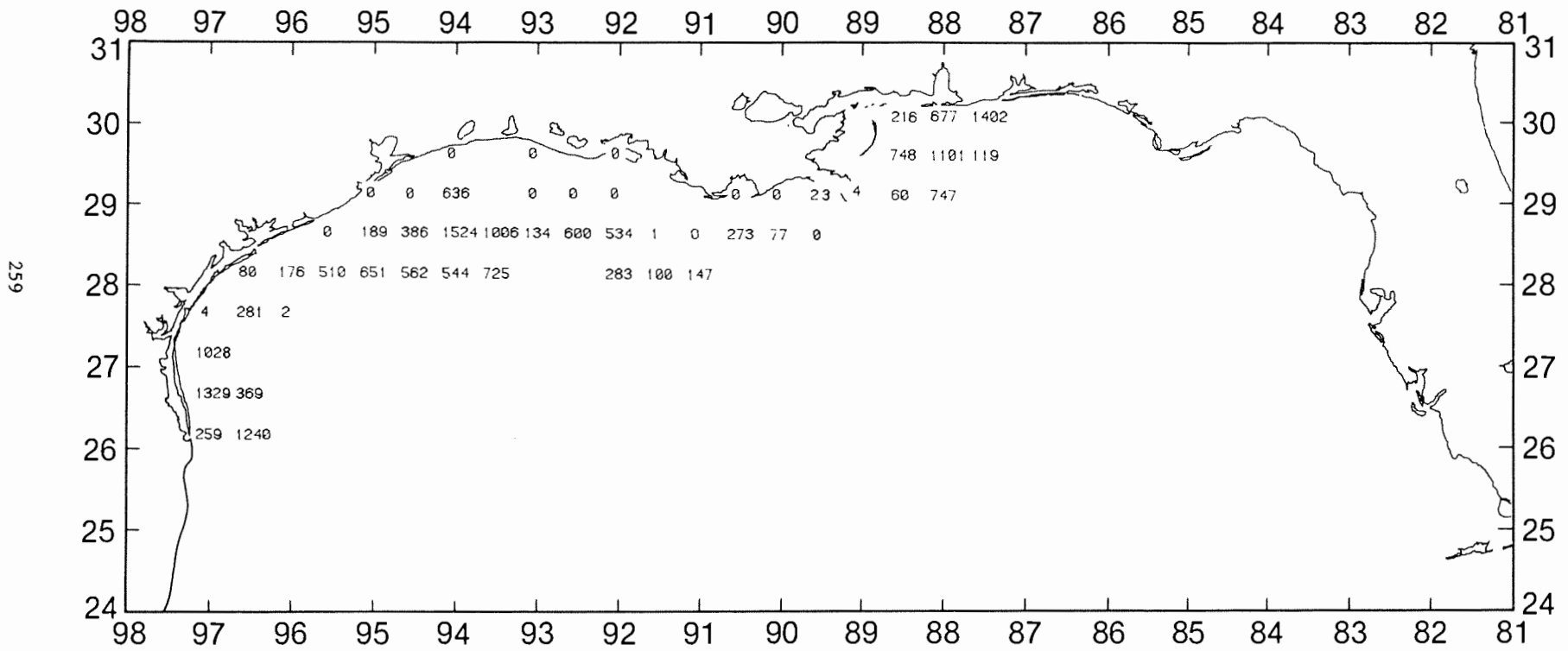


Figure 20. Longspine pogy, *Stenotomus caprinus*, number/hour for June-July 1985.

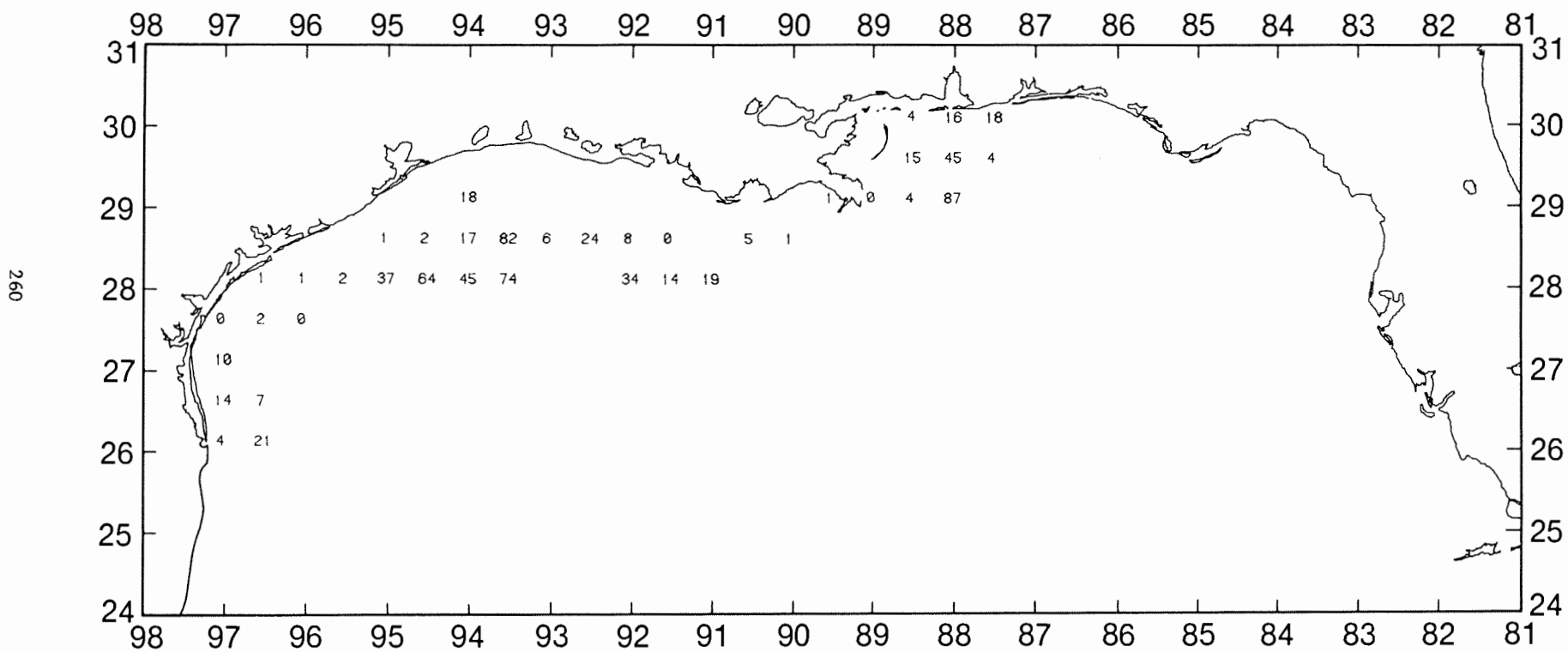


Figure 21. Longspine porgy, Stenotomus caprinus, lb/hour for June-July 1985.

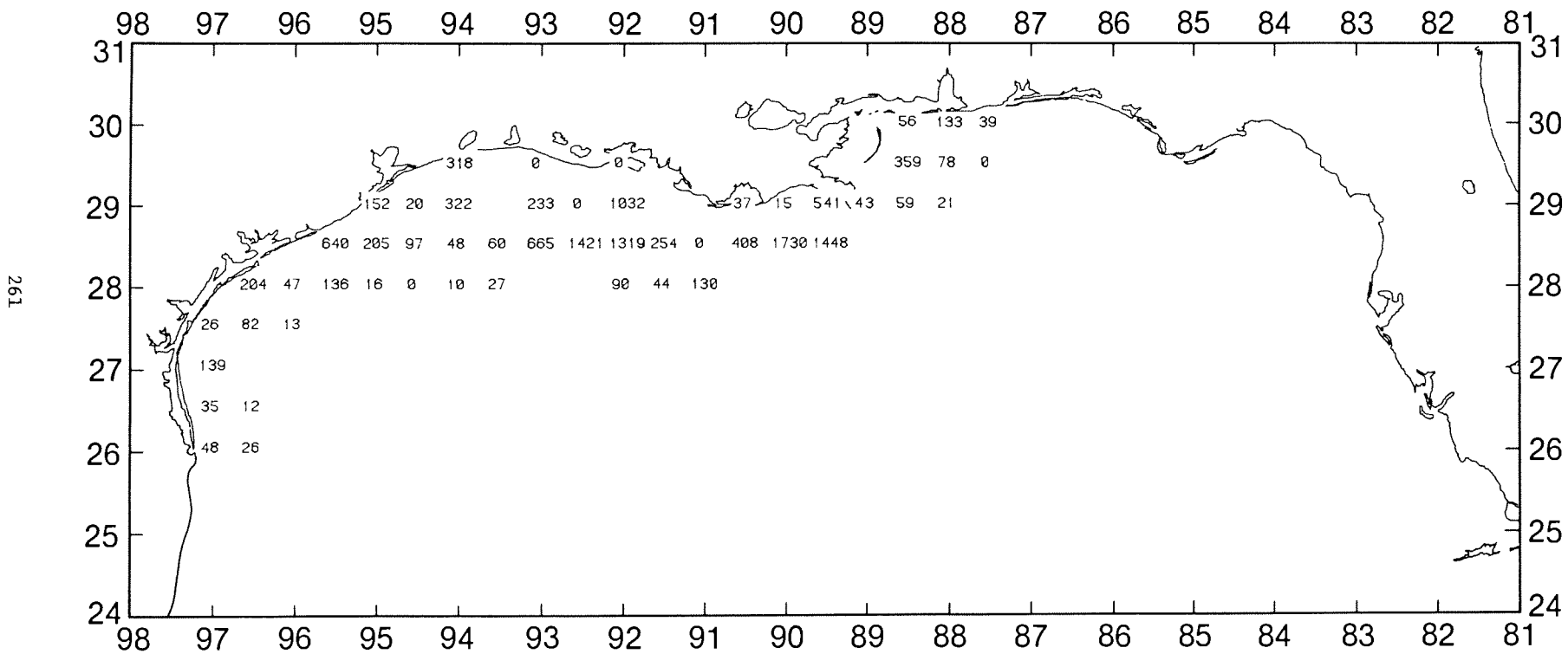


Figure 22. Blackfin searobin, Prionotus rubio, number/hour for June-July 1985.

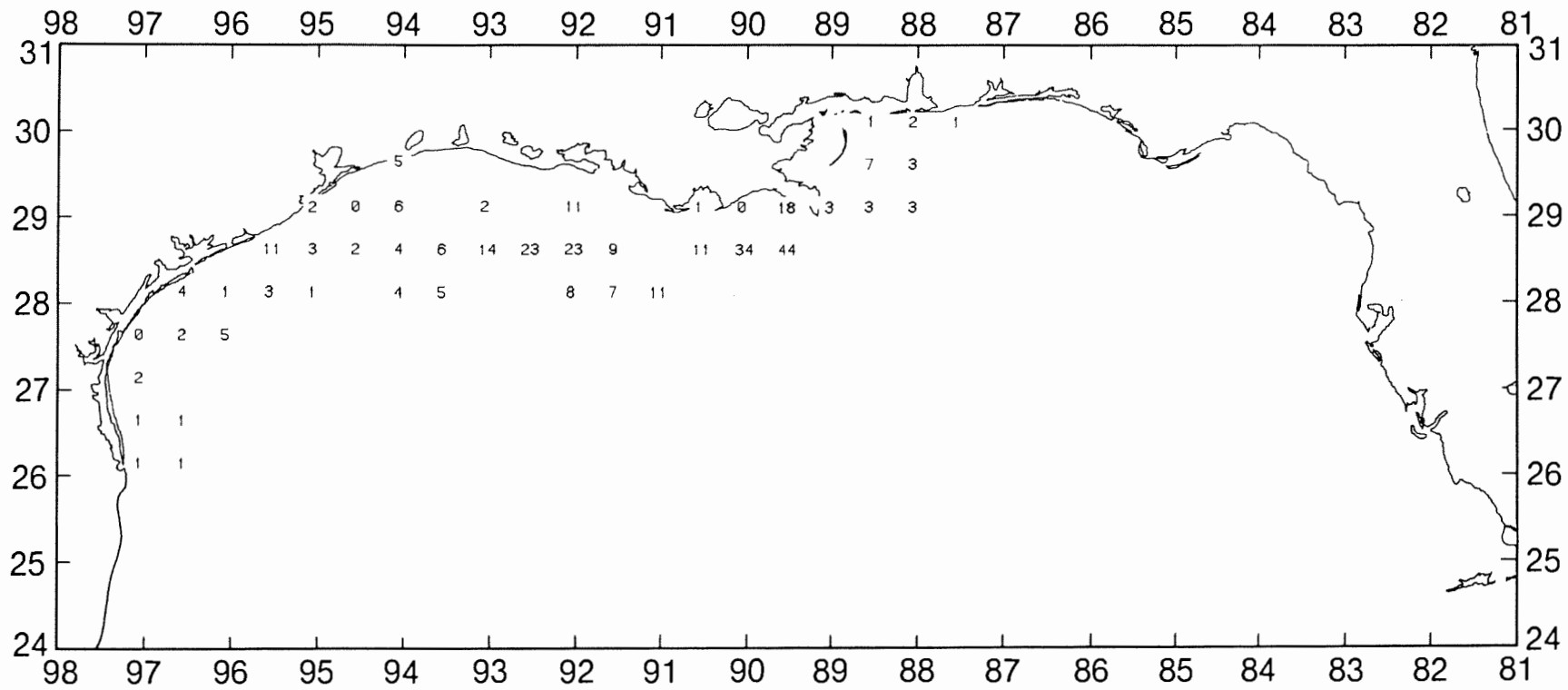


Figure 23. Blackfin searobin, *Prionotus rubio*, lb/hour for June-July 1985.

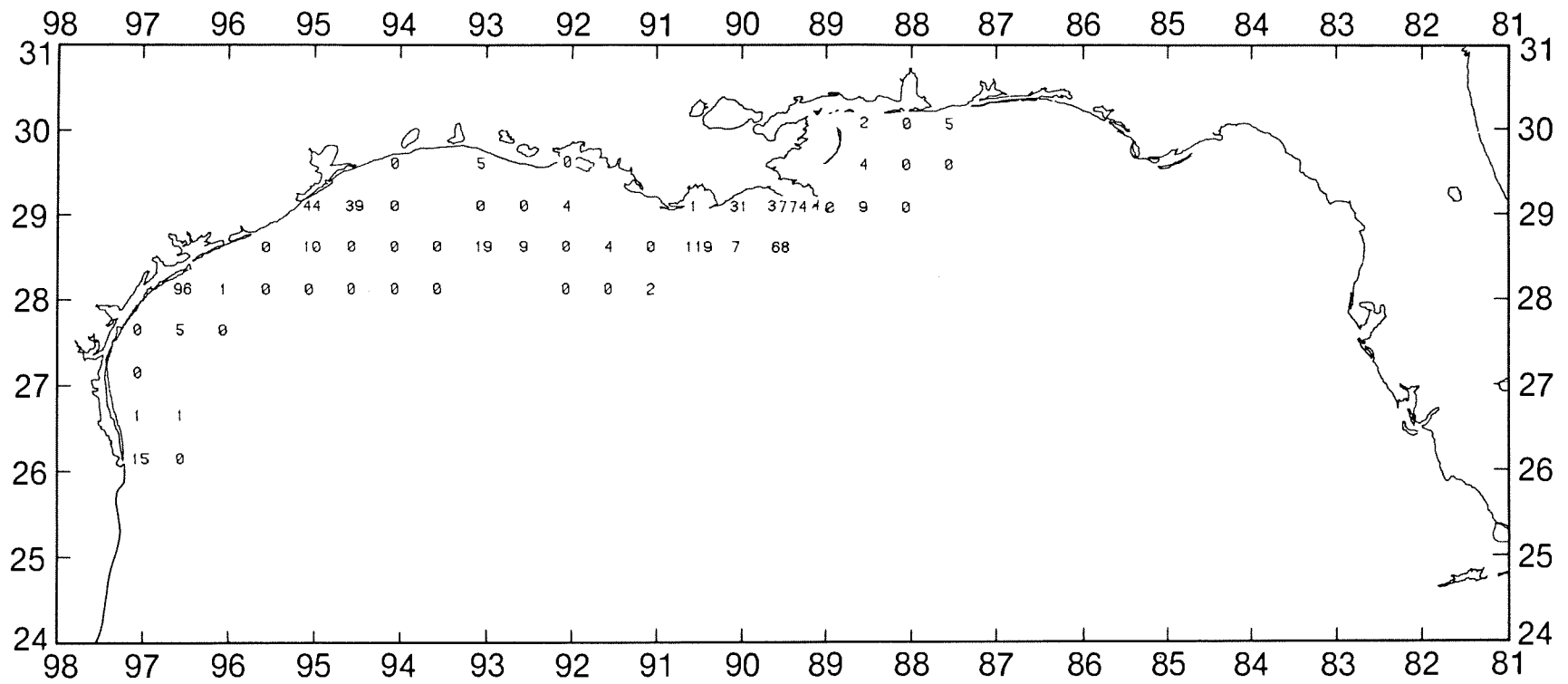


Figure 24. Atlantic cutlassfish, *Trichiurus lepturus*, number/hour for June-July 1985.

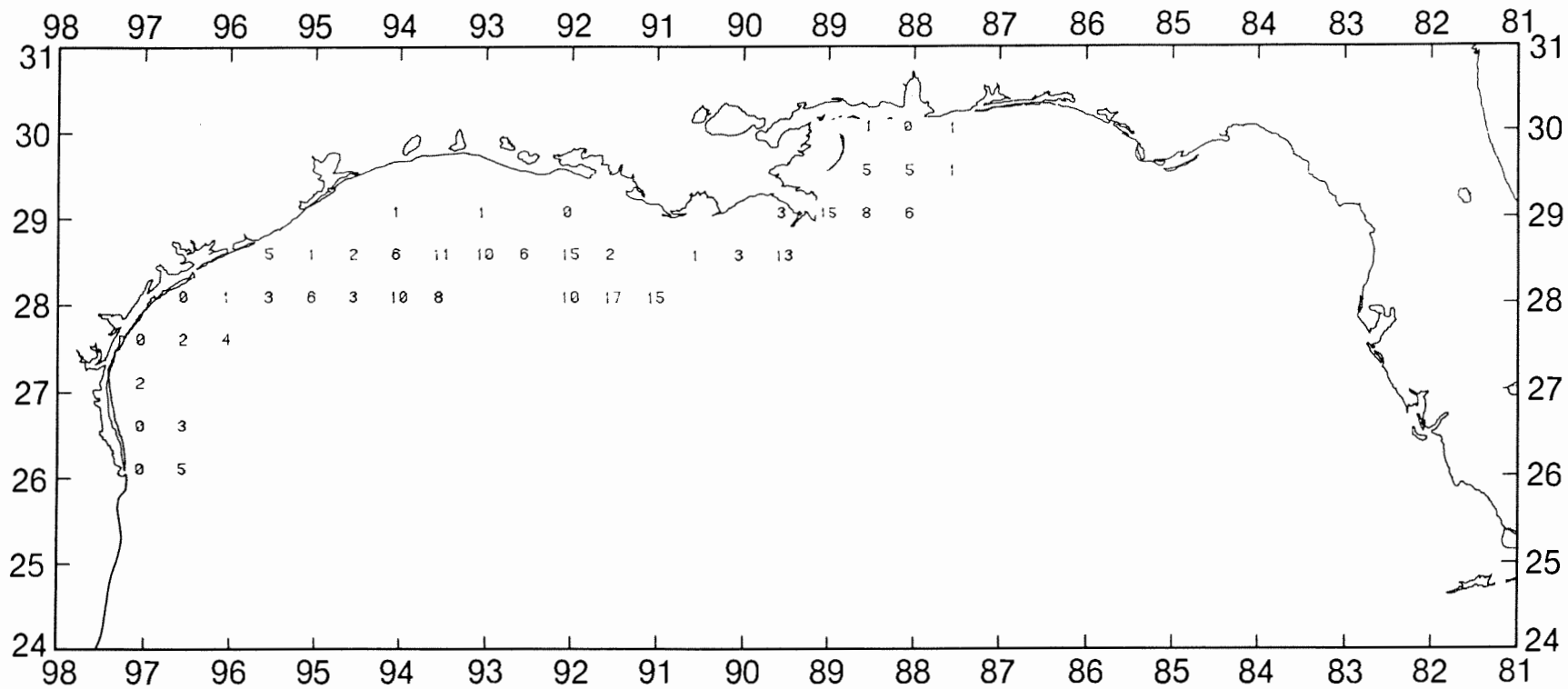


Figure 27. Rock sea bass, *Centropristis philadelphica*, 1b/hour for June-July 1985.

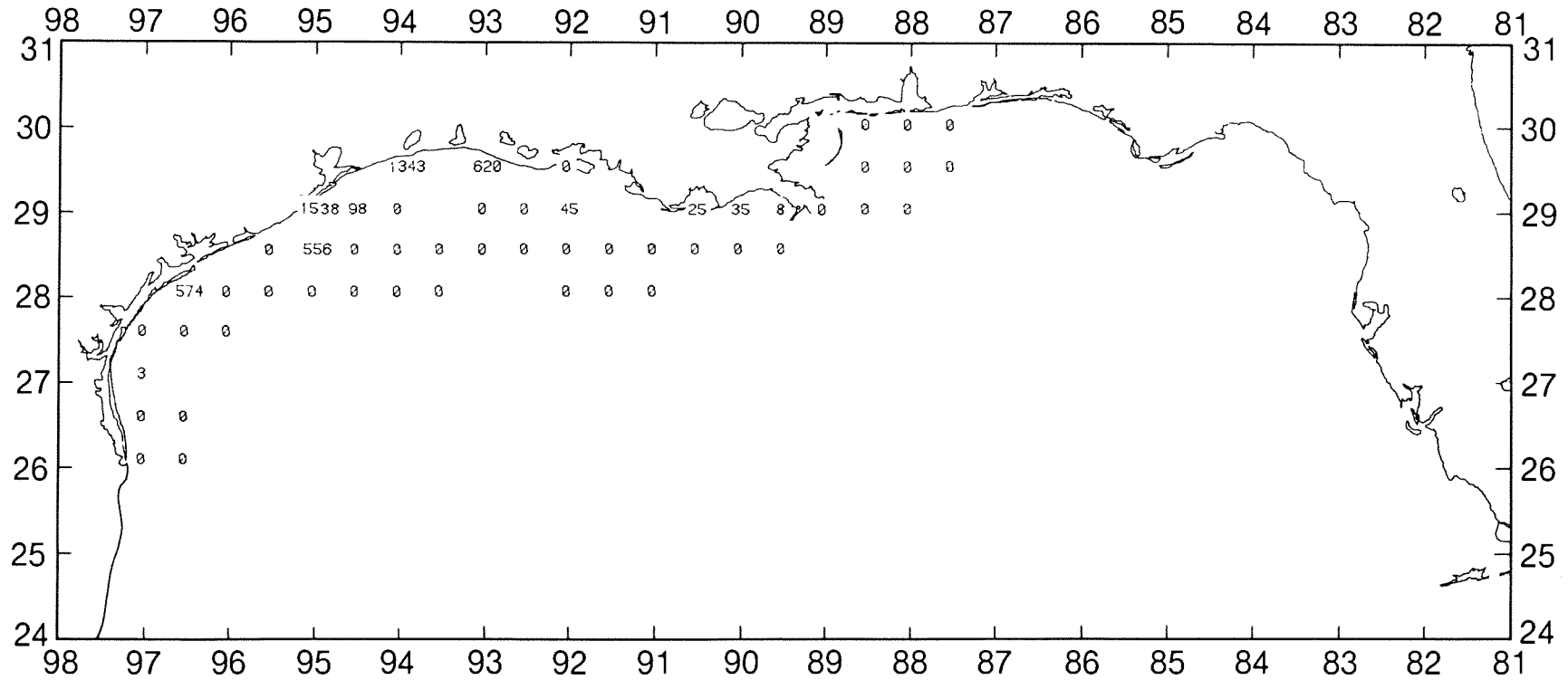


Figure 28. Star drum, *Stellifer lanceolatus*, number/hour for June-July 1985.

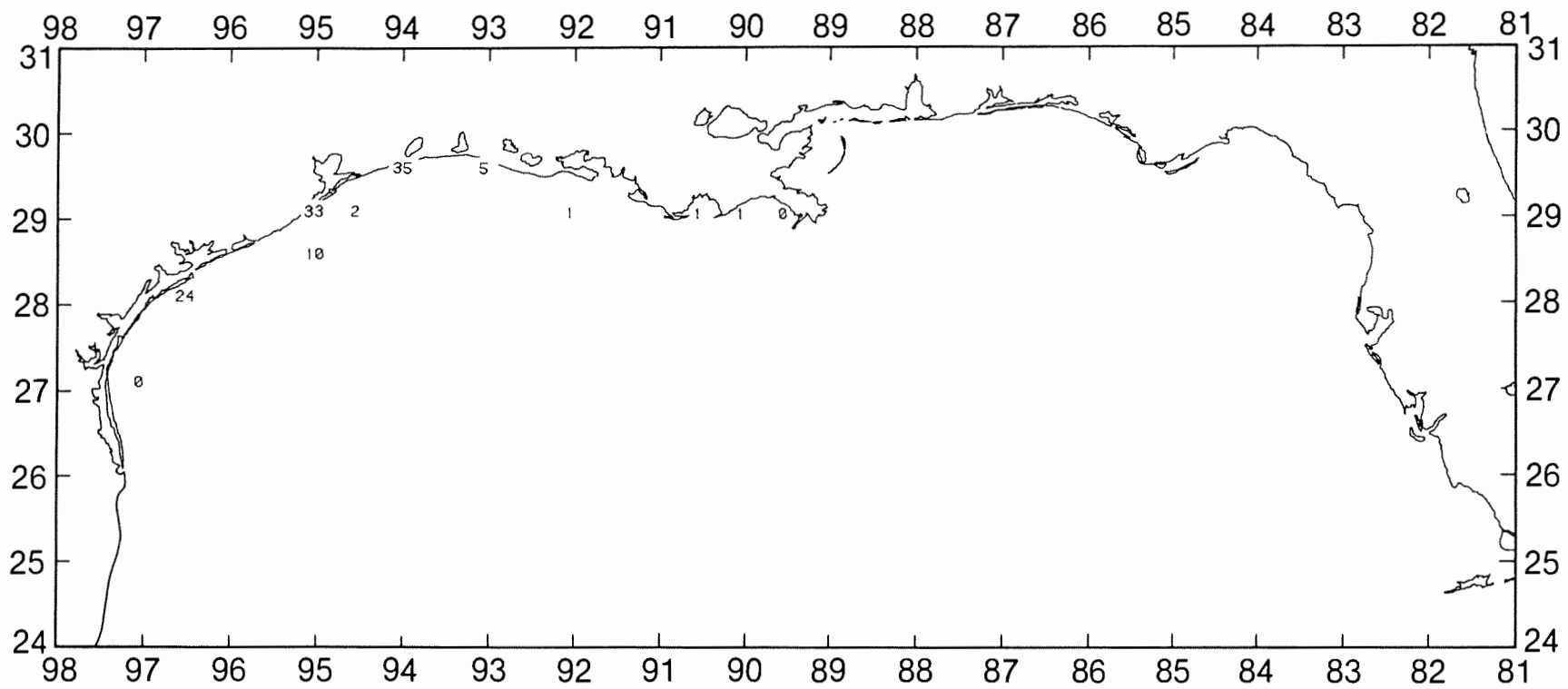


Figure 29. Star drum, *Stellifer lanceolatus*, lb/hour for June-July 1985.

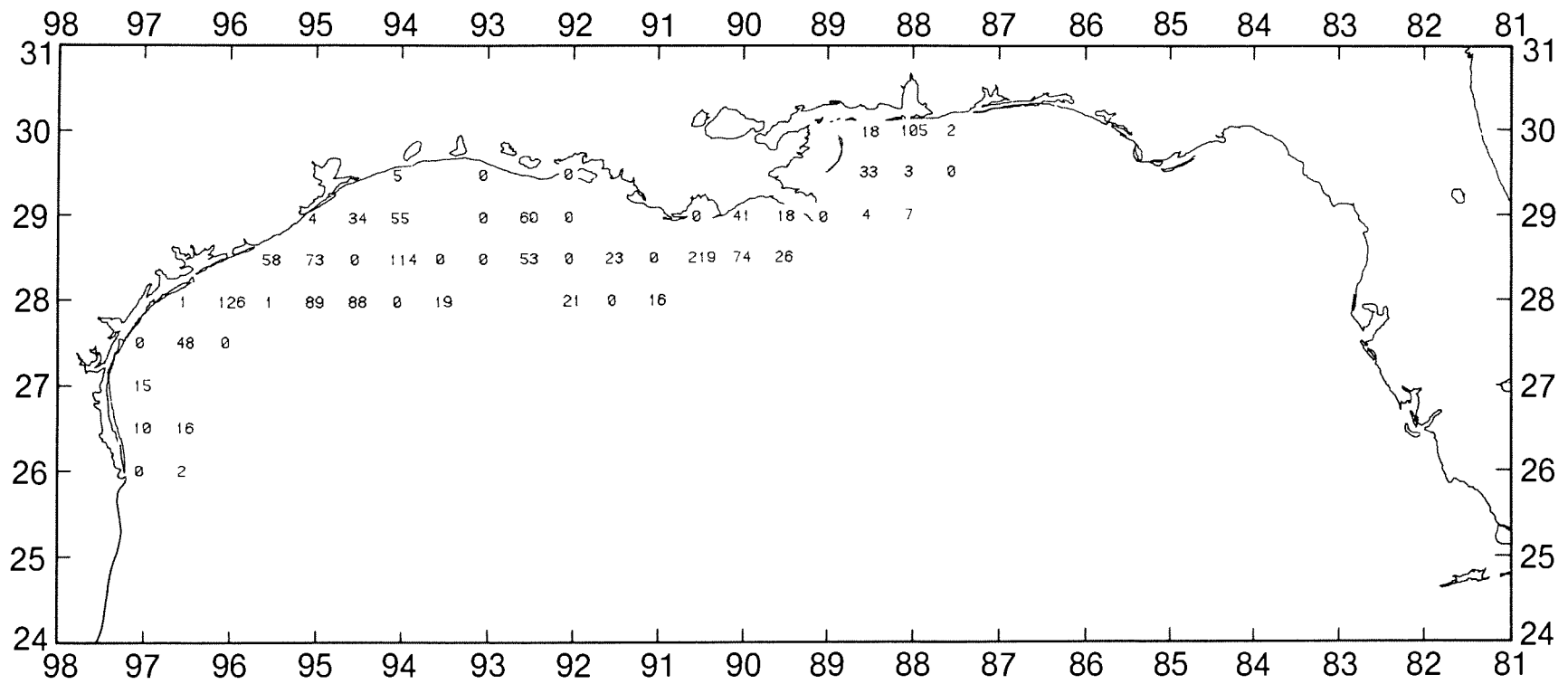


Figure 30. Gulf butterfish, *Peprilus burti*, number/hour for June-July 1985.

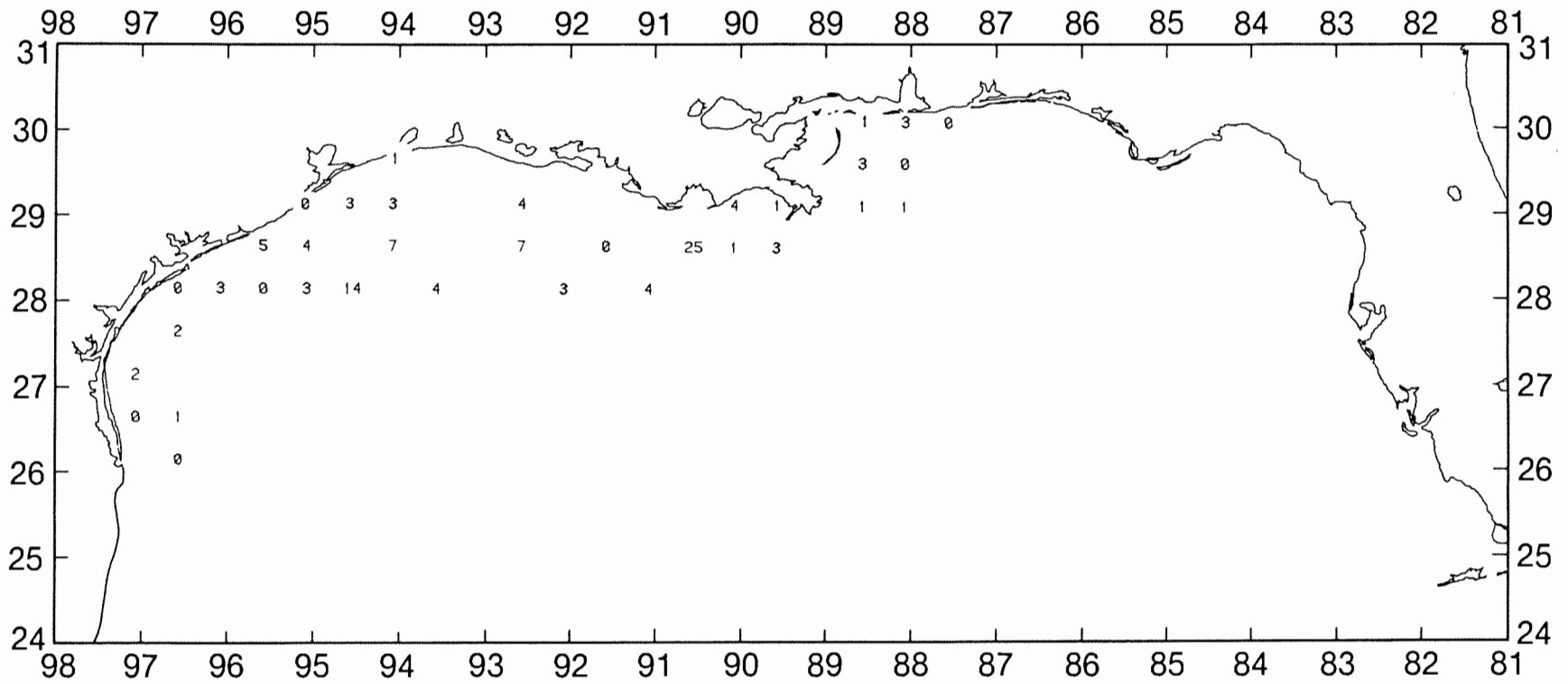


Figure 31. Gulf butterfish, *Peprilus burti*, lb/hour for June-July 1985.

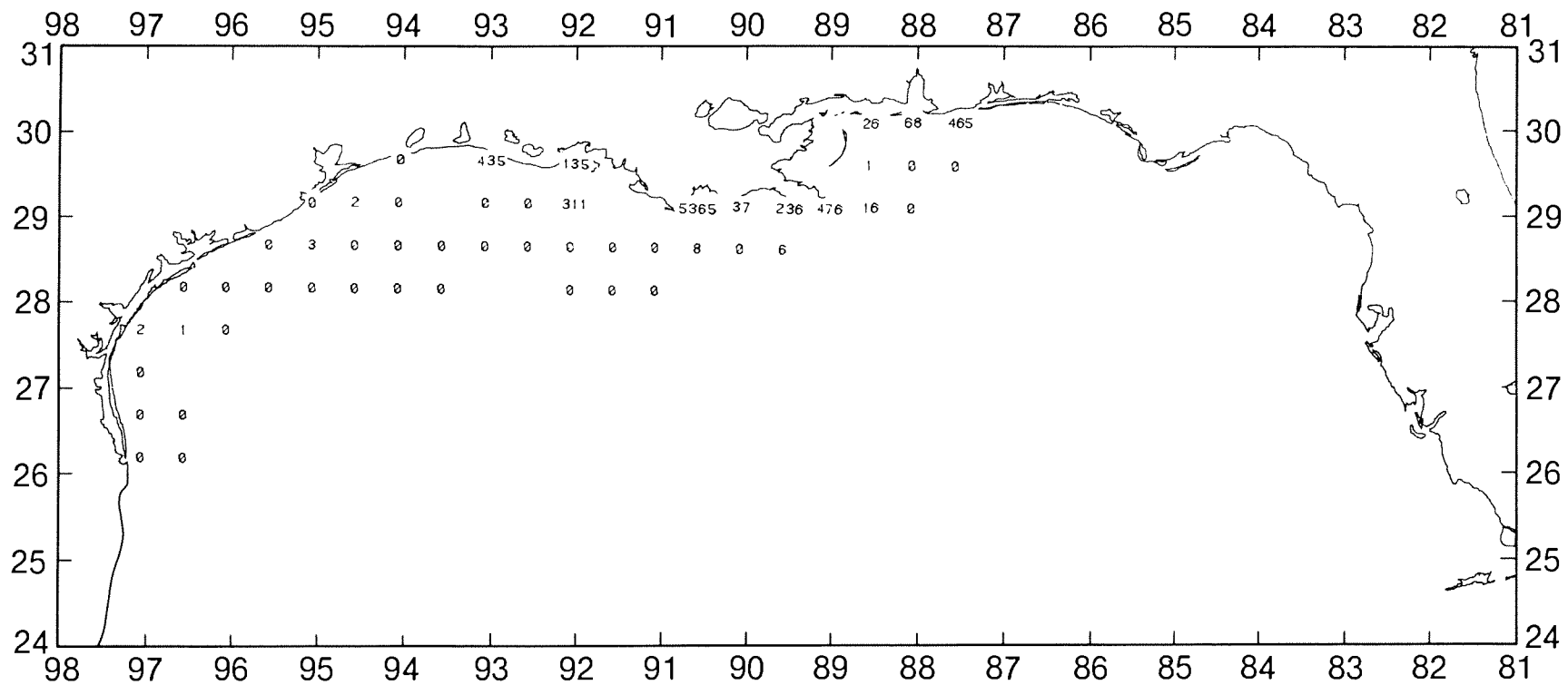


Figure 32. Bay anchovy, *Anchoa mitchilli*, number/hour for June-July 1985.

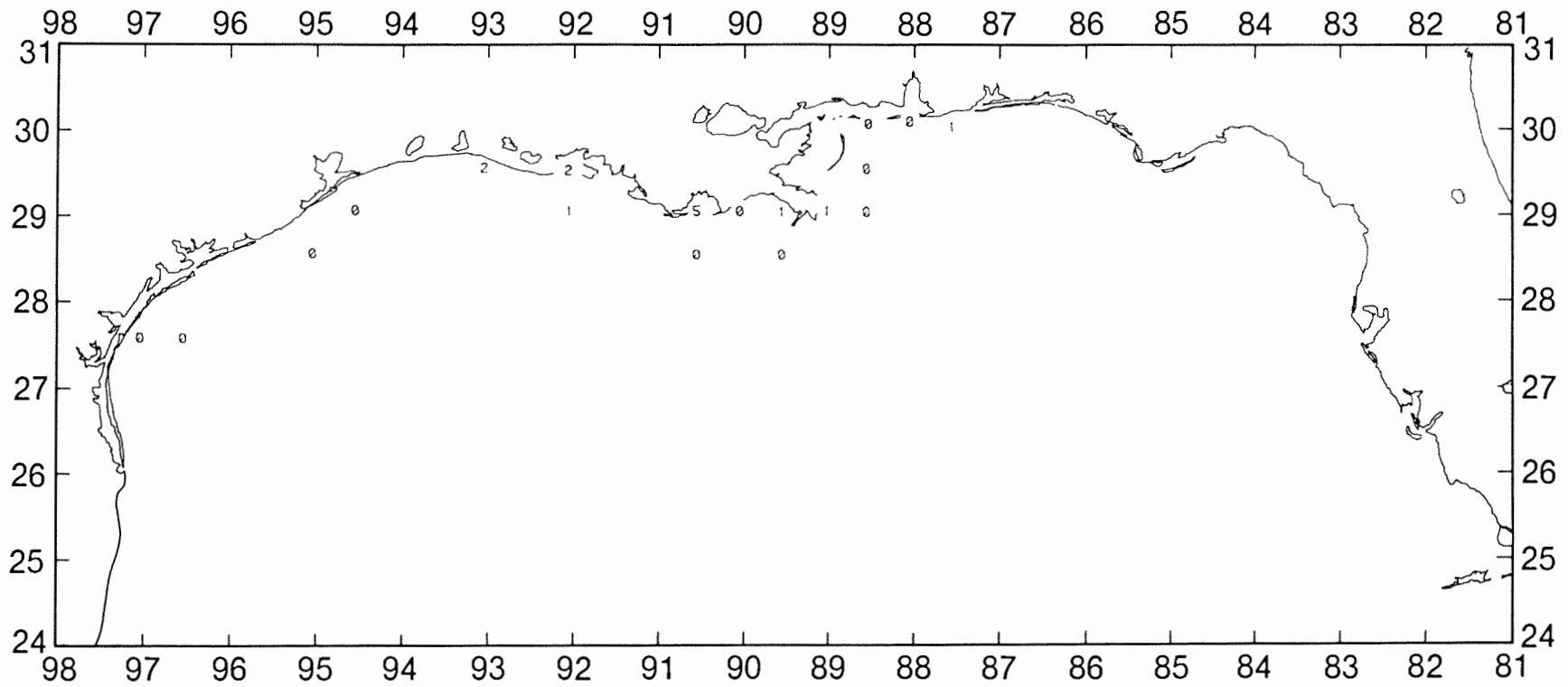


Figure 33. Bay anchovy, *Anchoa mitchilli*, lb/hour for June-July 1985.

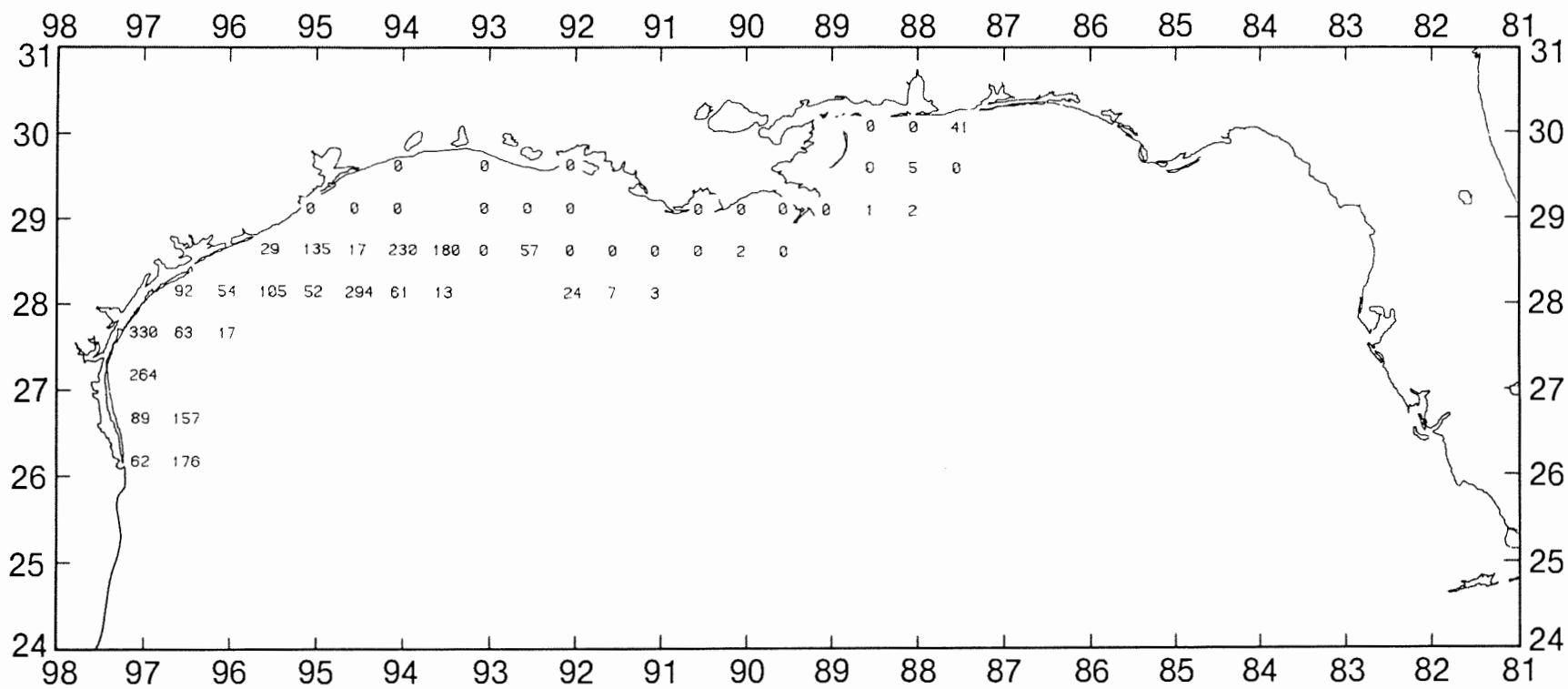


Figure 34. Dwarf goatfish, Upeneus parvus, number/hour for June-July 1985.

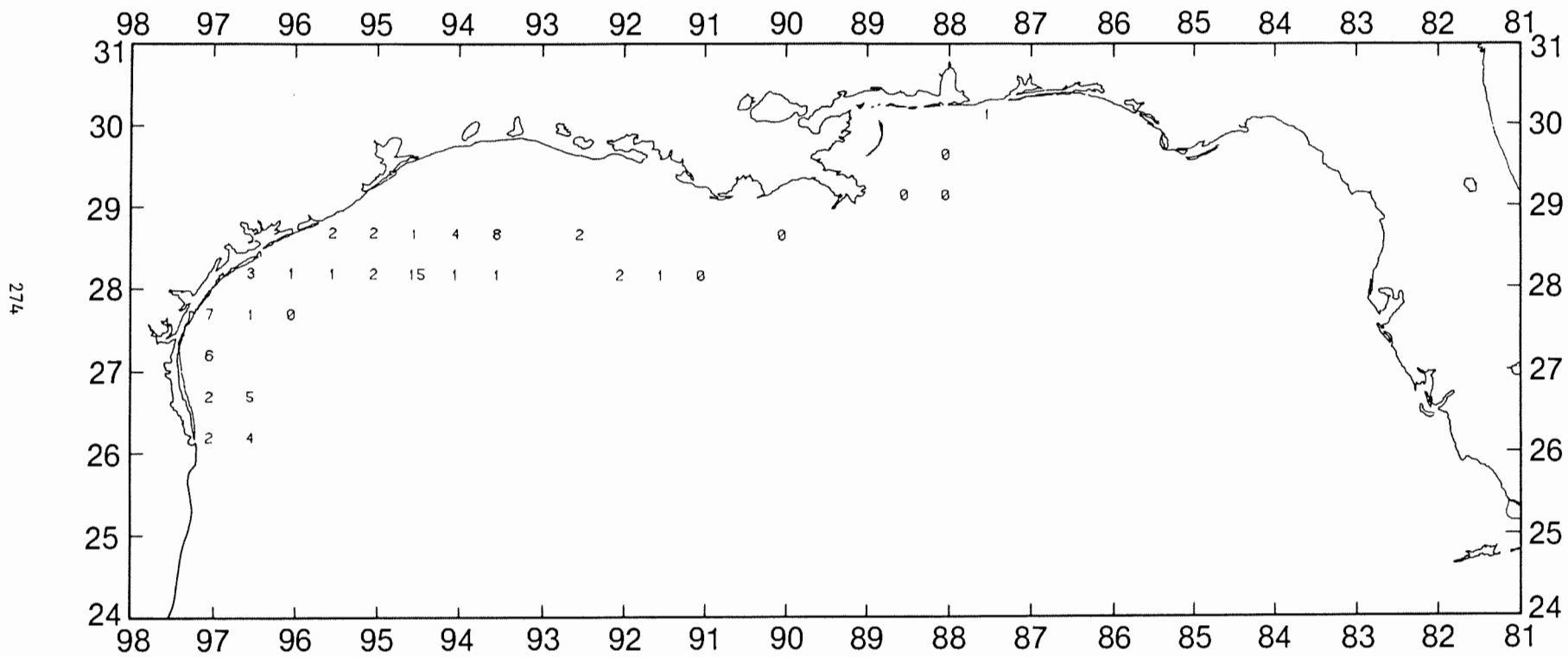


Figure 35. Dwarf goatfish, *Upeneus parvus*, lb/hour for June-July 1985.

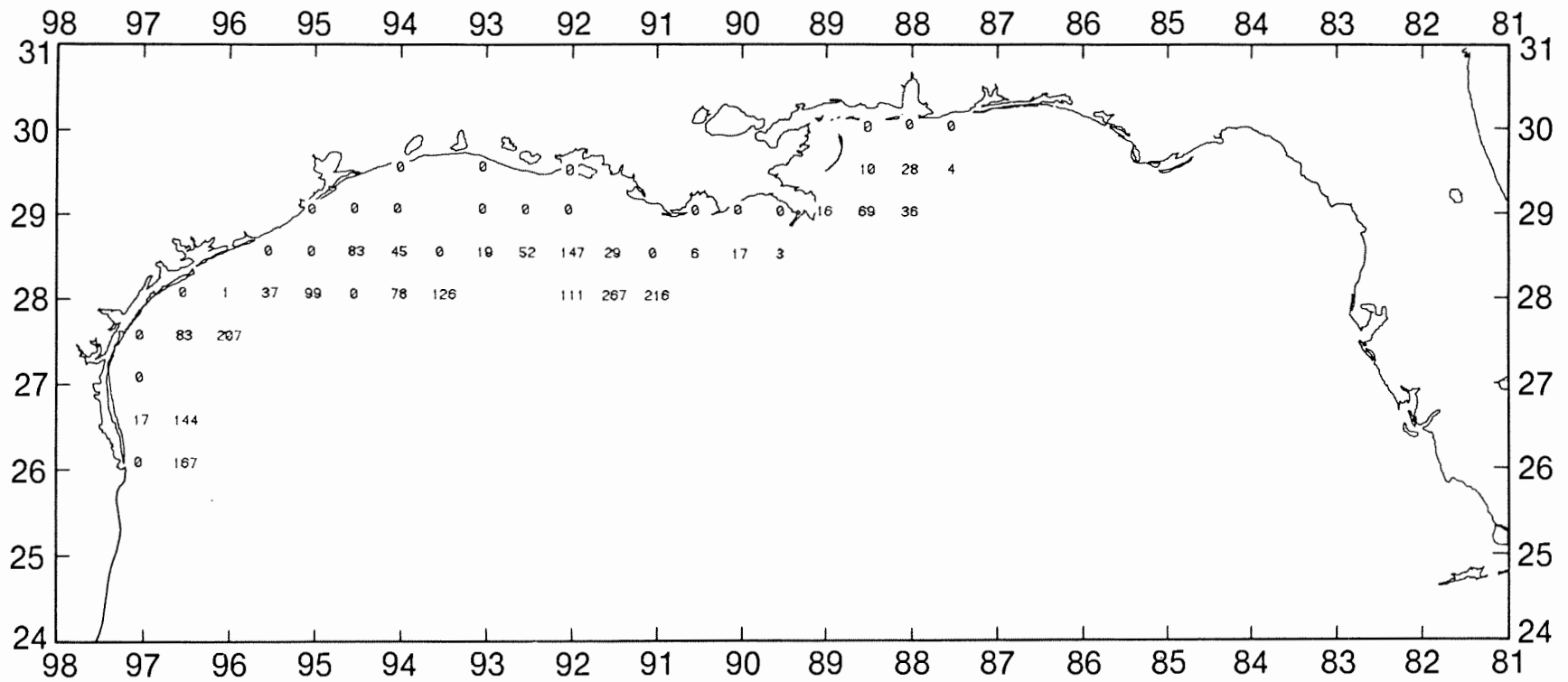


Figure 36. Blackear bass, *Serranus atrobranchus*, number/hour for June-July 1985.

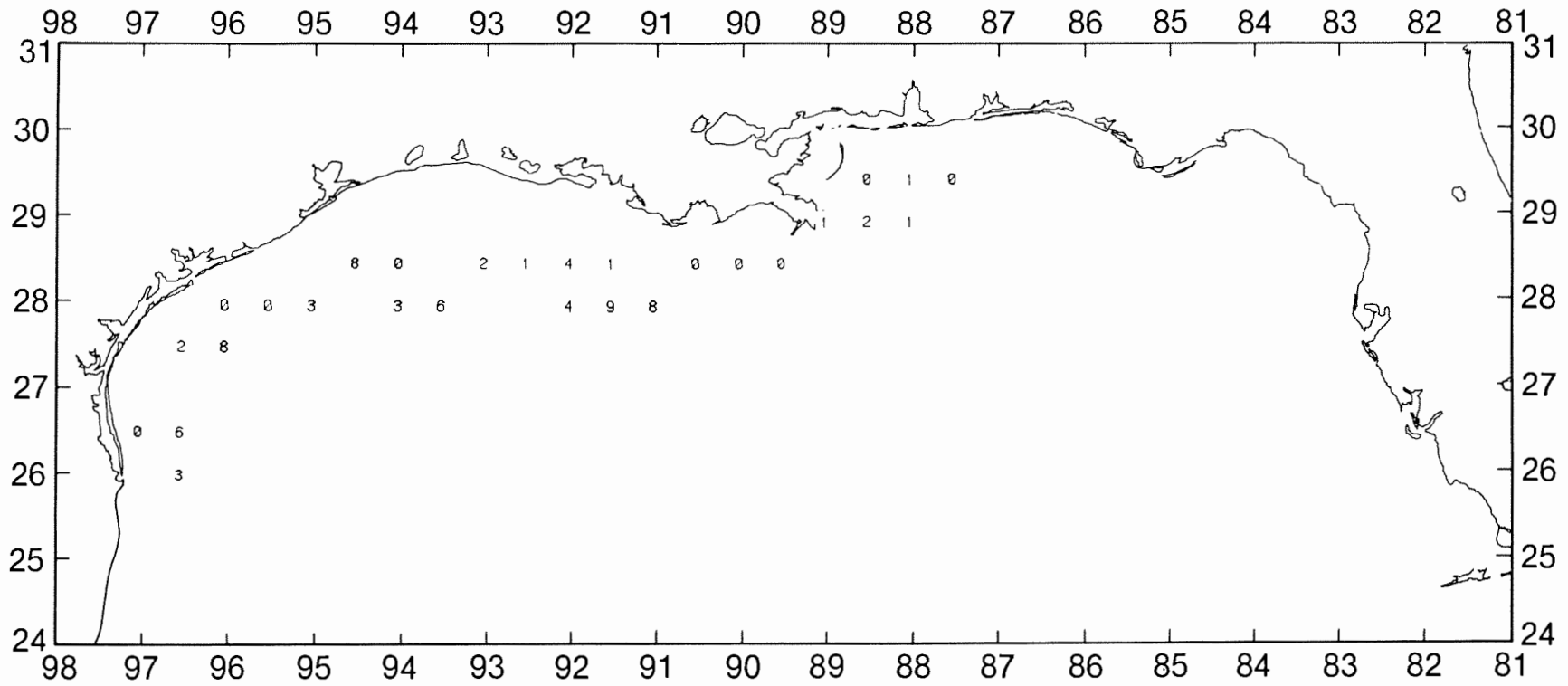


Figure 37. Blackear bass, *Serranus atrobranchus*, lb/hour for June-July 1985.

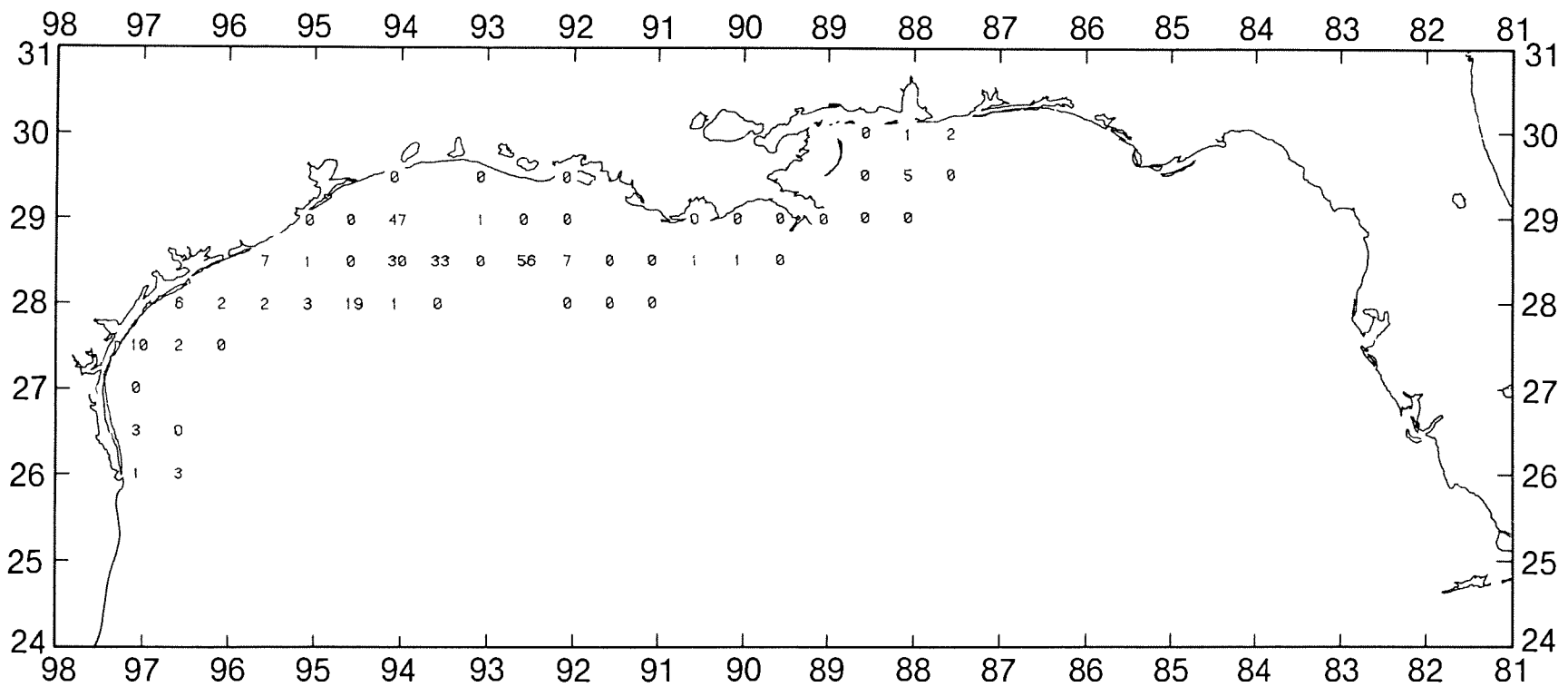


Figure 38. Red snapper, *Lutjanus campechanus*, number/hour for June-July 1985.

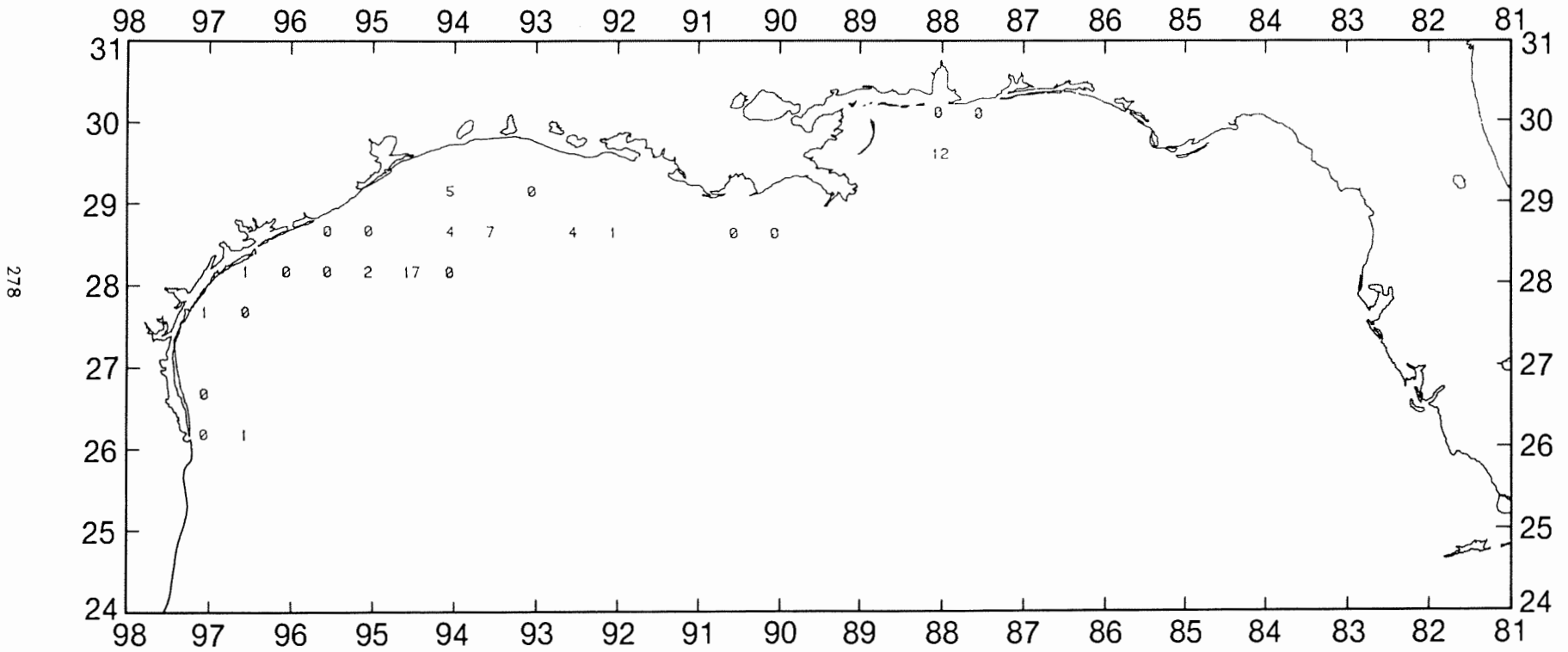


Figure 39. Red snapper, Lutjanus campechanus, lb/hour for June-July 1985.

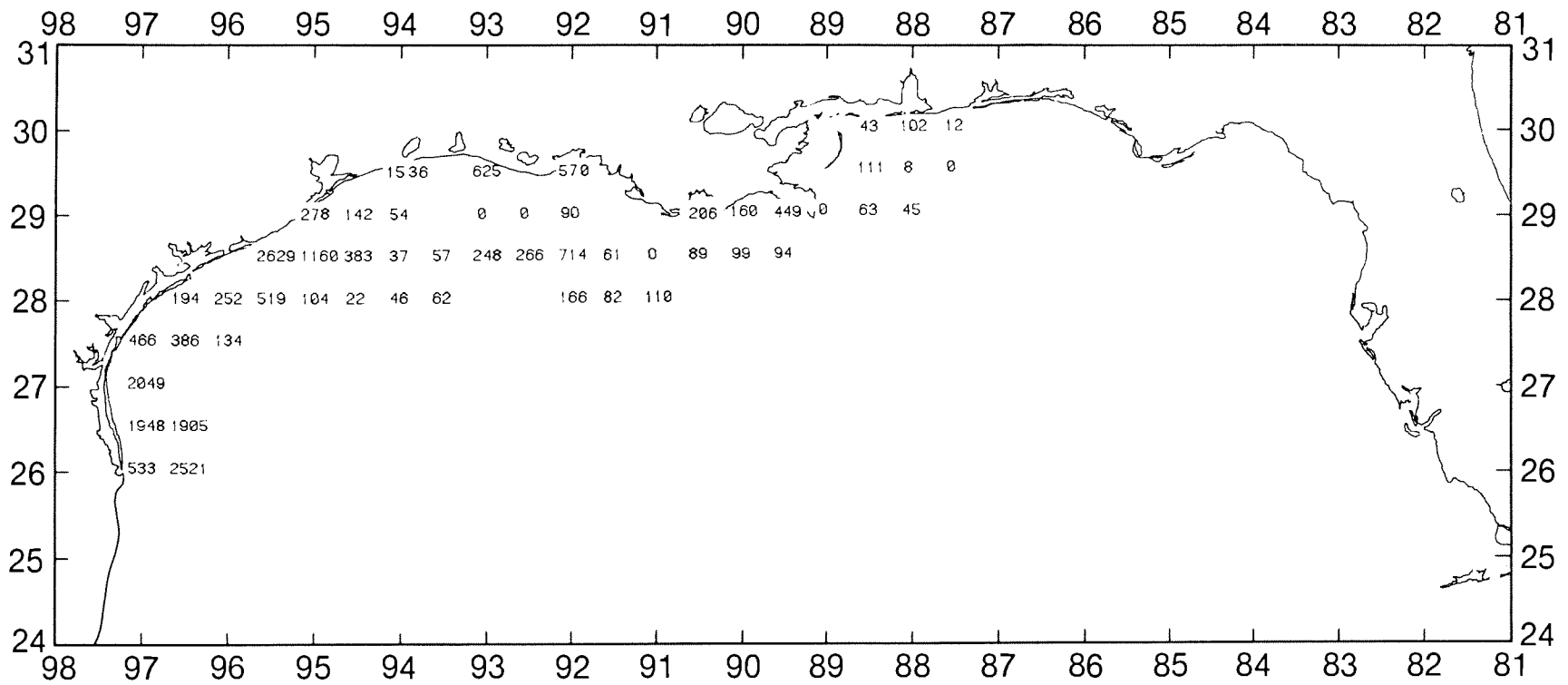


Figure 40. Brown shrimp, *Penaeus aztecus*, number/hour for June-July 1985.

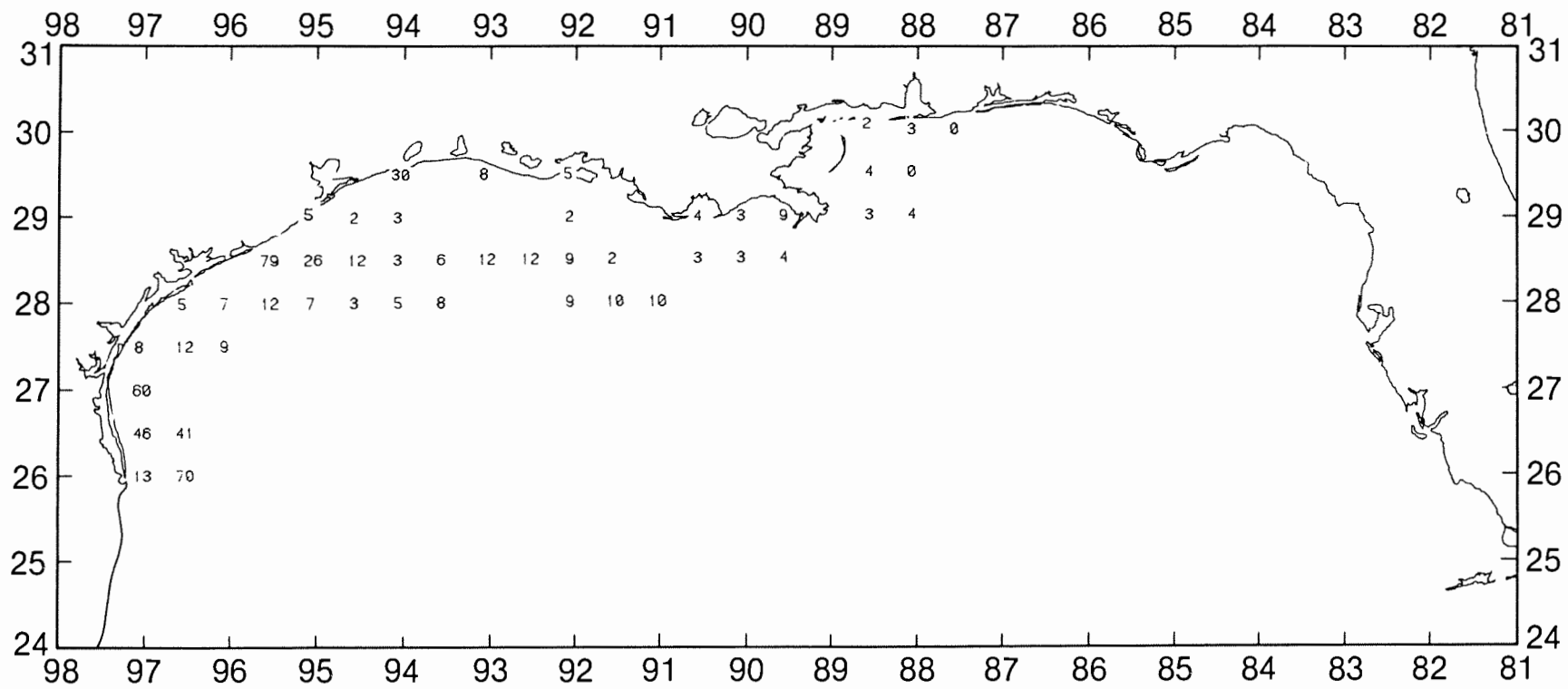


Figure 41. Brown shrimp, *Penaeus aztecus*, lb/hour for June-July 1985.

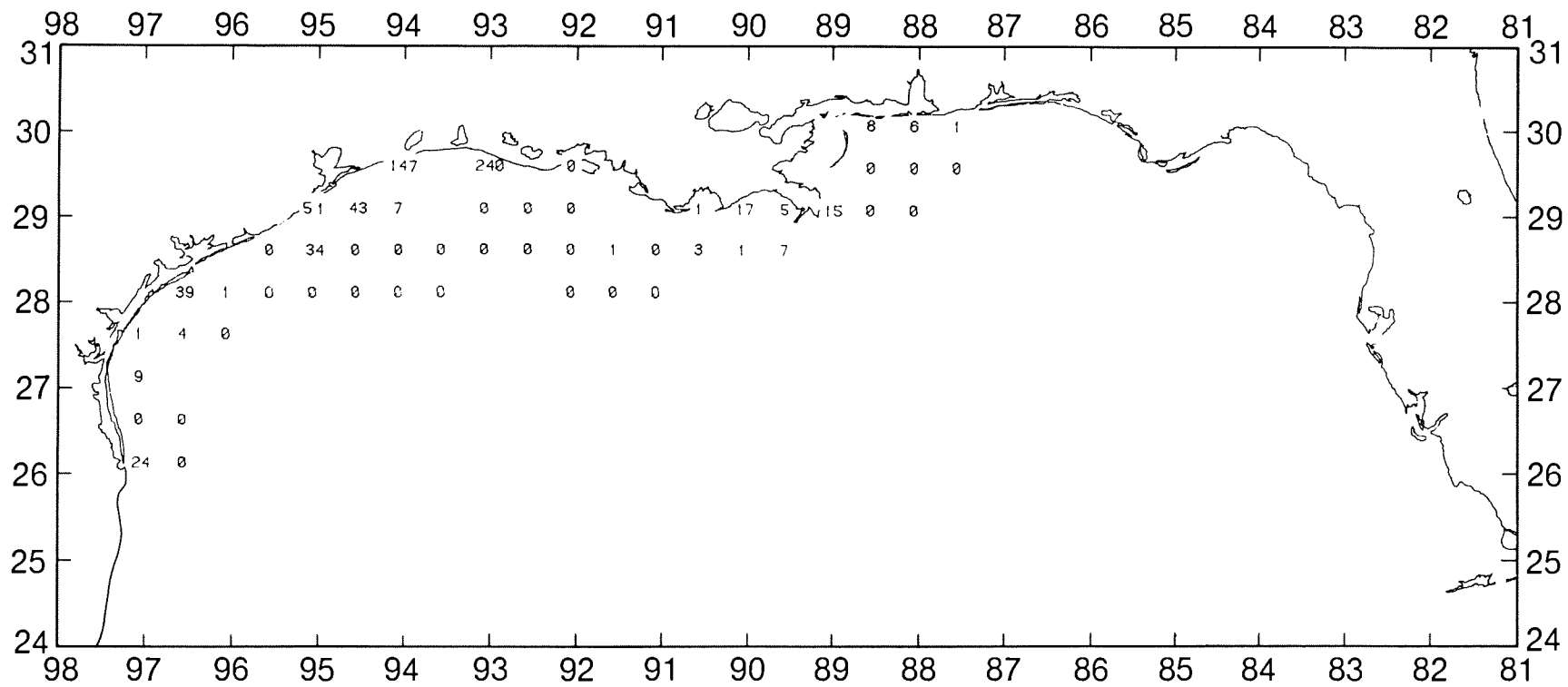


Figure 42. White shrimp, *Penaeus setiferus*, number/hour for June-July 1985.

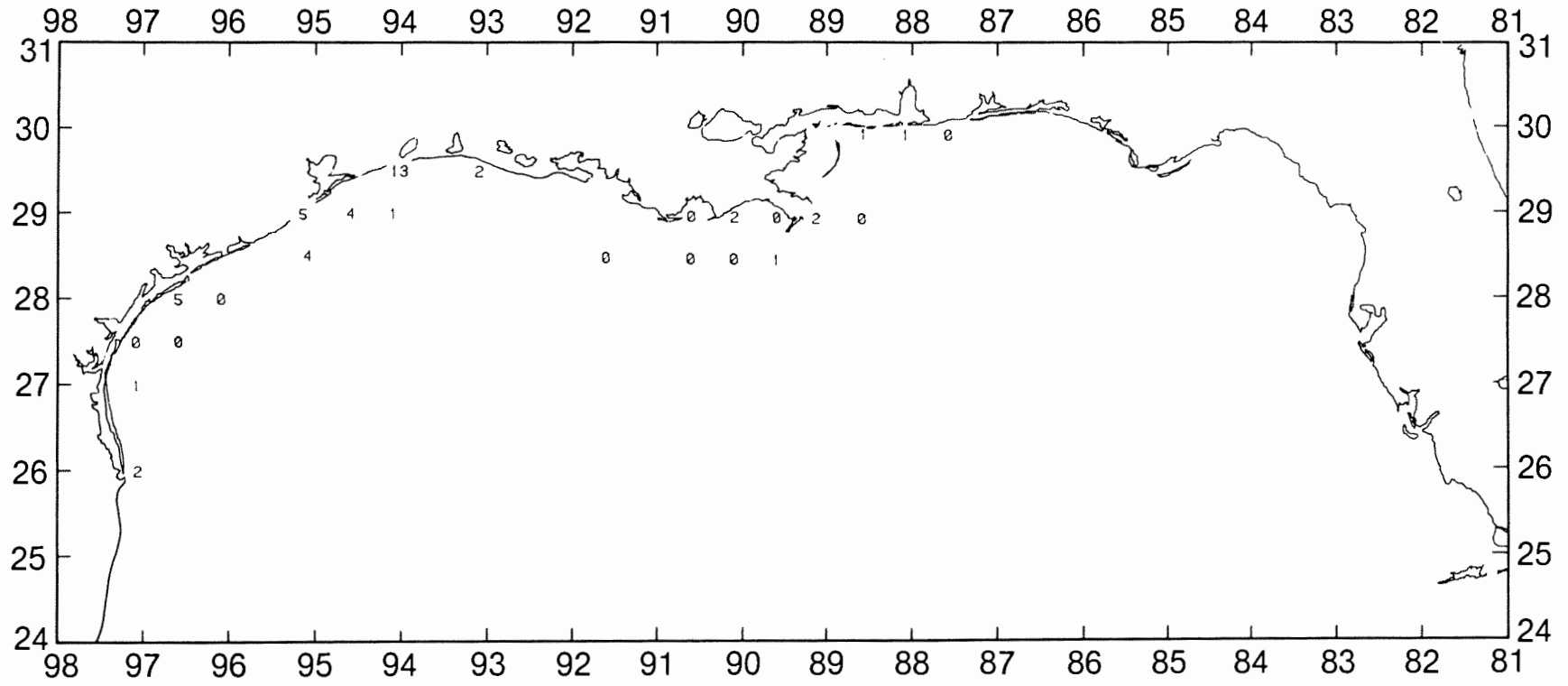


Figure 43. White shrimp, *Penaeus setiferus*, lb/hour for June-July 1985.

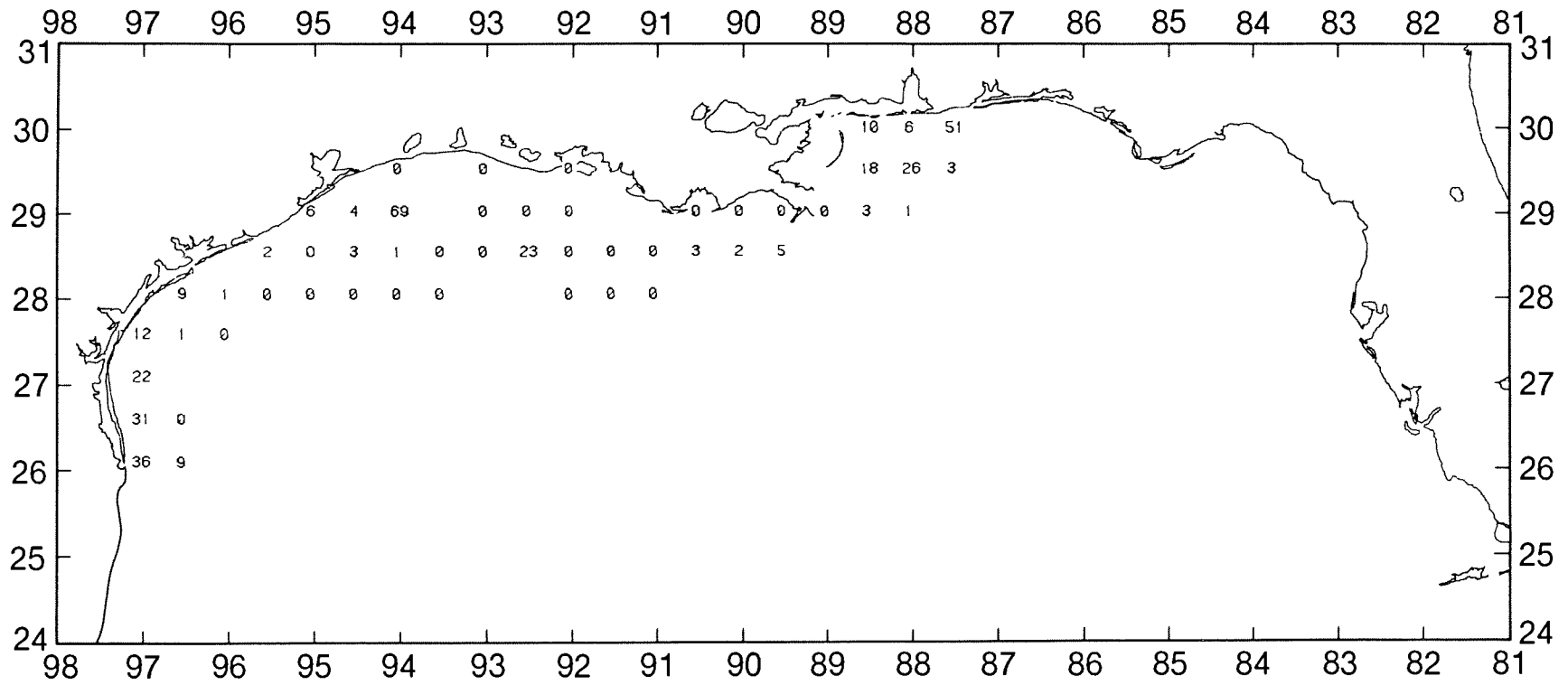


Figure 44. Pink shrimp, *Penaeus duorarum*, number/hour for June-July 1985.

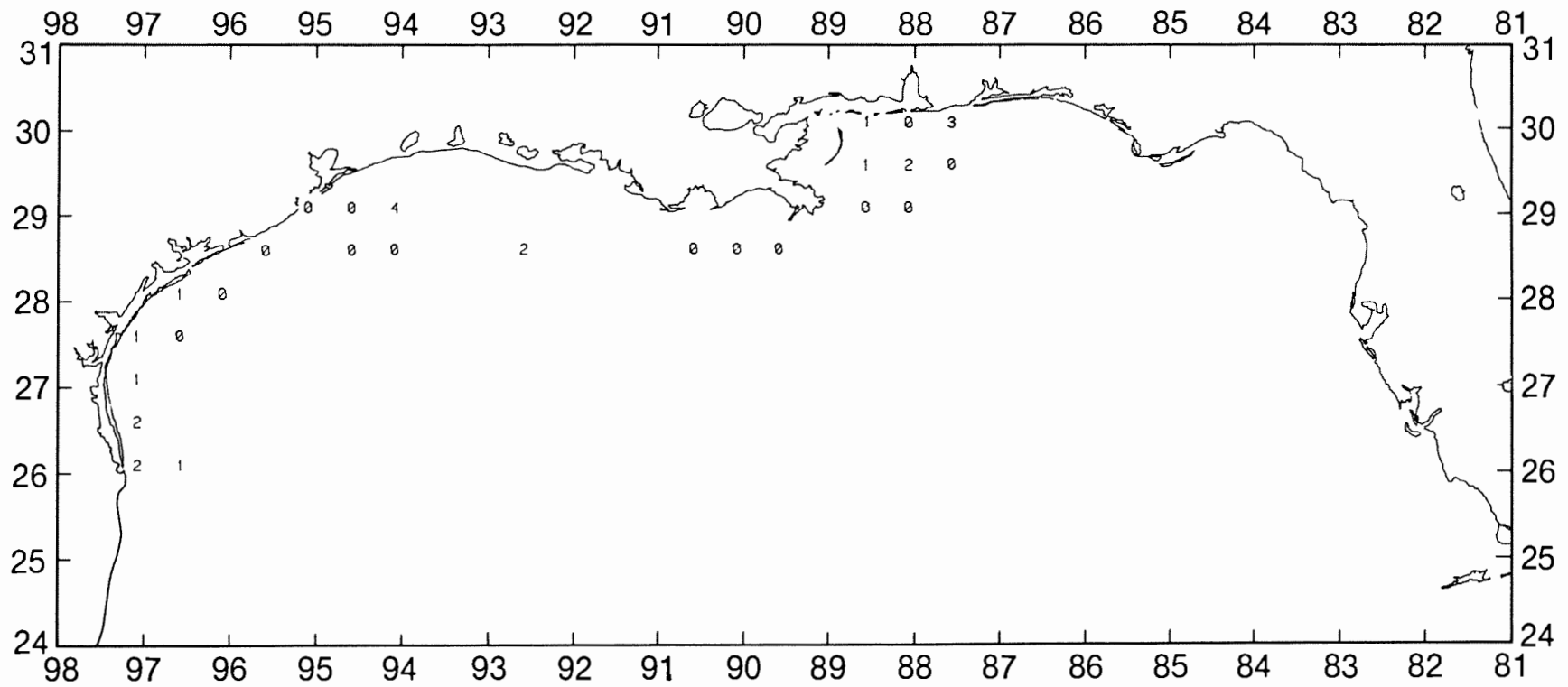


Figure 45. Pink shrimp, *Penaeus duorarum*, lb/hour for June-July 1985.

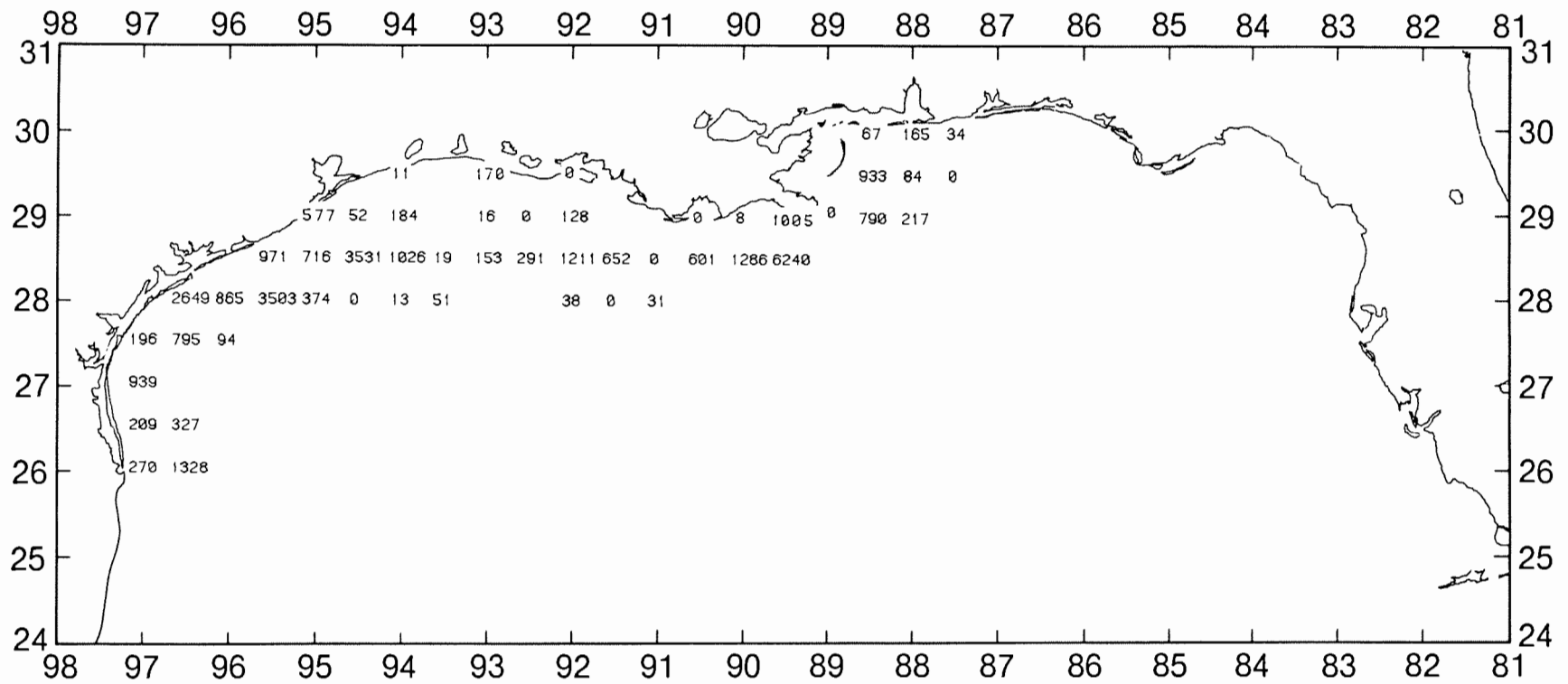


Figure 46. Roughneck shrimps, *Trachypenaeus* spp., number/hour for June-July 1985.

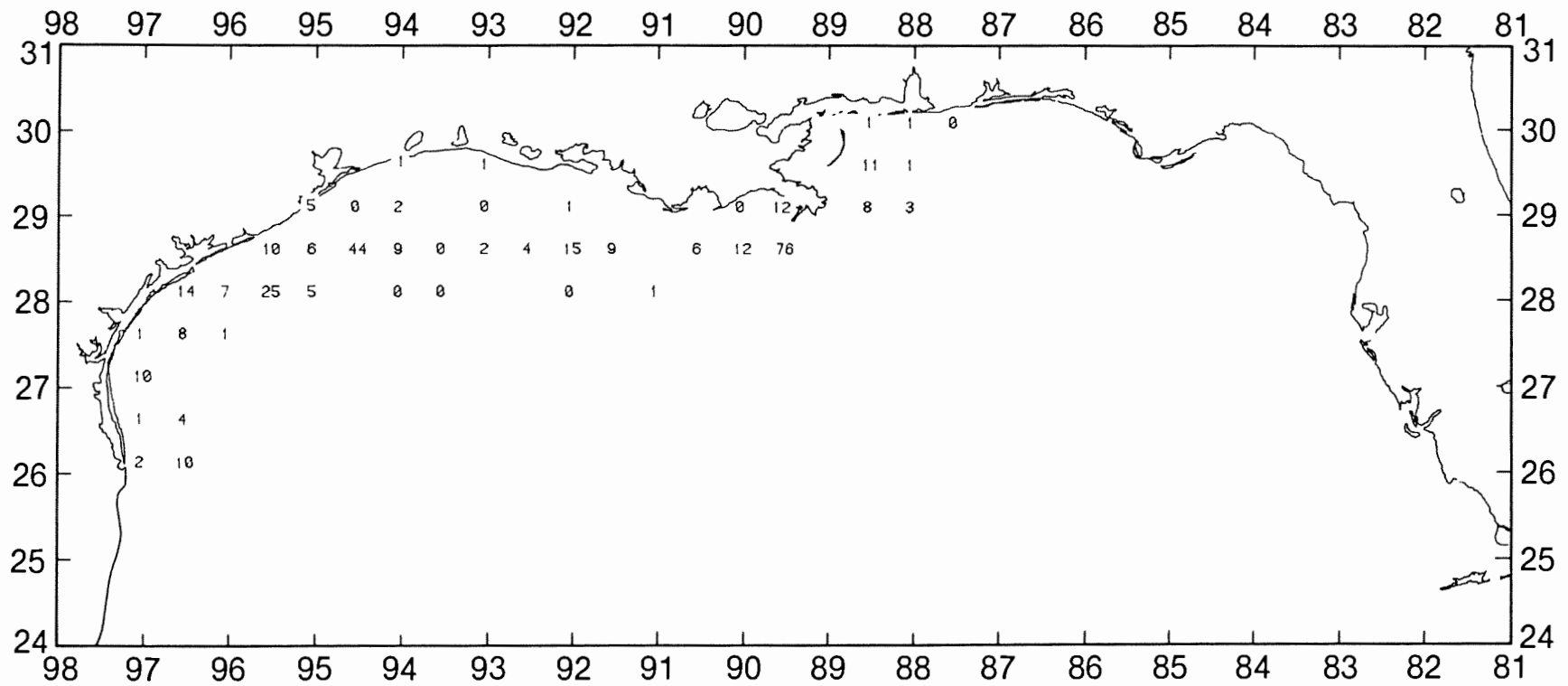


Figure 47. Roughneck shrimps, *Trachypenaeus* spp., lb/hour for June-July 1985.

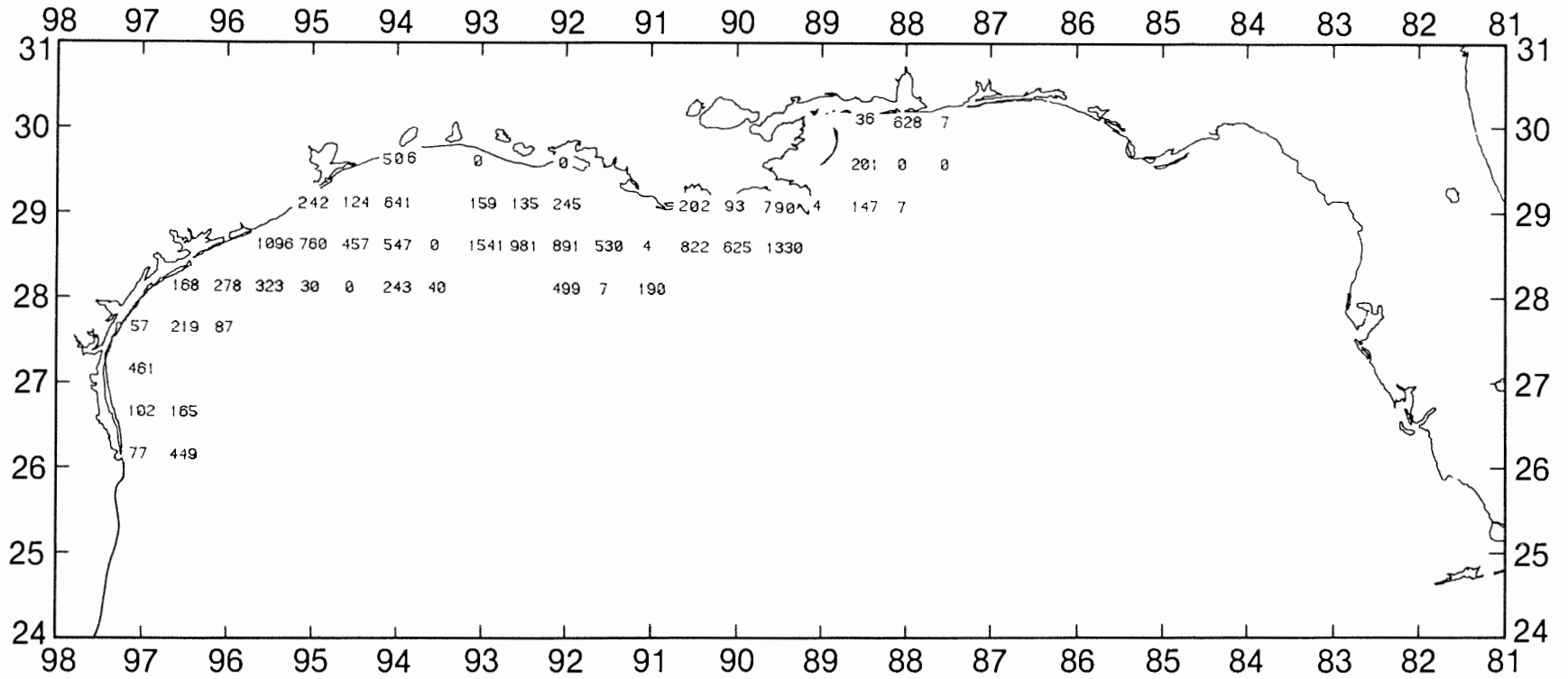


Figure 48. Lesser blue crab, *Callinectes similis*, number/hour for June-July 1985.

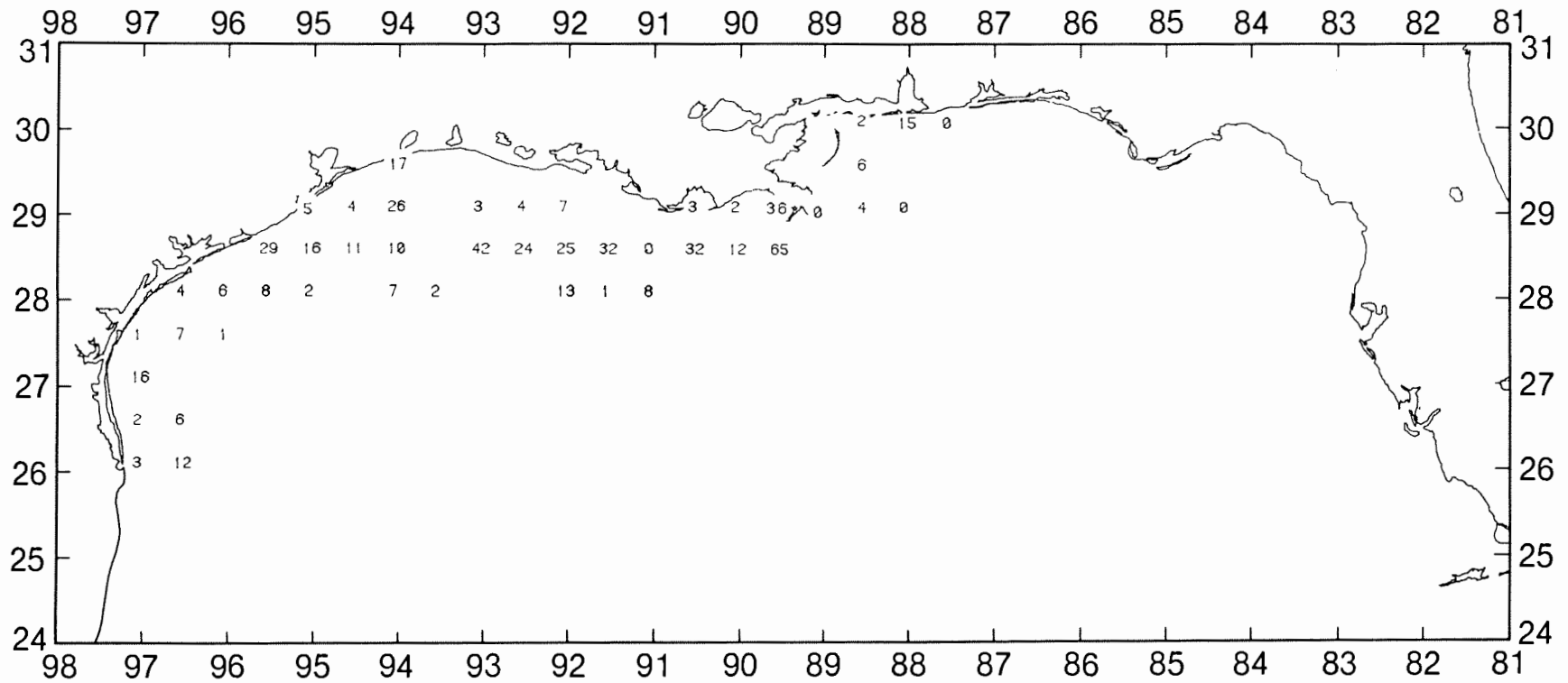


Figure 49. Lesser blue crab, *Callinectes similis*, lb/hour for June-July 1985.

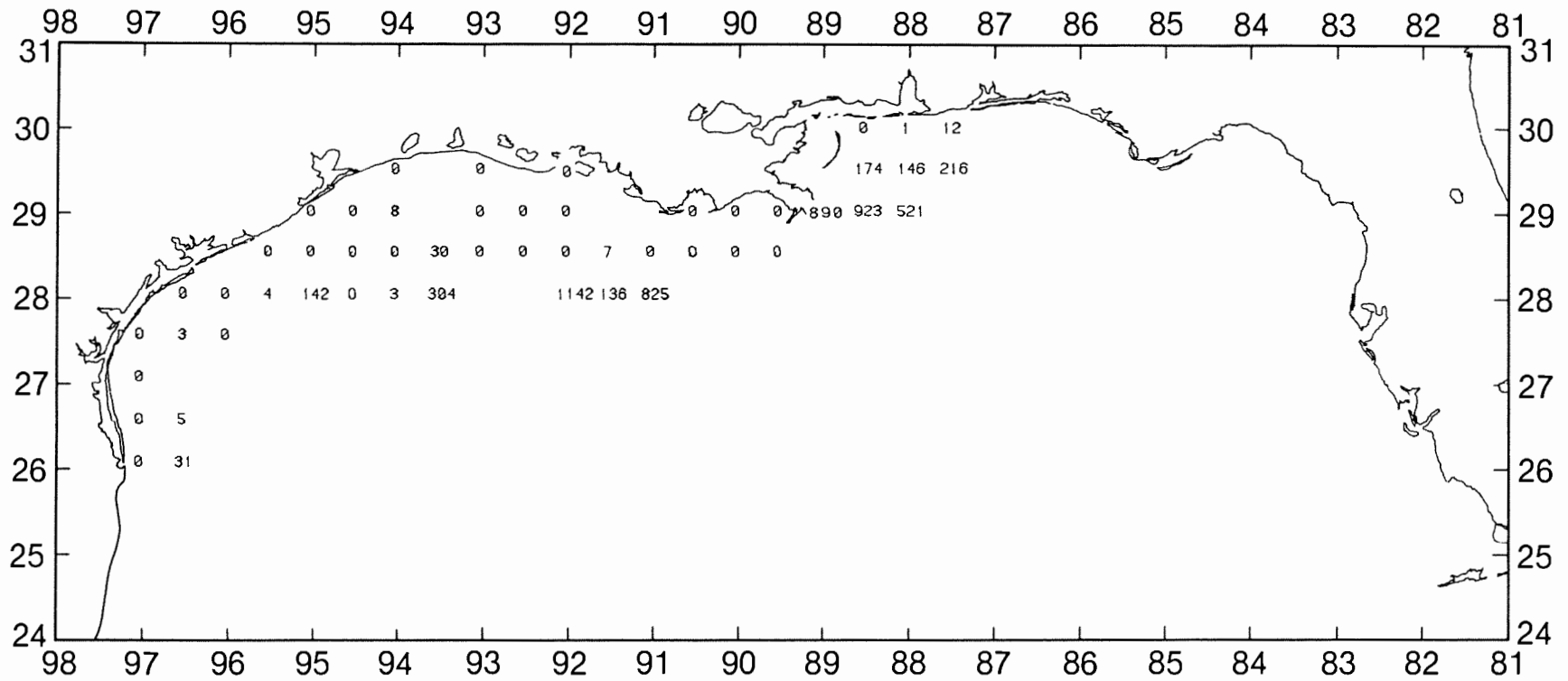


Figure 50. Swimming crab, *Portunus spinicarpus*, number/hour for June-July 1985.

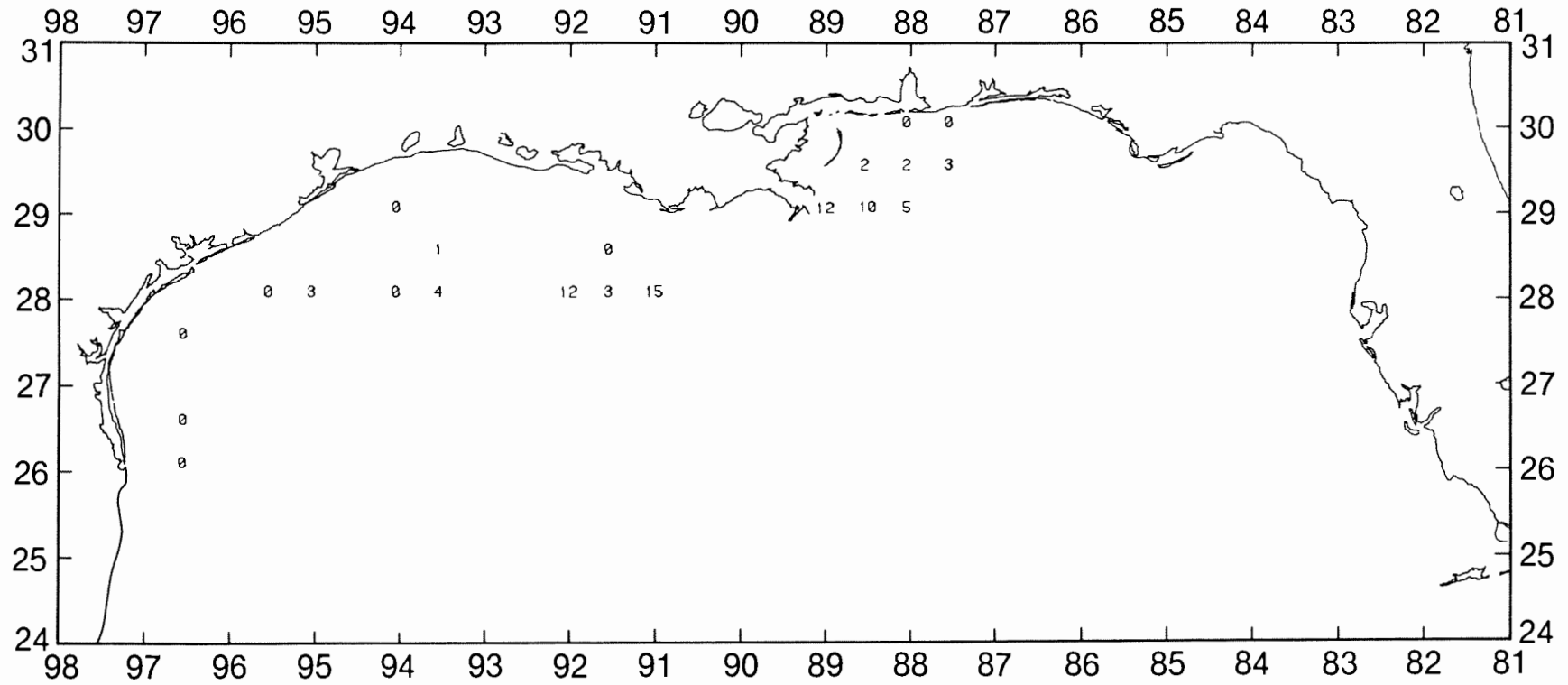


Figure 51. Swimming crab, *Portunus spinicarpus*, lb/hour for June-July 1985.

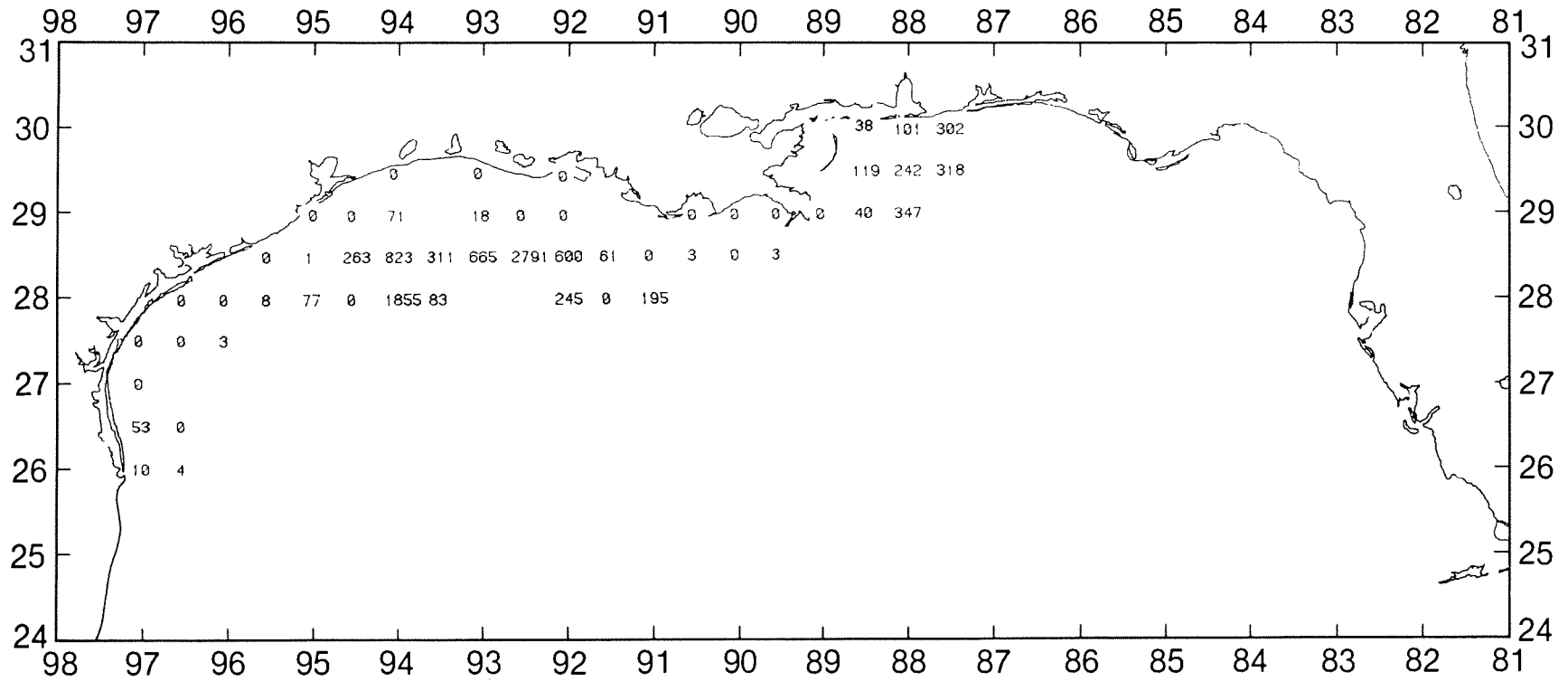


Figure 52. Rock shrimp, *Sicyonia brevirostris*, number/hour for June-July 1985.

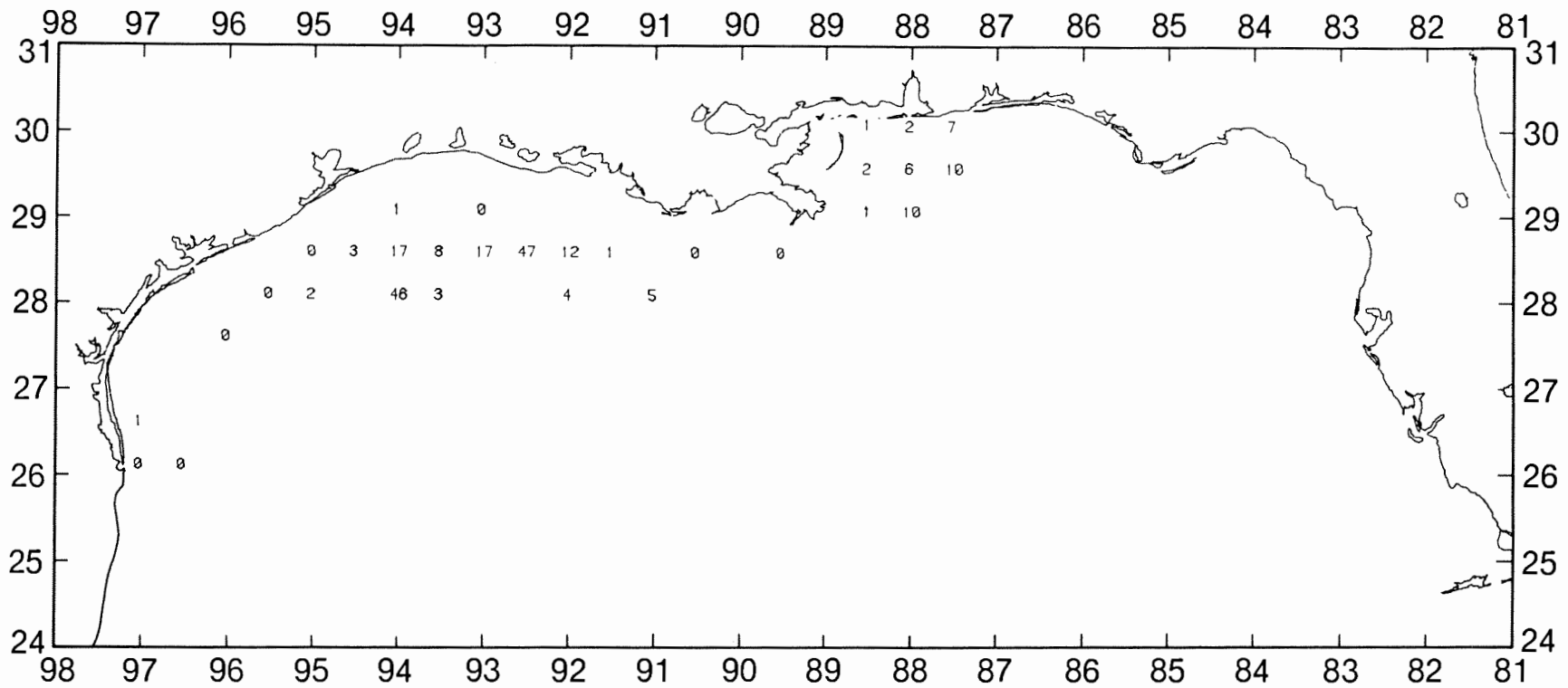


Figure 53. Rock shrimp, *Sicyonia brevirostris*, lb/hour for June-July 1985.

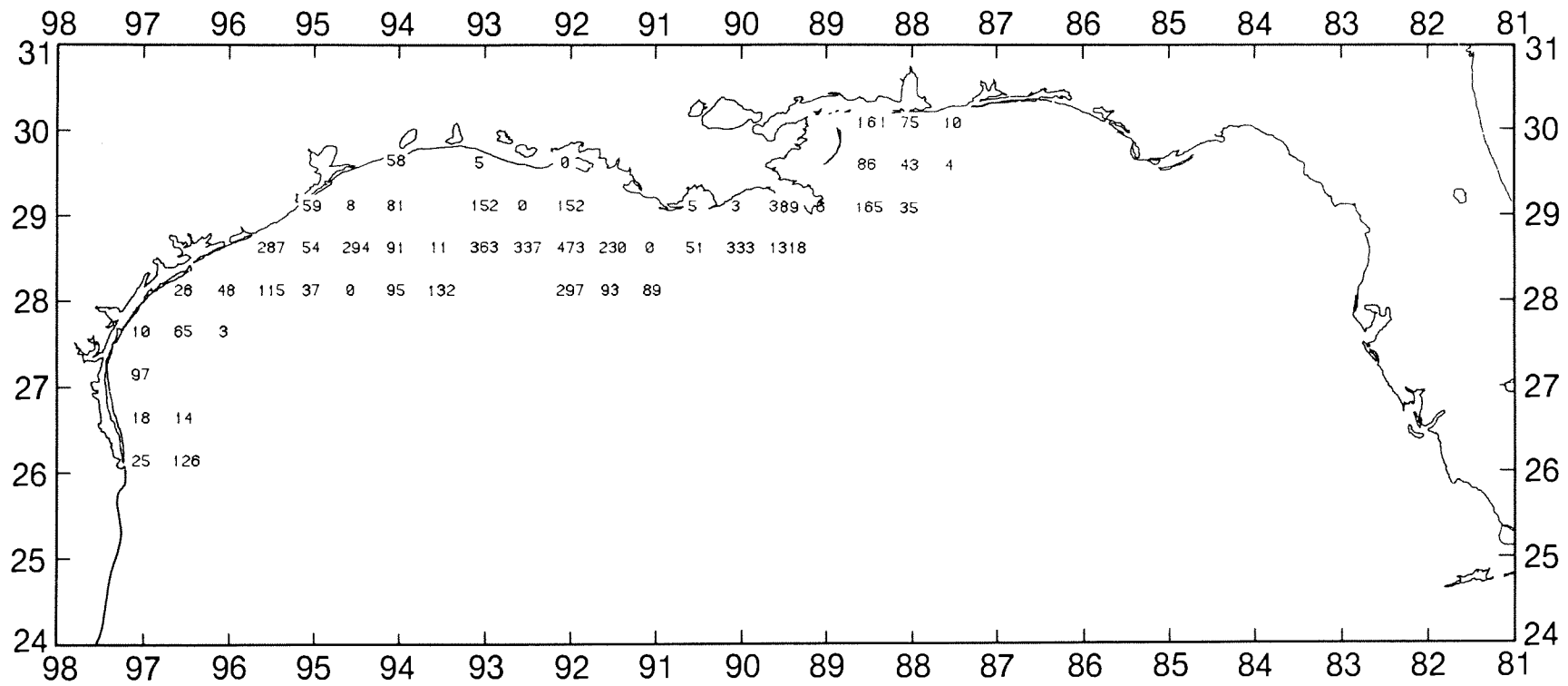


Figure 54. Mantis shrimps, *Squilla* spp., number/hour for June-July 1985.

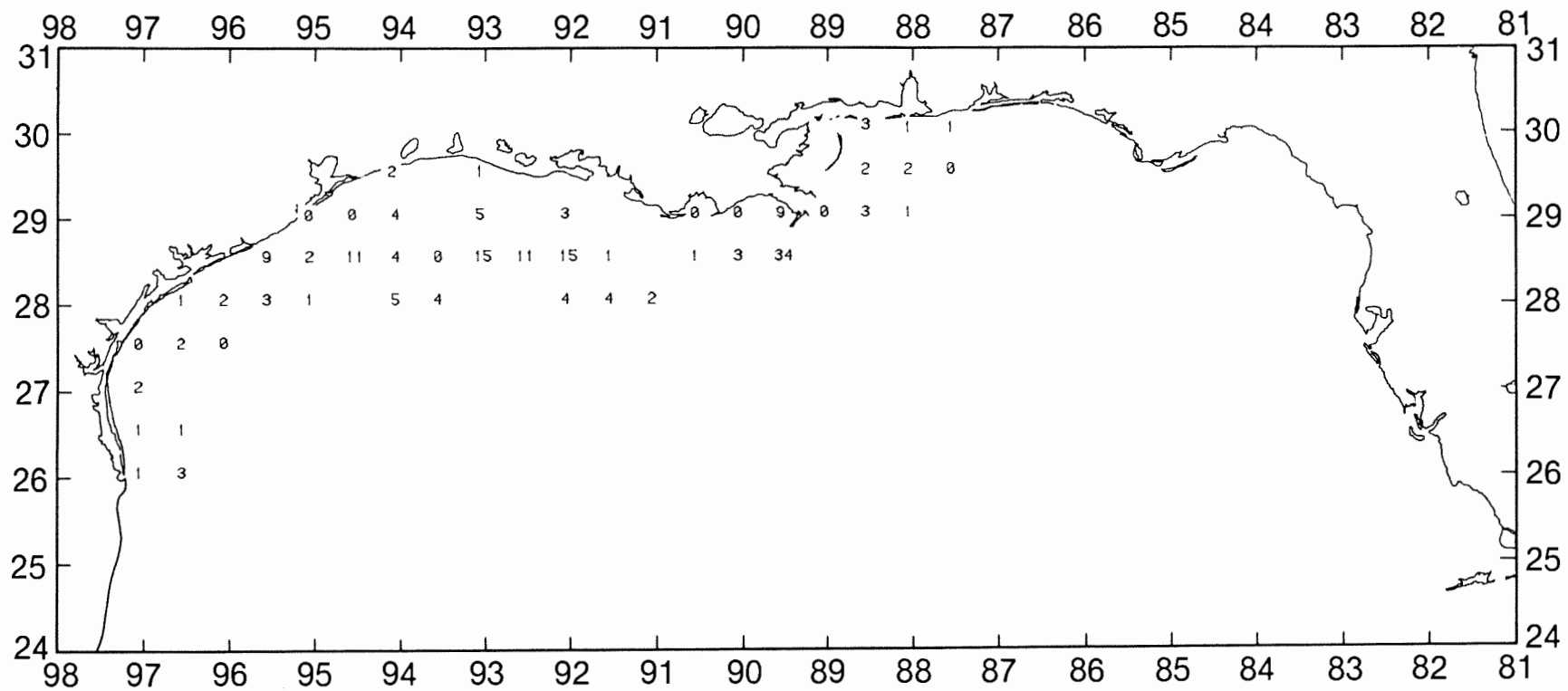


Figure 55. Mantis shrimps, *Squilla* spp., lb/hour for June-July 1985.

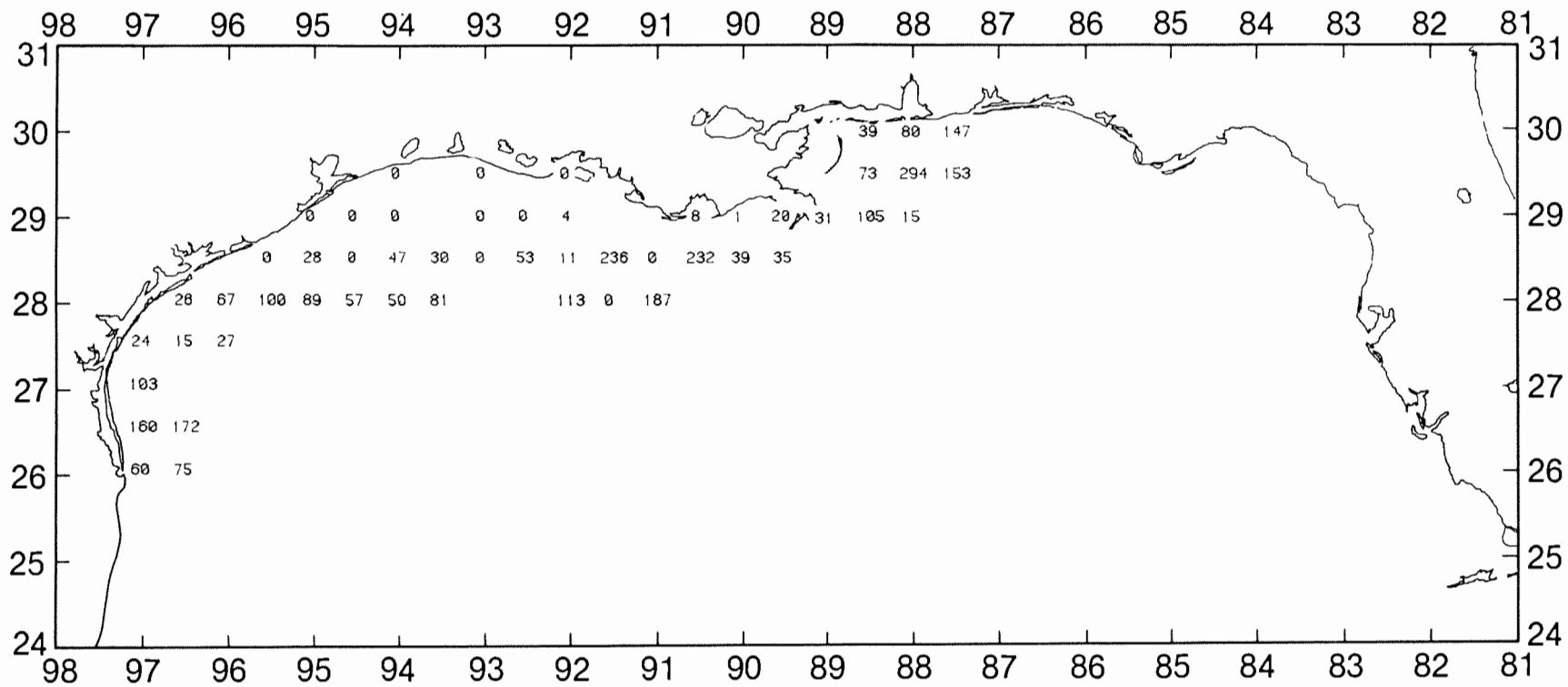


Figure 56. Common squid, *Loligo pealei*, number/hour for June-July 1985.

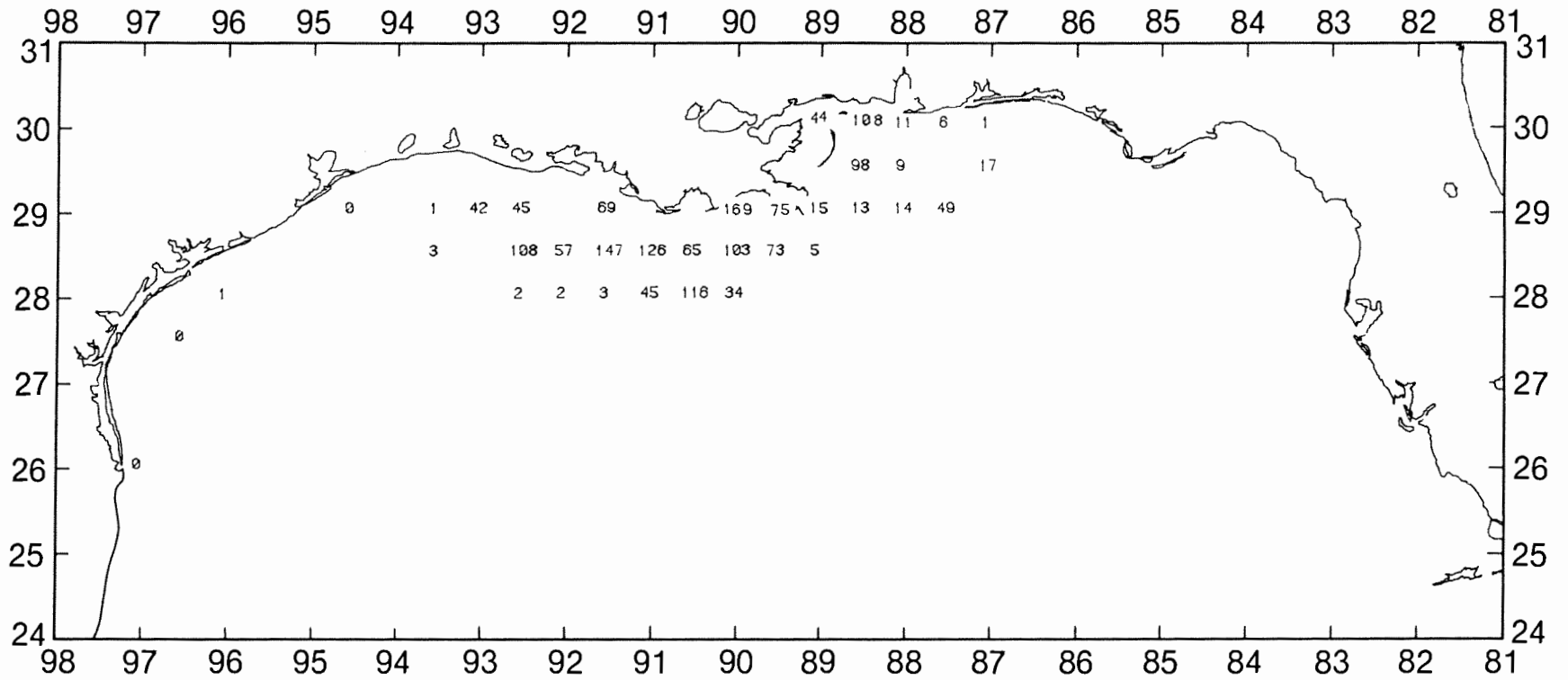


Figure 59. Atlantic croaker, *Micropogonias undulatus*, lb/hour for September-December 1985.

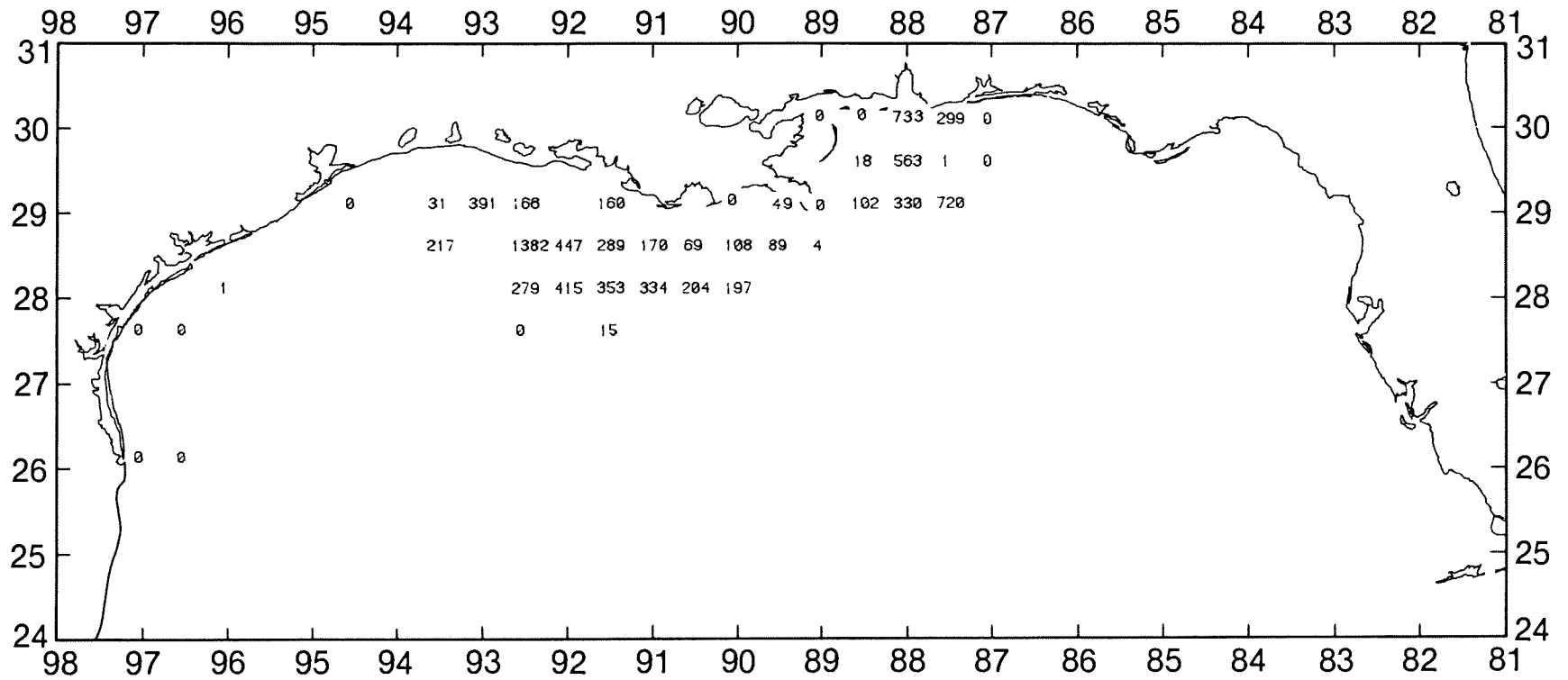


Figure 60. Longspine pogy, *Stenotomus caprinus*, number/hour for September-December 1985.

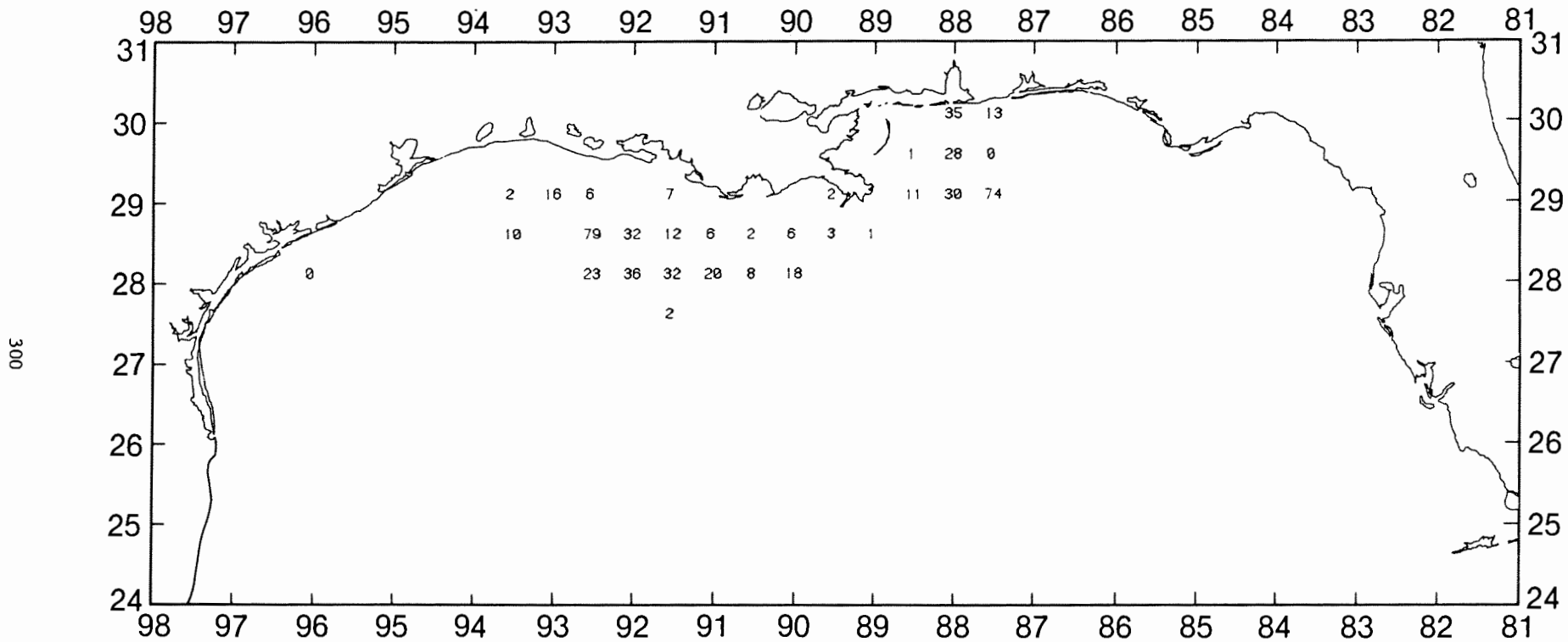


Figure 61. Longspine pogy, *Stenotomus caprinus*, lb/hour for September-December 1985.

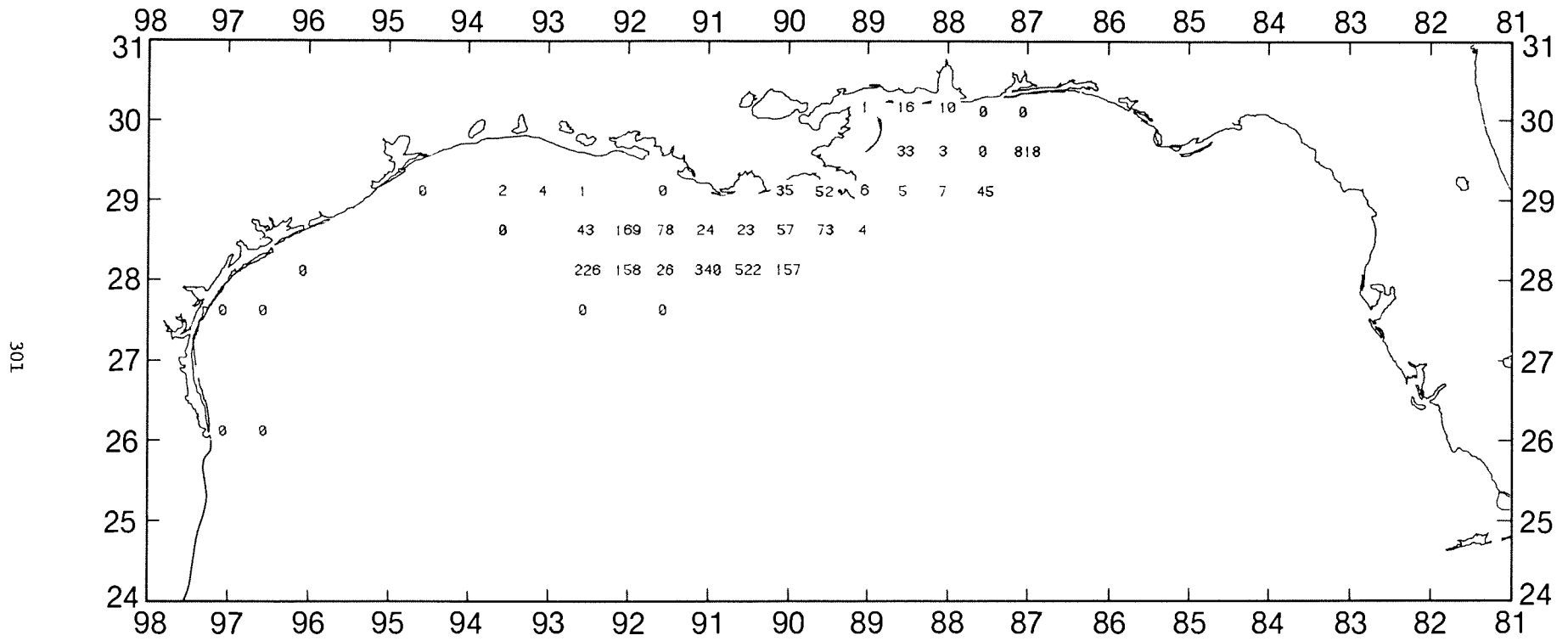


Figure 62. Spot, *Leiostomus xanthurus*, number/hour for September-December 1985.

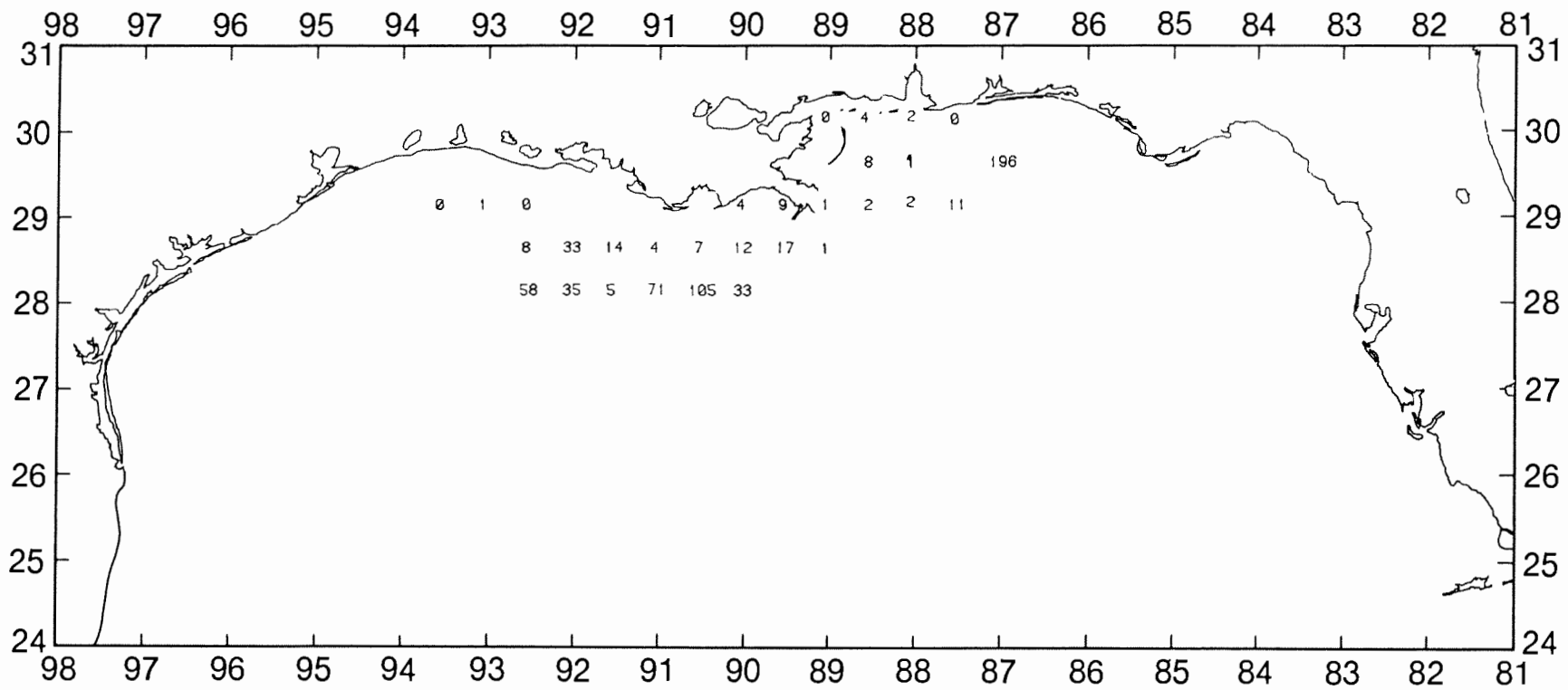


Figure 63. Spot, *Leiostomus xanthurus*, lb/hour for September-December 1985.

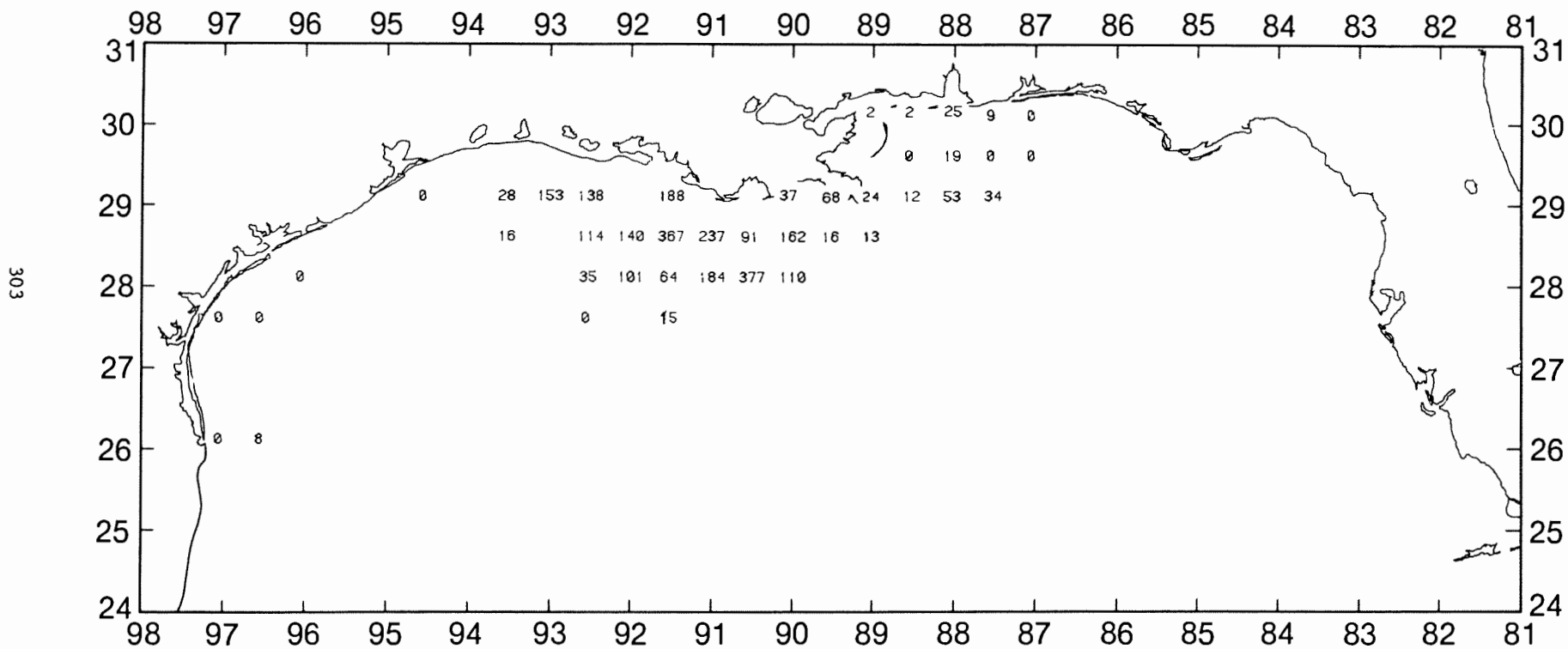


Figure 64. Blackfin searobin, Prionotus rubio, number/hour for September-December 1985.

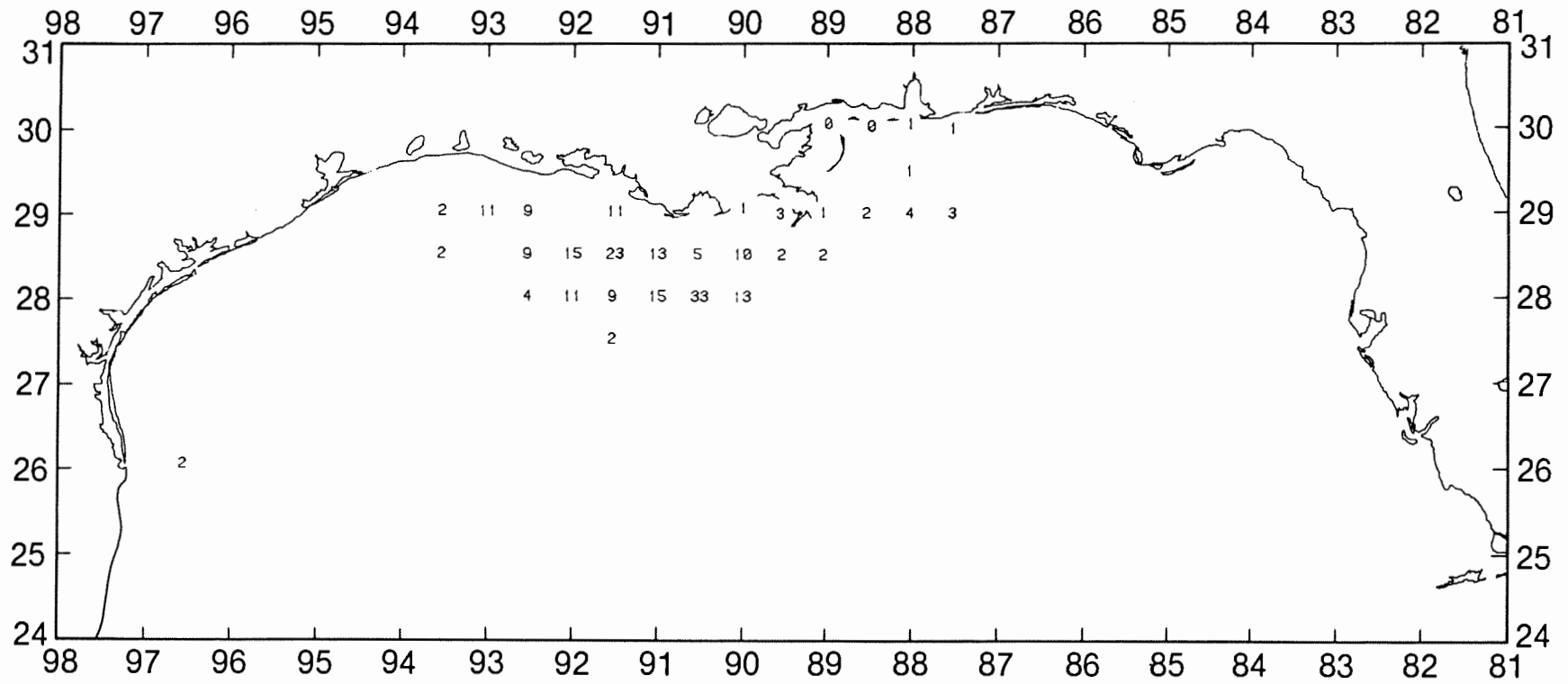


Figure 65. Blackfin searobin, *Prionotus rubio*, lb/hour for September-December 1985.

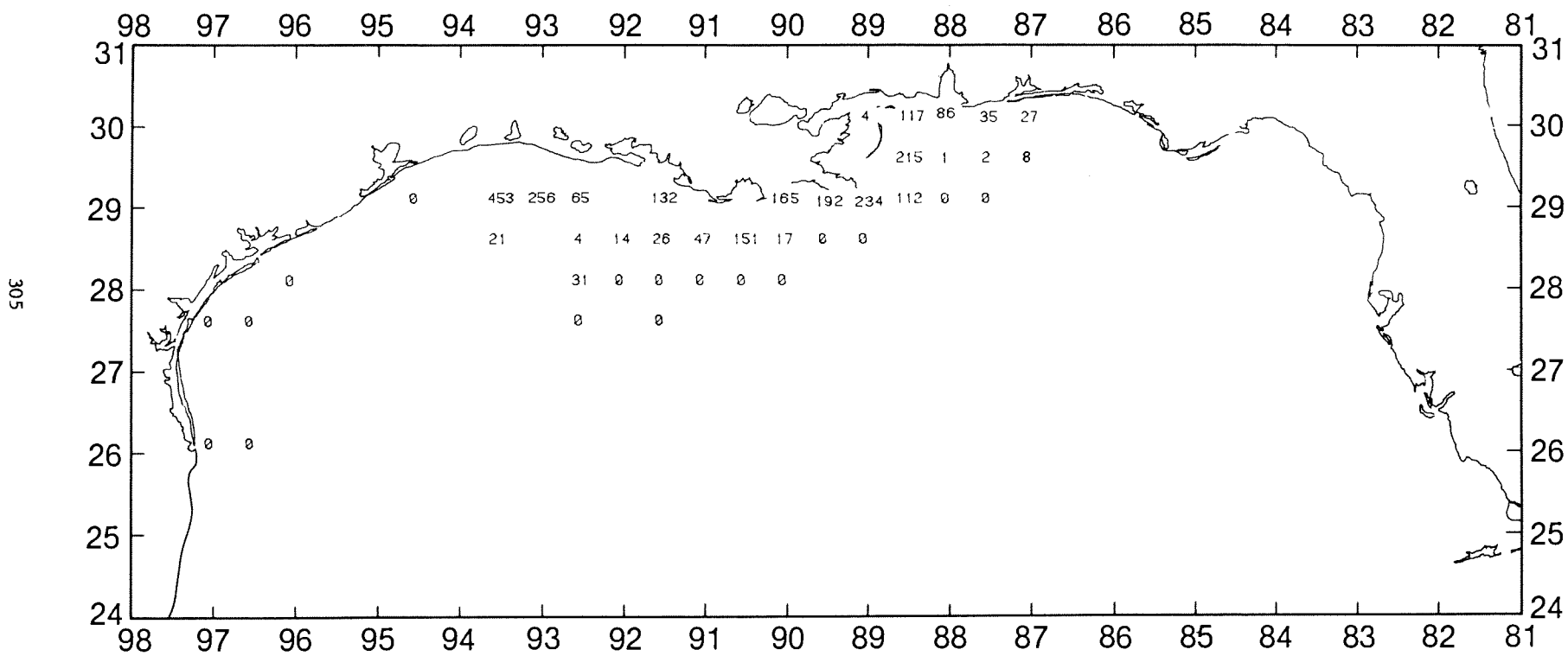


Figure 66. Sea catfish, Arius felis, number/hour for September-December 1985.

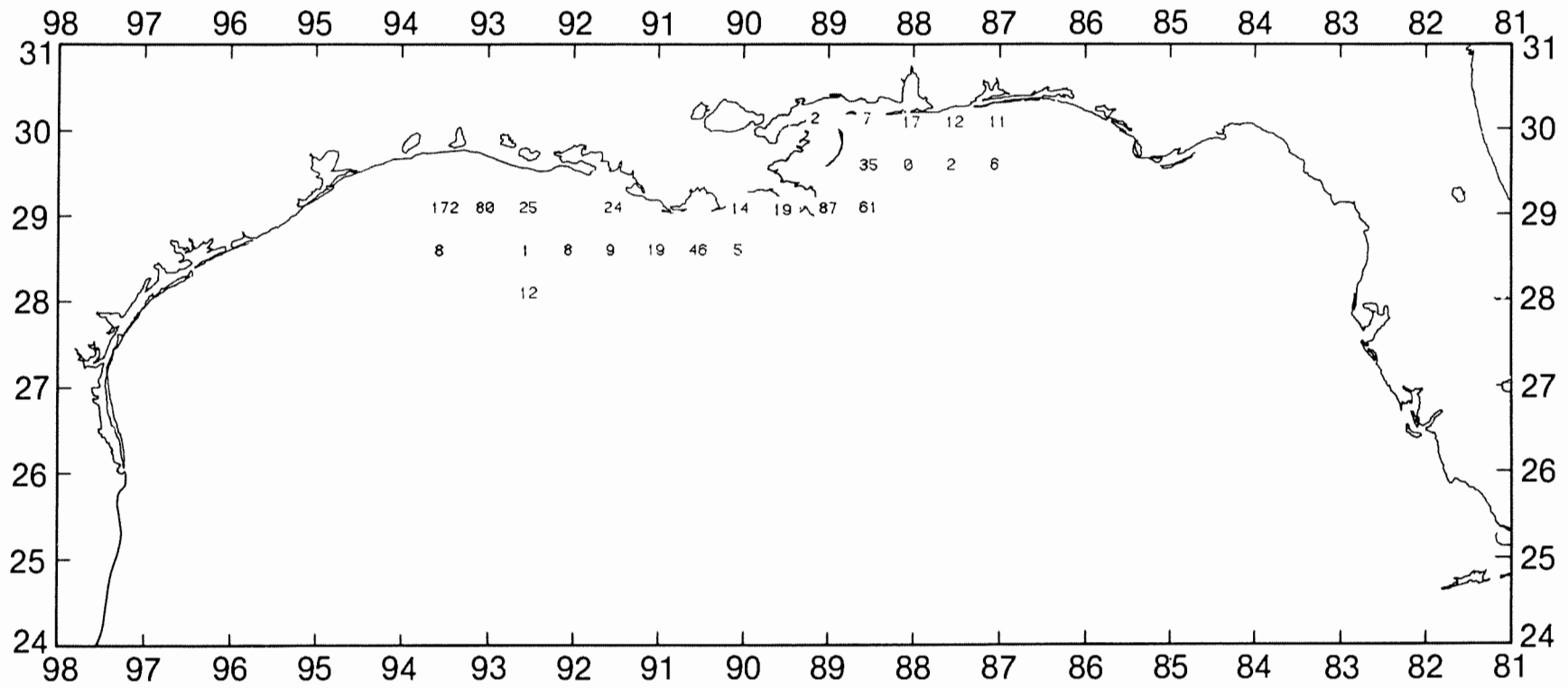


Figure 67. Sea catfish, *Arius felis*, lb/hour for September-December 1985.

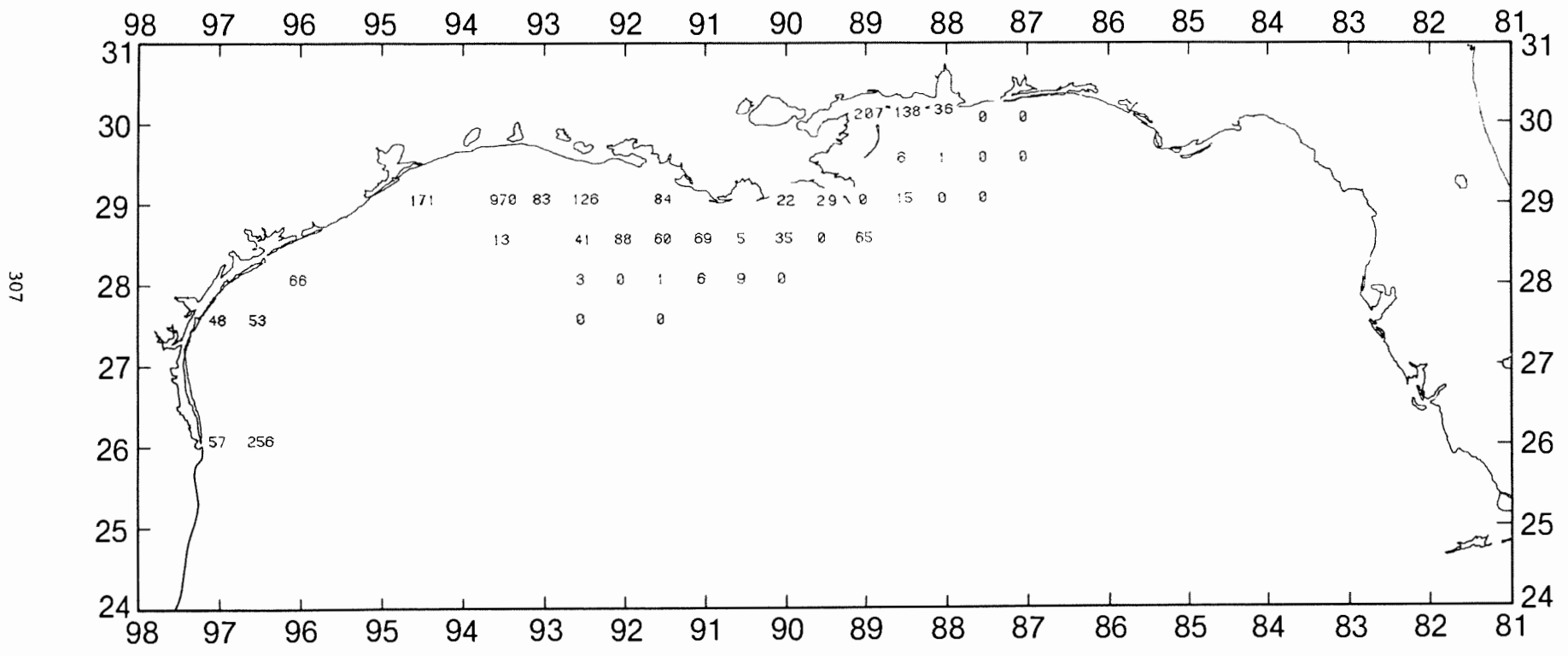


Figure 68. Silver seatrout, *Cynoscion nothus*, number/hour for September-December 1985.

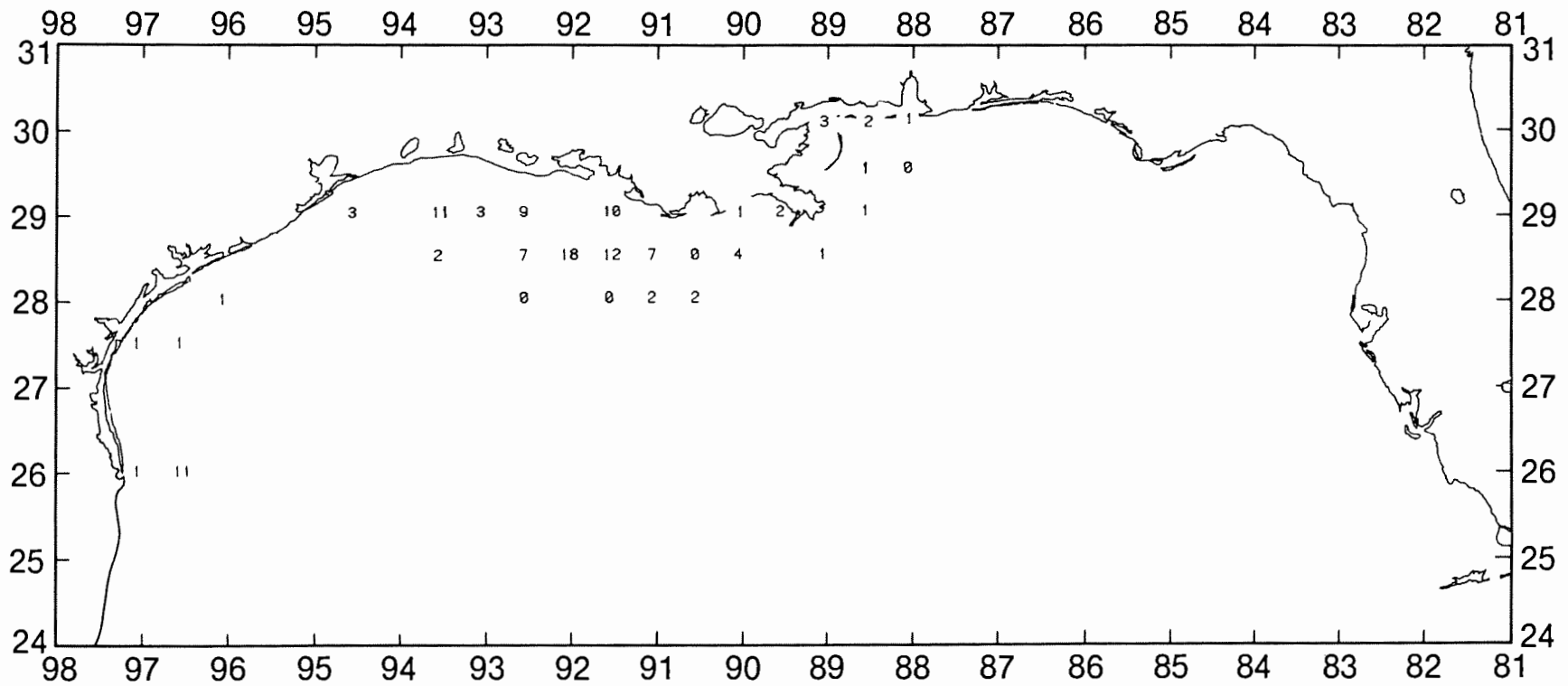


Figure 69. Silver seatrout, *Cynoscion nothus*, lb/hour for September-December 1985.

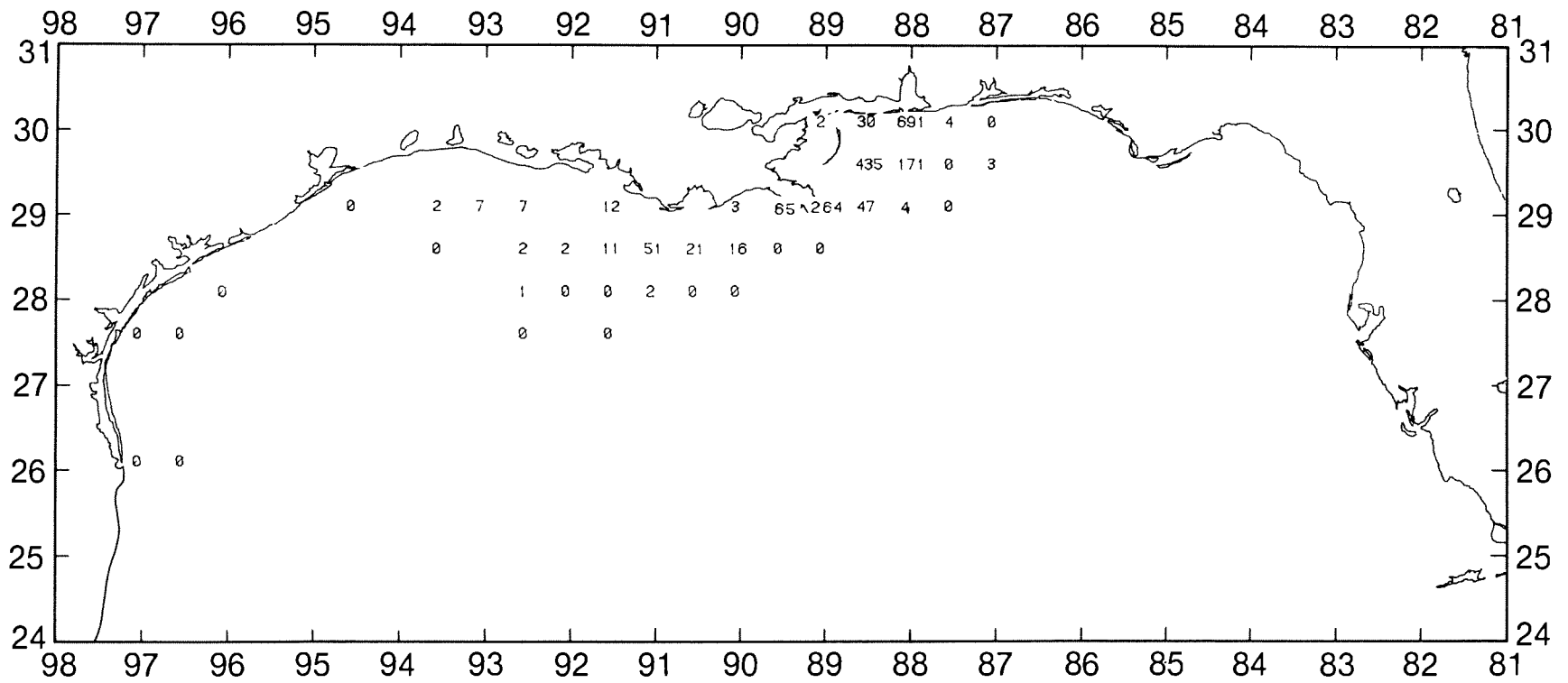


Figure 70. Atlantic bumper, *Chloroscombrus chrysurus*, number/hour for September-December 1985.

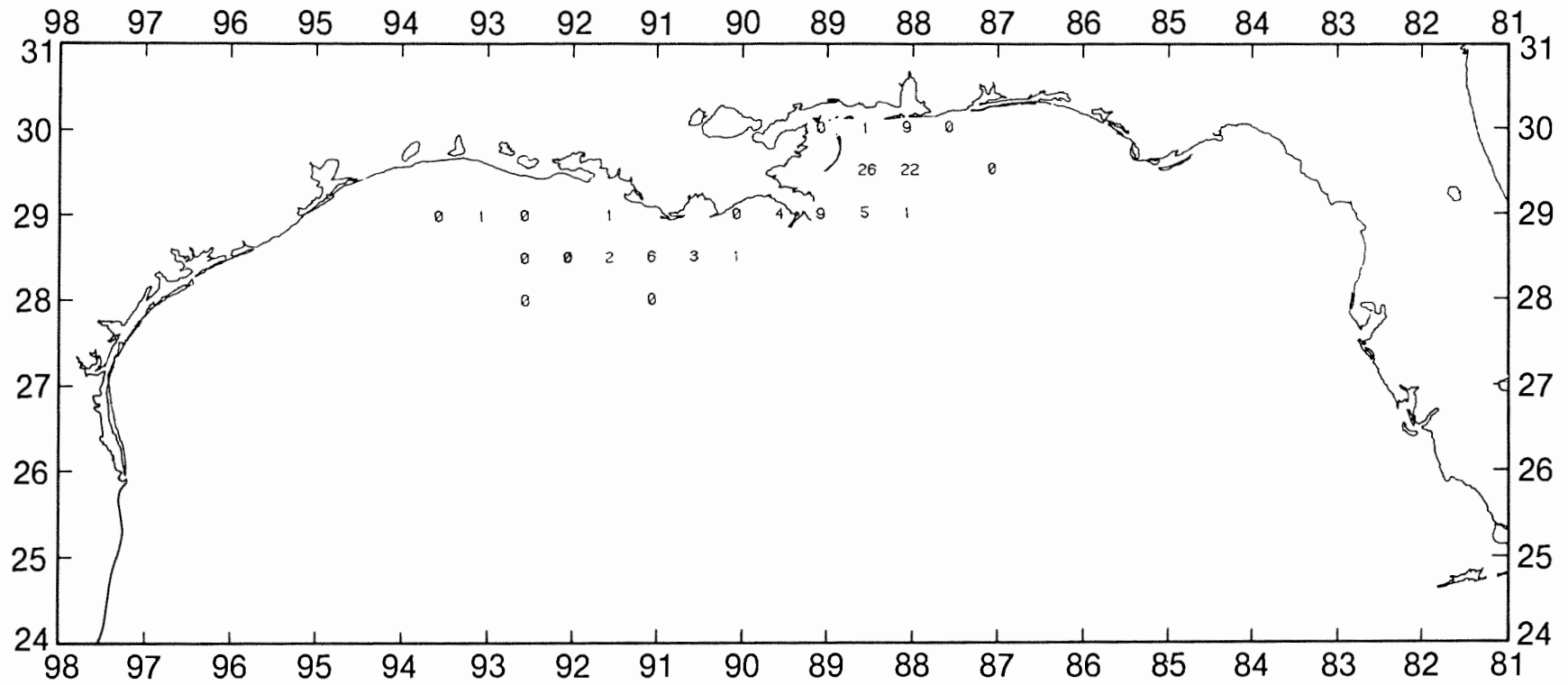


Figure 71. Atlantic bumper, *Chloroscombrus chrysurus*, lb/hour for September-December 1985.

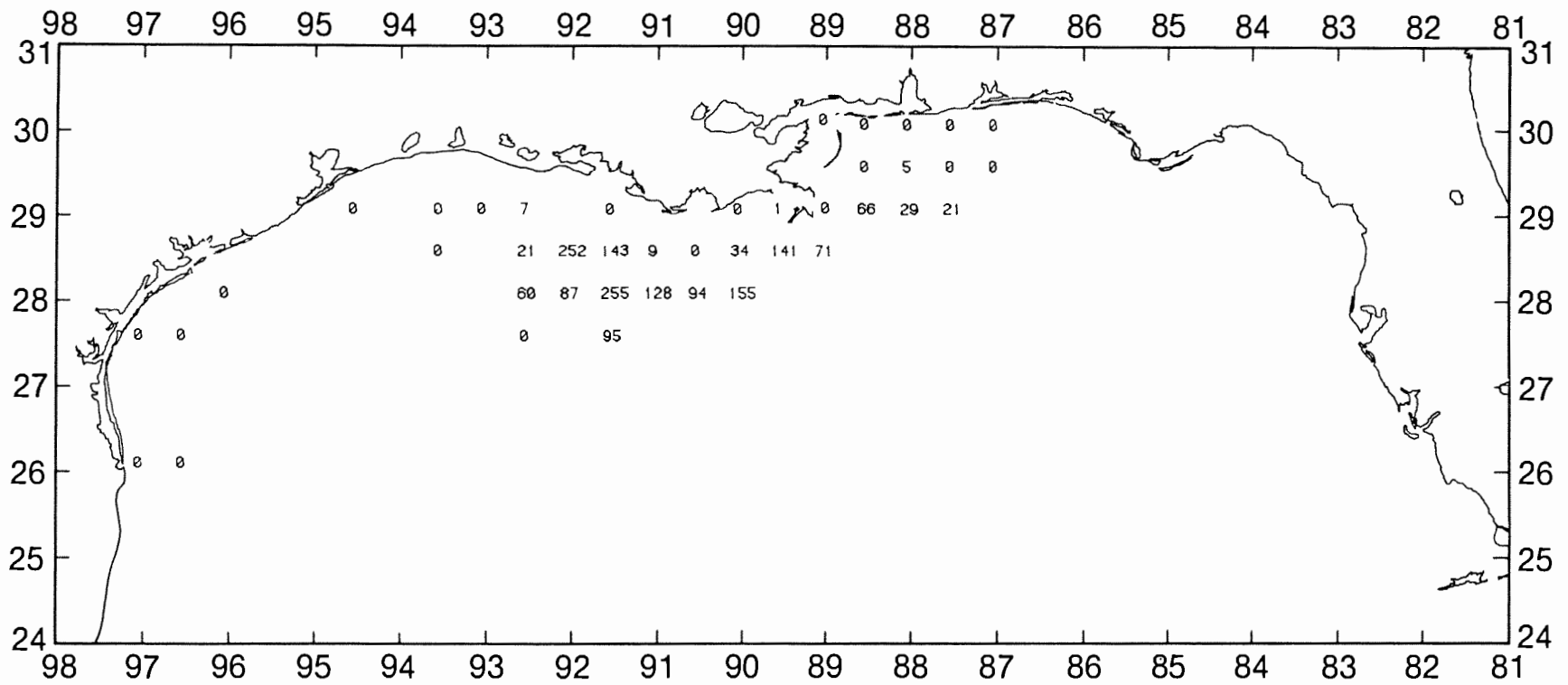


Figure 72. Blackear bass, *Serranus atrobranchus*, number/hour for September-December 1985.

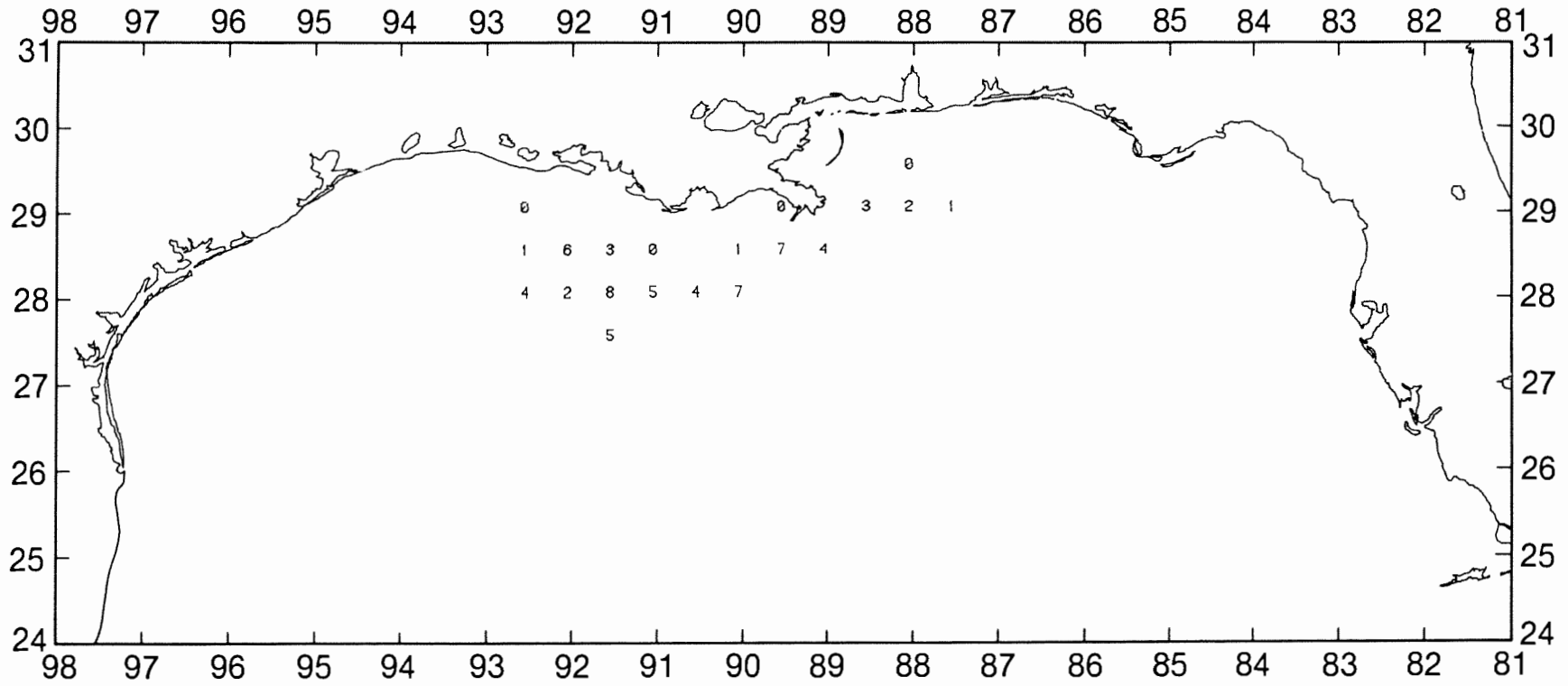


Figure 73. Blackear bass, *Serranus atrobranchus*, lb/hour for September-December 1985.

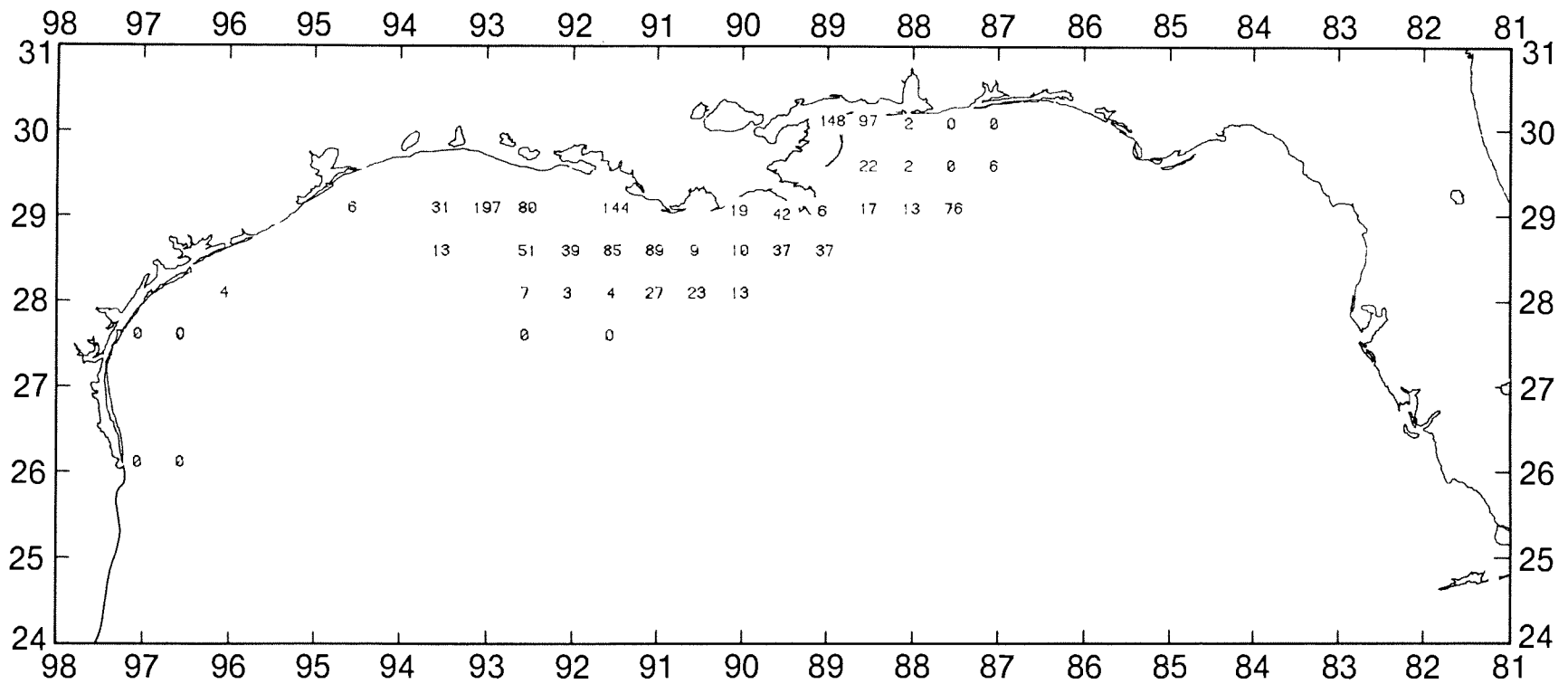


Figure 74. Sand seatrout, *Cynoscion arenarius*, number/hour for September-December 1985.

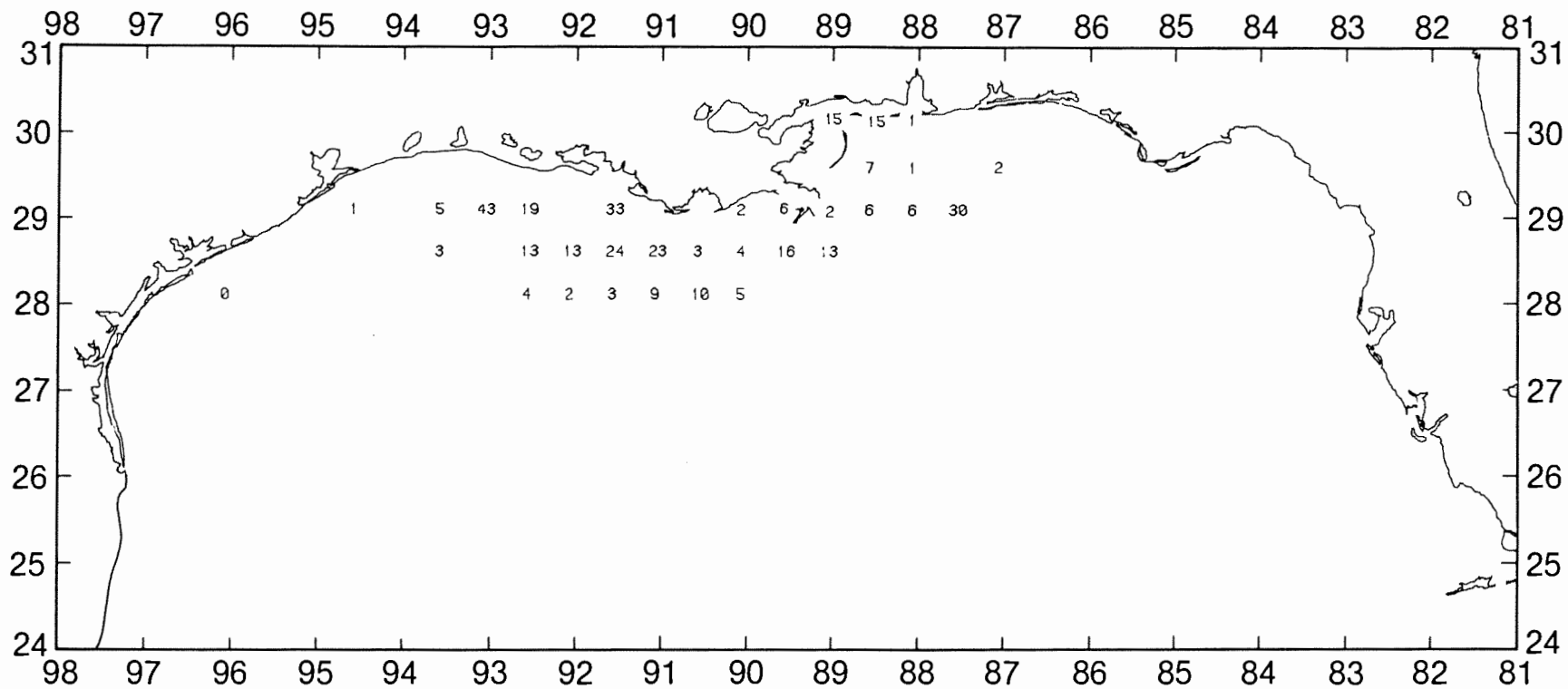


Figure 75. Sand seatrout, *Cynoscion arenarius*, lb/hour for September-December 1985.

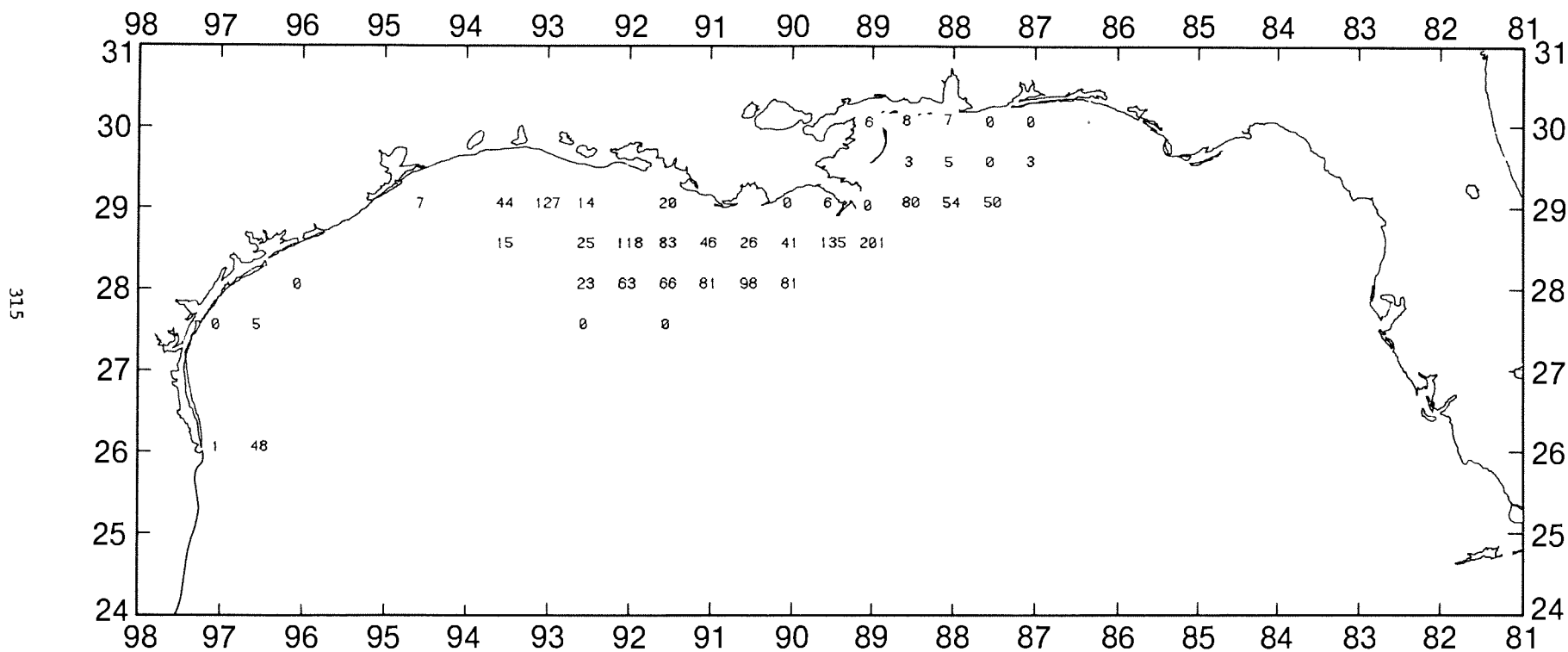


Figure 76. Rock sea bass, *Centropristis philadelphica*, number/hour for September-December 1985.

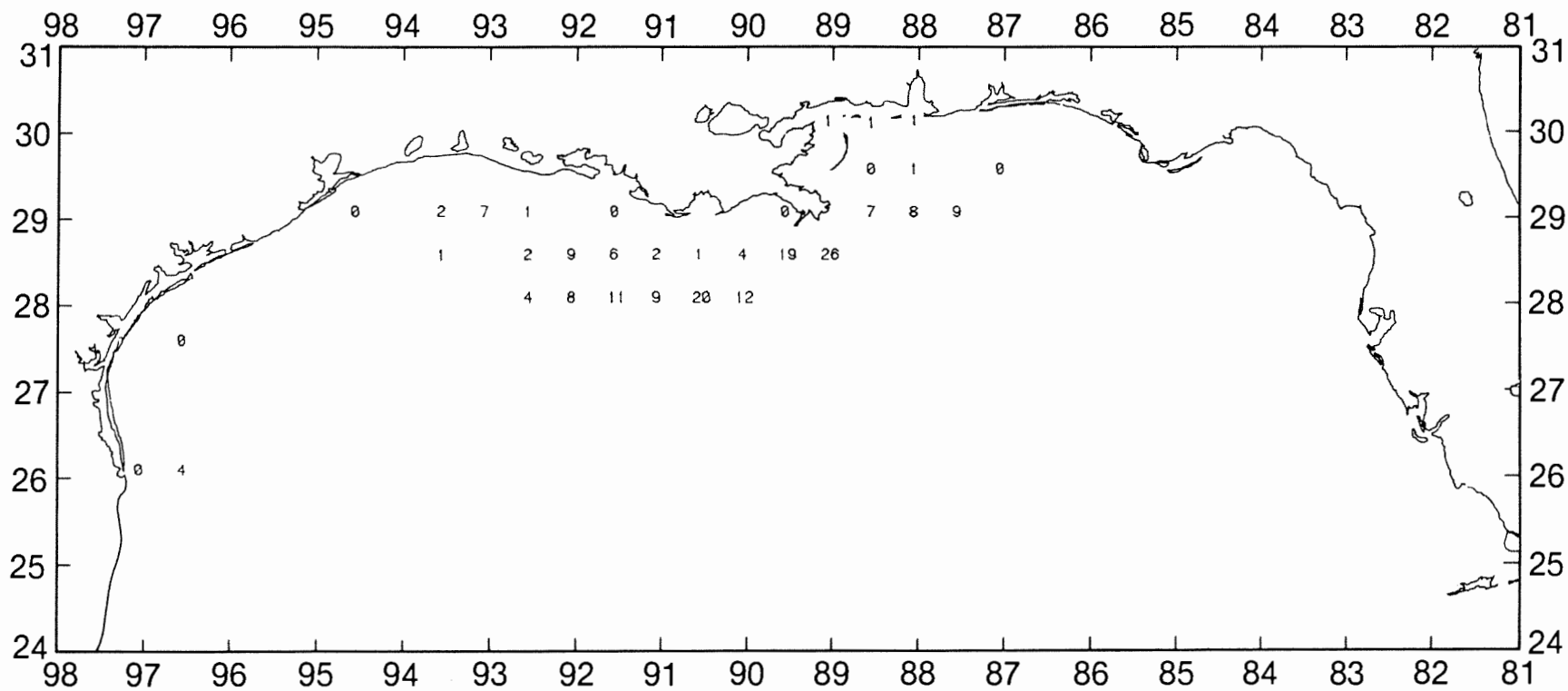


Figure 77. Rock sea bass, *Centropristis philadelphica*, lb/hour for September-December 1985.

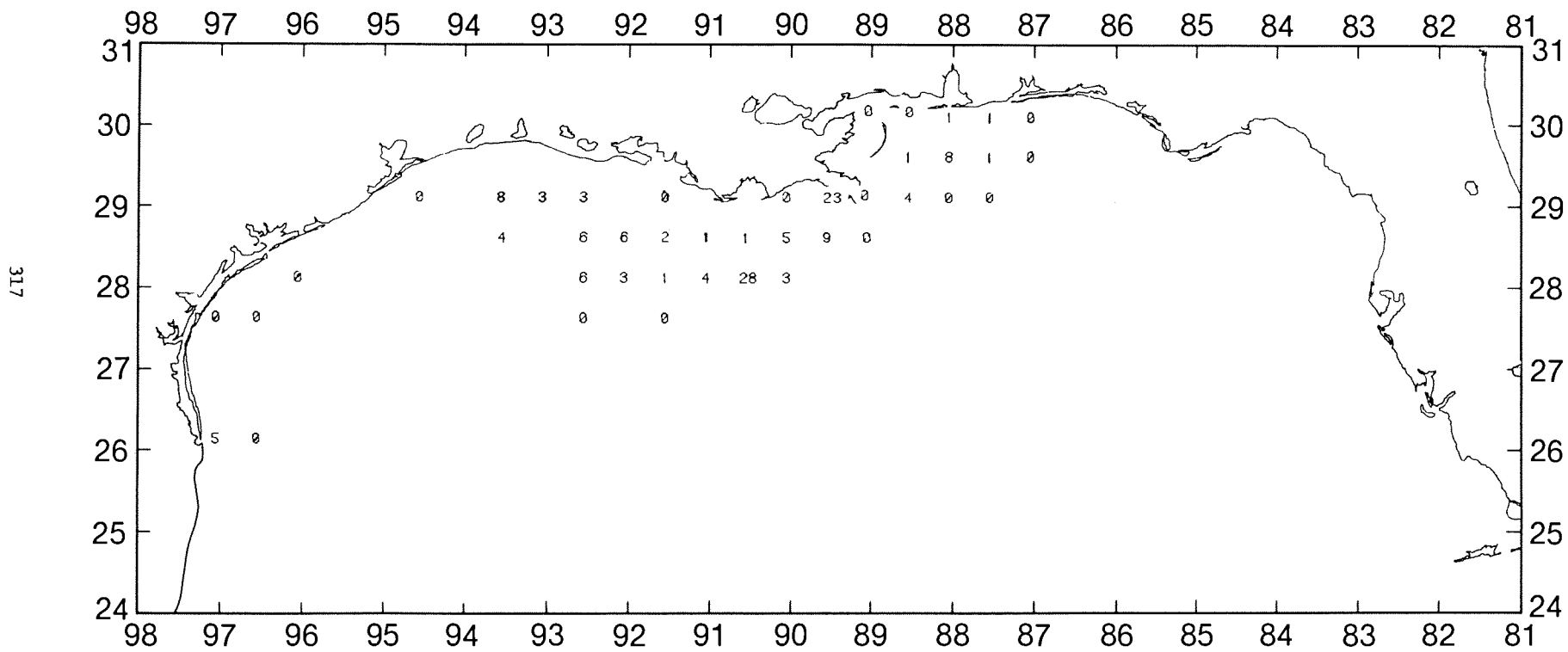


Figure 78. Red snapper, Lutjanus campechanus, number/hour for September-December 1985.

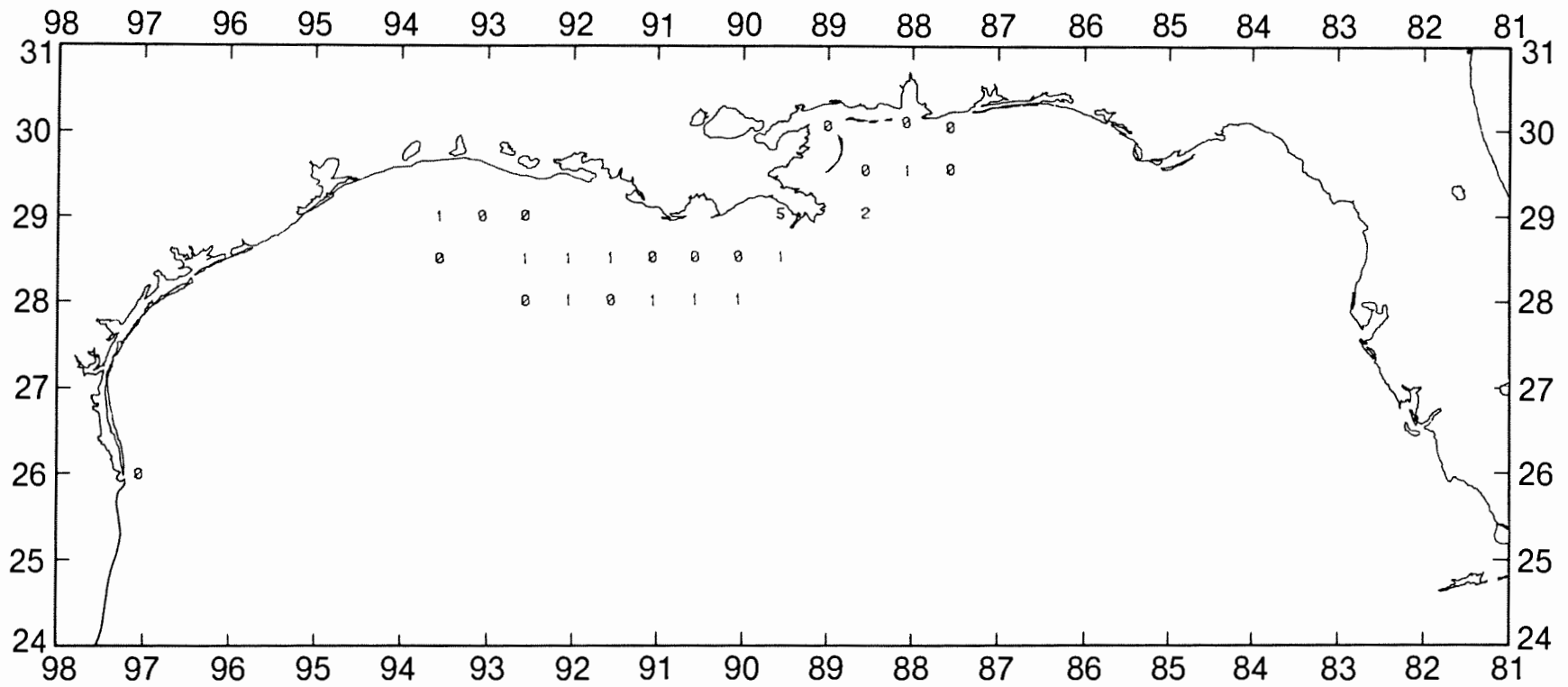


Figure 79. Red snapper, Lutjanus campechanus, lb/hour for September-December 1985.

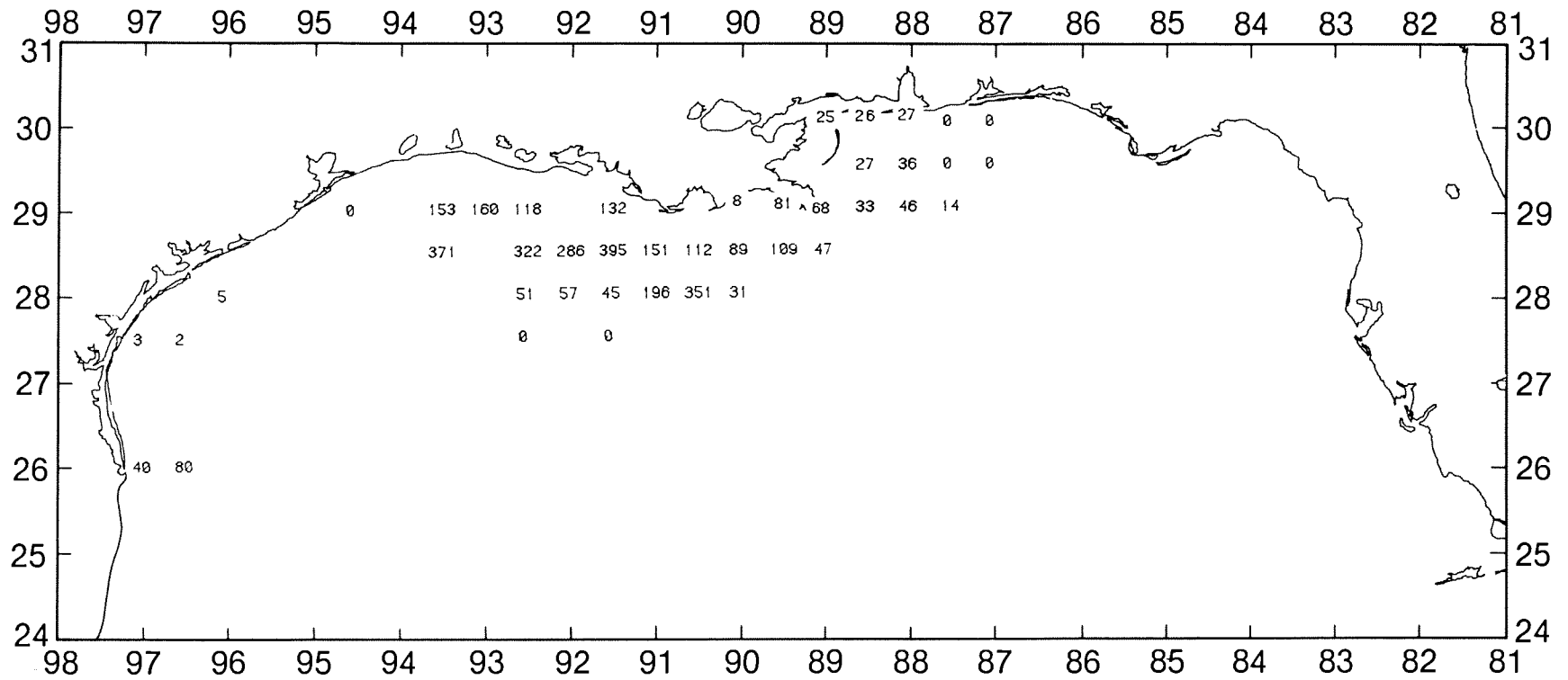


Figure 80. Brown shrimp, *Penaeus aztecus*, number/hour for September-December 1985.

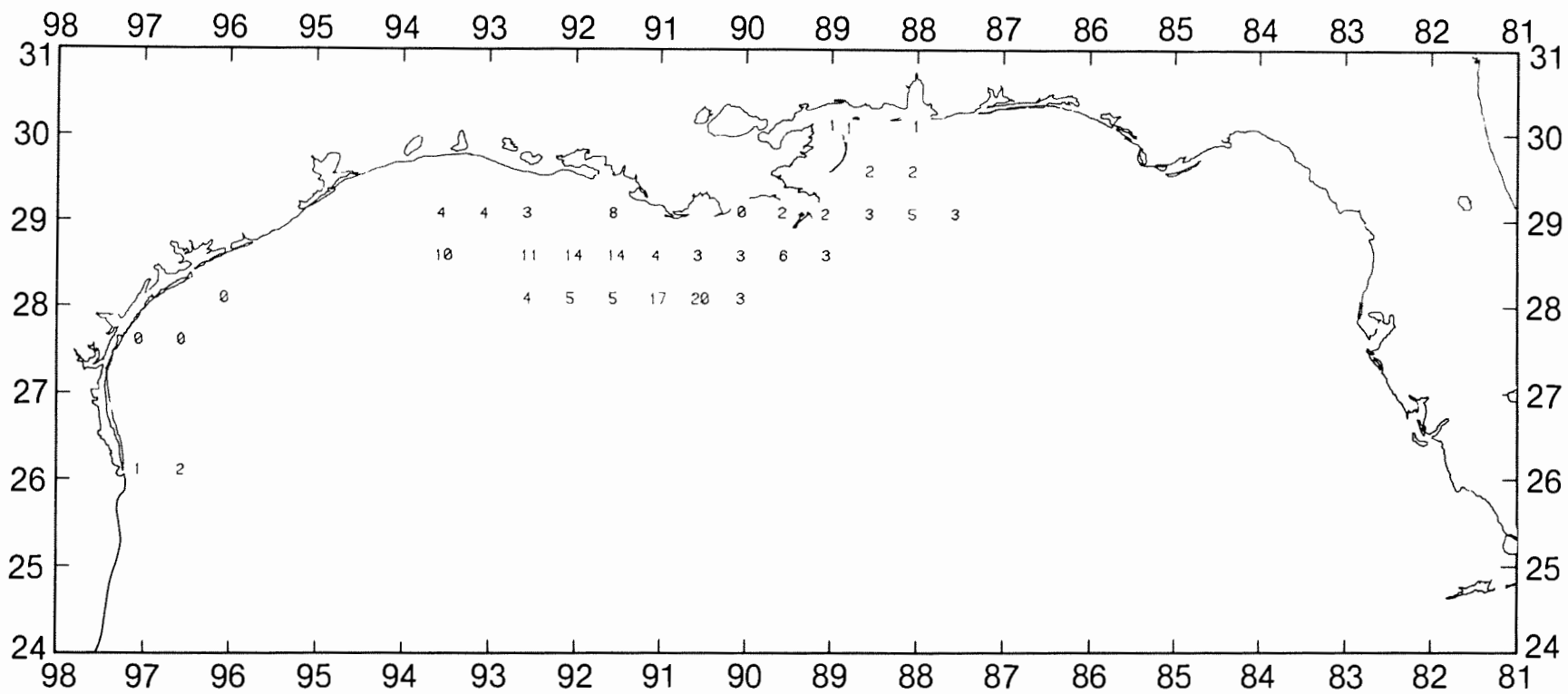


Figure 81. Brown shrimp, *Penaeus aztecus*, lb/hour for September-December 1985.

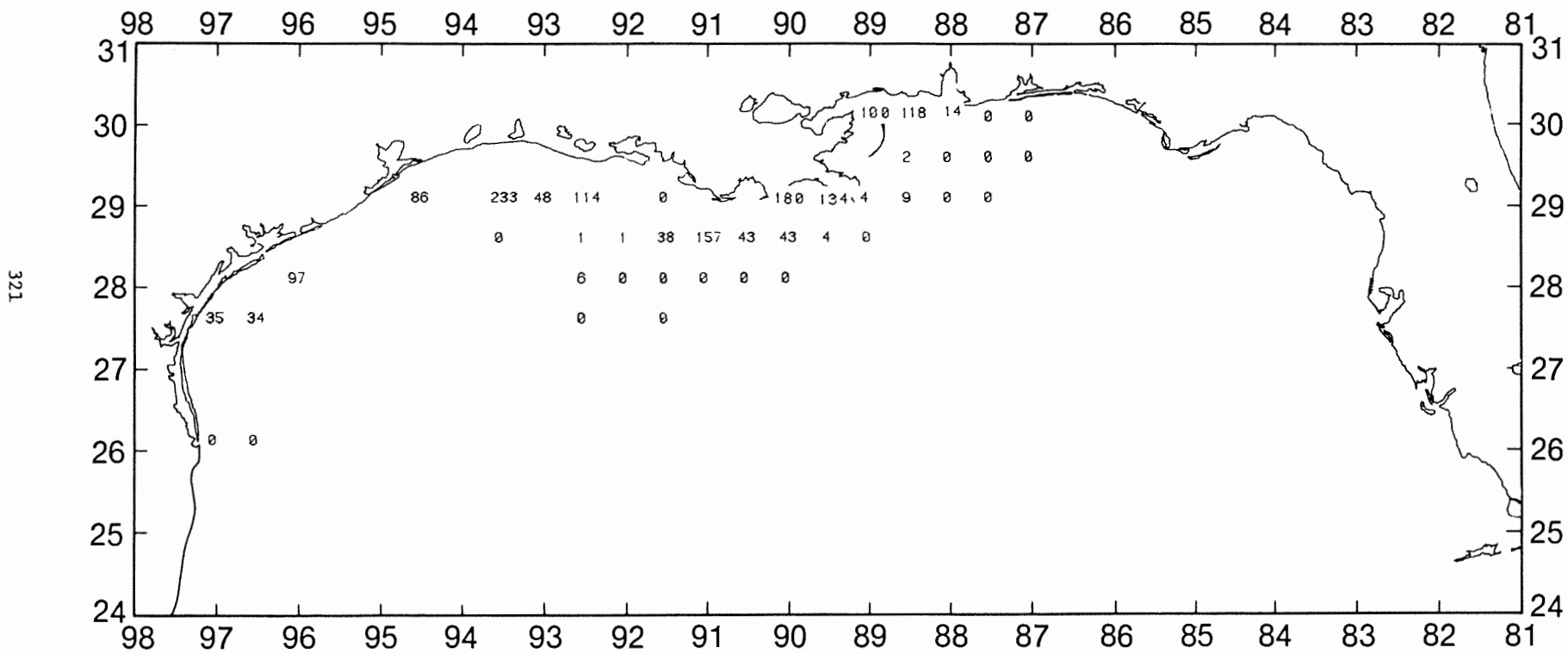


Figure 82. White shrimp, *Penaeus setiferus*, number/hour for September-December 1985.

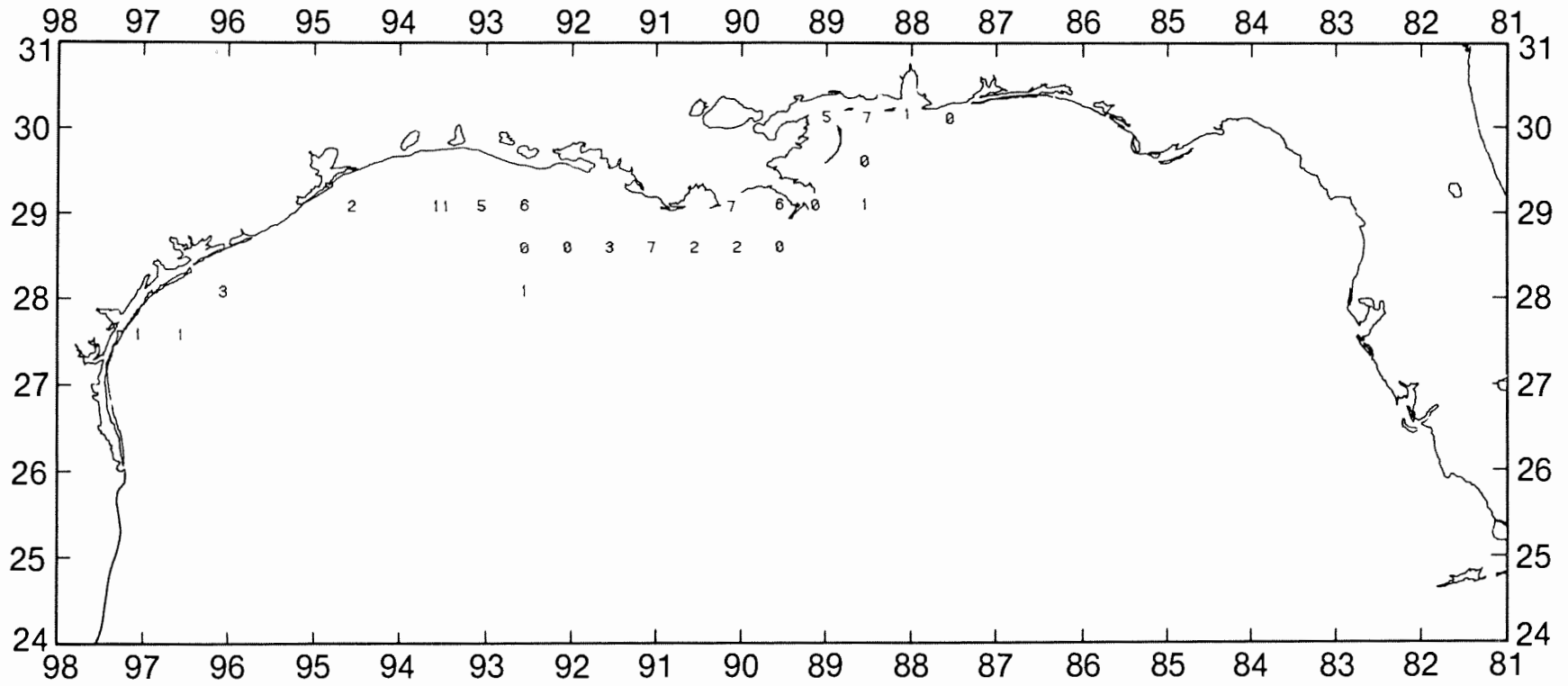


Figure 83. White shrimp, *Penaeus setiferus*, lb/hour for September-December 1985.

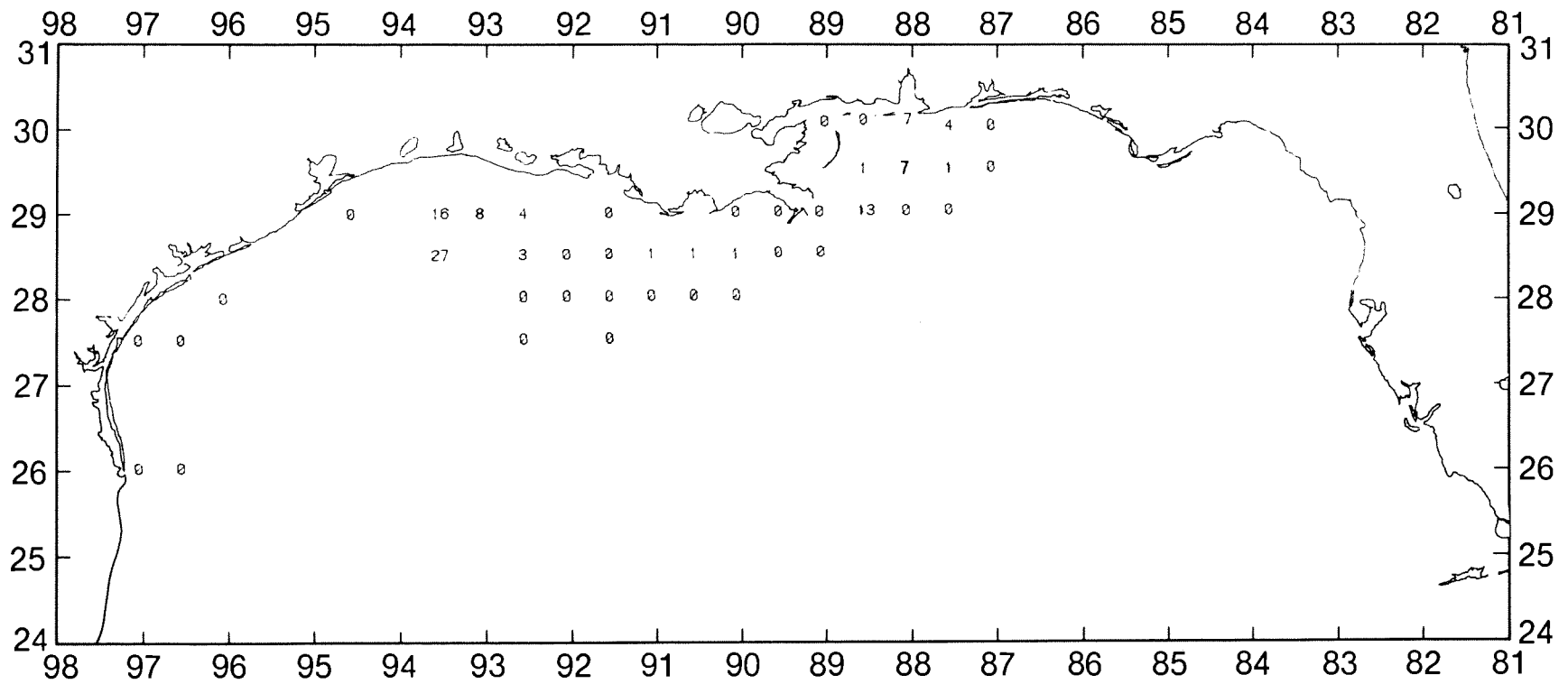


Figure 84. Pink shrimp, *Penaeus duorarum*, number/hour for September-December 1985.

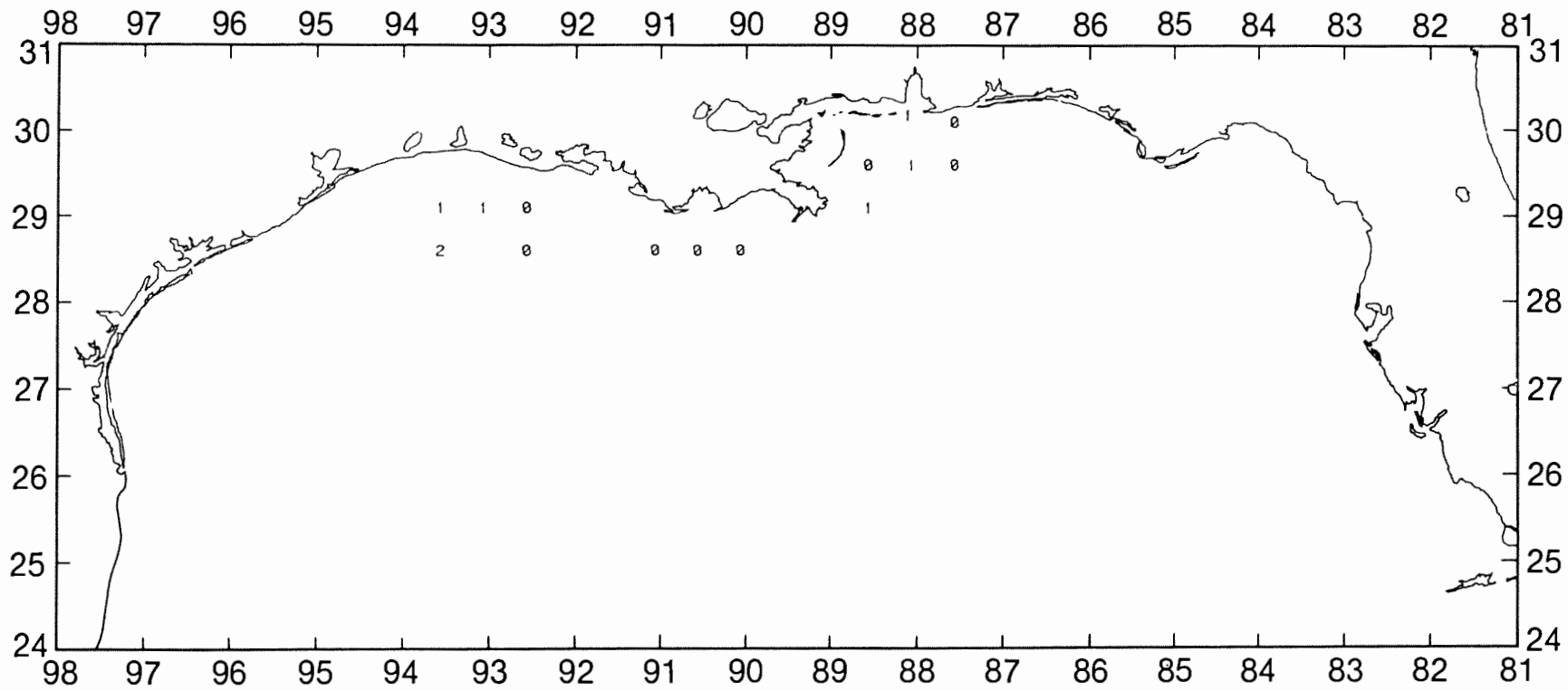


Figure 85. Pink shrimp, *Penaeus duorarum*, lb/hour for September-December 1985.

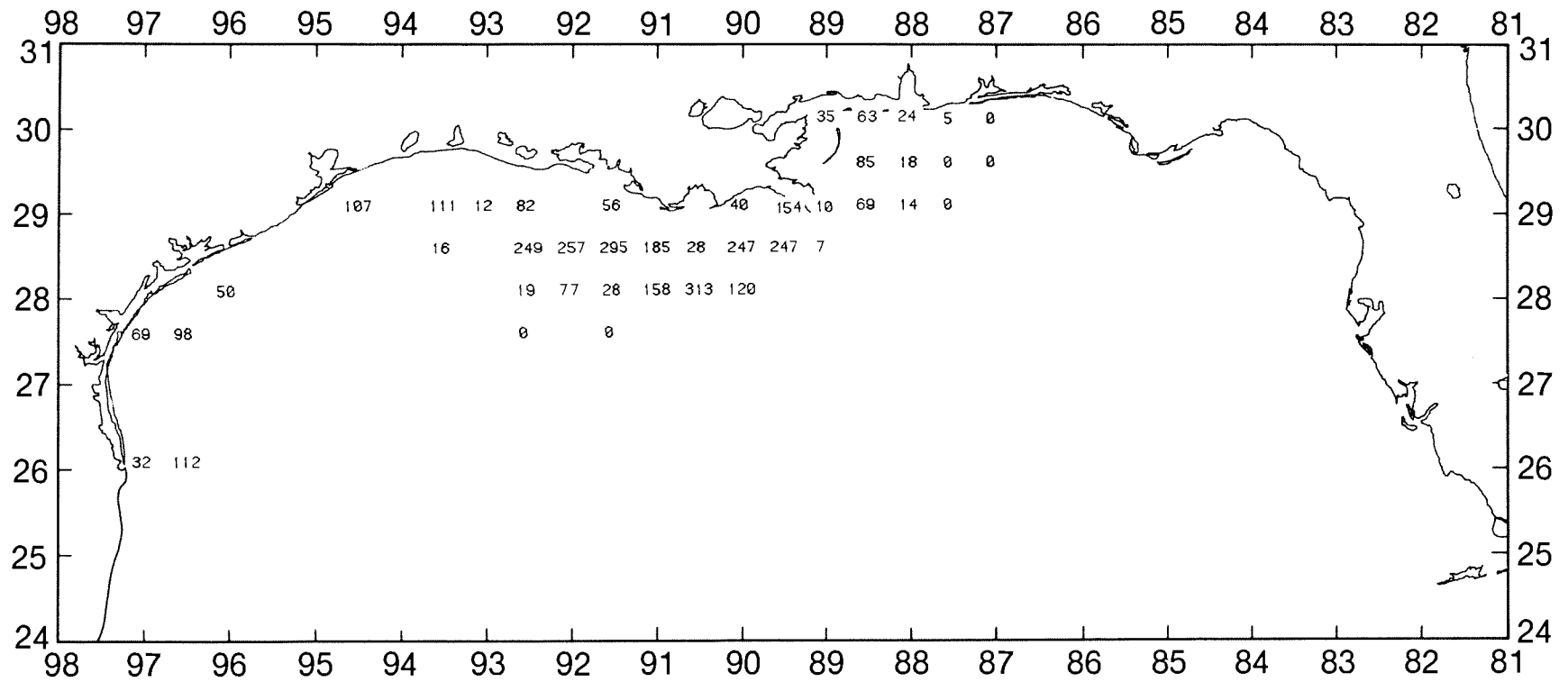


Figure 86. Lesser blue crab, *Callinectes similis*, number/hour for September-December 1985.

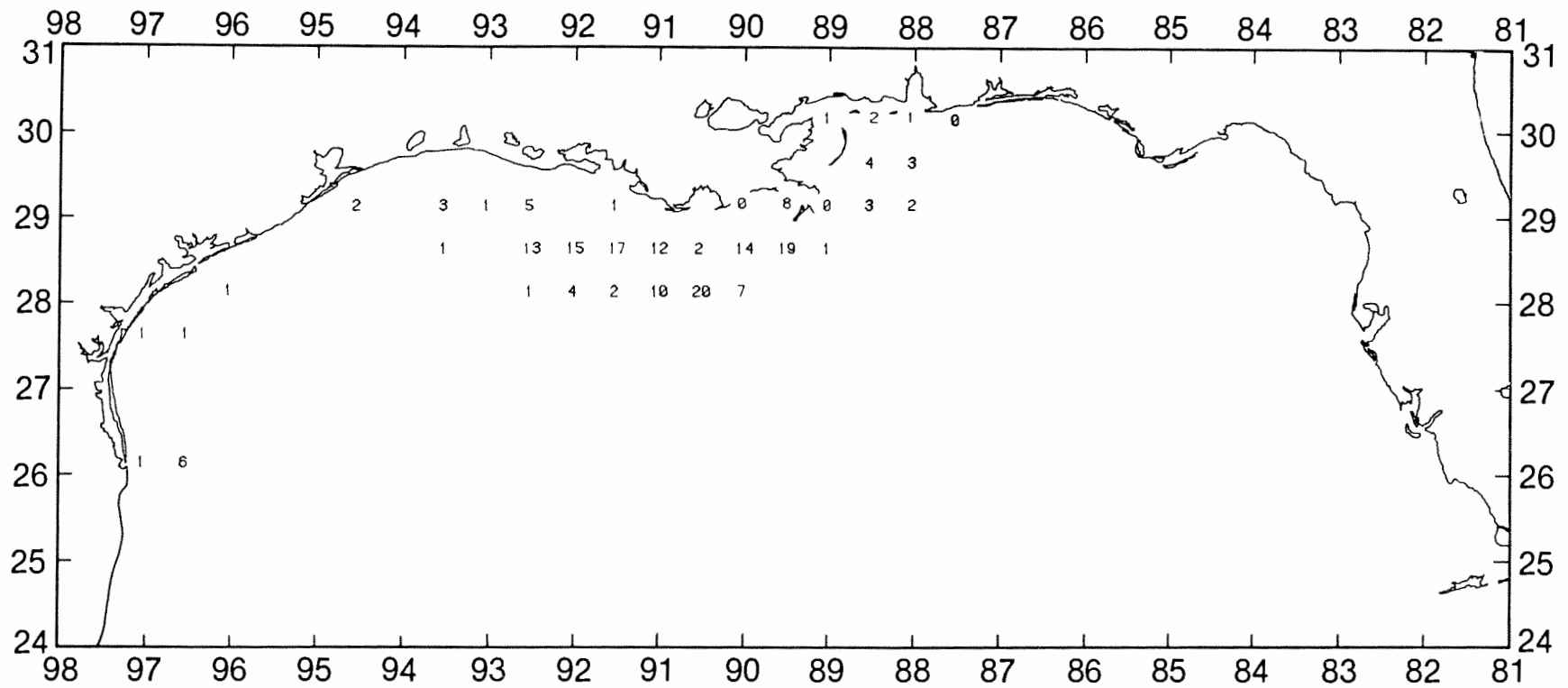


Figure 87. Lesser blue crab, *Callinectes similis*, lb/hour for September-December 1985.

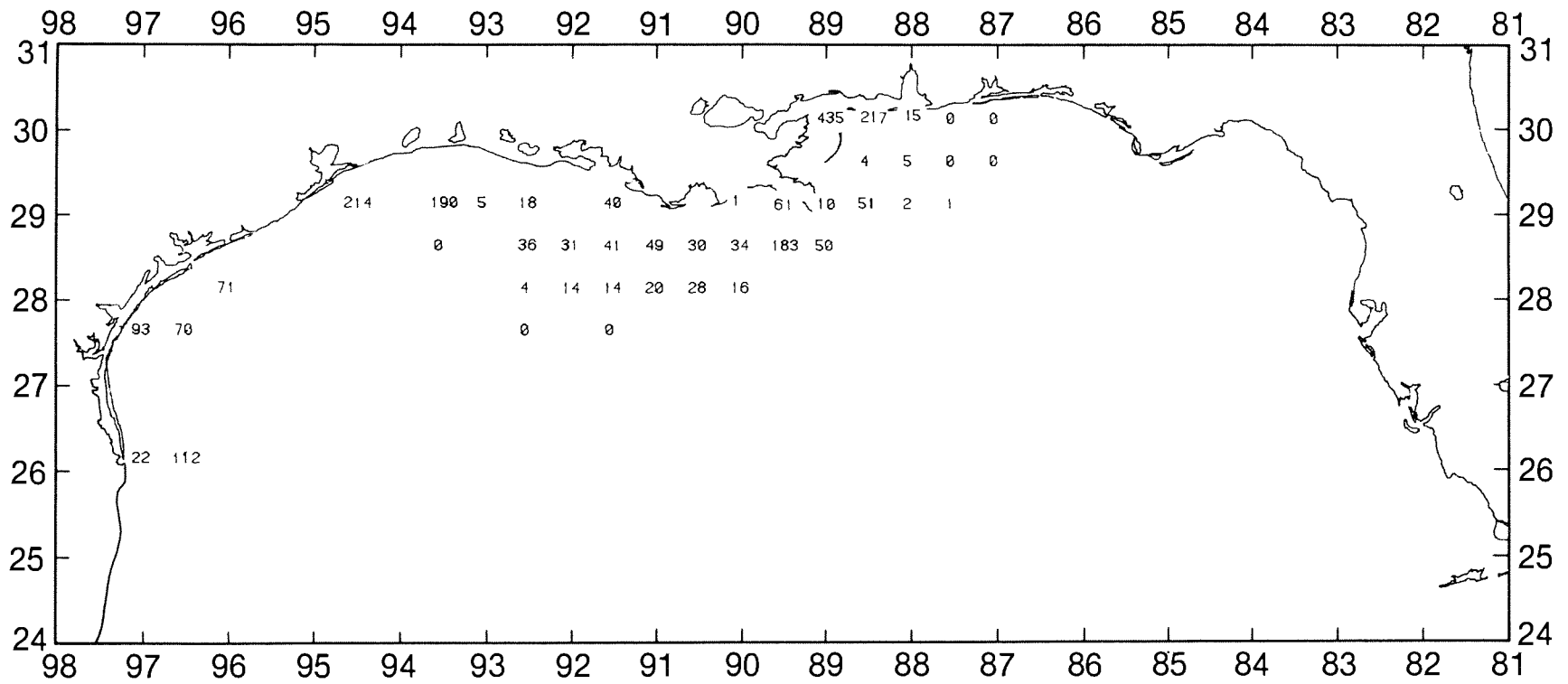


Figure 88. Mantis shrimps, *Squilla* spp., number/hour for September-December 1985.

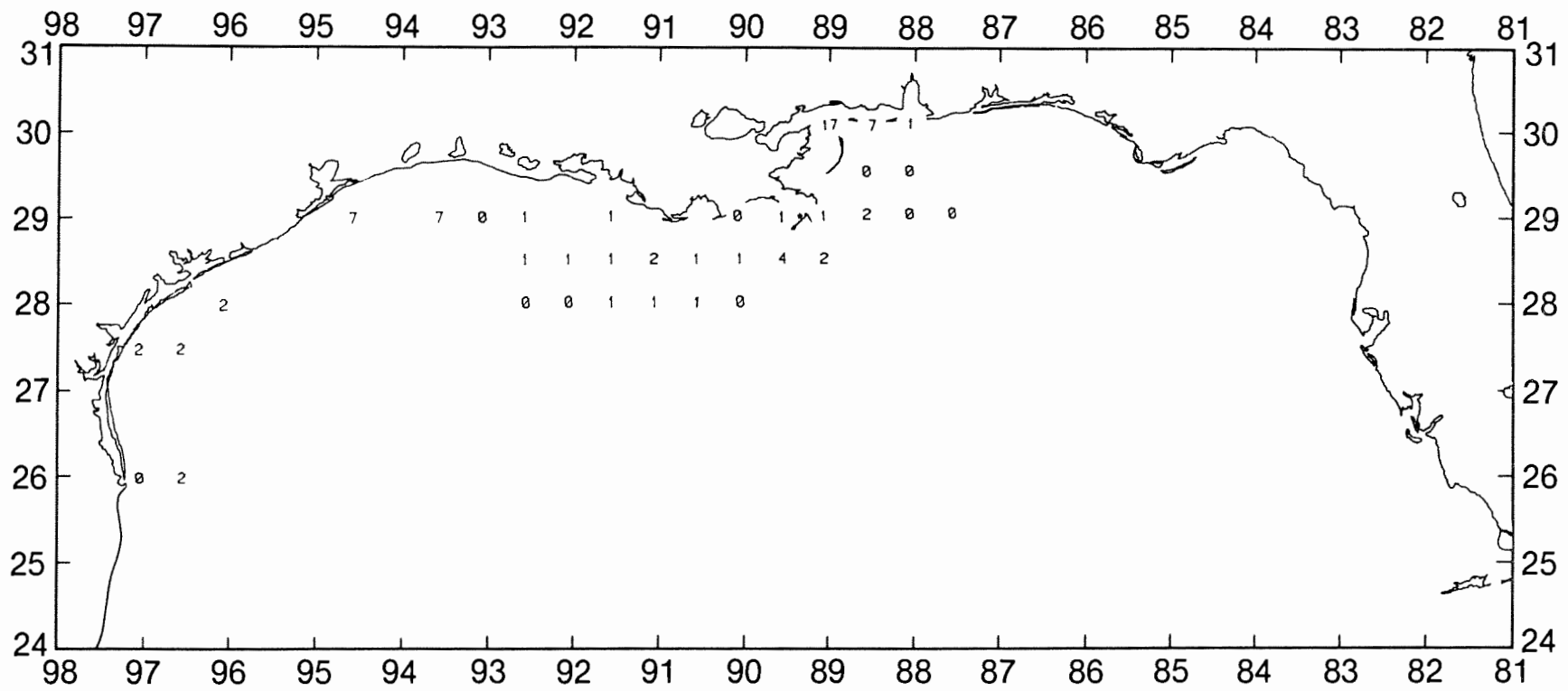


Figure 89. Mantis shrimps, *Squilla* spp., lb/hour for September-December 1985.

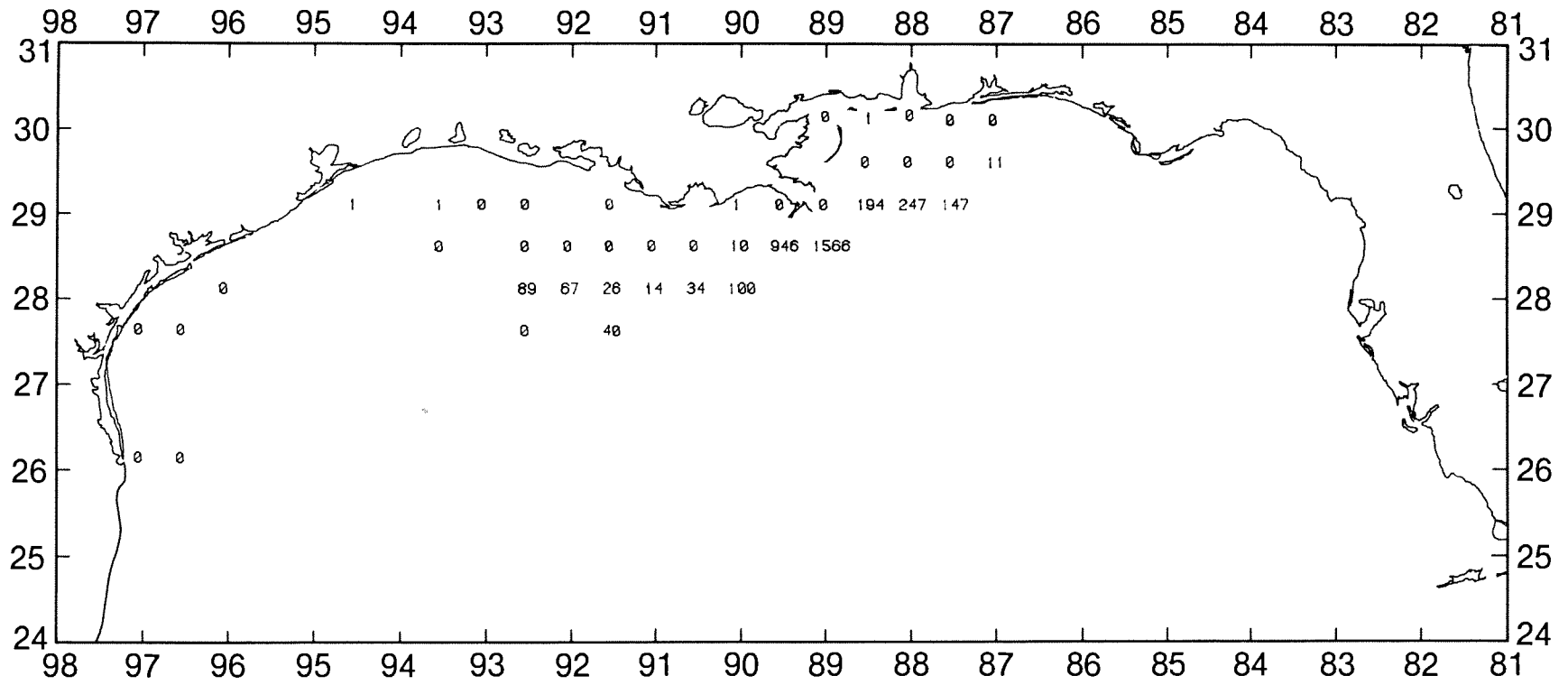


Figure 90. Swimming crab, *Portunus spinicarpus*, number/hour for September-December 1985.

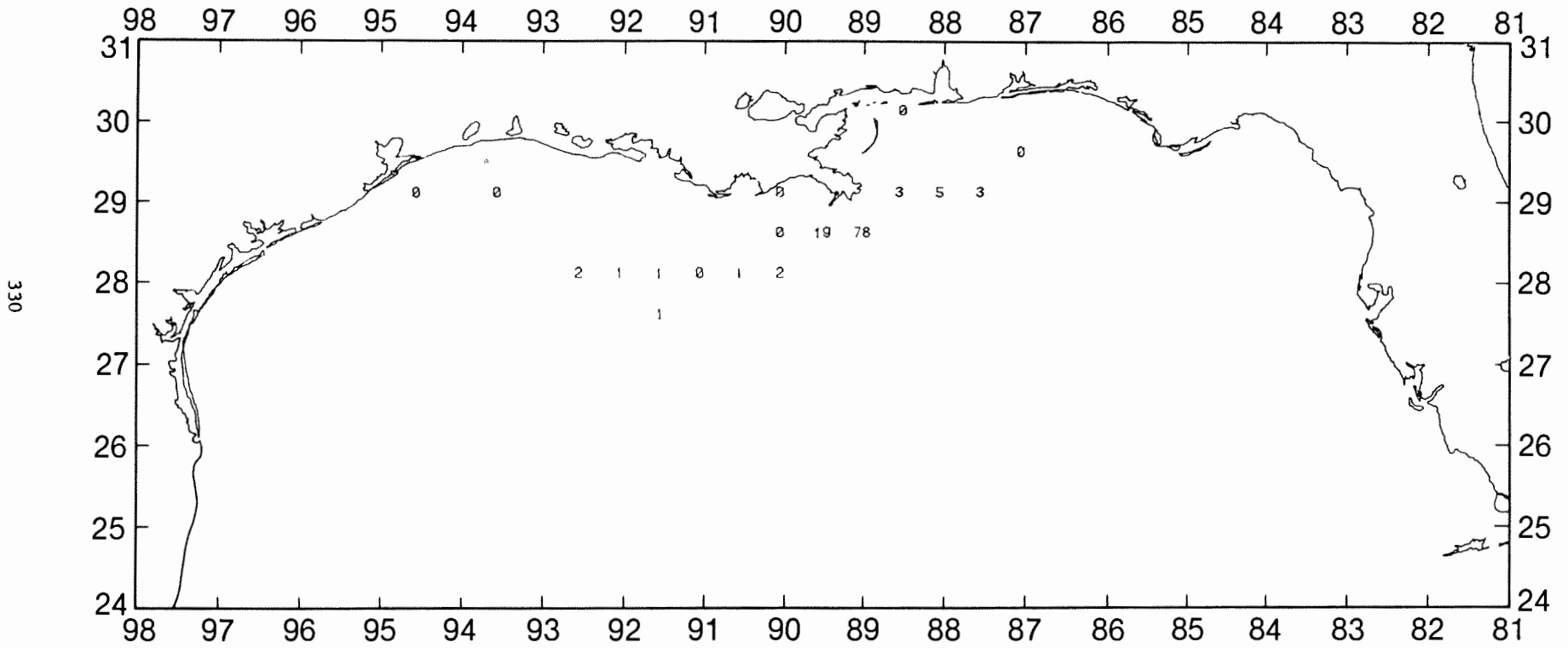


Figure 91. Swimming crab, Portunus spinicarpus, lb/hour for September-December 1985.

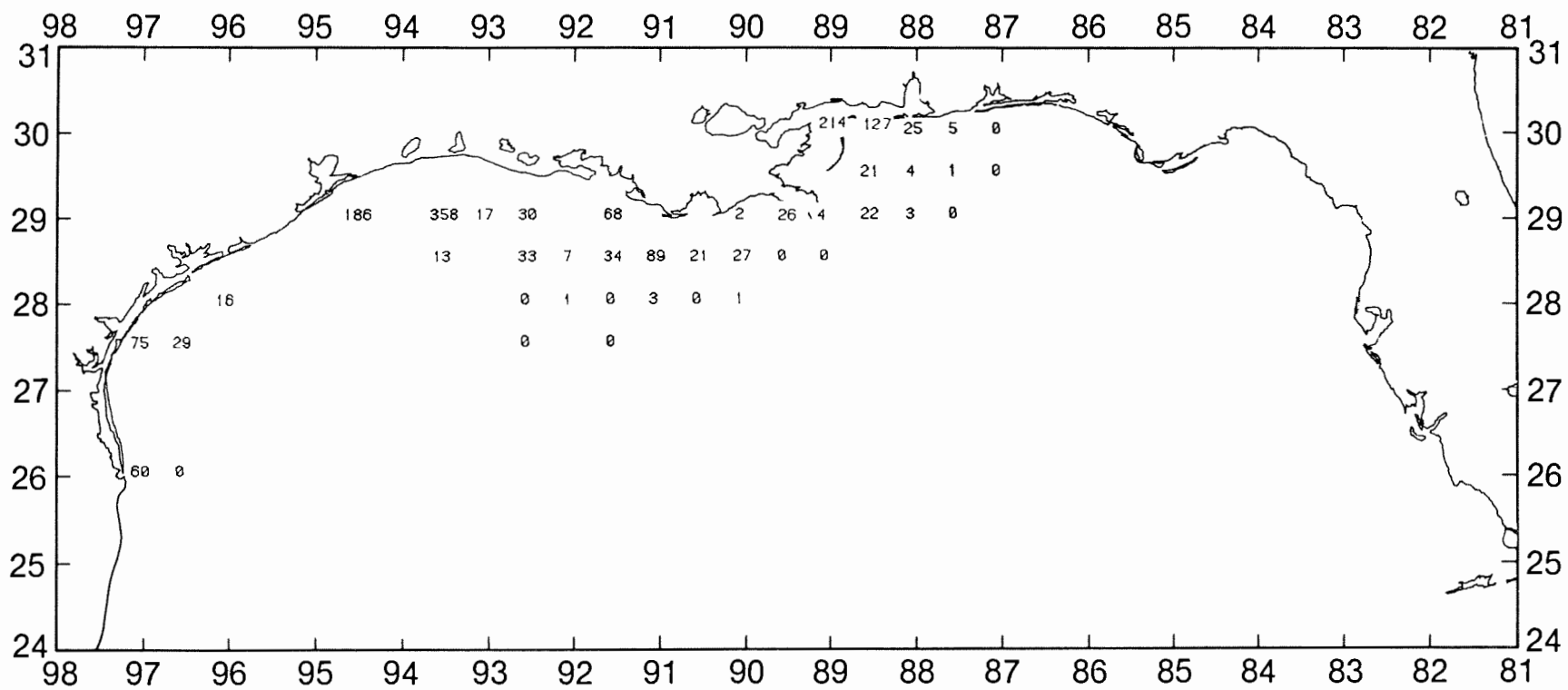


Figure 92. Swimming crab, *Portunus gibbesii*, number/hour for September-December 1985.

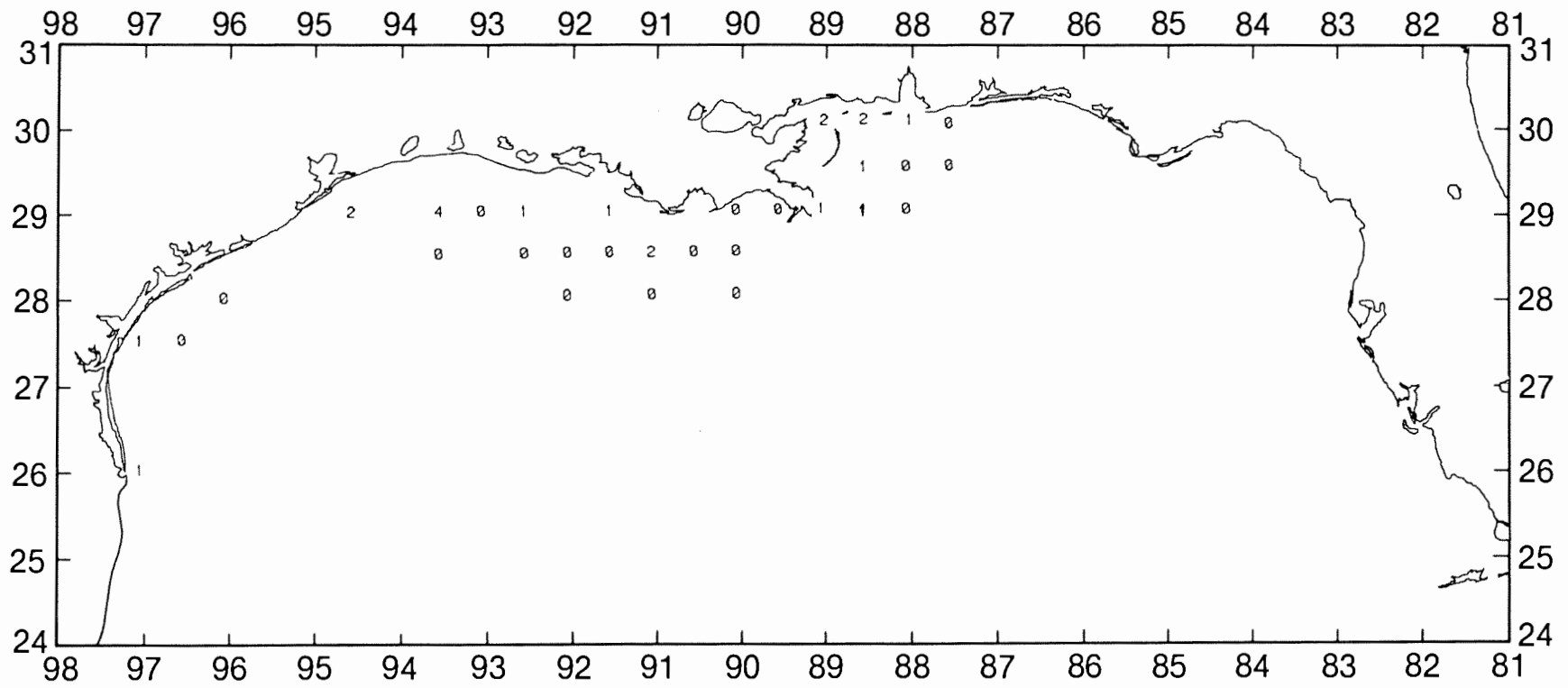


Figure 93. Swimming crab, *Portunus gibbesii*, 1b/hour for September-December 1985.

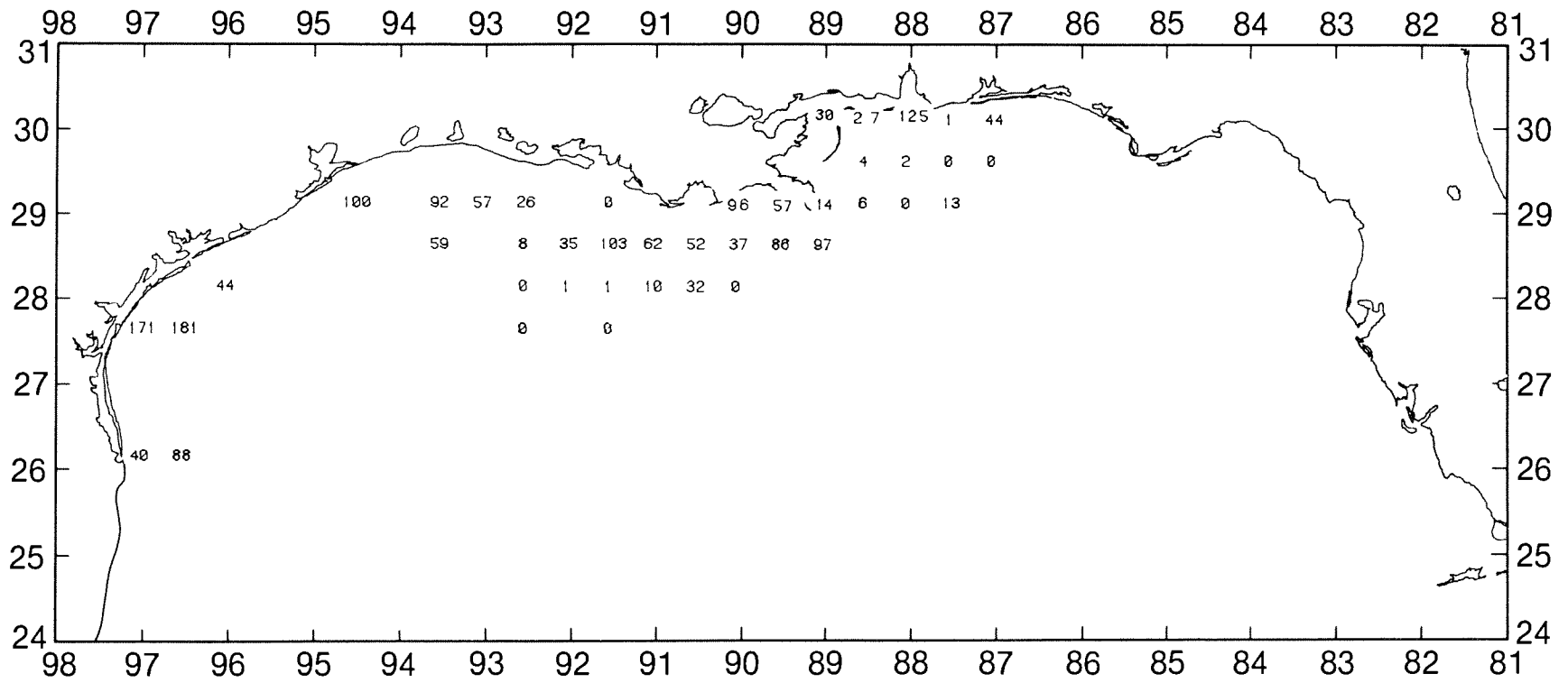


Figure 94. Roughneck shrimp, Trachypenaeus spp., number/hour for September-December 1985.

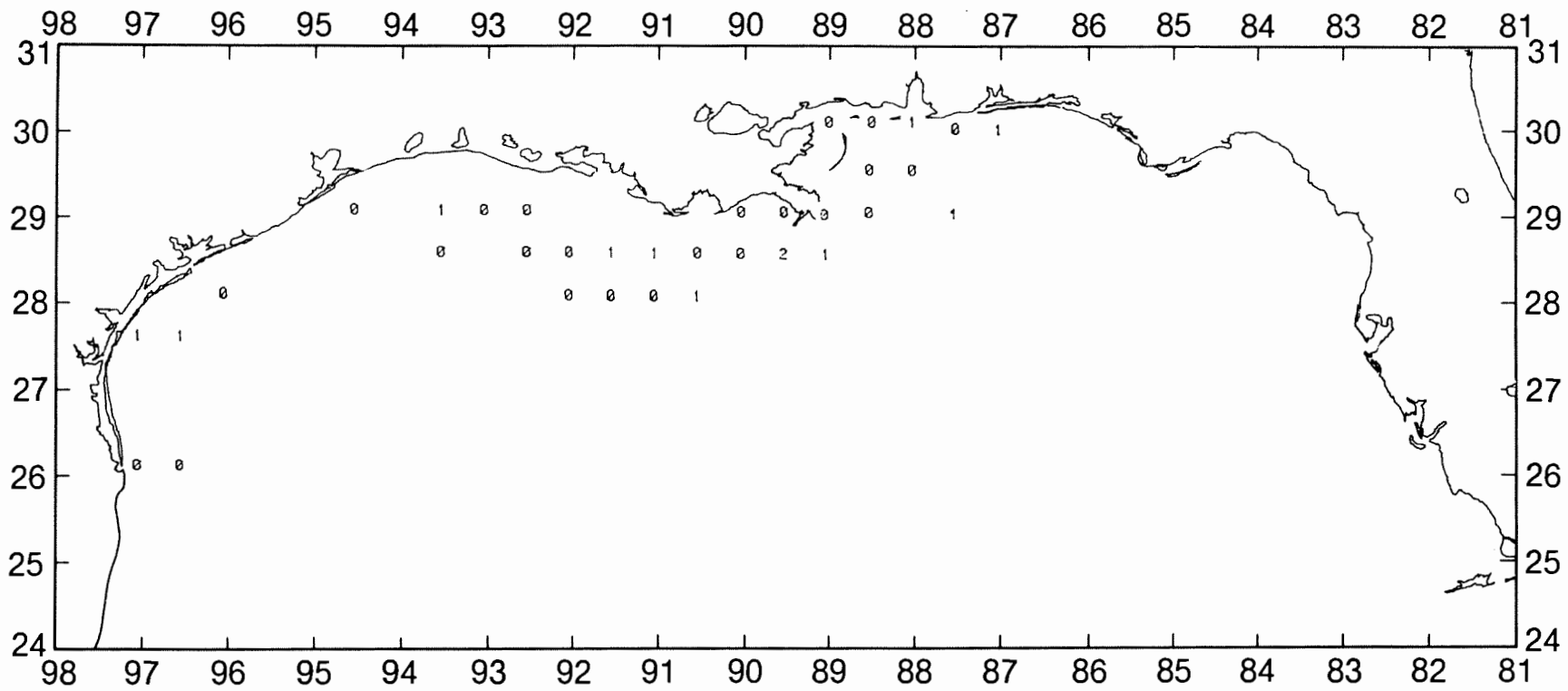


Figure 95. Roughneck shrimp, *Trachypenaeus* spp., lb/hour for September-December 1985.

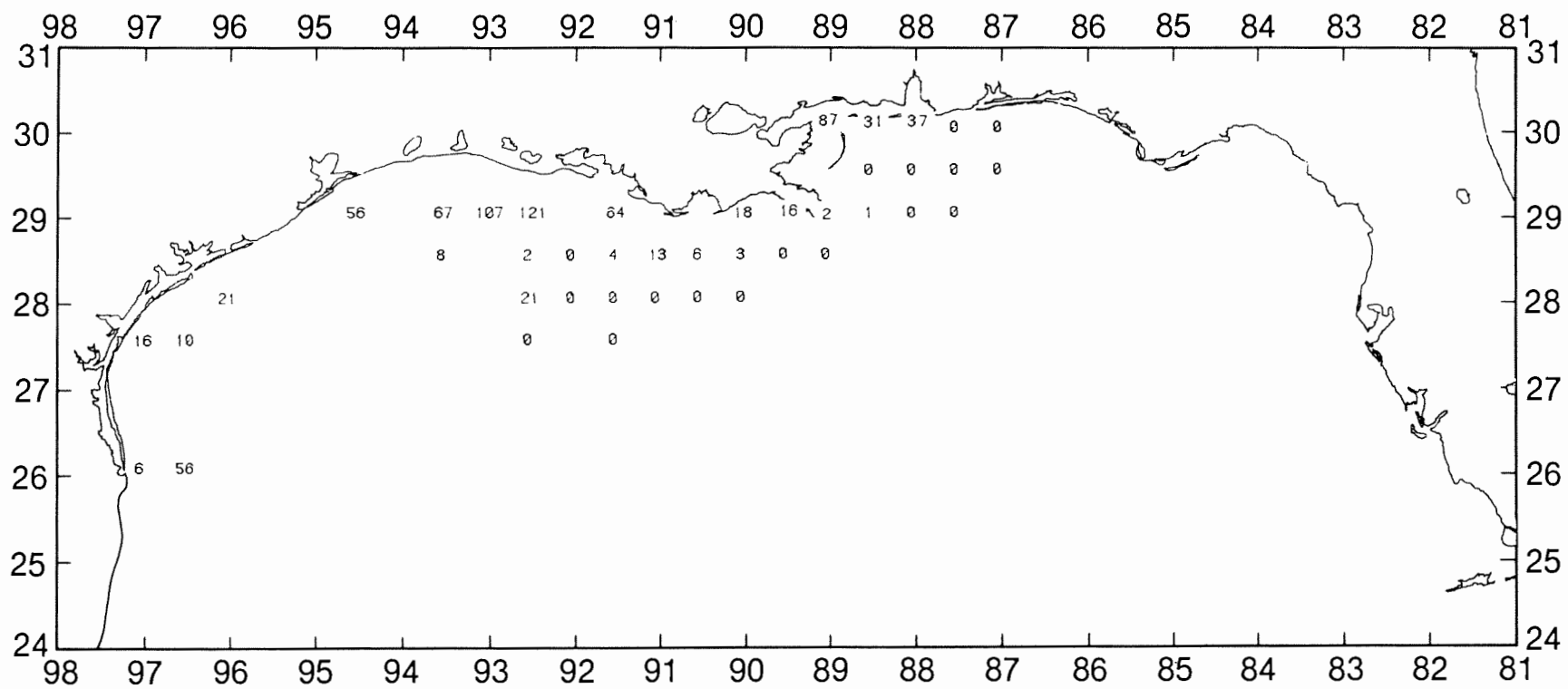


Figure 96. Brief squid, *Lolliguncula brevis*, number/hour for September-December 1985.

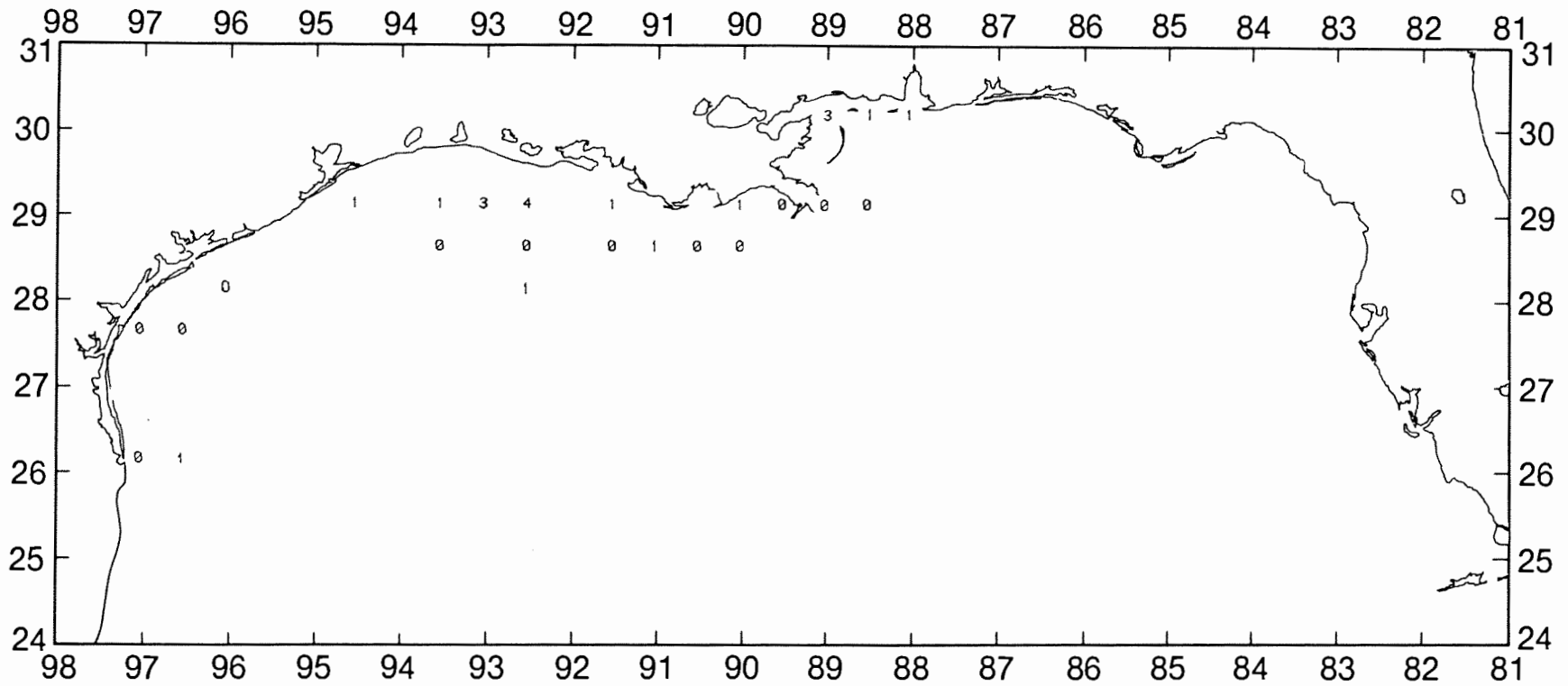


Figure 97. Brief squid, *Lolliguncula brevis*, lb/hour for September-December 1985.

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