seamap

environmental and biological atlas of the gulf of mexico 2000

gulf states marine fisheries commission

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SEAMAP ENVIRONMENTAL AND BIOLOGICAL ATLAS OF THE GULF OF MEXICO, 2000

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The 2000 SEAMAP Atlas was developed as a cooperative effort between the five Gulf States fishery management agencies and the National Marine Fisheries Service (NMFS), to present information collected during SEAMAP research survey activities in the Gulf of Mexico. The SEAMAP Data Coordinating Work Group would like to thank the following agencies for their participation in the project: Florida Fish and Wildlife Conservation Commission, Alabama Department of Conservation and Natural Resources, University of Southern Mississippi Institute of Marine Science, Gulf Coast Research Laboratory (representing the Mississippi Department of Marine Resources), Louisiana Department of Wildlife and Fisheries, Texas Parks and Wildlife Department, and NMFS-Southeast Fisheries Science Center.

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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 (Eldridge 1988). A major SEAMAP objective is to provide a 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 Science Center (SEFSC), presented a SEAMAP Strategic Plan (1981) to the Gulf States Marine Fisheries Commission (GSMFC). This strategic plan outlined the proposed program organization (goals, objectives, procedures, resource requirements, etc.). A SEAMAP Subcommittee was then formed within the existing framework of the GSMFC. The Subcommittee consists of one representative from each state fishery management agency [Florida Fish and Wildlife Conservation Commission (FFWCC); Alabama Department of Conservation and Natural Resources (ADCNR); Mississippi Department of Marine Resources (MDMR) represented by the University of Southern Mississippi, College of Marine Science, Gulf Coast Research Laboratory (USM/CMS/GCRL); Louisiana Department of Wildlife and Fisheries (LDWF) and Texas Parks and Wildlife Department (TPWD)], one from NMFS Southeast Fisheries Science Center and a non-voting member representing the Gulf of Mexico Fishery Management Council (GMFMC). The Subcommittee has organized and successfully coordinated numerous resource surveys from 1982 through 2000 (Table 1). The resultant data are published in atlases for the surveys in 1982 (Stuntz et al. 1985); 1983 (Thompson and Bane 1986a); 1984 (Thompson and Bane 1986b); 1985 (Thompson et al. 1988); 1986 (Sanders et al. 1990a); 1987 (Sanders et al. 1990b); 1988 (Sanders et al. 1991a); 1989 (Sanders et al. 1991b); 1990 (Sanders et al. 1992); 1991 (Donaldson et al. 1993); 1992 (Donaldson et al. 1994); 1993 (Donaldson et al. 1996); 1994 (Donaldson et al. 1997a); 1995 (Donaldson et al. 1997b); 1996 (Donaldson et al. 1998); 1997 (Rester et al. 1999); 1998 (Rester et al. 2000); and 1999 (Rester et al. 2001). Environmental assessment activities occurred with each of the surveys found in Table 1.

In March 2000, 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 through 1999. Overall survey objectives in 1982 to 2000 were to assess the distribution and abundance of recreational and commercial organisms collected by plankton, trap/video and trawl gears and document environmental factors that might affect their distribution and abundance. Data from plankton surveys are used for detection and assessment of fishery resources; in the determination of spawning seasons and areas; in investigations of early survival and recruitment mechanisms; and in estimation of the abundance of a stock based on its spawning production (Sherman et al. 1983). Assessment of the Texas Closure (Nichols 1982, 1984; Nichols and Poffenberger 1987) was the rationale for the establishment of the trawl surveys and to establish a seasonal data base to assess the abundance and distribution of the shrimp and groundfish stocks across the northern Gulf of Mexico. The Reef Fish Survey is designed to determine the relative abundance of reef fish populations and habitat using a fish trap/video recording system (Russell, unpublished report) and a fisheries acoustic system.

A major purpose of SEAMAP is to provide resource survey data to State and Federal management agencies and universities participating in SEAMAP activities. This nineteenth in a series of SEAMAP environmental and biological atlases presents such data, in a summarized form, collected during the 2000 SEAMAP surveys. The area covered in the Gulf of Mexico for all SEAMAP survey activities during 2000 is shown in Figure 1.

MATERIALS AND METHODS

Methodology for the 2000 SEAMAP surveys is similar to that of the 1982 through 1999 surveys. Sampling was conducted within the U.S. Exclusive Economic Zone (EEZ) and state territorial waters. The NOAA Ship GORDON GUNTER collected plankton and environmental data during the Spring Plankton Survey from April 20 to May 26.

Vessels that participated in the Summer Shrimp/Groundfish Survey and concurrently sampled plankton and environmental data included the USM/CMS/GCRL vessel TOMMY MUNRO (June 9, June 24-26, July 1-2, and July 12), the Louisiana vessel PELICAN (July 17-20), and the NOAA Ship OREGON II (June 13-July 19). The TPWD vessels MATAGORDA BAY, LAGUNA MADRE, R.J. KEMP, SABINE and TRINITY BAY (June 1-27) and the Alabama vessel A.E. VERRILL (June 5 and June 12) did not sample plankton in conjunction with the summer survey.

The Alabama vessel A.E. VERRILL was the only vessel that participated in the Reef Fish Survey (October11-30, and November 3).

Vessels that participated in collecting plankton and environmental data during the Fall Plankton Survey included the NOAA Ship OREGON II (September 7-October 1); the USM/CMS/GCRL vessel TOMMY MUNRO (October 13-15); the Louisiana vessel PELICAN (October 11-13); the Alabama vessel A.E. VERRILL (September 12); and the Florida vessel SUNCOASTER (September 26-29).

Vessels that participated in the Fall Shrimp/Groundfish Survey and concurrently sampled plankton and environmental data included the NOAA Ship OREGON II (October 14-November 19); the USM/CMS/GCRL vessel TOMMY MUNRO (October 20-31) and the Louisiana vessel PELICAN (November 27-December 1). The Alabama vessel A.E. VERRILL (October 19 and October 30); and the TPWD vessels MATAGORDA BAY, LAGUNA MADRE, R.J. KEMP, TRINITY BAY, and SABINE (November 10-December 28) did not sample plankton in conjunction with the fall survey.

PLANKTON SURVEYS

Plankton samples were taken at stations arranged in a systematic grid across the Gulf of Mexico. Such a grid was chosen because of the large survey area. Stations were set at minimum intervals of 30 miles (½ degree) and during the Fall Plankton Survey, Mississippi sampled stations set at intervals of 6 nautical miles.

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. The Tucker trawl, with 1 m^2 mouth, is outfitted with 0.335 micron mesh net. 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 ½ 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, either an oblique bongo and surface neuston tow or a surface neuston tow only were made. At bongo stations a standard oblique tow was made to 200 m, or to 2 m off the bottom at depths less than 200 m, with a payout speed of 50 m/min, 30-second settling time depths under 100 m and a 1-minute settling time for depths over 100 m, and a retrieval speed of 20 m/min, at a vessel speed of 1.5 knots to maintain a 45° angle. Neuston tows were made at the surface with the net half-submerged for 10 minutes at a vessel speed of 1.5 knots.

Samples were preserved initially in 10% buffered formalin. After a 48-hr period, all plankton samples were transferred to 95% ethyl alcohol for final preservation. The Pascagoula Laboratory curated and computerized the sample data. The right bongo sample and the neuston sample from each station were shipped to the Polish Sorting and Identification Center in Szczecin, Poland, for sorting and identification. Plankton samples from Louisiana vessels were retained by LDWF for sorting and identification at their facilities. 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).

Sorted ichthyoplankton specimens from the Polish Sorting and Identification Center were returned to the SEAMAP Archiving Center, managed in conjunction with the FFWCC, for long-term storage under museum conditions. Sorted ichthyoplankton samples from 1982 through 2000 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 at USM/CMS/GCRL as a backup for those samples transshipped to the Polish Sorting and Identification Center, in case of loss or damage during transit. These backup unsorted plankton samples containing zooplankton and phytoplankton are stored at the SEAMAP Invertebrate Plankton Archiving Center, managed in conjunction with USM/CMS/GCRL, for use by researchers.

ENVIRONMENTAL DATA

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

Vessel: Vessel code for each vessel.
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.
Barometric pressure: Recorded in millibars.
Wave height: Estimated visually in meters.
Wind speed and direction: Recorded in knots with direction recorded in compass degrees from which the wind was blowing.
Air temperature: Recorded in Centigrade.
Cloud cover: Estimated visually in percent cloud cover.
Secchi depth: Secchi depth in meters, estimated at each daylight station. Standard oceanographic 30-cm white discs were lowered until no longer visible, then raised until visible. If different depths were recorded, an average was used.
Water Color: Forel-Ule data was recorded.

The following parameters were measured at the surface, mid-depth and bottom; for bottom depths greater than 200 m, samples were taken at surface, 100 m and 200 m:

Water temperature: Temperatures were measured by a hand-held thermometer or by in situ electronic sensors onboard ship. 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 or refractometers were used on some vessels. Salinity samples were also measured with in situ electronic sensors.

Chlorophyll: Chlorophyll samples were collected and frozen for later laboratory analysis. The general procedure for shipboard collection of chlorophyll was to collect more than 9 liters of water from the surface. This was kept stirred by bubbling air through it while filtration was being done. Three samples, to each of which a 1 ml, 1% (W/V), suspension of MgCO3 was added, of up to 3 liters of water from the 9 liter sample were filtered through GF/C filters. The three filters were placed individually in Petri dishes, wrapped in opaque material and frozen until analysis. Each of the three samples was analyzed separately in the laboratory. Values in the tables that follow, are the mean of the three samples.

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 these have not been included as data in this report. The methodology used is described in Strickland and Parsons (1972) and Jeffrey and Humphrey (1975). Some of the values have been deleted from the data base because of analytical errors. In addition, chlorophyll samples data were also collected using a CTD. This method only obtains measures of chlorophyll a and is a measure of fluorescence (FL) and appears in the Tables as such.

Dissolved oxygen: Dissolved oxygen values were measured by electronic probes or by the Winkler titration 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.

Turbidity: Turbidity values were measured by electronic probes when equipment was available.

TRAWL SURVEYS

Summer Shrimp/Groundfish Survey

The sampling strategy and a description of the statistical rationale for the sampling design as described by Nichols in the 1982 SEAMAP Atlas (Stuntz et al. 1985) has been modified. Since 1987, the strategy has been that day/night sampling sites were chosen randomly in areas stratified by depth and statistical area. These areas are shrimp statistical zones 11 through 22 (Figure 2). Trawl stations sampled by NMFS, Alabama, Mississippi and Louisiana are made with a standard SEAMAP 40-ft net, and Texas sampled with a 20-ft net. Depth strata consisted of 1 fm intervals from 5 to 20 fm, a 2 fm interval from 20 to 22 fm, a 3 fm interval from 22 to 25 fm, 5 fm intervals from 25 to 50 fm and a 10 fm interval from 50 to 60 fm. Additionally, the USM/CMS/GCRL vessel TOMMY MUNRO sampled 1 fm intervals from 2 to 5 fm off Louisiana in July. Trawls were towed perpendicularly to the depth contours and covered the entire depth stratum on each station. Single tows were for a maximum of 55 minutes; 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 minutes and a maximum tow of 55 minutes. The Texas vessels towed 10 minutes parallel to the depth stratum. The Louisiana samples did not cover a complete depth stratum on several stations because of the distance between depth contours.

All Penaeus spp. shrimp were separated from the trawl catch at each station. Total count and weight by species were recorded for each station. A sample of up to 200 shrimp of each species from every trawl 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.

Fall Shrimp/Groundfish Survey

The design of the fall survey was similar to the Summer Shrimp/Groundfish Survey. During the Fall survey trawl stations were made with the standard 40-ft and 20-ft SEAMAP nets and covered NMFS shrimp statistical zones 11 through 21 (Figure 2). Catch rates on all the vessels sampling were treated in the same manner as the Summer Shrimp/Groundfish Survey with the exception to shrimp catches where only 20 shrimp of each species from every trawl were measured, although Louisiana measures a minimum of 50 shrimp.

REEF FISH SURVEY

The primary purpose of this survey is to assess relative abundance and compute population estimates of reef fishes found on natural reef fish habitat in the Gulf of Mexico. Two types of gear are used to deploy video cameras: 1) a single-funnel fish trap (2.13 m long by 0.76 m square) with the camera mounted at a height of 25 cm above the bottom of the trap; or 2) a 4 camera array with 4 cameras mounted orthogonal to each other at a height of 25 cm above the bottom. Both gears are baited with squid before deployment. The resultant video recordings (typically of one hour duration) are processed back at the laboratory where fishes are identified and counted independently by two tape readers. Final counts are entered into the SEAMAP reef fish database along with additional observations on habitat and fish activity.

The hardbottom database from which sampling sites for this survey are chosen was developed in the following manner. Areas of natural reef habitat from Brownsville, Texas to the southern tip of Florida (at 81°00' W longitude and 24°02' N latitude) and between 9 and 110 m water depth were first inscribed on navigation charts, then divided into 10 by 10 nautical mile blocks (primary sample units). Each block was subdivided into 100-m^2, secondary sample units that were numbered and initially classified as being "reef" or "nonreef", then entered into a database. Prior to the survey, blocks are selected from this database in the eastern and western Gulf with probability proportional to the number of "reef" sample units within a block. Within each selected block, 100 sample sites are randomly selected. During the survey each selected block is occupied for one 24-h period, where night hours are devoted to ship's echo sounder surveys of up to 100 sites and daytime hours to trap/video sampling. Each potential sample site surveyed at night is given a final determination as being either a reef site or not based on echo patterns, vertical relief and other characteristics. Up to 8 actual "reef" sites are then randomly selected for sampling during that day (Russell, unpublished report). Trap/video sampling begins one hour after sunrise and ends one hour before sunset. Trap soak time is one hour.

Associated environmental data collected at each site usually includes profiles of salinity, temperature, and surface chlorophyll; and may also include profiles of dissolved oxygen, light transmittance, and fluorescence. Additional environmental and meteorological observations taken on stations follow standard SEAMAP methodology. During the NMFS component of the reef fish survey, fish abundance is also measured with a fisheries acoustic device.

RESULTS

PLANKTON SURVEYS

Twelve-thousand two hundred seventeen (12,217) identified ichthyoplankton lots were received at the SEAMAP Archiving Center in 2000. Most of these samples have been accessioned into the SEAMAP Archiving Center computer systems and the remaining samples are being prepared for accession; both in dBase and SEAMAP Data Management System.

Plankton stations for the Spring Plankton Survey in conjunction with environmental stations are shown in Figure 3, the Summer Shrimp/Groundfish Survey stations are shown in Figure 4, the Fall Plankton Survey Stations in conjunction with environmental stations are shown in Figure 5, the Fall Shrimp/Groundfish survey stations are shown in Figure 6.

ENVIRONMENTAL DATA

Environmental data were collected in conjunction with each plankton station for the Spring (Figure 3) and Fall (Figure 5) plankton surveys. Environmental data stations for the Summer Shrimp/Groundfish Survey are shown in Figure 7 and the Fall Shrimp/Groundfish Survey in Figure 8. Environmental sampling locations are summarized in Figures 7 and 8 by 10-minute squares. A complete listing of environmental stations and dates of sampling by vessel for all SEAMAP surveys is shown in Table 2. In Table 2 under statistical zone, the 99 codes are stations located outside the shrimp statistical zones. Additional environmental information (Secchi readings, Forel-Ule, cloud cover, etc.) may be obtained from the SEAMAP Information System by contacting the SEAMAP Data Manager.

TRAWL SURVEYS

Summer Shrimp/Groundfish Survey

Shrimp and groundfish sampling was conducted during June and July from off Fort Morgan, Alabama to Brownsville, Texas and summarized by 10-minute squares in Figure 9. The Summer Shrimp/Groundfish Survey consisted primarily of biological trawl data and concomitant environmental and plankton data. A species composition listing from the 40-ft and 20-ft trawls is presented in Table 3, ranked in order of abundance, within the categories of finfish, crustaceans and other invertebrates.

Tables 4a-14a present the biological data, from the 40-ft and 20-ft nets, of the eight most abundant fish, six most abundant invertebrates and squid within NMFS shrimp statistical zones 11 and 13 through 22, by depth stratum. Tables 4b-14b list the total catch and environmental data from the 40-ft and 20-ft nets within NMFS statistical zones listed above, by depth stratum.

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

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

where " = population standard deviation
n = number of samples

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

For all "b" tables, discrepancies between catch and environmental data may appear in the number of samples (n). These discrepancies may be due to different sampling depths for trawl and environmental stations, unsuccessful trawl stations and/or stations where only plankton data were collected.

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 3 are displayed in plots of number/hour and lb/hour in Figures 12-51. Data for the biological plots were computed from the 40-ft and 20-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 some of the species were taken are shown. During this time frame, the state of Florida did not participate in any SEAMAP survey activities.

Fall Shrimp/Groundfish Survey

Shrimp and groundfish sampling was conducted during October through December from off Fort Morgan, Alabama to Brownsville, Texas and summarized by 10-minute squares in Figure 10. The Fall

Shrimp/Groundfish Survey consisted of biological trawl data and concomitant environmental and plankton data. A species composition listing from the 40-ft and 20 ft trawls is presented in Table 15. The species lists for Table 15 are 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 15 are displayed in plots of number/hour and lb/hour in Figures 52 to 91. Data for the biological plots were computed from the 40-ft and 20-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 some of the species were taken are shown. During this time frame, the state of Florida did not participate in any SEAMAP survey activities.

Tables 16a-27a present the biological data, from the 40-ft and 20-ft nets, of the eight most abundant fish, six most abundant invertebrates and squid species within NMFS shrimp statistical zones 11 and 13 through 21, by depth stratum. Tables 16b-27b list the total catch and environmental data from the 40-ft and 20-ft nets within the NMFS statistical zone listed above, by depth stratum.

The catch data were calculated using the same equation that was used to compute catch rates for the Summer Shrimp/Groundfish Survey and as in the Summer Shrimp/Groundfish Survey, discrepancies in the "b" tables may have occurred.

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 utilized a cellular phone and/or satellite communications aboard the NOAA Ship OREGON II. This enabled personnel aboard the vessel to transmit daily catch rates and environmental data to the NMFS computer system located at the NMFS Mississippi Laboratories in Pascagoula.

Summarized data were distributed weekly to approximately 225 individuals during the Summer Shrimp/Groundfish Survey. The summarized data in the form of computer plots and data listings were sent to management agencies and industry members. These plots showed station locations, catches of brown, pink, and white shrimp in lb/hr and count/lb and total finfish catch in lb/hr.

Beginning in 1998, the SEAMAP Subcommittee decided to produce near-real-time data for the Fall Shrimp/Groundfish Survey. The second annual fall real-time data distribution was produced in January of 2000. Plots of station locations and catch rates of red snapper were prepared and edited at the NMFS Mississippi Laboratories, and processed by GSMFC for a summary distribution at the end of the Survey to management agencies, fishermen, processors and researchers. These plots were also available through the SEAMAP home page.

The SEAMAP Subcommittee again produced near-real-time data for the Fall Shrimp/Groundfish Survey. This was the third time the data were distributed during the fall. Plots of station locations and catch rates of red snapper were prepared and edited at the NMFS Mississippi Laboratories, and processed by GSMFC for a summary distribution at the end of the Survey to management agencies, fishermen, processors and researchers.

REEF FISH SURVEY

Primary data collection and sampling for reef fish assessment was conducted throughout the year by personnel of the State of Alabama in artificial reef zones off their state. Station data for these observations can be found in Table 2 and station locations are plotted in Figure 11. A species composition listing from the traps is presented in Table 28. The species list for Table 28 is ranked in order of abundance. Video tapes from all sources were analyzed using NMFS standardized protocols. Due to a lack of funding in 2000, the NMFS portion of the reef fish survey was not conducted.

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 SEAMAP long-term baseline data was disrupted by the loss of the Spring Gulf-wide plankton and Fall Mackerel Survey. In 1986, the SEAMAP Subcommittee renewed its commitment for the collection of baseline plankton data. These ichthyoplankton samples are and will continue to 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.

Similar analyses and investigations are being undertaken with Summer and Fall Shrimp/Groundfish Survey data. These data sets are being 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 goals.

Much use has already been made of SEAMAP data. For example, during the past SEAMAP surveys an area of very low dissolved bottom oxygen was found off Louisiana in the summers of 1982, 1985-1999. The presence of this phenomenon and some of the related conditions and biological effects were reported by Leming and Stuntz (1984) and Hanifen et al. (1995) , 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 to assist in the identification of the minimum 1997 reduction in red snapper shrimp trawl bycatch mortality rate that would enable the red snapper fishery to still recover to the 20% spawning potential ratio (SPR) by the year 2019 (Goodyear 1997). This analysis was requested and supported by the Gulf of Mexico Fishery Management Council to address the issue of red snapper bycatch. SEAMAP data were also used by some coastal states to determine the status of shrimp stocks and their movements just as the shrimping seasons were to be opened and SEAMAP data were used to develop a guide to the grouper species of the western North Atlantic Ocean (Grace et al. 1994). The primary purpose of the guide is for species identification with projects that deploy underwater video camera systems.

Since SEAMAP's inception in 1982, the goal of plankton activities in the Gulf of Mexico has been to collect data on the early life stages of fishes and invertebrates that will complement and enhance the fishery-independent data gathered on the adult life-stage (Lyczkowski-Shultz and Brasher 1996). An annual larval index for the Atlantic bluefin tuna is generated each year from the Spring Plankton Survey and is used by the International Commission for the Conservation of Atlantic Bluefin Tunas to estimate stock size (Scott et al. 1993). Larval indices generated from the Summer Shrimp/Groundfish and Fall Plankton Surveys have now become an integral part of the king mackerel assessment in the Gulf (Gledhill and Lyczkowski-Shultz 2000). Larvae from SEAMAP collections have formed the basis for formal descriptions of larval development for fishes such as the snappers, cobia, tripletail, and dolphin (Drass et al. 2000; Ditty and Shaw 1992; Ditty and Shaw 1993; Ditty et al. 1994). Data on distribution and relative abundance of larvae of all Gulf fishes captured during SEAMAP surveys have been summarized by Richards et al. 1984, Kelley et al. 1985, Kelley et al. 1990, and Kelley et al. 1993.

The SEAMAP data collected during the Summer Shrimp/Groundfish Survey continues to be used extensively for fishery management purposes. In 1981, the Gulf of Mexico Fishery Management Council's plan for shrimp was implemented (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 May 15 through early July of each year. The GMFMC determined that this type of closure would allow small brown shrimp to be protected from harvest but would still allow the taking of larger brown shrimp by fishermen in deeper waters.

The National Marine Fisheries Service was charged with evaluating the effects of the Texas Closure and submitted a report (Nance 1999) to the GMFMC in December 1999. This report contained the results and an overview of the effect of the 1998 Texas Closure. After review of these data and other information, the GMFMC voted to continue the Texas Closure for 2000.

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-served 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 Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 2001-2005 (ASMFC 2001).

Data requests and inquiries, as well as requests for plankton samples, can be made by contacting Jeff Rester, the SEAMAP Coordinator, Gulf States Marine Fisheries Commission, P.O. Box 726, Ocean Springs, MS 39566-0726; 228/875-5912 or via e-mail at jrester@gsmfc.org.

Table 1. List of SEAMAP survey activities from 1982 to 2000.

SEAMAP SURVEY ACTIVITIES

YEAR	SPRING PLANKTON	SUMMER SHRIMP/GROUNDFISH	BUTTERFISH	FALL PLANKTON	FALL SHRIMP/GROUNDFISH	WINTER PLANKTON	REEF FISH
1982	APRIL-MAY	JUNE-JULY	--	--	--	--	--
1983	APRIL-MAY	JUNE-JULY	--	--	--	DECEMBER	--
1984	APRIL-MAY	JUNE-JULY	--	AUGUST	--	DECEMBER	--
1985	--	JUNE-JULY	JULY-AUGUST	SEPTEMBER	SEPTEMBER-DECEMBER	--	--
1986	APRIL-MAY	JUNE-JULY	MAY-JUNE	SEPTEMBER	OCTOBER-DECEMBER	--	--
1987	APRIL-MAY	JUNE-JULY	--	SEPTEMBER	SEPTEMBER-DECEMBER	--	--
1988	MARCH-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	--	--
1989	APRIL-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	--	--
1990	APRIL-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	--	--
1991	APRIL-MAY	JUNE-JULY	--	AUGUST-SEPTEMBER	SEPTEMBER-DECEMBER	--	--
1992	APRIL-MAY	JUNE-JULY	--	AUGUST-OCTOBER	OCTOBER-DECEMBER	--	MAY-JUNE
1993	APRIL-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	JANUARY-FEBRUARY	MAY-JULY, SEPTEMBER/NOVEMBER
1994	APRIL-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-NOVEMBER	--	MAY-JULY, AUGUST-OCTOBER, DECEMBER
1995	APRIL-JUNE	JUNE-JULY	--	SEPTEMBER	OCTOBER-DECEMBER	--	JANUARY, JUNE-AUGUST, DECEMBER
1996	APRIL-JUNE	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	DECEMBER	JULY, AUGUST, NOVEMBER
1997	APRIL-JUNE	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	--	JUNE, JULY, AUGUST, NOVEMBER
1998	APRIL-JUNE	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-NOVEMBER	--	MAY, JULY, AUGUST
1999	APRIL-MAY	JUNE-JULY	--	SEPTEMBER-OCTOBER	OCTOBER-NOVEMBER	--	JANUARY, AUGUST, OCTOBER, DECEMBER
2000	APRIL-MAY	JUNE-JULY	–	SEPTEMBER-OCTOBER	OCTOBER-DECEMBER	--	OCTOBER, NOVEMBER

Table 2. Selected environmental parameters measured during 2000 SEAMAP surveys in the Gulf of Mexico, by individual vessel and survey.
(Gear codes: ST = trawl; PN = bongo and/or neuston; TV = trap/video; EV = environmental).

GORDON GUNTER, SPRING PLANKTON SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
63001	4/20/2000	213	2959.6	8700.4	10	68	34	67	21.5	21.2	19.9	36.4	36.4	36.4			6.8	6.8	6.3	PN
63002	4/20/2000	1007	2929.8	8629.9	99	205	100	202	22.7	18.7	15.1	36.5	36.4	36.0			6.8	5.3	3.6	PN
63003	4/20/2000	1617	2900.1	8600.2	99	212	100	200	22.9	19.9	16.0	36.5	36.4	36.1			6.8	6.4	3.9	PN
63004	4/20/2000	2205	2830.3	8529.6	8	189	95	189	23.5	20.3	16.2	36.5	36.4	36.2			6.7	6.0	4.0	PN
63005	4/21/2000	314	2800.0	8459.8	6	240	101	200	22.9	19.8	15.7	36.5	36.4	36.1			6.6	5.6	4.0	PN
63006	4/21/2000	742	2730.0	8459.9	5	385	99	205	24.9	20.6	16.3	36.3	36.4	36.2			6.5	6.2	4.0	PN
63007	4/21/2000	1217	2700.0	8500.2	99	840	99	202	25.5	19.9	15.3	36.2	36.6	36.0			6.5	4.6	3.9	PN
63008	4/21/2000	1728	2630.1	8500.2	99	536	100	202	25.1	19.3	14.8	36.3	36.5	36.0			6.7	4.4	4.1	PN
63009	4/21/2000	2140	2600.0	8500.0	99	3330	100	200	24.9	19.9	14.1	36.3	36.5	35.4			6.6	4.8	3.6	PN
63010	4/22/2000	137	2600.1	8430.0	99	210	100	201	25.7	19.9	15.0	36.3	36.4	36.0			6.4	5.4	3.9	PN
63011	4/22/2000	501	2559.9	8400.0	3	128	64	126	24.5	22.0	19.9	36.4	36.5	36.6			6.4	6.5	4.3	PN
63012	4/22/2000	922	2530.0	8359.8	3	133	65	133	25.6	22.1	19.2	36.2	36.4	36.5			6.3	6.5	4.0	PN
63013	4/22/2000	1308	2500.1	8400.1	99	121	60	120	26.1	22.3	19.9	36.3	36.8	36.6			6.3	4.9	4.5	PN
63014	4/22/2000	1725	2430.2	8359.7	2	2196	103	198	26.4	20.3	16.3	36.2	36.5	36.3			6.4	5.4	3.9	PN
63015	4/22/2000	2057	2429.9	8330.1	99	285	101	204	26.6	24.3	18.9	36.1	36.7	36.6			6.2	5.2	4.4	PN
63016	4/23/2000	128	2400.0	8329.8	2	1050	100	200	26.1	25.0	20.1	36.2	36.3	36.8			6.1	6.1	4.6	PN
63017	4/23/2000	621	2400.1	8400.0	99	1739	100	201	26.5	23.3	18.2	36.1	36.8	36.5			6.2	5.1	4.7	PN
63018	4/23/2000	1334	2430.1	8429.9	99	3422	101	202	25.6	18.2	14.1	36.3	36.4	35.8			6.6	4.3	3.8	PN
63019	4/23/2000	1826	2500.0	8430.0	99	2286	101	204	26.0	19.0	14.7	36.3	36.5	35.9			6.6	4.4	3.7	PN
63020	4/23/2000	2206	2459.7	8500.2	99	3348	100	202	25.5	20.1	16.1	36.3	36.4	36.1			6.5	5.5	3.9	PN
63021	4/24/2000	157	2429.8	8459.9	99	3400	101	204	25.5	21.0	16.5	36.2	36.4	36.2			6.3	6.2	4.0	PN
63022	4/24/2000	414	2429.8	8512.0	99	3386	105	210	26.6	23.6	17.7	36.1	36.5	36.4			6.2	5.5	4.6	PN
63023	4/24/2000	1109	2500.5	8529.9	99	3339	97	203	26.5	25.7	19.3	36.0	36.3	36.5			6.1	6.1	4.3	PN
63024	4/24/2000	1535	2500.4	8559.8	99	3294	102	204	26.5	25.5	22.1	36.1	36.2	36.9			6.1	6.2	4.6	PN
63025	4/24/2000	2044	2530.4	8600.7	99	3237	103	206	26.7	25.8	20.6	36.0	36.3	36.8			6.1	6.0	4.4	PN
63026	4/25/2000	23	2530.5	8627.9	99	3240	100	200	26.3	25.5	23.0	36.1	36.2	36.9			6.0	6.2	4.7	PN
63027	4/25/2000	611	2559.8	8600.0	99	3203	100	202	26.3	22.4	17.0	36.1	36.7	36.3			6.3	5.0	4.1	PN
63028	4/25/2000	1214	2630.8	8600.0	99	3200	102	201	25.6	20.4	16.3	36.3	36.6	36.2			6.3	4.7	4.4	PN
63029	4/25/2000	1708	2700.6	8600.2	99	3203	100	201	25.3	19.9	15.9	36.3	36.7	36.1			6.5	4.8	4.4	PN
63030	4/25/2000	2128	2730.1	8559.8	99	3275	100	200	24.1	20.2	15.0	36.4	36.5	36.0			6.6	4.4	3.8	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, SPRING PLANKTON SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
63031	4/26/2000	110	2800.0	8600.0	99	1000	101	201	23.1	19.3	15.1	36.5	36.5	36.0			6.6	4.7	4.2	PN
63032	4/26/2000	519	2830.2	8600.0	99	320	100	200	23.4	20.7	15.6	36.5	36.4	36.1			6.7	6.3	3.8	PN
63033	4/26/2000	1111	2900.0	8629.9	99	368	99	202	22.7	20.5	15.6	36.5	36.4	36.1			6.8	6.6	3.7	PN
63034	4/26/2000	1601	2900.0	8700.0	99	672	110	221	22.8	18.8	14.3	36.5	36.4	35.8			6.9	4.9	3.6	PN
63035	4/26/2000	2115	2829.9	8700.0	99	836	100	202	23.1	20.4	16.0	36.5	36.4	36.1			6.8	6.0	4.1	PN
63036	4/27/2000	52	2759.9	8700.1	99	2840	100	201	23.6	19.0	15.4	36.5	36.5	36.1			6.8	4.2	4.2	PN
63037	4/27/2000	502	2730.0	8660.0	99	3019	100	201	25.1	18.9	14.4	36.4	36.5	35.8			6.6	4.4	3.8	PN
63038	4/27/2000	853	2700.0	8659.6	99	2946	98	202	26.8	24.2	17.6	36.0	36.8	36.4			6.2	4.9	4.5	PN
63039	4/27/2000	1319	2630.1	8700.7	99	2985	101	201	26.9	25.5	20.7	36.0	36.2	36.8			6.1	6.2	4.5	PN
63040	4/27/2000	1527	2615.9	8700.5	99	3093	99	200	26.7	25.3	21.9	36.1	36.2	36.9			6.1	6.2	4.5	PN
63041	4/27/2000	1959	2600.1	8730.2	99	3148	100	203	26.8	25.5	21.6	36.1	36.2	36.9			6.1	6.3	4.5	PN
63042	4/27/2000	2322	2600.1	8800.0	99	3010	99	201	27.2	25.6	19.7	36.0	36.3	36.7			6.2	6.1	4.6	PN
63043	4/28/2000	246	2629.6	8759.9	99	2700	100	200	26.9	22.5	16.9	36.1	36.4	36.3			6.2	6.2	4.4	PN
63044	4/28/2000	552	2659.9	8800.0	99	2754	100	202	25.6	18.7	14.6	36.3	36.3	35.9			6.5	4.9	3.7	PN
63045	4/28/2000	1007	2730.0	8800.0	99	2617	100	201	24.7	18.6	15.0	36.4	36.6	36.0			7.6	5.0	3.8	PN
63046	4/28/2000	1348	2800.0	8801.1	99	2435	100	202	23.4	18.2	14.0	36.5	36.5	35.8			6.8	4.5	3.7	PN
63047	4/28/2000	1756	2830.1	8800.0	99	2306	100	200	23.0	19.8	15.0	36.4	36.4	36.0			6.8	5.2	3.9	PN
63048	4/28/2000	2133	2900.1	8800.0	99	1383	99	201	22.9	20.2	15.6	35.9	36.4	36.1			6.8	6.2	3.7	PN
63049	4/29/2000	143	2929.9	8759.9	99	44	22	43	23.3	23.1	22.8	35.0	35.0	36.4			6.6	6.5	6.4	PN
63050	4/29/2000	613	2859.9	8830.0	99	605	99	202	23.2	19.9	16.0	35.2	36.4	36.1			6.9	5.9	3.9	PN
63051	4/29/2000	1103	2829.9	8900.0	99	794	100	202	23.7	19.8	14.5	36.3	36.7	35.9			6.8	4.8	3.5	PN
63052	4/29/2000	1532	2800.2	8859.7	99	1300	99	201	23.9	18.0	13.6	35.4	36.4	35.7			6.8	4.1	3.6	PN
63053	4/29/2000	2009	2730.1	8859.9	99	1720	100	200	24.0	17.1	13.3	35.5	36.3	35.7			10.3	12.7	14.6	PN
63054	4/29/2000	2355	2659.9	8900.0	99	2270	102	203	24.1	19.1	14.4	35.8	36.5	35.9			6.7	4.3	3.5	PN
63055	4/30/2000	354	2629.9	8900.1	99	2855	99	203	24.7	18.9	14.5	36.3	36.4	35.9			6.7	4.9	3.9	PN
63056	4/30/2000	725	2559.9	8900.0	99	3111	99	203	24.9	19.9	14.7	36.4	36.6	35.9			6.6	4.5	3.9	PN
63057	4/30/2000	1130	2559.9	8930.0	99	3294	100	201	24.9	20.0	14.7	36.3	36.5	35.9			6.6	4.7	3.4	PN
63058	4/30/2000	1513	2559.6	9000.1	99	2910	99	202	24.8	19.6	14.0	36.3	36.5	35.8			6.7	4.5	3.3	PN
63059	4/30/2000	1921	2630.0	8959.9	99	2882	95	201	24.5	18.9	14.1	36.3	36.4	35.8			6.8	4.2	3.4	PN
63060	4/30/2000	2247	2659.4	8959.8	99	2452	101	203	23.9	19.6	14.6	36.1	36.4	35.9			6.8	5.5	3.6	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, SPRING PLANKTON SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
63061	5/1/2000	253	2729.9	9000.1	99	1150	100	203	23.7	18.9	14.2	36.8	36.4	35.8			6.7	4.7	3.6	PN
63062	5/1/2000	637	2759.4	9000.0	99	586	100	204	23.5	19.1	14.4	35.6	36.5	35.9			7.2	4.3	3.8	PN
63063	5/1/2000	1127	2800.0	9030.0	99	297	100	202	23.7	19.0	15.9	33.8	36.5	36.1			6.7	4.2	4.3	PN
63064	5/1/2000	1534	2759.9	9059.6	99	149	76	148	24.0	20.9	18.0	36.4	36.4	36.4			6.6	6.2	4.1	PN
63065	5/1/2000	1923	2730.0	9100.0	99	1336	100	202	24.2	20.7	16.0	36.5	36.4	36.1			6.7	6.0	4.0	PN
63066	5/1/2000	2251	2659.9	9100.0	99	1665	100	200	24.3	20.9	16.0	36.4	36.4	36.1			6.6	6.2	3.8	PN
63067	5/2/2000	254	2629.8	9059.7	99	2105	103	200	24.5	19.1	14.4	36.3	36.4	35.9			6.6	4.4	3.4	PN
63068	5/2/2000	635	2600.1	9100.0	99	2708	102	202	24.3	19.4	14.2	36.3	36.5	35.8			6.6	4.3	3.4	PN
63069	5/2/2000	1040	2600.0	9130.0	99	2050	92	206	24.9	20.8	14.6	36.4	36.3	35.9			6.6	5.0	3.3	PN
63070	5/2/2000	1328	2559.8	9200.2	99	2141	101	202	25.2	20.4	13.8	36.0	36.5	35.8			6.6	5.4	3.2	PN
63071	5/2/2000	1954	2630.0	9159.9	99	1879	104	203	24.7	18.9	13.6	36.4	36.4	35.8			6.7	4.1	3.3	PN
63072	5/2/2000	2329	2700.1	9200.0	99	1885	100	202	24.5	20.2	13.8	36.4	36.4	35.8			6.6	5.0	3.4	PN
63073	5/3/2000	324	2729.9	9159.9	99	778	100	200	24.1	19.5	15.1	36.3	36.4	36.0			6.6	5.3	3.8	PN
63074	5/3/2000	656	2800.0	9200.0	16	117	58	116	24.1	22.0	18.7	36.4	36.4	36.4			6.5	6.6	3.8	PN
63075	5/3/2000	1039	2800.0	9230.0	16	103	51	103	23.8	22.3	19.7	36.3	36.4	36.4			5.1	6.5	4.8	PN
63076	5/3/2000	1407	2800.3	9300.0	17	103	50	103	24.0	21.9	19.9	36.1	36.1	36.4			6.5	6.7	4.7	PN
63077	5/3/2000	1751	2729.9	9300.0	99	780	102	200	24.2	20.5	15.3	36.3	36.7	36.0			6.7	4.8	4.0	PN
63078	5/3/2000	2135	2659.9	9300.1	99	1299	101	201	24.4	19.3	14.5	36.4	36.5	35.9			6.7	4.3	3.4	PN
63079	5/4/2000	133	2630.0	9259.8	99	1627	100	201	24.2	18.3	12.7	35.4	36.3	35.6			6.8	3.5	3.2	PN
63080	5/4/2000	416	2611.1	9309.9	99	1894	100	201	25.2	21.8	15.7	36.4	36.4	36.1			6.4	5.7	3.7	PN
63081	5/4/2000	721	2600.6	9329.8	99	2288	105	202	25.0	23.2	18.5	36.5	36.4	36.5			6.3	6.2	4.0	PN
63082	5/4/2000	1313	2629.8	9400.2	99	1557	100	202	24.9	23.6	20.3	36.5	36.5	36.7			6.3	6.4	4.3	PN
63083	5/4/2000	1717	2659.9	9359.9	99	1007	100	203	25.1	23.3	19.1	36.5	36.4	36.5			6.4	6.3	3.8	PN
63084	5/4/2000	2209	2729.8	9359.7	99	824	100	201	25.2	23.3	16.8	36.4	36.5	36.2			6.4	6.3	3.8	PN
63085	5/5/2000	218	2759.8	9400.2	99	80	41	79	24.3	21.7	19.8	35.2	36.0	36.3			6.5	6.7	5.0	PN
63086	5/5/2000	554	2801.3	9429.8	18	62	30	61	24.3	24.2	22.5	35.6	35.6	36.3			6.3	6.3	5.4	PN
63087	5/5/2000	915	2800.0	9500.0	99	78	39	77	25.1	25.4	22.4	36.1	36.4	36.4			6.2	6.2	5.5	PN
63088	5/5/2000	1333	2730.0	9500.0	99	897	97	203	25.9	23.2	16.0	36.4	36.4	36.1			6.4	6.6	3.8	PN
63089	5/5/2000	1806	2700.2	9500.0	99	1482	99	202	25.2	23.6	21.0	36.5	36.5	36.8			6.3	6.3	4.4	PN
63090	5/5/2000	2243	2630.0	9459.9	99	1665	100	201	25.2	23.7	21.8	36.6	36.5	36.8			6.3	6.3	4.3	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, SPRING PLANKTON SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
63091	5/11/2000	36	3000.1	8659.7	9	73	37	73	24.7	21.2	20.6	34.1	36.1	36.4			6.6	6.6	5.8	PN
63092	5/12/2000	502	2930.0	8630.1	99	203	102	202	25.3	19.7	15.8	35.5	36.4	36.1			6.6	6.0	3.7	PN
63093	5/12/2000	946	2900.1	8600.4	99	242	99	203	25.0	20.6	15.2	36.5	36.4	36.0			6.6	5.9	3.7	PN
63094	5/12/2000	1514	2830.1	8530.1	99	200	100	200	27.0	19.1	15.7	36.3	36.4	36.1			6.5	4.9	3.8	PN
63095	5/12/2000	2207	2800.0	8500.0	5	253	100	203	27.0	19.6	15.3	36.3	36.5	36.0			6.4	4.8	3.9	PN
63096	5/13/2000	202	2730.0	8459.9	5	393	100	201	26.9	19.8	15.6	36.3	36.5	36.4			6.4	5.1	3.8	PN
63097	5/13/2000	549	2700.0	8459.8	99	815	100	200	27.4	22.0	17.5	36.3	36.8	36.4			6.2	4.7	4.6	PN
63098	5/13/2000	1006	2630.3	8500.2	99	1909	99	202	27.3	25.8	20.6	36.2	36.2	36.8			6.1	6.0	4.4	PN
63099	5/13/2000	1358	2600.4	8500.0	99	3330	100	200	27.5	25.4	21.0	36.2	36.3	36.8			6.1	6.0	4.5	PN
63100	5/13/2000	1839	2559.5	8430.2	99	219	100	200	27.7	22.7	16.8	36.3	36.5	36.3			6.2	6.8	3.9	PN
63101	5/13/2000	2204	2600.5	8359.8	4	137	68	137	26.5	22.2	17.6	36.5	36.4	36.3			6.4	6.7	3.8	PN
63102	5/14/2000	147	2530.0	8400.0	3	137	69	136	26.6	22.3	18.1	36.4	36.4	36.4			6.3	6.7	3.8	PN
63103	5/14/2000	512	2459.9	8400.0	99	126	63	124	26.5	22.8	18.6	36.4	36.6	36.5			6.3	6.3	4.1	PN
63104	5/14/2000	859	2430.5	8359.8	2	2000	99	202	26.5	19.2	13.5	36.3	36.5	35.7			6.5	4.6	3.7	PN
63105	5/14/2000	1313	2430.0	8329.7	2	272	100	201	26.8	17.9	13.2	36.4	36.4	35.7			6.6	4.5	3.6	PN
63106	5/14/2000	2011	2359.9	8330.3	99	1098	101	205	26.3	17.3	10.1	36.5	36.2	35.2			6.7	4.2	3.4	PN
63107	5/14/2000	2353	2400.5	8400.6	99	2000	101	201	26.4	20.9	14.6	36.4	36.6	35.9			6.4	5.2	3.6	PN
63108	5/15/2000	508	2430.1	8430.0	99	3422	100	200	26.5	20.5	16.4	36.3	36.8	36.3			6.4	4.5	4.2	PN
63109	5/15/2000	906	2459.4	8430.2	99	2000	100	202	26.6	21.4	13.9	36.4	36.6	35.7			6.4	5.7	3.7	PN
63110	5/15/2000	1327	2459.9	8500.0	99	3327	100	202	26.8	20.8	16.1	36.3	36.5	36.1			6.4	5.4	4.2	PN
63111	5/15/2000	1756	2430.2	8500.1	99	3386	101	202	27.0	20.8	17.4	36.5	36.7	36.3			6.4	4.7	4.4	PN
63112	5/15/2000	1950	2429.7	8511.9	99	3389	101	202	27.5	21.7	16.6	36.2	36.5	36.3			6.1	6.2	4.1	PN
63113	5/16/2000	22	2459.7	8529.3	99	3303	100	200	27.6	23.2	17.1	36.1	36.3	36.3			6.2	6.6	4.4	PN
63114	5/16/2000	259	2459.6	8559.2	99	3294	100	200	27.7	24.2	18.7	36.2	36.4	36.6			6.1	6.6	4.6	PN
63115	5/16/2000	710	2530.0	8600.0	99	3182	100	200	27.4	25.5	21.2	36.2	36.2	36.8			6.0	6.2	4.5	PN
63116	5/16/2000	1028	2529.5	8627.4	99	3255	100	201	27.6	25.5	21.8	36.1	36.2	36.9			6.0	6.2	4.5	PN
63117	5/16/2000	1511	2600.1	8600.0	99	3239	101	202	27.7	25.6	21.9	36.1	36.2	36.8			6.0	6.1	4.4	PN
63118	5/16/2000	2014	2630.5	8600.6	99	3203	101	202	26.8	22.9	18.1	36.4	36.4	36.4			6.3	6.8	4.3	PN
63119	5/16/2000	2339	2700.0	8600.8	99	3257	100	201	26.3	18.7	13.5	36.5	36.5	35.7			6.6	4.6	3.7	PN
63120	5/17/2000	331	2729.9	8559.1	99	3222	100	201	26.3	19.2	13.1	36.5	36.5	35.6			6.4	4.4	3.7	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, SPRING PLANKTON SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
63121	5/17/2000	823	2800.3	8600.1	99	964	100	201	26.8	18.7	15.0	36.3	36.5	36.0			6.4	3.8	3.9	PN
63122	5/17/2000	1241	2830.0	8559.9	99	329	101	201	25.9	19.4	15.1	36.5	36.5	36.0			6.5	4.5	3.7	PN
63123	5/17/2000	1738	2859.7	8629.9	99	372	101	201	25.5	20.4	15.1	36.5	36.4	36.0			6.6	5.7	3.7	PN
63124	5/17/2000	2059	2859.8	8700.6	99	690	101	202	25.4	19.9	14.7	34.8	36.4	35.9			6.7	5.0	3.6	PN
63125	5/18/2000	101	2830.0	8700.1	99	841	100	200	26.3	19.6	15.4	36.4	36.5	36.0			6.5	4.5	3.7	PN
63126	5/18/2000	449	2759.9	8700.1	99	2891	100	201	26.5	19.8	14.8	36.4	36.6	35.9			6.4	4.2	3.9	PN
63127	5/18/2000	900	2730.0	8659.7	99	3056	101	202	26.6	19.4	15.0	36.4	36.6	36.0			6.4	4.3	4.0	PN
63128	5/18/2000	1234	2700.4	8659.7	99	2983	100	200	26.7	20.3	15.6	36.4	36.6	36.1			6.2	4.6	3.8	PN
63129	5/18/2000	1703	2629.9	8700.2	99	2946	101	203	27.5	25.0	18.8	36.2	36.6	36.6			6.1	5.7	4.4	PN
63130	5/18/2000	1918	2615.9	8700.8	99	3093	100	201	27.3	25.5	21.0	36.1	36.3	36.8			6.1	6.0	4.5	PN
63131	5/19/2000	11	2600.1	8729.4	99	3148	101	200	27.7	25.2	20.1	36.1	36.5	36.7			6.0	5.6	4.5	PN
63132	5/19/2000	305	2600.0	8759.5	99	3010	101	200	27.4	25.3	18.5	36.2	36.4	36.5			6.1	5.7	4.4	PN
63133	5/19/2000	703	2629.4	8800.1	99	2708	100	202	27.4	25.0	20.3	36.2	36.3	36.8			6.1	6.2	4.6	PN
63134	5/19/2000	1041	2659.9	8800.4	99	2754	100	201	26.4	21.4	16.5	36.3	36.3	36.2			6.4	6.1	3.7	PN
63135	5/19/2000	1610	2729.6	8800.0	99	2566	100	203	26.7	17.7	14.1	36.3	36.3	35.8			6.6	4.6	3.6	PN
63136	5/19/2000	2037	2800.1	8759.8	99	2434	100	203	26.5	18.9	14.7	36.5	36.5	35.9			6.6	3.9	3.7	PN
63137	5/20/2000	59	2830.0	8760.0	99	2306	100	200	26.1	20.1	15.8	35.6	36.5	36.1			6.5	5.1	3.9	PN
63138	5/20/2000	444	2900.1	8800.1	11	1383	99	202	25.5	20.5	15.4	35.6	36.4	36.0			6.6	5.0	3.7	PN
63139	5/20/2000	905	2929.8	8800.2	11	43	21	43	25.6	24.0	22.6	34.2	36.1	36.4			6.4	6.2	5.8	PN
63140	5/20/2000	1443	2900.2	8830.4	11	586	101	202	26.6	20.1	15.3	34.0	36.4	36.0			6.5	5.5	3.7	PN
63141	5/20/2000	2003	2829.9	8900.2	99	808	100	200	26.3	20.0	15.6	34.1	36.5	36.0			6.6	5.1	4.1	PN
63142	5/20/2000	2342	2800.1	8900.0	99	2443	101	200	26.5	19.7	15.0	36.5	36.5	36.0			6.5	4.6	4.0	PN
63143	5/21/2000	347	2730.0	8900.0	99	1777	99	200	26.4	19.8	15.3	36.5	36.4	36.0			6.5	5.3	3.9	PN
63144	5/21/2000	747	2700.1	8900.5	99	2269	100	201	27.1	21.1	15.8	36.3	36.4	36.0			6.3	6.1	3.4	PN
63145	5/21/2000	1231	2630.0	8859.9	99	2855	100	202	27.5	21.6	17.4	36.3	36.6	36.3			6.3	4.8	4.0	PN
63146	5/21/2000	1619	2559.9	8900.0	99	3111	100	202	28.0	22.5	17.2	36.2	36.6	36.3			6.2	5.8	4.2	PN
63147	5/21/2000	1948	2559.9	8930.0	99	3111	103	207	27.6	21.7	16.5	36.2	36.8	36.2			6.4	4.6	4.2	PN
63148	5/22/2000	45	2559.6	8959.9	99	2802	100	202	27.3	21.0	15.2	36.2	36.4	36.0			6.4	6.1	3.5	PN
63149	5/22/2000	428	2629.6	9000.0	99	2855	101	202	26.8	20.5	15.1	36.4	36.4	36.0			6.4	5.2	3.5	PN
63150	5/22/2000	805	2659.6	9000.2	99	2379	100	201	26.9	19.4	14.7	36.3	36.4	35.9			6.3	4.3	3.4	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, SPRING PLANKTON SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
63151	5/22/2000	1300	2730.1	9000.3	99	1153	97	200	27.0	19.0	11.8	36.3	36.3	35.5			6.6	5.0	3.2	PN
63152	5/22/2000	1925	2800.0	9000.1	99	528	101	204	26.8	18.5	14.5	36.3	36.3	35.9			6.6	4.7	3.6	PN
63153	5/22/2000	2251	2801.6	9030.0	14	239	101	202	26.5	18.3	14.6	35.2	36.4	35.9			6.6	4.1	3.6	PN
63154	5/23/2000	158	2800.0	9100.1	99	148	75	147	26.5	20.4	17.0	36.3	36.4	36.3			6.4	5.3	3.8	PN
63155	5/23/2000	554	2729.9	9100.2	99	1352	100	202	26.9	18.9	15.5	35.4	36.4	36.1			6.5	4.3	3.9	PN
63156	5/23/2000	926	2700.3	9059.7	99	1665	101	201	26.8	19.8	14.4	36.3	36.4	35.9			6.5	4.8	3.3	PN
63157	5/23/2000	1331	2630.1	9100.0	99	2105	101	200	27.3	17.5	13.0	36.4	36.3	35.6			6.6	4.3	3.5	PN
63158	5/23/2000	1709	2559.7	9100.1	99	2708	100	204	27.3	18.6	13.4	35.8	36.4	35.7			4.0	3.6	3.2	PN
63159	5/23/2000	2125	2559.6	9130.0	99	2050	101	202	27.0	18.1	12.5	36.0	36.3	35.6			6.6	3.6	3.1	PN
63160	5/24/2000	35	2600.2	9200.1	99	2196		201	27.2	18.6	13.8	36.2	36.4	35.8			6.5	4.1	3.5	PN
63161	5/24/2000	443	2629.9	9200.3	99	1879	100	201	26.9	19.7	14.1	36.3	36.5	35.8			6.3	4.7	3.4	PN
63162	5/24/2000	859	2659.6	9159.7	99	1390	101	200	26.6	20.0	14.9	36.1	36.4	35.9			6.4	5.4	3.6	PN
63163	5/24/2000	1306	2729.6	9200.1	99	778	100	202	26.4	20.8	16.6	36.5	36.4	36.2			6.4	6.1	4.3	PN
63164	5/24/2000	1647	2759.4	9200.8	99	118	59	117	26.7	22.5	19.9	35.9	36.2	36.4			6.3	6.4	4.9	PN
63165	5/24/2000	2039	2800.0	9230.0	16	103	50	101	27.0	23.5	19.9	36.3	36.3	36.4			6.2	6.3	4.7	PN
63166	5/24/2000	2354	2801.0	9260.0	16	103	51	100	27.2	23.8	19.6	36.2	36.4	36.4			6.2	6.5	4.2	PN
63167	5/25/2000	356	2730.0	9300.0	99	896	102	203	26.6	19.4	14.2	36.0	36.4	35.8			6.5	4.0	3.5	PN
63168	5/25/2000	741	2659.9	9300.0	99	1190	103	201	26.7	22.8	15.2	36.4	36.4	36.0			6.2	6.2	3.5	PN
63169	5/25/2000	1136	2630.1	9259.4	99	1702	99	200	26.8	21.2	14.9	36.5	36.4	36.0			6.7	6.6	3.4	PN
63170	5/25/2000	1407	2611.6	9309.5	99	1922	100	202	27.0	22.4	16.9	36.4	36.4	36.2			6.3	7.0	3.4	PN
63171	5/25/2000	1708	2600.7	9330.0	99	2288	100	201	26.9	23.4	18.3	36.5	36.4	36.4			6.2	6.3	3.7	PN
63172	5/25/2000	2037	2601.0	9359.9	99	3294	100	201	26.7	23.5	20.0	36.5	36.4	36.6			6.2	6.4	3.9	PN
63173	5/26/2000	47	2630.3	9400.1	99	1557	99	201	26.8	23.7	19.5	36.5	36.4	36.6			6.2	6.5	3.9	PN
63174	5/26/2000	450	2659.8	9400.4	99	961	102	201	27.0	23.3	18.8	36.5	36.4	36.4			6.1	6.4	3.6	PN
63175	5/26/2000	912	2730.0	9400.3	99	787	101	200	26.7	20.0	13.9	35.8	36.5	35.8			6.4	4.4	3.3	PN
63176	5/26/2000	1248	2759.6	9400.4	99	79	34	76	26.8	23.9	20.3	35.8	35.9	36.3			6.2	6.4	4.4	PN
63177	5/26/2000	1632	2800.3	9430.0	18	68	34	66	27.0	25.5	22.9	35.9	36.4	36.4			6.0	6.2	5.6	PN

Table 2. Selected environmental parameters (continued)

R. J. KEMP, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
31001	6/6/2000	817	2751.4	9701.5	20	6	3	6	28.3	28.2	28.3	36.6	36.6	36.6			6.3	6.4	6.4	ST
31002	6/6/2000	907	2755.8	9657.9	20	9	5	9	28.1	28.1	28.0	36.5	36.5	36.4			6.1	6.5	6.5	ST
31003	6/6/2000	948	2757.4	9655.9	20	10	5	10	27.9	27.9	27.8	36.4	36.5	36.4			6.5	6.7	6.5	ST
31004	6/6/2000	1026	2759.4	9655.2	20	3	2	3	28.2	28.2	28.1	36.4	36.5	36.5			6.8	6.7	6.7	ST
31005	6/6/2000	1101	2800.2	9654.5	19	3	2	3	27.9	27.9	27.6	36.4	36.5	36.5			6.7	6.5	6.7	ST
31006	6/6/2000	1132	2800.6	9653.6	19	6	3	6	28.3	28.3	28.3	36.5	36.5	36.5			6.5	6.5	6.4	ST
31007	6/6/2000	1246	2752.0	9652.6	20	18	9	18	26.9	26.9	26.9	36.3	36.3	36.3			7.4	7.3	7.1	ST
31008	6/6/2000	1343	2751.4	9651.7	20	20	10	20	27.1	27.0	26.9	36.3	36.3	36.5			6.8	7.2	7.2	ST
31009	6/27/2000	901	2746.8	9701.7	20	12	6	12	28.2	28.1	28.2	36.0	36.3	36.3			5.7	5.8	5.7	ST
31010	6/27/2000	933	2745.8	9702.6	20	12	6	12	28.1	28.1	28.1	36.5	36.3	36.5			5.8	6.0	5.9	ST
31011	6/27/2000	1024	2742.7	9705.7	20	12	6	12	28.3	28.2	28.3	36.4	36.4	36.4			5.6	5.9	5.6	ST
31012	6/27/2000	1241	2741.8	9707.7	20	11	5	11	28.8	28.7	28.5	36.5	36.5	36.7			5.9	6.0	5.9	ST
31013	6/27/2000	1324	2742.6	9702.7	20	16	8	16	28.8	28.0	27.1	36.5	36.3	36.3			6.0	6.1	5.2	ST
31014	6/27/2000	1408	2744.8	9700.6	20	16	8	16	28.9	28.1	27.8	36.3	36.4	36.4			6.1	6.0	6.0	ST
31015	6/27/2000	1439	2745.8	9659.8	20	16	8	16	28.9	28.1	27.8	36.4	36.6	36.4			5.9	6.1	5.8	ST
31016	6/27/2000	1548	2746.6	9653.5	20	21	10	21	28.9	28.3	28.0	36.4	36.4	36.3			6.0	6.1	6.0	ST

Table 2. Selected environmental parameters (continued)

MATAGORDA BAY, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
32001	6/5/2000	1016	2827.5	9615.5	19	6	3	6	28.8	28.8	28.8	35.3	35.3	35.3			5.5	5.5	5.4	ST
32002	6/5/2000	1104	2825.5	9612.5	19	13	7	13	28.6	28.3	28.2	35.1	35.3	35.3			5.6	5.6	5.4	ST
32003	6/5/2000	1232	2819.5	9620.6	19	14	7	14	28.1	28.6	28.4	34.9	35.7	35.5			5.8	5.5	5.5	ST
32004	6/13/2000	1053	2827.6	9606.5	19	14	7	14	28.0	27.9	27.9	32.7	32.6	32.6			5.6	5.5	5.6	ST
32005	6/13/2000	1119	2827.5	9605.5	19	14	7	14	28.1	28.0	28.0	32.7	32.7	32.7			5.7	5.5	5.5	ST
32006	6/13/2000	1222	2824.6	9603.5	19	18	9	18	28.2	27.9	28.1	33.1	33.0	33.2			5.8	5.8	5.6	ST
32007	6/13/2000	1318	2823.6	9606.5	19	17	9	17	28.4	28.1	27.9	33.1	33.2	33.1			6.1	6.0	5.8	ST
32008	6/13/2000	1405	2822.7	9608.6	19	18	9	18	28.3	27.9	28.1	33.2	33.2	33.2			6.9	6.7	5.9	ST
32009	6/27/2000	1043	2815.4	9628.7	19	10	5	10	29.0	28.9	28.8	36.2	36.6	36.6			6.0	6.0	5.9	ST
32010	6/27/2000	1122	2814.5	9626.4	19	15	8	15	29.0	28.7	28.7	36.5	36.5	36.5			5.9	6.1	5.8	ST
32011	6/27/2000	1203	2812.4	9625.6	19	20	10	20	28.8	28.6	27.6	36.5	36.5	36.5			6.3	6.4	5.1	ST
32012	6/27/2000	1244	2809.6	9625.5	19	23	11	23	28.9	28.6	27.0	36.5	36.5	36.5			6.0	6.2	5.1	ST
32013	6/27/2000	1335	2812.6	9622.6	19	22	11	22	28.8	28.7	26.8	36.5	36.5	36.3			5.9	6.0	4.6	ST
32014	6/27/2000	1413	2812.6	9620.5	19	23	12	23	29.0	28.3	26.4	36.2	36.2	36.2			6.0	6.1	4.7	ST
32015	6/27/2000	1445	2814.6	9620.7	19	22	11	22	29.3	28.6	26.7	36.2	36.2	36.3			5.7	6.0	5.2	ST
32016	6/27/2000	1515	2815.7	9621.5	19	20	10	20	29.2	28.9	27.1	36.3	36.4	36.5			5.9	6.0	5.7	ST

Table 2. Selected environmental parameters (continued)

LAGUNA MADRE, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
33001	6/13/2000	905	2559.5	9706.5	22	15	8	15	26.1	26.1	25.3	35.7	36.1	36.1			6.7	6.9	6.5	ST
33002	6/13/2000	948	2559.5	9705.5	22	18	9	18	26.3	26.2	25.7	36.1	36.4	36.4			7.5	7.0	6.7	ST
33003	6/13/2000	1028	2600.6	9704.6	21	20	10	20	26.4	26.2	26.1	36.3	36.4	36.4			7.4	7.2	7.2	ST
33004	6/13/2000	1139	2559.6	9700.6	22	26	13	26	26.4	26.1	24.8	36.4	36.4	36.4			6.9	6.9	6.4	ST
33005	6/13/2000	1235	2603.6	9705.5	21	19	10	19	26.8	26.6	26.1	36.3	36.3	36.4			8.1	6.4	8.3	ST
33006	6/13/2000	1318	2604.5	9704.5	21	20	10	20	26.7	26.5	26.2	36.3	36.4	36.4			7.3	7.2	7.9	ST
33007	6/13/2000	1359	2605.7	9703.6	21	21	11	21	26.8	26.5	26.6	36.4	36.4	36.3			7.3	6.9	7.3	ST
33008	6/13/2000	1455	2606.5	9709.5	21	5	3	5	26.8	26.8	27.0	36.2	36.1	36.3			6.2	6.6	6.2	ST
33009	6/26/2000	846	2609.6	9700.5	21	27	14	27	24.8	24.6	22.7	36.4	36.5	36.4			9.7	9.7	9.0	ST
33010	6/26/2000	931	2609.6	9702.5	21	22	11	22	24.7	24.6	22.9	36.4	36.3	36.4			8.3	8.3	8.0	ST
33011	6/26/2000	1003	2610.6	9703.5	21	20	10	20	24.9	24.5	22.9	36.4	36.4	36.4			8.1	7.9	7.4	ST
33012	6/26/2000	1050	2613.6	9702.5	21	21	11	21	25.2	25.0	23.2	36.4	36.5	36.5			8.3	7.6	7.6	ST
33013	6/26/2000	1131	2614.6	9703.6	21	20	10	20	26.8	23.4	23.1	36.6	36.5	36.4			7.9	7.8	7.8	ST
33014	6/26/2000	1246	2617.5	9706.5	21	18	9	18	24.8	24.5	23.4	36.4	36.5	36.4			8.1	8.1	8.2	ST
33015	6/26/2000	1401	2614.6	9709.5	21	14	7	14	24.5	23.5	23.0	36.4	36.5	36.4			7.8	8.0	8.1	ST
33016	6/26/2000	1545	2608.6	9709.5	21	8	4	8	24.5	23.9	23.3	36.4	36.5	36.4			7.5	7.4	7.5	ST

Table 2. Selected environmental parameters (continued)

SABINE, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
40001	6/1/2000	830	2938.5	9353.4	17	4	2	4	28.2	28.2	28.2	26.9	26.7	27.2			5.9	5.7	5.5	ST
40002	6/1/2000	918	2939.5	9357.8	17	4	2	4	28.8	28.7	28.6	27.2	27.4	27.3			6.9	6.6	5.1	ST
40003	6/1/2000	954	2940.4	9358.3	17	2	1	2	28.6	28.5	28.5	26.7	26.8	27.1			6.7	6.5	5.1	ST
40004	6/1/2000	812	2940.3	9359.4	17	2	1	2	27.8	27.8	27.0	29.8	29.9	29.9			4.7	4.8	4.0	ST
40005	6/1/2000	859	2938.5	9402.8	17	6	3	6	28.2	28.3	28.2	30.3	30.4	30.5			4.6	4.7	4.6	ST
40006	6/1/2000	1709	2932.5	9354.8	17	11	6	11	29.2	29.0	27.9	29.4	29.3	30.3			7.5	7.4	4.5	ST
40007	6/1/2000	1754	2933.5	9352.3	17	11	6	11	29.1	28.9	28.2	28.3	29.2	29.8			6.9	6.7	5.7	ST
40008	6/1/2000	1837	2935.5	9350.9	17	8	4	8	29.3	29.1	28.8	27.9	27.9	28.9			6.0	5.7	5.2	ST
40009	6/19/2000	939	2942.5	9341.0	17	7	4	7	28.2	28.1	28.1	19.7	21.7	23.6			5.3	5.3	5.7	ST
40010	6/19/2000	1022	2941.1	9339.5	17	8	4	8	28.2	28.1	28.1	21.3	24.4	24.9			6.7	6.5	6.2	ST
40011	6/19/2000	1151	2939.5	9344.8	17	8	4	8	28.5	28.5	28.1	22.7	23.5	25.5			7.3	7.2	6.1	ST
40012	6/19/2000	1232	2938.5	9345.1	17	8	4	8	28.7	28.7	28.0	24.3	24.6	25.6			6.7	6.8	5.8	ST
40013	6/19/2000	1338	2936.5	9349.9	17	8	4	8	28.8	28.6	28.1	20.0	20.9	24.4			6.6	6.4	5.9	ST
40014	6/22/2000	916	2932.6	9350.5	17	12	6	12	28.6	28.6	28.5	25.6	28.5	29.2			7.2	6.7	5.4	ST
40015	6/22/2000	1014	2931.5	9351.2	17	12	6	12	28.7	28.8	28.7	26.3	28.7	29.3			6.6	6.0	5.2	ST
40016	6/22/2000	1114	2931.6	9349.8	17	12	6	12	28.9	28.6	28.5	26.3	28.6	29.2			7.1	6.9	5.3	ST

Table 2. Selected environmental parameters (continued)

TRINITY BAY, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
65001	6/13/2000	1102	2919.6	9440.5	18	12	6	12	28.6	28.4	28.1	33.0	28.4	28.3			7.4	7.1	7.1	ST
65002	6/13/2000	1151	2917.5	9439.5	18	9	5	9	28.4	28.3	28.3	28.9	29.2	28.8			7.0	6.4	5.3	ST
65003	6/13/2000	1228	2917.6	9437.4	18	13	6	13	28.7	28.5	28.4	28.9	30.1	29.7			5.7	5.7	4.9	ST
65004	6/13/2000	1338	2923.6	9428.5	18	12	6	12	28.6	28.5	28.3		28.6	29.7			5.7	5.3	5.2	ST
65005	6/13/2000	1427	2928.6	9432.4	18	6	3	6	29.0	29.0	28.8	28.0	28.0	28.0			7.0	7.0	6.7	ST
65006	6/13/2000	1513	2925.9	9435.6	18	8	4	8	28.6	28.4	27.8	28.0	28.5	28.6			7.0	6.9	6.8	ST
65007	6/13/2000	1532	2925.6	9436.4	18	7	4	7	28.6	28.4	27.8	28.1	28.6	28.7			7.0	6.9	6.8	ST
65008	6/13/2000	1704	2921.8	9438.7	18	9	4	9	28.7	28.6	28.2	28.2	28.5	28.9			7.2	7.1	6.2	ST
65009	6/26/2000	1034	2915.3	9436.5	18	13	7	13	29.2	29.0	29.0	33.1	32.9	33.0			5.4	5.6	5.3	ST
65010	6/26/2000	1102	2915.8	9441.5	18	11	6	11	29.3	29.1	29.1		33.1	33.3			5.3	5.1	5.2	ST
65011	6/26/2000	1131	2914.2	9444.6	18	12	6	12	29.3	29.1	29.1	33.0	33.1	33.2			4.7	4.5	5.6	ST
65012	6/26/2000	1205	2913.8	9443.2	18	12	6	12	29.7	29.3	29.3	32.3	32.7	33.0			4.8	4.8	6.8	ST
65013	6/26/2000	1240	2911.2	9450.8	18	12	6	12	29.6	29.2	29.1	32.5	32.5	33.1			3.1	2.5	2.5	ST
65014	6/26/2000	1330	2907.6	9449.2	18	14	7	14	29.8	29.3	29.2	32.7	32.8	33.1			2.5	2.4	3.1	ST
65015	6/26/2000	1359	2906.3	9447.7	18	15	8	15	29.8	29.4	29.3	32.4	32.4	32.7			3.6	4.1	4.0	ST
65016	6/26/2000	1451	2908.9	9444.3	18	16	8	16	30.0	29.2	29.1	32.2	32.6	33.0			3.6	4.1	5.3	ST

Table 2. Selected environmental parameters (continued)

A.E. VERRILL, SUMMER SHRIMP/GROUNDFISH SURVEY																				
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, MG/M3	FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	SUR	MID	MAX	GEAR
2301	6/5/2000	922	3008.4	8802.6	11	16	8		27.8	22.9		32.6	36.2				6.5	6.1		ST
2302	6/5/2000	1047	3011.5	8806.8	11	11	6	11	27.8	27.8	23.4	32.3	32.9	35.8			6.3	6.2	3.1	ST
2303	6/12/2000	1114	3003.3	8808.3	11	22	11	22	27.1	27.1	23.8	34.5	34.6	35.9			7.2	7.2	7.9	ST
2304	6/12/2000	1157	3002.1	8810.9	11	24	12	24	27.2	27.0	23.5	34.7	34.7	36.1			7.5	7.5	6.8	ST
2305	6/12/2000	1242	3001.0	8811.9	11	26	13	26	27.3	26.8	23.1	34.8	35.0	36.2			6.3	6.2	5.8	ST
2306	6/12/2000	1441	2954.8	8819.4	11	33	17	33	27.3	25.8	22.1	35.2	35.5	36.4			6.1	6.3	5.5	ST
2307	6/12/2000	1731	3013.4	8818.6	11	4	2	4	28.4	28.4	28.3	33.9	33.9	33.9			6.1	6.1	6.1	ST
2308	6/12/2000	2000	3012.6	8819.0	11	5	3	5	27.9	27.9	27.9	34.1	34.1	34.1			6.1	6.1	6.1	ST
2309	6/12/2000	2054	3009.6	8817.1	11	16	8	16	27.7	27.5	27.2	34.5	34.5	34.5			6.1	6.2	5.9	ST

Table 2. Selected environmental parameters (continued)

TOMMY MUNRO, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
17001	6/9/2000	1525	3003.4	8849.6	11	10	5	9	25.4	27.3	27.1	33.2	33.2	33.2			7.1	7.1	7.1	ST
17002	6/24/2000	647	2932.5	8843.4	11	15	8	14	29.8	28.5	26.9	31.9	33.8	35.6			8.0	4.2	4.2	ST
17003	6/24/2000	933	2932.2	8835.5	11	36	18	35	28.6	21.4	24.5	32.4	36.5	36.2			6.6	5.3	5.0	ST
17004	6/24/2000	1258	2932.7	8827.5	11	47	23	46	28.9	23.7	21.9	33.4	36.3	36.5			6.5	6.5	5.5	ST
17005	6/24/2000	1539	2930.3	8830.2	11	50	25	49	29.9	23.7	21.3	33.8	36.3	36.7			6.5	7.1	6.1	PN
17006	6/24/2000	1817	2947.5	8826.4	11	34	17	33	29.0	26.8	23.2	34.5	36.1	36.6			6.6	6.9	6.4	ST
17007	6/24/2000	2048	2942.0	8830.5	11	32	16	31	28.6	26.4	21.7	33.7	35.3	36.9			8.0	8.2	5.7	ST
17008	6/24/2000	2319	2943.3	8833.1	11	26	13	25	28.1	27.2	22.0	33.3	35.1	36.9			7.9	8.2	5.7	ST
17009	6/25/2000	200	2941.9	8846.4	11	13	6	12	29.3	29.4	27.6	33.2	33.1	35.1			6.7	6.6	6.8	ST
17010	6/25/2000	425	2940.1	8850.8	11	10	5	9	29.0	29.3	27.7	32.5	32.9	35.2			5.1	6.2	6.8	ST
17011	6/25/2000	707	2955.5	8840.6	11	17	8	16	28.5	25.0	24.6	32.9	36.0	36.4			6.4	6.6	6.5	ST
17012	6/25/2000	913	2958.6	8839.5	11	18	9	17	28.4	27.9	24.8	31.8	34.3	36.1			7.0	8.2	7.3	ST
17013	6/25/2000	1126	2954.8	8847.7	11	6	3	5	29.0	29.0	28.6	33.2	34.1	34.9			6.4	8.4	8.3	ST
17014	6/25/2000	1253	3001.3	8849.6	11	6	3	5	30.4	30.0	30.4	29.4	29.9	30.2			6.8	6.6	6.6	ST
17015	6/25/2000	1507	3009.3	8832.3	11	13	6	12	29.9	28.9	27.7	30.0	32.6	35.2			6.3	6.3	6.0	ST
17016	6/25/2000	1647	3000.0	8830.0	11	25	12	24	29.6	28.0	25.2	32.7	35.5	34.2			6.5	6.5	6.5	PN
17017	6/25/2000	1803	2955.2	8827.2	11	30	15	29	29.5	27.7	24.1	32.7	35.5	36.0			6.4	6.6	6.2	ST
17018	6/25/2000	2008	2955.2	8821.4	11	30	15	29	29.4	27.5	24.3	33.7	35.2	36.4			6.4	8.2	7.5	ST
17019	6/25/2000	2312	2955.7	8834.3	11	23	11	22	28.7	27.7	24.2	32.6	35.4	36.6			6.8	8.0	7.2	ST
17020	6/26/2000	132	3002.6	8826.0	11	20	10	19	29.3	29.1	25.7	32.1	33.2	35.9			5.6	6.4	6.6	ST
17021	6/26/2000	345	3005.3	8827.8	11	17	8	16	29.3	29.2	26.3	31.4	31.7	35.4			5.4	6.6	6.3	ST
17022	7/1/2000	834	2913.2	8954.2	13	8	4	7	27.6	28.2	27.8	30.2	34.6	35.4			4.1	3.9	3.1	ST
17023	7/1/2000	1238	2902.2	9026.3	14	4	2	3	28.9	29.0	29.0	33.2	33.3	33.4			5.8	5.7	4.9	ST
17024	7/1/2000	2002	2916.8	8952.5	13	4	2	3	28.0	27.8	27.7	29.3	35.3	35.5			5.9	2.8	2.2	ST
17025	7/1/2000	2211	2907.6	9006.8	14	8	4	7	26.8	27.5	27.2	34.7	35.9	36.1			5.6	3.7	1.5	ST
17026	7/2/2000	547	2858.4	9111.8	15	6	3	5	29.7	29.9	29.8	24.9	25.9	33.1			8.3	7.4	4.0	ST
17027	7/2/2000	1053	2912.0	9147.8	15	6	3	5	30.3	29.9	30.1	32.3	32.5	32.3			5.0	5.5	5.8	ST
17028	7/2/2000	1417	2910.7	9214.2	16	6	3	5	28.6	29.3	29.2	30.5	30.2	30.1			6.8	6.3	6.4	ST

Table 2. Selected environmental parameters (continued)

TOMMY MUNRO, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
17029	7/2/2000	1522	2910.8	9218.7	16	6	3	5	29.5	29.7	30.2	30.1	30.2	29.7			6.6	6.5	6.5	ST
17030	7/2/2000	2009	2918.9	9209.8	16	4	2	3	28.7	28.7	28.9	32.0	32.0	31.4			6.0	6.2	5.6	ST
17031	7/2/2000	2304	2928.5	9226.6	16	8	4	7	28.5	28.8	28.4	30.8	31.5	34.6			5.3	5.6	2.3	ST
17032	7/3/2000	645	2943.0	9331.9	17	8	4	7	29.2	29.7	29.5	32.5	32.6	32.4			5.2	4.2	4.2	ST
17033	7/12/2000	5	2948.2	8849.3	11	6	3	5	30.3	30.6	30.6	32.3	32.3	32.3			6.3	6.1	6.1	ST
17034	7/12/2000	135	2953.5	8840.5	11	17	9	16	30.2	29.7	26.8	33.8	34.0	35.8			6.8	5.8	4.9	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	6/13/2000	2046	2959.3	8759.7	10	24	12	23	27.7	27.1	24.0	34.8	34.9	36.1			6.1	6.2	5.6	PN
2	6/13/2000	2325	2957.9	8811.4	11	29	14	28	27.5	27.0	22.8	34.8	34.9	36.4			6.1	6.3	5.6	ST
3	6/14/2000	231	2943.3	8812.5	11	32	16	32	27.3	24.9	22.0	35.2	36.0	36.4			6.2	6.2	5.6	ST
6	6/14/2000	926	2916.2	8825.0	11	68	34	66	27.8	23.3	20.5	32.9	36.5	36.4			6.5	6.6	5.0	ST
7	6/14/2000	1206	2919.2	8810.6	11	80	40	79	28.2	21.8	18.9	35.8	36.4	36.4			6.3	5.8	2.9	ST
8	6/14/2000	1500	2919.0	8803.8	11	86	43	86	27.8	21.9	18.4	35.3	36.3	36.4			6.4	5.8	3.4	ST
9	6/14/2000	1714	2930.2	8800.2	11	38	19	38	28.0	23.0	19.8	34.2	36.2	36.4			6.4	6.0	3.8	PN
10	6/14/2000	1959	2925.5	8803.7	11	52	26	51	28.0	21.8	19.4	34.1	36.4	36.4			6.4	5.9	3.5	ST
11	6/14/2000	2135	2923.0	8805.7	11	70	36	68	27.7	20.6	19.0	33.8	36.4	36.4			6.5	5.1	3.4	ST
12	6/15/2000	42	2930.8	8814.8	11	40	20	40	27.4	21.8	20.3	34.8	36.4	36.4			6.4	6.0	4.2	ST
13	6/15/2000	507	2917.1	8831.9	11	58	29	58	27.5	22.1	21.0	32.9	36.3	36.4			6.4	5.1	5.8	ST
14	6/15/2000	831	2913.5	8848.6	11	63	31	62	27.8	21.5	20.5	31.1	36.4	36.4			7.4	6.2	4.9	ST
16	6/15/2000	1232	2916.7	8848.9	11	50	25	50	27.8	22.3	20.9	32.7	36.3	36.4			7.3	6.7	5.2	ST
17	6/15/2000	1521	2923.0	8849.0	11	22	11	22	27.6	25.3	22.9	33.4	35.8	36.2			6.4	6.4	4.9	ST
18	6/15/2000	1546	2921.8	8847.2	11	38	19	38	28.6	23.5	22.0	30.5	36.2	36.4			7.1	6.7	4.6	ST
19	6/15/2000	1643	2920.5	8847.4	11	42	21	42	28.6	23.2	21.7	30.4	36.2	36.4			7.2	6.3	5.2	ST
20	6/15/2000	2020	2918.0	8857.7	11	21	10	20	27.7	26.4	23.7	30.3	35.0	36.0			9.0	6.1	4.3	ST
21	6/15/2000	2149	2918.2	8851.5	11	42	21	41	27.9	23.6	22.1	31.4	36.3	36.4			8.6	6.5	4.8	ST
22	6/15/2000	2348	2920.0	8851.5	11	32	16	31	27.6	25.3	22.8	32.2	35.8	36.3			7.3	6.4	4.9	ST
23	6/16/2000	220	2928.8	8841.4	11	22	11	22	27.9	26.2	23.0	33.0	35.7	36.1			6.2	6.4	4.2	ST
24	6/17/2000	2356	2910.8	8835.8	11	75	37	75	28.2	19.5	18.5	31.5	36.4	36.4			6.7	4.2	3.9	ST
25	6/18/2000	243	2905.2	8851.8	11	86	43	85	27.9	22.1	21.0	31.8	36.4	36.4			6.9	5.2	5.0	ST
26	6/20/2000	1340	2608.1	9703.7	21	20	10	20	26.7	25.5	23.9	36.4	36.4	36.4			6.1	6.1	5.8	ST
27	6/20/2000	1619	2609.8	9653.6	21	35	17	35	27.8	24.1	23.6	36.3	36.4	36.4			6.1	6.5	5.4	ST
29	6/20/2000	2049	2604.1	9706.5	21	12	6	12	25.8	23.8	23.8	36.5	36.4	36.4			6.0	5.6	5.6	ST
30	6/20/2000	2309	2616.1	9710.3	21	12	6	12	25.9	25.9	24.6	36.4	36.4	36.4			5.7	5.7	4.3	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
31	6/21/2000	53	2620.1	9702.1	21	25	13	25	26.4	26.3	24.0	36.4	36.4	36.4			6.1	6.1	5.0	ST
32	6/24/2000	1344	2615.5	9709.3	21	10	5	10	24.1	24.3	24.0	36.4	36.4	36.4			5.8	5.8	5.7	ST
33	6/24/2000	1608	2625.3	9702.1	21	27	13	27	27.0	24.2	23.8	36.4	36.4	36.4			6.2	6.2	5.8	ST
34	6/24/2000	1909	2626.5	9632.7	21	66	33	66	27.8	24.5	22.2	36.2	36.4	36.4			6.1	6.7	5.2	ST
35	6/24/2000	2223	2623.4	9630.3	21	62	31	62	27.7	24.2	22.8	36.4	36.4	36.4			6.6	6.6	5.4	ST/PN
37	6/25/2000	325	2630.0	9659.9	21	29	14	28	26.9	24.3	23.6	36.4	36.4	36.4			6.1	6.1	5.8	PN
38	6/25/2000	517	2633.2	9704.6	21	26	13	26	26.5	25.8	23.8	36.4	36.4	36.4			6.1	6.1	5.8	ST
39	6/25/2000	657	2630.9	9700.8	21	32	16	32	26.7	24.2	23.6	36.4	36.4	36.4			4.8	6.3	3.5	ST
40	6/25/2000	919	2637.0	9649.5	21	44	22	44	27.7	27.0	23.5	36.4	36.4	36.4			5.9	6.2	3.8	ST
41	6/25/2000	1321	2654.4	9706.8	21	31	15	31	27.3	26.6	23.5	36.3	36.4	36.4			6.1	6.1	5.7	ST
42	6/25/2000	1542	2643.7	9707.5	21	29	14	29	26.8	25.2	24.0	36.4	36.4	36.4			6.1	6.1	5.7	ST
43	6/25/2000	1746	2637.1	9707.4	21	24	12	24	26.2	24.8	23.9	36.4	36.4	36.4			6.0	5.9	5.8	ST
44	6/25/2000	2025	2635.1	9715.1	21	14	7	14	25.5	25.2	24.8	36.4	36.4	37.5			5.8	5.7	5.2	ST
45	6/25/2000	2234	2641.3	9701.1	21	32	16	32	27.2	25.1	23.6	36.0	36.4	36.4			6.1	6.4	5.9	ST
46	6/26/2000	108	2652.2	9656.6	21	53	26	53	27.7	25.6	22.6	36.5	36.4	36.4			6.0	6.6	5.8	ST
48	6/26/2000	553	2657.2	9711.7	21	25	12	25	26.9	26.8	23.9	36.4	36.4	36.4			6.0	6.0	5.8	ST
49	6/26/2000	811	2658.4	9721.8	21	11	5	10	26.9	26.9	26.5	36.4	36.4	36.3			5.9	5.9	5.9	ST
50	6/26/2000	958	2707.5	9720.5	20	11	5	10	27.1	27.1	27.1	36.4	36.4	36.4			5.8	5.8	5.8	ST
51	6/26/2000	1212	2716.0	9708.5	20	24	12	24	27.7	27.5	24.8	36.4	36.4	36.4			5.9	6.0	6.3	ST
52	6/26/2000	1423	2720.2	9657.8	20	35	17	34	27.6	27.2	23.8	36.3	36.5	36.4			6.0	6.1	6.1	ST
53	6/26/2000	1550	2719.7	9654.0	20	38	19	38	27.9	27.7	24.2	36.5	36.5	36.0			6.0	6.0	6.0	ST
54	6/26/2000	2029	2717.2	9654.9	20	38	19	38	27.9	27.5	23.8	36.4	36.5	36.2			6.0	6.1	6.1	ST
55	6/26/2000	2305	2710.4	9701.5	20	34	17	34	27.8	27.3	23.6	36.4	36.5	36.3			6.0	6.1	5.9	ST
56	6/27/2000	108	2711.5	9713.5	20	22	11	22	27.1	27.0	24.5	36.4	36.5	36.3			6.0	6.0	6.1	ST
57	6/27/2000	241	2708.7	9716.0	20	20	10	20	27.2	27.2	24.4	36.4	36.4	36.4			6.0	6.0	6.0	ST
58	6/27/2000	501	2656.2	9716.2	21	20	10	20	26.2	26.1	24.0	36.4	36.4	36.4			6.0	6.0	5.3	ST
59	6/27/2000	617	2700.0	9711.8	21	25	12	24	26.4	25.2	23.6	36.4	36.4	36.3			6.0	6.0	5.3	PN
60	6/27/2000	815	2700.1	9700.5	20	37	18	36	27.1	26.8	23.3	36.3	36.4	36.4			6.0	6.2	6.0	PN

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
61	6/27/2000	1229	2700.3	9636.8	20	91	45	90	28.2	24.3	20.5	36.3	36.4	36.5			6.0	6.7	3.7	ST/PN
64	6/27/2000	1912	2730.4	9635.3	20	62	31	62	28.3	27.5	22.9	36.4	36.6	36.4			5.9	6.2	5.3	ST
65	6/27/2000	2237	2715.1	9633.7	20	91	45	90	28.2	25.0	20.5	36.4	36.5	36.5			6.0	6.8	3.7	ST
66	6/28/2000	42	2715.2	9637.1	20	82	41	82	28.1	25.2	21.4	36.4	36.4	36.4			6.0	6.7	4.3	ST
67	6/28/2000	430	2727.3	9643.3	20	55	27	55	28.0	27.8	23.0	36.4	36.4	36.4			5.9	6.0	5.3	ST
69	6/28/2000	806	2741.8	9656.0	20	24	12	23	27.8	27.8	24.8	33.2	33.2	36.3			4.9	4.8	5.0	ST
70	6/28/2000	900	2744.2	9658.5	20	18	9	18	28.0	27.9	25.7	33.2	33.2	33.1			2.6	4.0	4.7	ST
71	6/28/2000	1109	2747.9	9658.7	20	15	8	15	28.1	28.0	25.9	33.1	33.1	33.0			2.9	7.2	9.5	ST
72	6/28/2000	1240	2751.6	9700.1	20	11	5	10	28.9	28.9	28.7	33.2	33.2	33.2			2.4	2.8	3.0	ST
73	6/28/2000	1535	2729.9	9700.0	20	27	13	26	27.8	27.4	24.3	33.0	32.9	33.0			3.9	7.2	9.6	PN
74	6/28/2000	2024	2730.4	9649.4	20	40	20	39	28.1	27.9	23.6	36.4	36.4	36.4			5.9	6.0	6.3	ST
75	6/28/2000	2127	2732.5	9654.8	20	29	15	29	27.7	27.6	24.0	36.4	36.4	36.4			6.0	6.0	6.6	ST
76	6/29/2000	14	2725.1	9659.7	20	31	15	30	27.1	27.0	23.8	36.4	36.4	36.4			6.0	6.1	5.2	ST
77	6/29/2000	312	2734.0	9709.0	20	16	8	16	27.6	27.6	25.4	36.4	36.4	36.4			6.0	6.0	6.9	ST
78	6/29/2000	357	2744.5	9705.6	20	12	6	11	28.3	28.3	28.0	36.5	36.5	36.4			5.7	5.8	5.6	ST
79	6/29/2000	753	2800.0	9629.9	20	26	13	26	28.2	28.2	24.6	36.4	36.4	36.3						PN
80	6/29/2000	953	2803.1	9614.4	19	33	16	32	28.3	28.3	24.5	36.4	36.3	37.6						ST
81	6/29/2000	1248	2745.3	9629.8	20	48	24	47	28.3	28.0	23.2	36.4	36.4	36.4			6.0	6.0	4.8	PN
82	6/29/2000	1458	2739.2	9620.8	20	73	36	73	28.6	27.5	21.8	36.3	36.4	36.4			5.9	6.2	3.9	ST
83	6/29/2000	1745	2726.4	9626.4	20	91	45	90	28.6	24.9	20.9	36.4	36.4	36.5			6.0	6.7	3.6	ST/PN
84	6/29/2000	2216	2735.8	9609.7	20	110	55	110	29.0	23.9	19.2	36.0	36.4	36.5			6.0	6.6	3.2	ST
86	6/30/2000	244	2808.4	9613.8	19	35	17	35	28.4	28.1	23.8	36.2	36.3	36.4			5.9	6.0	5.8	ST
87	6/30/2000	400	2803.8	9613.8	19	31	15	31	28.2	28.2	24.3	36.3	36.3	36.4			5.9	5.9	6.0	ST
88	6/30/2000	547	2815.8	9620.7	19	18	9	18	28.5	28.5	26.3	36.4	36.4	36.3			5.8	5.8	4.0	ST/PN
91	6/30/2000	1353	2749.7	9548.8	20	64	32	63	28.8	26.8	22.9	35.1	35.7	35.6			5.3	5.8	4.4	ST
92	6/30/2000	1647	2803.6	9544.6	19	44	22	44	29.0	28.0	23.7	35.4	35.9	36.3			5.9	5.9	5.3	ST
94	6/30/2000	1841	2809.9	9544.3	19	35	17	34	28.9	28.4	25.9	35.9	36.1	36.5			5.8	5.9	5.8	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GROUNDFISH SURVEY																				
			POSITION		STAT	DEPTH	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, MG/M3	FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	LAT	LONG	ZONE	(M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	SUR	MID	MAX	GEAR
95	6/30/2000	2245	2801.1	9553.9	19	46	23	45	28.9	27.4	23.3	35.6	36.3	36.4			5.9	6.1	5.2	ST/PN
97	7/1/2000	120	2808.9	9553.3	19	34	17	34	28.6	28.6	24.8	36.0	36.0	36.4						ST
98	7/1/2000	535	2828.3	9609.2	19	12	6	11	28.7	28.7	28.7	36.5	36.5	36.5						ST/PN
99	7/1/2000	840	2830.0	9551.1	19	16	8	15	29.1	29.1	29.1	36.3	36.3	36.3						ST
100	7/1/2000	1045	2837.1	9549.7	19	11	5	10	29.3	29.3	29.2	36.3	36.3	36.3						ST
101	7/1/2000	1123	2834.7	9548.8	19	14	7	13	29.2	29.0	29.0	36.3	36.3	36.3						ST
102	7/1/2000	1430	2816.3	9546.0	19	29	14	29	29.0	28.5	25.1	35.8	36.1	36.4						ST
103	7/1/2000	1604	2813.5	9543.4	19	33	16	29	29.2	28.5	28.1	35.7	36.0	36.2						ST
104	7/1/2000	1727	2816.4	9539.4	19	31	15	31	29.1	28.4	25.1	35.8	36.1	36.6						ST
105	7/1/2000	2043	2829.7	9525.6	19	27	13	26	29.2	28.5	25.8	35.6	36.1	36.2						ST/PN
106	7/1/2000	2225	2832.1	9520.7	19	27	13	26	29.1	28.8	26.1	35.2	35.4	36.2			5.8	5.9	5.0	ST
107	7/2/2000	119	2846.0	9522.0	19	16	8	16	29.3	29.3	27.8	35.9	35.9	35.4			5.7	5.7	5.2	ST
108	7/2/2000	426	2804.2	9504.5	19	12	6	11	28.7	28.3	27.5	35.6	35.7	35.7			5.3	5.0	4.6	ST
109	7/2/2000	714	2858.0	9500.0	19	18	9	17	28.7	28.7	27.7	35.1	35.1	35.4			5.7	5.8	5.3	ST/PN
111	7/2/2000	1034	2854.6	9514.1	19	13	6	12	29.3	29.3	29.2	35.9	35.9	35.9			5.5	5.5	5.5	ST
112	7/2/2000	1414	2835.4	9528.5	19	20	10	19	29.1	28.4	25.6	35.5	36.2	36.0			5.8	5.7	4.8	ST
113	7/2/2000	1529	2835.8	9524.8	19	24	12	24	29.2	28.8	25.6	35.4	36.0	36.1			5.8	5.8	5.2	ST
114	7/2/2000	1730	2841.2	9517.3	19	22	11	21	29.1	28.9	26.3	35.4	35.6	35.9			5.8	5.8	5.3	ST
115	7/2/2000	1911	2838.5	9511.8	19	24	12	24	29.4	28.9	26.8	35.0	35.2	35.9			5.8	5.9	5.3	ST
116	7/2/2000	2158	2845.5	9457.9	18	22	11	21	29.1	29.0	28.3	35.6	35.7	35.6			5.8	5.8	5.7	ST
117	7/3/2000	47	2854.9	9441.3	18	16	8	16	29.1	29.1	28.8	34.6	34.6	35.4			5.8	5.8	5.6	ST
118	7/3/2000	228	2900.1	9430.0	18	18	9	18	29.2	29.2	29.1	35.0	35.0	35.1			5.7	5.7	5.6	PN
119	7/4/2000	1940	2928.4	9422.4	18	11	6	11	29.6	29.6	29.6	34.1	34.1	34.2			5.8	5.8	5.4	ST
120	7/4/2000	2135	2928.9	9421.4	18	11	6	11	29.7	29.7	29.6	33.4	33.4	34.2			2.2	2.8	5.5	ST
121	7/5/2000	142	2903.6	9418.0	18	15	8	15	29.5	29.6	29.5	33.3	33.3	33.3			2.4	3.8	4.6	ST
122	7/5/2000	411	2850.9	9421.2	18	24	12	24	29.1	29.2	27.8	33.2	33.4	34.4			2.7	4.6	5.6	ST
123	7/5/2000	547	2841.8	9415.5	18	29	15	29	29.4	29.2	26.6	33.6	33.8	35.8			5.8	5.9	5.1	ST
124	7/5/2000	912	2829.9	9429.9	18	37	18	36	29.1	29.0	25.9	34.0	34.6	36.1			5.8	6.0	4.6	PN
125	7/5/2000	1233	2829.9	9500.4	19	34	17	34	29.6	28.9	27.0	34.1	35.3	36.0			5.8	5.9	5.3	PN
126	7/5/2000	1443	2819.6	9511.2	19	37	18	37	29.4	28.9	24.8	35.6	35.9	36.0			5.8	5.9	4.5	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GROUNDFISH SURVEY																				
			POSITION		STAT	DEPTH	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, MG/M3	FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	LAT	LONG	ZONE	(M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	SUR	MID	MAX	GEAR
129	7/5/2000	1847	2807.6	9504.7	19	55	27	55	29.3	28.9	23.1	35.6	36.0	36.3			5.9	6.0	4.4	ST
130	7/5/2000	2132	2815.6	9503.5	19	44	22	44	29.5	27.7	23.7	34.3	36.0	36.3			5.9	6.2	3.7	ST
133	7/6/2000	408	2800.6	9529.7	19	55	27	55	29.0	28.0	24.3	36.3	36.3	36.3			5.8	6.1	5.2	ST
135	7/6/2000	802	2750.3	9526.3	20	91	45	91	29.0	27.4	19.2	35.5	36.3	36.5			5.9	6.5	3.3	ST
136	7/6/2000	947	2751.9	9523.1	20	93	47	93	29.1	27.6	19.4	35.5	36.3	36.4			5.8	6.4	3.4	ST
137	7/6/2000	1255	2801.6	9511.9	19	63	30	63	29.1	28.0	21.8	35.5	36.3	36.3			5.9	6.1	4.3	ST
138	7/6/2000	1443	2801.2	9505.5	19	73	35	73	29.5	28.2	21.1	35.6	36.4	36.3			5.9	6.2	4.1	ST
139	7/6/2000	1601	2759.8	9459.8	18	83	41	83	29.3	24.4	20.7	35.6	36.4	36.4			6.0	6.7	3.8	PN
140	7/6/2000	2023	2759.5	9518.5	20	62	31	62	29.4	28.5	21.8	36.0	36.4	36.2			5.8	6.2	4.1	ST
141	7/6/2000	2218	2754.3	9516.3	20	90	45	90	29.2	27.0	19.7	35.7	36.6	36.5			5.9	6.5	3.5	ST
142	7/7/2000	239	2802.2	9447.5	18	71	35	71	29.2	25.6	21.5	35.0	36.7	36.3			6.0	6.8	4.4	ST
143	7/7/2000	521	2756.8	9433.0	18	102	52	102	28.9	23.4	19.3	36.4	36.5	36.4			6.0	6.6	3.5	ST/PN
144	7/7/2000	1044	2800.0	9400.1	18	82	41	82	29.6	23.6	19.9	34.9	36.4	36.5			6.0	6.2	3.5	PN
145	7/7/2000	1327	2804.2	9344.0	17	71	35	71	29.8	25.0	20.6	35.2	36.2	36.4			6.0	6.1	3.9	ST
146	7/7/2000	1548	2800.5	9330.3	17	82	41	82	30.5	24.0	19.6	35.6	36.5	36.5			6.0	6.4	3.6	PN
147	7/7/2000	1825	2804.3	9312.8	17	91	45	91	29.8	23.4	19.2	35.6	36.4	36.3			6.0	6.2	3.5	ST
148	7/7/2000	2145	2805.2	9327.5	17	82	42	82	30.0	23.7	19.8	35.4	36.4	36.4			6.1	6.3	3.7	ST
149	7/8/2000	229	2827.3	9355.7	17	44	22	44	29.9	29.0	23.3	33.7	36.3	35.9			5.8	5.9	3.5	ST
151	7/8/2000	523	2832.8	9407.0	18	36	18	36	29.9	28.4	25.0	33.7	35.1	35.9			5.8	5.8	4.4	ST
152	7/8/2000	803	2830.0	9400.3	18	41	20	41	29.6	28.5	24.1	33.7	36.1	36.0			5.8	6.0	4.3	PN
154	7/8/2000	1019	2822.1	9352.2	17	55	28	53	30.2	28.8	21.9	34.8	36.2	36.3			5.8	6.1	4.3	ST
155	7/8/2000	1340	2833.1	9344.5	17	36	18	36	30.3	28.6	23.5	33.8	35.6	35.9			5.8	6.0	4.2	ST
156	7/8/2000	1527	2839.5	9341.2	17	29	14	29	30.7	29.7	25.5	33.2	33.2	36.1			4.0	4.6	5.0	ST
157	7/8/2000	1738	2843.9	9356.1	17	25	12	24	30.4	29.6	28.1	33.5	33.7	35.3			2.7	4.1	5.0	ST
158	7/8/2000	2018	2835.5	9355.2	17	33	16	33	30.5	29.3	24.3	33.8	34.0	36.0			3.6	3.8	3.2	ST
159	7/8/2000	2148	2833.9	9350.2	17	35	17	35	30.1	29.4	24.0	33.9	34.0	35.9			2.8	3.0	6.6	ST
160	7/8/2000	2350	2828.1	9347.9	17	44	22	44	30.0	28.8	22.6	33.8	36.5	36.1			5.9	6.1	3.6	ST
163	7/9/2000	521	2840.4	9340.6	17	27	14	27	30.2	29.4	25.5	33.7	33.7	36.1			2.9	4.4	4.4	ST
164	7/9/2000	751	2830.1	9330.1	17	42	21	42	30.1	28.6	23.3	34.4	35.6	36.0			5.8	6.1	4.4	PN
165	7/9/2000	852	2831.9	9330.1	17	40	21	39	30.1	28.7	23.5	34.5	35.6	35.9			5.8	6.0	4.3	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
167	7/9/2000	1146	2838.6	9329.8	17	32	16	31	30.2	29.2	25.2	33.1	34.4	36.2			3.0	4.9	5.3	ST
168	7/9/2000	1337	2844.7	9336.6	17	24	12	24	30.3	29.6	29.4	33.7	33.8	34.6						ST
171	7/9/2000	1904	2907.3	9353.7	17	16	9	16	30.5	30.2	29.1	33.5	33.6	34.4						ST
172	7/9/2000	2343	2900.4	9400.2	18	20	10	20	30.3	30.0	28.5	33.9	34.1	35.3						PN
173	7/10/2000	157	2856.5	9356.1	17	22	11	22	30.1	30.1	28.4	34.0	34.2	35.4						ST
174	7/10/2000	517	2847.8	9334.5	17	26	13	26	30.0	29.9	26.9	33.7	33.7	36.0						ST
175	7/10/2000	737	2900.5	9329.5	17	24	12	24	30.1	30.1	28.6	33.7	33.7	35.1						PN
176	7/10/2000	940	2912.0	9329.0	17	16	8	16	30.2	30.2	29.3	32.9	32.9	34.3						ST
177	7/10/2000	1207	2929.6	9329.3	17	11	5	11	30.4	30.5	30.3	32.3	32.3	32.3						PN
178	7/10/2000	1426	2921.7	9319.7	17	15	8	15	30.5	30.5	29.5	32.3	32.3	32.8			5.6	5.6	3.8	ST
179	7/10/2000	1517	2922.5	9317.3	17	12	7	12	30.5	30.5	30.4	32.1	32.1	32.2			5.7	5.7	5.7	ST
180	7/10/2000	1604	2930.3	9259.8	16	13	8	13	30.6	30.4	28.8	31.5	31.5	33.3			7.4	7.0	1.0	PN
181	7/10/2000	2037	2922.4	9317.2	17	11	6	11	30.5	30.5	29.8	32.2	32.2	32.8			5.7	5.8	4.1	ST
182	7/10/2000	2307	2932.5	9309.7	17	13	6	13	30.5	30.5	30.5	32.0	32.0	32.0			5.6	5.6	5.7	ST
184	7/11/2000	311	2937.2	9255.0	16	9	4	9	30.1	30.1	29.3	30.8	30.8	31.5			4.8	4.8	0.9	ST
185	7/11/2000	520	2926.5	9249.5	16	14	7	14	30.2	30.2	28.7	31.3	31.3	33.7			6.0	6.0	2.6	ST
186	7/11/2000	740	2919.5	9242.2	16	16	8	16	29.9	29.9	28.8	31.3	32.3	34.6			5.7	5.7	2.8	ST
188	7/11/2000	1158	2911.3	9222.2	16	11	5	11	30.4	30.2	29.2	30.4	30.4	34.9			6.0	6.0	4.3	ST
189	7/11/2000	1318	2906.1	9226.0	16	20	10	20	30.5	30.1	28.2	31.2	31.2	35.9			5.7	5.8	1.5	ST
190	7/11/2000	1453	2900.2	9229.5	16	24	11	24	30.9	29.6	26.9	31.3	32.9	39.0			5.8	5.6	2.7	PN
191	7/11/2000	1819	2851.6	9252.8	16	25	12	25	30.6	29.8	26.9	30.9	31.8	36.0			5.8	5.5	2.5	ST
193	7/11/2000	2154	2909.2	9253.2	16	20	10	20	30.6	30.4	28.8	32.4	32.6	34.7			5.8	5.8	4.5	ST
196	7/12/2000	205	2919.6	9242.1	16	16	8	16	30.5	30.5	28.8	31.6	31.6	34.5			5.7	5.8	4.5	ST
198	7/12/2000	640	2900.9	9259.1	16	24	12	24	30.3	30.4	28.7	32.1	33.1	34.8			6.7	5.7	4.7	PN
199	7/12/2000	838	2849.4	9300.2	17	26	13	26	30.5	29.9	26.7	31.2	31.5	36.0			5.7	5.8	3.2	ST
200	7/12/2000	1045	2843.0	9254.5	16	33	16	32	30.7	29.6	26.0	30.9	33.9	36.2			5.8	5.8	4.1	ST
201	7/12/2000	1320	2834.0	9250.8	16	38	18	38	30.6	29.2	23.0	31.0	34.4	36.2			5.8	5.6	4.7	ST
202	7/12/2000	1523	2829.9	9259.1	16	46	23	46	30.7	29.9	22.5	34.6	34.7	36.2			5.7	5.9	4.6	PN
203	7/12/2000	2015	2838.5	9309.9	17	35	17	35	30.9	29.4	24.4	33.8	35.3	36.1			5.7	5.9	5.2	ST
204	7/12/2000	2154	2841.4	9304.4	17	33	16	33	30.7	29.9	24.5	32.2	34.9	36.2			5.7	5.9	4.8	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
205	7/12/2000	2335	2848.0	9258.4	16	27	13	27	30.8	30.3	26.6	31.1	32.7	36.0			5.7	5.7	4.7	ST
206	7/13/2000	605	2801.1	9259.4	16	102	52	102	29.8	23.3	18.7	35.5	36.4	36.4			5.8	6.0	3.8	PN
207	7/13/2000	807	2810.6	9256.8	16	73	36	73	30.1	26.3	19.9	34.0	36.1	36.4			5.8	6.3	3.4	ST
209	7/13/2000	1117	2814.5	9251.9	16	64	32	64	30.3	28.5	20.4	33.9	35.7	36.4			5.8	6.2	3.4	ST
212	7/13/2000	1643	2829.9	9230.4	16	50	25	50	31.2	27.9	21.9	31.9	35.8	36.3			5.7	6.0	4.4	PN
213	7/13/2000	2014	2824.7	9240.7	16	55	27	55	30.8	28.6	21.8	32.1	35.6	36.3			5.8	6.0	4.6	ST
217	7/14/2000	347	2814.6	9301.1	17	64	32	64	30.1	28.0	20.6	34.5	36.2	36.4			5.7	6.2	3.2	ST
219	7/14/2000	1059	2805.8	9224.6	16	90	45	89	30.5	24.4	19.0	34.7	36.3	36.4			5.8	6.4	3.4	ST/PN
221	7/14/2000	1519	2759.8	9159.8	15	122	51	122	30.3	24.0	18.1	35.7	36.4	36.4			5.9	6.6	3.5	PN
222	7/14/2000	2013	2807.9	9214.8	16	83	41	83	30.7	24.3	19.2	34.2	36.2	36.4			5.7	6.7	3.8	ST
224	7/14/2000	2251	2803.1	9213.9	16	119	60	119	30.2	22.1	18.1	34.8	36.4	36.4			5.9	5.9	3.7	ST
225	7/15/2000	427	2801.5	9143.7	15	110	55	110	30.5	23.8	18.3	32.9	36.5	36.4			5.7	6.1	3.4	ST
227	7/15/2000	804	2815.7	9142.3	15	73	35	73	30.3	26.2	19.8	32.3	36.2	36.4			5.8	6.7	3.7	ST
229	7/15/2000	1251	2825.8	9130.7	15	53	24	52	30.6	28.9	21.6	31.7	35.7	36.3			5.7	6.1	4.3	ST/PN
231	7/15/2000	1708	2837.9	9141.3	15	35	17	35	30.5	29.6	23.0	31.6	35.3	36.2			5.8	5.9	4.3	ST
232	7/15/2000	1902	2843.9	9146.4	15	29	14	29	30.5	29.9	25.2	31.6	35.0	36.3			5.7	5.8	4.4	ST
233	7/15/2000	2032	2846.8	9149.4	15	27	17	27	30.4	30.0	26.8	31.9	34.0	36.2			5.7	5.8	5.5	ST
234	7/15/2000	2239	2847.3	9157.7	15	29	14	29	30.3	30.0	26.2	32.2	34.6	36.2			5.7	5.8	5.2	ST
235	7/16/2000	134	2853.1	9202.5	16	25	13	25	30.4	29.9	26.7	32.2	33.2	36.2			5.7	5.7	5.7	ST
236	7/16/2000	407	2859.8	9202.3	16	22	11	22	30.3	30.3	27.0	32.3	32.8	36.1			5.7	5.7	5.5	ST/PN
237	7/16/2000	647	2906.5	9149.7	15	9	5	9	29.6	27.6	27.6	33.5	35.6	35.7			5.9	1.9	1.7	ST
238	7/16/2000	927	2859.8	9130.3	15	11	6	11	30.2	27.9	27.7	31.9	35.8	35.9			6.0	1.9	1.6	PN
239	7/16/2000	1117	2853.2	9122.9	15	11	5	11	29.7	29.7	27.4	34.0	33.9	36.0			5.8	5.9	2.3	ST
240	7/16/2000	1436	2830.9	9112.5	15	36	18	36	30.6	29.8	21.9	31.5	34.8	36.3			5.8	5.6	4.2	ST
241	7/16/2000	1634	2822.3	9110.6	15	55	27	55	31.1	27.8	20.4	31.5	35.9	36.4			5.8	5.5	3.6	ST
243	7/16/2000	2004	2810.5	9107.3	15	95	48	95	30.9	24.0	19.4	32.2	36.3	36.4			5.8	7.0	3.9	ST
244	7/16/2000	2241	2819.8	9115.4	15	64	32	64	30.7	28.1	20.1	31.6	36.3	36.4			5.8	6.2	3.6	ST
246	7/17/2000	305	2831.5	9134.6	15	44	22	44	30.5	29.4	21.9	31.9	36.0	36.3			5.8	6.0	4.4	ST
247	7/17/2000	452	2835.5	9132.3	15	36	18	36	30.5	29.1	22.2	31.8	35.2	36.3			5.8	6.0	3.9	ST
248	7/17/2000	830	2830.1	9059.5	14	33	16	33	30.3	29.0	22.4	32.1	35.5	36.3			5.9	4.5	3.8	PN

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GROUNDFISH SURVEY																				
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL,	FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	MG/M3 SUR	SUR	SUR	MID	MAX	GEAR
249	7/17/2000	1005	2828.3	9050.6	14	37	18	37	30.2	29.7	22.6	31.8	34.8	36.3			5.7	5.5	4.3	ST
250	7/17/2000	1146	2832.7	9055.4	14	28	14	28	30.5	29.0	23.0	30.7	35.1	36.2			6.2	4.2	3.5	ST
251	7/17/2000	1254	2835.5	9055.0	14	22	11	22	30.6	29.3	24.0	26.6	35.0	36.2			7.3	3.6	2.5	ST
252	7/17/2000	1413	2837.2	9053.6	14	18	9	18	30.8	29.0	24.9	26.0	34.8	36.1			8.3	4.1	1.4	ST
253	7/17/2000	1649	2851.3	9055.0	14	10	5	10	30.9	29.9	28.5	21.8	32.7	35.7			10.0	3.0	1.8	ST
254	7/17/2000	1922	2831.7	9043.1	14	31	16	31	30.5	28.5	22.5	31.5	35.4	36.3			6.1	5.7	3.0	ST
255	7/17/2000	2052	2830.3	9036.9	14	35	17	35	30.5	28.9	22.4	31.4	35.6	36.3			6.0	6.0	2.8	ST
256	7/17/2000	2204	2833.9	9039.3	14	24	12	24	30.9	29.0	22.8	27.4	35.1	36.3			7.2	5.1	2.6	ST
257	7/18/2000	37	2837.7	9057.9	14	18	9	18	30.8	28.2	25.0	25.8	35.6	36.4			9.4	1.8	1.4	ST
258	7/18/2000	311	2851.6	9048.4	14	11	6	11	30.5	28.7	28.5	26.5	35.6	35.8			6.5	3.0	2.6	ST
259	7/18/2000	444	2853.1	9039.3	14	13	6	13	30.5	30.4	28.6	28.4	31.4	35.9			7.2	6.1	3.2	ST
260	7/18/2000	708	2855.2	9032.6	14	13	6	13	30.0	30.1	26.6	30.5	30.8	36.0			7.0	7.1	3.3	ST/PN
261	7/18/2000	1119	2902.0	9001.9	14	19	10	19	30.3	30.0	25.1	32.6	34.5	36.1			5.6	5.5	0.4	ST/PN
262	7/18/2000	1550	2904.3	8953.7	13	24	12	24	30.4	29.4	23.7	34.5	35.9	36.2			5.7	6.0	0.0	ST
263	7/18/2000	1841	2847.2	8945.2	13	74	37	74	31.0	23.9	18.4	31.8	36.2	36.4			5.9	6.2	2.9	ST
264	7/18/2000	2335	2857.8	9011.5	14	16	8	16	30.6	29.5	25.9	29.4	34.7	36.1			5.8	4.7	3.7	ST
265	7/19/2000	157	2846.0	9014.7	14	28	13	28	30.7	29.6	22.0	28.4	35.4	36.4			5.9	4.6	3.0	ST
266	7/19/2000	316	2842.2	9011.5	14	36	18	36	30.6	28.4	20.8	28.6	35.7	36.4			6.3	5.6	3.2	ST
267	7/19/2000	530	2845.6	9019.9	14	22	11	22	30.2	28.8	23.0	29.2	35.3	36.3			5.9	4.5	3.1	ST
268	7/19/2000	945	2815.3	9018.1	14	82	40	82	30.6	26.0	18.6	30.4	36.1	36.4			5.8	6.7	3.6	ST
269	7/19/2000	1218	2818.3	9011.3	14	82	41	82	30.8	25.7	18.3	30.6	36.0	36.4			5.8	6.6	3.6	ST
270	7/19/2000	1517	2829.3	9000.2	14	88	45	88	31.1	22.1	18.0	28.0	36.3	36.4			6.3	5.3	3.6	PN
271	7/19/2000	1847	2829.6	8930.1	13	515	100	202	30.4	18.5	15.4	33.9	36.4	36.0			5.9	4.2	3.8	PN

Table 2. Selected environmental parameters (continued)

PELICAN, SUMMER SHRIMP/GROUNDFISH SURVEY																					
			POSITION		STAT	DEPTH	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, MG/M3	FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	LAT	LONG	ZONE	(M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	SUR	MID	MAX	GEAR
37737	7/17/2000	1017	2859.9	9029.9	14	10	4	10	30.4	30.4	28.8	32.4	32.4	35.9	8.643		6.6	6.6	3.2	PN
37738	7/17/2000	1424	2900.0	9100.0	15	6	3	6	30.2	29.4	29.1	31.3	33.7	34.3	9.913		4.5	1.6	1.3	PN
37739	7/17/2000	1811	2859.9	9130.1	15	8	4	8	30.0	28.0	27.7	33.5	35.6	35.8	3.022		6.8	3.8	1.7	PN
37740	7/17/2000	2201	2833.6	9119.0	15	29	14	29	30.7	30.0	23.5	31.9	33.9	36.2	0.577		5.9	5.9	4.4	ST
37741	7/18/2000	4	2837.3	9109.7	15	21	11	21	30.6	29.6	25.0	32.0	33.8	36.1	0.750		6.4	5.5	3.6	ST
37742	7/18/2000	321	2829.7	9044.6	14	32	15	32	30.5	28.4	22.8	30.1	35.6	36.2	0.610		6.3	5.1	4.6	ST
37743	7/18/2000	808	2835.6	9119.2	15	30	15	30	30.4	29.9	22.9	32.2	34.1	36.2	0.302		6.0	5.9	4.2	ST
37744	7/18/2000	1002	2838.4	9110.1	15	19	10	19	30.3	29.5	25.4	32.3	33.7	36.1	0.519		6.2	4.8	3.0	ST
37745	7/18/2000	1143	2830.0	9100.1	15	32	15	32	30.6	29.4	22.4	31.8	34.2	36.3	0.462		6.0	4.9	3.8	PN
37746	7/18/2000	1405	2829.5	9044.2	14	33	17	33	30.6	29.5	22.7	31.3	34.1	36.2	0.792		6.3	5.4	4.2	ST
37747	7/18/2000	1556	2829.9	9029.5	14	37	19	37	31.0	29.3	22.1	30.8	35.8	36.3	0.834		6.3	6.0	3.5	PN
37748	7/18/2000	1755	2835.3	9023.4	14	33	17	33	30.7	28.4	22.1	30.3	35.6	36.3	0.897		6.4	5.4	3.9	ST
37749	7/18/2000	2002	2835.6	9023.5	14	32	16	32	30.5	27.7	22.1	31.1	35.8	36.3	0.974		6.3	5.2	4.0	ST
37750	7/19/2000	5	2900.6	9003.9	14	17	9	17	30.4	30.4	25.7	30.2	33.8	36.1	2.695		6.9	5.4	4.4	ST
37751	7/19/2000	145	2902.4	8956.5	13	21	11	21	30.3	30.3	24.6	32.0	34.4	36.1	2.107		5.8	5.5	0.9	ST
37752	7/19/2000	327	2904.4	8946.4	13	27	14	27	30.0	29.5	22.5	34.9	35.9	36.3	0.405		6.1	6.2	0.1	ST
37753	7/19/2000	525	2857.8	8930.3	13	29	15	29	30.1	27.2	20.4	30.3	35.7	36.4	20.095		6.1	1.2	1.3	ST
37754	7/19/2000	611	2858.3	8930.4	13	29	15	29	30.1	27.2	20.4	30.3	35.7	36.4	20.095		6.1	1.2	1.3	ST
37755	7/19/2000	651	2859.9	8930.0	13	14	7	14	30.3	30.3	27.0	33.0	34.6	36.0	8.526		6.0	5.8	1.8	PN
37756	7/19/2000	923	2904.4	8946.0	13	28	13	28	30.0	29.3	22.4	35.0	35.8	36.3	0.736		6.0	6.2	0.0	ST
37757	7/19/2000	1028	2905.9	8944.6	13	24	11	24	29.9	29.7	23.6	35.3	35.6	36.2	0.557		6.4	6.8	0.0	ST
37758	7/19/2000	1228	2902.5	8956.7	13	22	11	22	30.6	30.0	23.6	30.8	35.2	36.2	2.666		5.9	5.3	0.1	ST
37759	7/19/2000	1340	2900.1	9000.0	13	23	11	23	30.8	30.2	23.4	29.8	34.6	36.2	1.867		6.0	5.3	1.6	PN
37760	7/19/2000	1508	2900.9	9003.8	14	19	9	19	30.8	29.9	24.5	29.0	34.9	36.2	1.599		6.1	5.3	1.6	ST
37761	7/19/2000	1805	2853.9	9022.8	14	16	8	16	30.7	28.9	24.8	29.0	35.2	36.2	2.411		7.3	4.2	3.6	ST
37762	7/19/2000	2025	2854.4	9022.8	14	17	9	17	30.8	28.4	24.7	29.6	35.7	36.2	2.533		6.9	3.8	3.6	ST
37763	7/20/2000	47	2905.9	8944.6	13	23	12	23	30.0	29.7	24.0	34.1	35.6	36.2	1.346		5.9	5.9	0.5	ST
37764	7/20/2000	224	2913.4	8948.1	13	9	5	9	29.2	29.2	27.9	35.8	35.8	36.0	1.384		5.8	5.9	3.6	ST
37765	7/20/2000	348	2913.4	8952.1	13	8	5	8	29.0	28.9	27.9	35.9	35.9	36.0	6.561		4.7	4.7	2.9	ST
37766	7/20/2000	631	2913.4	8952.1	13	9	5	9	29.3	29.1	27.8	35.7	35.8	36.0	10.396		5.0	4.9	2.6	ST
37767	7/20/2000	748	2913.4	8948.0	13	11	5	11	29.4	29.1	27.7	34.4	35.7	36.0	10.256		5.7	5.7	3.4	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL PLANKTON SURVEY																				
			POSITION		STAT	DEPTH	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, MG/M3	FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	LAT	LONG	ZONE	(M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	SUR	MID	MAX	GEAR
4001	9/7/2000	1507	2601.1	9600.0	99	950	102	199	29.9	23.6	17.9	36.6	36.4	36.4			8.5	11.7	13.9	PN
4002	9/7/2000	2021	2601.1	9629.8	99	60	30	57	29.4	27.8	22.9	36.0	36.5	36.5			8.5	9.3	10.3	PN
4003	9/7/2000	2329	2559.9	9700.1	22	26	12	24	27.6	26.9	25.4	36.3	36.4	36.4			9.2	9.5	9.9	PN
4004	9/8/2000	257	2630.0	9660.0	21	34	17	33	29.0	27.4	24.6	36.2	36.4	36.5			8.7	9.3	9.8	PN
4005	9/8/2000	612	2630.3	9630.0	21	81	40	80	29.6	29.5	19.3	36.3	36.5	36.5			8.5	9.2	11.7	PN
4006	9/8/2000	1146	2700.0	9559.9	99	756	101	202	29.7	22.8	15.5	36.5	36.4	36.0			8.5	12.2	16.2	PN
4007	9/8/2000	1650	2700.4	9638.4	20	85	42	83	29.6	26.7	21.7	36.1	36.5	36.5			5.7	6.4	4.4	PN
4008	9/9/2000	1420	2729.9	9700.8	20	26	12	24	28.9	28.5	28.0	36.3	36.3	36.5			5.9	5.9	5.8	PN
4009	9/9/2000	1807	2700.0	9712.0	20	26	13	25	29.0	28.7	27.9	36.2	36.2	36.4			6.0	6.0	6.2	PN
4010	9/9/2000	2337	2729.9	9630.1	20	71	35	70	29.5	29.4	23.4	36.3	36.5	36.4			5.9	6.1	5.9	PN
4011	9/10/2000	301	2734.9	9600.2	20	140	72	139	29.4	23.6	18.6	36.3	36.4	36.4			6.0	6.5	3.7	PN
4012	9/10/2000	622	2759.8	9600.0	20	44	21	42	29.0	28.8	25.7	36.4	36.4	36.4			5.9	6.1	6.1	PN
4013	9/10/2000	1050	2800.0	9630.1	19	25	12	23	28.8	28.7	28.6	36.5	36.5	36.5			6.0	5.9	5.9	PN
4014	9/10/2000	1357	2820.0	9619.9	19	14	6	13	29.9	29.5	29.5	36.8	36.8	36.9			6.3	5.9	5.5	PN
4015	9/10/2000	1637	2830.1	9600.8	19	13	6	11	30.4	29.6	29.5	36.8	36.7	36.7			6.5	5.6	5.4	PN
4016	9/10/2000	2008	2829.9	9530.3	19	25	11	22	29.9	29.4	29.4	36.6	36.6	36.6			6.2	6.2	5.8	PN
4017	9/10/2000	2316	2800.0	9530.1	20	53	26	52	29.4	29.2	24.4	36.4	36.4	36.5			6.1	6.2	6.3	PN
4018	9/11/2000	122	2745.0	9530.0	20	102	51	101	29.4	23.5	18.3	36.4	36.4	36.4			6.2	6.3	3.7	PN
4019	9/11/2000	328	2730.3	9529.9	99	580	100	200	29.5	19.0	13.7	36.4	36.4	35.8			6.3	3.8	3.7	PN
4020	9/11/2000	810	2800.0	9500.1	19	77	38	76	29.3	25.7	20.5	36.3	36.4	36.5			6.2	7.1	3.6	PN
4021	9/11/2000	1315	2730.2	9430.4	99	659	102	200	30.2	21.4	16.3	36.6	36.5	36.2			6.2	4.9	3.9	PN
4022	9/11/2000	1756	2800.1	9429.9	18	67	32	66	29.7	29.2	21.9	36.4	36.5	36.4			6.2	6.3	4.7	PN
4023	9/11/2000	2144	2830.0	9429.9	18	35	15	34	29.6	29.3	27.9	36.6	36.6	36.5			6.1	6.1	5.8	PN
4024	9/12/2000	36	2829.9	9459.8	18	33	16	32	29.6	29.3	29.2	36.6	36.6	36.6			6.1	6.1	5.8	PN
4025	9/12/2000	350	2859.9	9459.9	18	16	8	15	29.3	29.3	28.8	36.6	36.6	36.6			6.1	6.1	5.4	PN
4026	9/12/2000	650	2900.0	9430.1	18	18	8	16	29.8	29.8	29.7	36.8	36.8	36.8			6.0	6.0	5.7	PN
4027	9/12/2000	1040	2927.0	9430.0	18	9	4	8	29.4	29.2	29.2	36.4	36.4	36.4			6.8	6.5	6.4	PN
4028	9/12/2000	1919	2930.0	9400.8	18	12	6	10	29.6	29.6	29.5	35.9	35.9	35.8			6.7	6.7	6.4	PN
4029	9/12/2000	2239	2900.0	9400.0	17	20	10	19	30.0	30.0	29.9	26.8	26.9	26.0			2.0	1.9	2.5	PN
4030	9/13/2000	204	2830.3	9400.0	17	39	19	38	29.5	29.5	25.3	36.6	36.6	36.5			6.1	6.1	4.5	PN
4031	9/13/2000	530	2800.0	9357.4	99	74	37	73	29.2	25.7	20.4	36.3	36.4	36.5			6.4	6.9	4.4	PN
4032	9/13/2000	1015	2729.9	9330.1	99	520	101	202	29.6	20.8	15.0	36.3	36.5	36.0			6.3	4.2	4.0	PN

Table 2. Selected environmental parameters (continued)

OREGON II, FALL PLANKTON SURVEY																					
			POSITION		STAT	DEPTH	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, MG/M3	FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	LAT	LONG	ZONE	(M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	SUR	MID	MAX	GEAR
4033	9/13/2000	1436	2759.9	9329.9	99	90	45	88	29.6	25.8	20.2	36.4	36.4	36.5			6.3	7.4	4.1	PN
4034	9/13/2000	1852	2829.9	9330.0	17	41	20	39	29.7	29.5	25.4	36.6	36.6	36.4			6.2	6.2	4.4	PN
4035	9/13/2000	2225	2858.9	9328.6	17	22	11	21	29.9	29.9	29.9	36.1	36.1	36.2			6.0	6.0	5.9	PN
4036	9/14/2000	146	2929.9	9330.0	17	11	5	10	29.2	29.3	29.3	34.8	34.8	34.8			5.4	5.4	5.4	PN
4037	9/14/2000	455	2929.9	9300.0	17	13	6	12	29.4	29.5	29.6	35.0	35.0	35.1			6.0	6.2	6.6	PN
4038	9/14/2000	912	2859.9	9300.0	17	23	10	21	29.8	29.8	29.8	36.0	36.0	36.0			5.8	5.8	5.9	PN
4039	9/14/2000	1336	2830.2	9300.1	17	43	21	42	30.1	29.8	26.0	36.5	36.5	36.4			6.1	6.2	6.2	PN
4040	9/14/2000	1710	2800.5	9300.2	17	99	49	98	30.1	24.5	19.0	36.5	36.4	36.4			6.4	7.2	4.0	PN
4041	9/14/2000	2152	2730.0	9229.9	99	842	100	200	30.0	23.0	16.3	36.5	36.4	36.2			6.3	6.5	4.1	PN
4042	9/15/2000	141	2800.1	9229.0	16	100	50	99	29.6	26.0	19.6	36.3	36.4	36.4			6.4	7.3	4.3	PN
4043	9/15/2000	505	2830.3	9230.1	16	47	23	46	29.9	29.6	24.6	36.5	36.5	36.4			6.2	6.2	4.9	PN
4044	9/15/2000	844	2859.5	9229.7	16	24	11	23	29.6	29.6	29.6	34.9	35.2	35.5			6.1	6.0	5.5	PN
4045	9/15/2000	1251	2929.1	9230.7	16	9	4	8	29.1	29.2	29.1	27.3	31.5	32.0			7.1	6.1	5.5	PN
4046	9/16/2000	438	2900.3	9159.7	15	18	9	17	29.6	29.7	29.7	34.2	34.2	34.6			6.2	6.2	5.6	PN
4047	9/16/2000	833	2830.0	9159.8	15	47	23	45	29.6	29.6	24.0	36.5	36.5	36.4			6.2	6.3	4.5	PN
4048	9/16/2000	1155	2800.1	9200.0	16	111	55	109	29.5	25.9	19.9	36.3	36.4	36.4			6.3	7.7	4.5	PN
4049	9/16/2000	1700	2729.3	9130.0	99	1026	100	200	29.8	23.3	16.5	36.5	36.4	36.2			6.3	6.8	4.0	PN
4050	9/16/2000	2140	2800.0	9129.8	15	147	72	146	29.8	24.0	15.9	36.6	36.4	36.1			6.4	7.4	4.1	PN
4051	9/17/2000	140	2829.9	9130.0	15	46	23	45	29.5	29.5	25.8	36.1	36.1	36.3			6.2	6.3	4.5	PN
4052	9/17/2000	502	2859.9	9130.2	15	11	5	10	29.0	29.0	29.0	32.8	32.8	32.8			7.3	7.3	7.5	PN
4053	9/17/2000	924	2847.9	9100.0	14	10	4	8	29.1	29.1	29.1	32.9	32.9	32.9			5.9	6.0	6.1	PN
4054	9/17/2000	1138	2830.0	9100.3	15	32	15	31	29.4	29.5	29.1	34.2	34.3	35.7			6.2	6.2	4.1	PN
4055	9/17/2000	1501	2800.0	9059.8	99	146	73	145	29.7	24.9	15.2	36.6	36.4	36.0			6.2	7.4	4.0	PN
4056	9/17/2000	1942	2730.2	9029.6	99	988	100	200	29.6	23.1	16.6	36.5	36.4	36.2			6.3	6.8	4.3	PN
4057	9/18/2000	16	2805.0	9029.9	14	136	68	135	29.5	24.3	15.7	36.5	36.4	36.1			6.4	7.3	4.0	PN
4058	9/18/2000	350	2830.2	9029.5	14	38	19	37	29.0	29.6	26.6	35.2	35.9	36.3			6.2	6.2	4.7	PN
4059	9/18/2000	714	2859.6	9029.6	14	11	5	9	28.6	28.6	28.6	30.3	30.3	30.3			6.1	6.1	6.2	PN
4060	9/18/2000	1049	2900.2	9000.0	13	22	10	21	28.3	28.6	28.5	31.3	32.1	32.4			7.2	6.4	6.2	PN
4061	9/18/2000	1515	2830.0	8959.9	13	92	46	90	29.1	24.1	20.0	34.8	36.3	36.4			6.5	4.9	4.1	PN

Table 2. Selected environmental parameters (continued)

OREGON II, FALL PLANKTON SURVEY																				
			POSITION		STAT	DEPTH	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			CL, MG/M3	FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	LAT	LONG	ZONE	(M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	SUR	MID	MAX	GEAR
4062	9/18/2000	1922	2759.7	8959.8	99	586	101	200	29.5	20.5	15.1	36.5	36.4	36.0			6.4	5.7	4.3	PN
4063	9/19/2000	20	2830.0	8930.0	13	468	100	200	29.4	20.0	14.6	36.5	36.5	35.9			6.3	4.9	4.0	PN
4064	9/19/2000	410	2900.1	8930.2	13	15	7	14	27.9	27.9	29.3	29.1	30.8	34.0			6.9	6.5	3.2	PN
4065	9/19/2000	915	2900.1	8859.9	11	66	33	66	28.5	29.5	19.7	34.0	36.2	36.4			6.4	6.2	3.5	PN
4066	9/19/2000	1326	2830.0	8900.0	99	756	101	202	29.5	20.6	14.8	36.5	36.4	35.9			6.3	5.6	4.1	PN
4067	9/19/2000	1856	2900.0	8830.0	99	590	100	199	29.4	20.0	14.3	36.5	36.4	35.9			6.4	4.4	4.2	PN
4068	9/19/2000	2118	2913.0	8830.1	11	109	54	106	29.0	25.5	18.4	35.2	36.2	36.4			6.3	4.3	3.9	PN
4069	9/20/2000	2	2929.9	8829.9	11	49	24	48	28.6	28.8	25.1	34.5	35.0	36.3			6.2	6.1	4.3	PN
4070	9/20/2000	353	2959.8	8830.7	11	26	13	25	28.2	28.2	28.2	34.5	34.5	34.5			6.1	6.1	6.1	PN
4071	9/20/2000	720	2959.9	8800.1	11	26	12	25	28.3	28.3	28.3	34.4	34.4	34.4			6.1	6.1	6.1	PN
4072	9/20/2000	1103	2930.1	8800.0	10	43	20	41	28.5	28.6	27.9	35.3	35.6	36.0			6.2	6.2	5.8	PN
4073	9/20/2000	1319	2915.1	8759.8	99	223	101	202	28.3	18.5	14.7	34.7	36.4	35.9			6.5	4.3	4.2	PN
4074	9/20/2000	1859	2929.9	8730.1	99	68	33	65	28.9	24.7	19.9	34.9	36.3	36.5			6.5	5.9	4.4	PN
4075	9/20/2000	2235	3000.0	8730.0	10	24	12	23	28.8	28.8	28.8	35.1	36.0	36.0			6.3	6.2	6.2	PN
4076	9/21/2000	35	3014.6	8730.0	10	12	6	11	28.0	27.9	27.9	34.2	34.2	34.2			6.3	6.1	6.0	PN
4077	9/25/2000	2332	2947.9	8659.6	9	180	90	178	28.5	17.8	14.2	35.2	36.4	35.8			6.6	4.5	4.1	PN
4078	9/26/2000	155	3000.0	8700.0	9	69	34	68	28.8	28.2	21.4	35.7	36.2	36.4			6.4	6.7	4.7	PN
4079	9/26/2000	429	3019.9	8659.9	9	18	9	17	28.0	28.0	28.0	35.1	35.1	35.1			6.0	6.0	6.2	PN
4080	9/26/2000	712	3020.0	8630.1	9	20	10	19	27.8	27.9	28.3	34.6	34.6	35.2			5.9	5.9	5.9	PN
4081	9/26/2000	1001	2959.9	8629.9	9	55	27	53	28.5	28.5	22.6	35.8	35.8	36.4			6.4	6.3	5.4	PN
4082	9/26/2000	1356	2930.0	8629.9	9	202	100	200	28.3	17.4	13.9	35.3	36.3	35.8			6.5	4.5	4.0	PN
4083	9/26/2000	1816	2912.0	8600.1	99	184	92	181	28.3	18.4	14.3	35.3	36.4	35.9			6.5	4.4	4.1	PN
4084	9/26/2000	2115	2930.1	8600.0	9	55	26	53	28.5	28.6	22.0	35.9	35.9	36.4			6.4	6.5	4.9	PN
4085	9/27/2000	107	2959.8	8559.9	8	30	15	30	28.0	28.0	28.5	35.2	35.2	35.7			6.2	6.3	5.9	PN
4086	9/27/2000	437	2948.1	8530.1	8	19	9	18	27.8	27.8	27.8	35.3	35.3	35.3			5.8	5.8	5.9	PN
4087	9/27/2000	725	2927.6	8531.0	8	17	8	16	27.7	27.7	27.8	35.3	35.3	35.3			6.2	6.3	6.3	PN
4088	9/27/2000	1134	2930.0	8456.8	7	12	6	11	27.6	27.6	27.6	35.3	35.3	35.3			6.2	6.3	6.3	PN
4089	9/27/2000	1439	2930.0	8430.3	7	22	11	21	27.9	27.9	28.5	35.7	35.7	36.1			6.3	6.3	6.1	PN
4090	9/27/2000	1808	2930.1	8400.2	7	19	8	16	27.5	27.5	27.5	35.8	35.8	35.8			6.3	6.4	6.5	PN
4091	9/27/2000	2043	2945.9	8359.9	7	10	5	9	26.3	26.3	26.4	33.0	32.9	33.0			6.3	6.4	6.4	PN

Table 2. Selected environmental parameters (continued)

OREGON II, FALL PLANKTON SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
4092	9/28/2000	10	2930.1	8337.3	7	11	5	10	26.8	26.8	26.8	34.3	34.3	34.3			6.5	6.5	6.6	PN
4093	9/28/2000	500	2900.2	8320.5	7	11	5	10	27.8	27.8	27.8	36.4	36.4	36.4			6.4	6.4	6.5	PN
4094	9/28/2000	633	2900.1	8329.8	7	16	8	15	27.8	27.8	27.8	36.3	36.3	36.3			6.3	6.4	6.4	PN
4095	9/28/2000	1006	2900.1	8400.1	7	28	13	26	28.0	28.0	28.0	36.5	36.5	36.5			6.1	6.1	6.1	PN
4096	9/28/2000	1339	2859.9	8430.0	6	31	16	28	28.3	28.3	28.3	36.1	36.1	36.1			6.2	6.2	6.3	PN
4097	9/28/2000	1710	2900.0	8459.8	7	37	16	33	28.5	28.5	28.5	36.0	36.0	36.0			6.3	6.3	6.4	PN
4098	9/28/2000	2038	2900.1	8530.1	8	68	33	67	28.4	28.4	19.2	36.0	36.0	36.4			6.3	6.4	4.3	PN
4099	9/29/2000	25	2830.2	8529.8	8	189	94	188	28.4	20.6	14.2	35.8	36.5	35.8			6.3	5.1	4.1	PN
4100	9/29/2000	530	2830.1	8500.1	8	98	49	97	28.5	27.8	16.1	36.0	36.1	36.1			6.3	5.9	3.9	PN
4101	9/29/2000	1042	2829.8	8429.9	6	48	24	46	28.5	28.5	28.5	36.2	36.2	36.2			6.1	6.1	6.2	PN
4102	9/29/2000	1436	2830.0	8400.2	6	33	14	30	28.4	28.4	28.4	36.4	36.4	36.4			6.3	6.3	6.2	PN
4103	9/29/2000	1800	2830.0	8330.2	6	23	10	19	28.5	28.5	28.5	36.7	36.7	36.7			6.3	6.4	6.5	PN
4104	9/29/2000	2120	2829.9	8303.2	6	11	5	9	27.6	27.6	27.6	36.5	36.5	36.5			6.2	6.3	6.3	PN
4105	9/30/2000	50	2800.1	8300.0	6	14	7	13	28.3	28.3	28.3	36.5	36.5	36.5			6.4	6.5	6.6	PN
4106	9/30/2000	401	2800.3	8330.0	6	29	14	28	28.9	28.9	28.9	36.7	36.7	36.7			6.1	6.1	6.1	PN
4107	9/30/2000	749	2729.9	8329.9	5	39	19	38	28.9	28.9	28.9	36.3	36.3	36.3			6.1	6.1	6.1	PN
4108	9/30/2000	1121	2730.1	8400.0	5	58	29	56	28.4	28.4	23.2	36.3	36.3	36.4			6.4	6.4	4.9	PN
4109	9/30/2000	1602	2800.1	8400.0	6	44	22	42	28.8	28.8	28.7	36.4	36.4	36.4			6.2	6.2	6.2	PN
4110	9/30/2000	2035	2800.1	8430.0	6	74	36	70	28.5	28.5	19.5	36.3	36.3	36.4			6.3	6.4	4.3	PN
4111	10/1/2000	18	2730.0	8429.9	5	126	63	126	27.6	22.3	15.9	36.0	36.4	36.1			6.5	5.4	4.5	
4112	10/1/2000	505	2800.2	8500.9	99	241	100	200	28.3	18.1	14.0	35.8	36.4	35.8			6.6	4.5	4.2	PN

Table 2. Selected environmental parameters (continued)

A.E. VERRILL, FALL PLANKTON SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
2301	9/12/2000	833	3012.4	8802.4	11	16	8	16	28.3	28.3	28.3	33.2	33.6	33.6			6.5	6.4	6.4	PN
2302	9/12/2000	943	3014.0	8807.9	11	8	4	8	28.4	28.4	28.3	33.1	28.4	33.1			6.5	6.5	6.5	PN
2303	9/12/2000	1045	3007.9	8808.7	11	18	9	18	28.9	28.8	28.8	34.3	34.3	34.4			6.4	6.4	6.4	PN
2304	9/12/2000	1130	3007.4	8804.2	11	18	9	18	29.1	28.9	28.9	34.3	34.3	34.3			6.3	6.4	6.4	PN
2305	9/12/2000	1227	3007.4	8758.9	10	17	9	17	29.0	28.9	28.7	34.2	34.2	34.1			6.4	6.4	6.4	PN
2306	9/12/2000	1316	3012.6	8758.9	10	10	5	10	28.7	28.3	28.3	32.8	32.8	33.0			6.4	6.5	6.5	PN
2307	9/12/2000	1508	3015.9	8759.0	10	4	2	4	28.5	28.3	28.2	28.8	30.2	32.2			6.6	6.6	6.5	PN
2308	9/12/2000	1541	3015.9	8802.3	11	16	8	16	28.6	28.6	28.2	32.4	32.5	32.9			6.5	6.5	6.5	PN
2309	9/12/2000	1607	3016.0	8803.7	11	5	3	5	29.2	28.8	28.5	31.3	31.6	31.8			6.4	6.4	6.4	PN

Table 2. Selected environmental parameters (continued)

SUNCOASTER, FALL PLANKTON SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
26001	9/26/2000	1343	2730.0	8300.0	5	17	8	15	29.8	29.5	29.2	36.6	36.6	36.6	0.289		6.2	6.3	5.8	PN
26002	9/27/2000	17	2659.9	8430.0	99	175	84	171	28.9	18.6	14.4	36.0	36.5	35.9	0.103		6.3	4.7	4.4	PN
26003	9/27/2000	535	2700.0	8359.3	4	82	37	77	28.8	25.6	18.1	35.7	36.2	36.3	0.117		6.0	6.0	4.2	PN
26004	9/27/2000	942	2700.0	8330.0	5	52	28	50	29.0	29.0	26.9	36.2	36.0	36.3	0.124		5.6	5.6	5.7	PN
26005	9/27/2000	1320	2700.0	8300.0	4	32	19	32	29.8	29.6	29.3	36.1	36.1	36.2	0.230		5.1	5.0	4.9	PN
26006	9/27/2000	1658	2630.1	8300.0	4	38	20	38	29.8	29.5	29.5	35.8	36.1	36.2	0.159		5.1	5.1	4.9	PN
26007	9/27/2000	2030	2630.0	8330.0	4	58	30	57	29.2	28.7	23.5	35.9	35.9	36.4	0.174		5.0	5.2	4.7	PN
26008	9/28/2000	10	2629.9	8400.0	99	124	63	121	28.8	20.4	15.7	35.6	36.4	36.1	0.108		5.2	4.2	3.8	PN
26009	9/28/2000	413	2630.0	8430.1	99	200	100	193	28.9	19.5	14.6	36.2	36.5	35.9	0.144		5.2	4.1	4.0	PN
26010	9/28/2000	820	2600.0	8430.0	99	219	111	215	29.0	18.8	14.1	35.9	36.5	35.8	0.180		5.1	4.1	3.9	PN
26011	9/28/2000	1257	2559.6	8400.0	99	135	57	125	28.8	20.9	16.5	35.8	36.4	36.2	0.110		4.9	4.2	3.9	PN
26012	9/28/2000	1749	2600.0	8330.0	3	64	28	59	29.5	28.6	22.1	36.1	36.1	36.4	0.135		6.3	6.7	5.8	PN
26013	9/28/2000	2113	2600.0	8332.0	4	44	20	40	29.4	29.3	28.3	35.9	35.9	36.1	0.129		5.9	6.0	5.8	PN
26014	9/29/2000	1721	2630.0	8230.0	4	19	9	18	29.6	29.7	29.5	36.8	36.8	36.7	1.337		5.3	5.3	5.1	PN

Table 2. Selected environmental parameters (continued)

A.E. VERRILL, TRAP/VIDEO SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
2301	10/11/2000	1050	2959.4	8807.0	11	24	12	24	26.0	25.0	24.0	32.0	32.0	32.0			11.4	9.6	9.2	TV
2302	10/17/2000	940	3001.2	8802.3	11	24	12	24	23.0	23.5	24.0	35.0	35.0	35.0			6.8	7.2	7.4	TV
2303	10/17/2000	1150	2958.3	8805.6	11	27	14	27	24.0	24.5	23.5	34.0	35.0	36.0			6.4	7.0	7.0	TV
2304	10/19/2000	850	3002.8	8800.5	11	18	9	18	23.0	23.5	24.0	35.0	35.0	35.0			6.8	7.2	7.4	TV
2305	10/19/2000	1150	3002.7	8804.7	11	22	11	22	24.0	24.0	23.5	34.0	35.0	36.0			6.4	7.0	7.0	TV
2306	10/20/2000	800	3002.8	8804.1	11	24	12	24	22.0	23.5	23.0	30.0	32.0	32.0			1.6	1.8	7.6	TV
2307	10/20/2000	925	3002.8	8804.7	11	24	12	24	23.5	23.0	22.0	34.0	35.0	35.0			6.6	7.4	7.4	TV
2308	10/30/2000	930	3003.7	8805.2	11	21	11	21	24.0	23.0	22.0	32.0	34.0	34.0			8.0	7.8	7.4	TV
2309	10/30/2000	1105	2959.4	8806.3	11	24	12	24	24.0	23.0	23.0	34.0	35.0	35.0			9.6	8.8	8.0	TV
2310	11/3/2000	900	3004.8	8750.4	10	18	9	18	22.5	23.0	23.5	31.0	32.0	32.0			5.8	7.0	5.6	TV
2311	11/3/2000	1030	3004.9	8748.2	10	17	9	17	22.5	23.0	22.5	32.0	32.0	32.0			6.2	6.2	8.0	TV

Table 2. Selected environmental parameters (continued)

PELICAN, FALL PLANKTON SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
37768	10/11/2000	1140	2900.1	9130.2	15	10	6	10	20.3	20.4	20.4	33.8	33.8	33.8	3.992		7.0	7.0	7.2	PN
37769	10/11/2000	1529	2848.1	9119.0	15	13	6	13	23.6	23.6	23.6	34.2	34.2	34.3	1.532		6.5	6.6	6.6	ST
37770	10/11/2000	1721	2846.1	9112.8	15	12	6	12	23.6	23.6	23.6	33.8	33.8	33.8			6.5	6.5	6.6	ST
37771	10/11/2000	1854	2838.1	9112.0	15	21	10	21	24.2	24.2	24.3	35.3	35.3	35.3	1.095		6.4	6.4	6.4	ST
37772	10/11/2000	2022	2838.2	9112.0	15	21	10	21	24.2	24.2	24.3	35.3	35.3	35.3	1.095		6.4	6.4	6.4	ST
37773	10/11/2000	2232	2848.1	9119.0	15	13	6	13	23.4	23.4	23.4	34.0	34.0	34.0			6.6	6.6	6.6	ST
37774	10/12/2000	30	2845.9	9112.8	15	11	6	11	23.6	23.6	23.6	33.9	33.9	33.9	1.013		6.6	6.6	6.5	ST
37775	10/12/2000	435	2832.9	9050.3	14	24	12	24	25.6	25.6	25.6	36.3	36.3	36.4	0.584		6.2	6.1	6.2	ST
37776	10/12/2000	611	2828.8	9048.4	14	34	16	34	26.1	26.1	26.1	36.3	36.3	36.3	0.587		6.1	6.1	6.1	ST
37777	10/12/2000	745	2829.5	9054.5	14	34	19	34	26.0	26.0	25.9	36.3	36.3	36.4	0.490		6.1	6.1	6.1	ST
37778	10/12/2000	1038	2833.1	9051.0	14	25	13	25	25.5	25.5	25.5	36.4	36.4	36.4	0.532		6.1	6.1	6.1	ST
37779	10/12/2000	1209	2828.7	9048.7	14	34	26	34	26.1	26.0	26.0	36.3	36.3	36.4	0.684		6.0	6.0	6.0	ST
37780	10/12/2000	1415	2833.7	9042.9	14	23	13	23	25.8	25.8	25.7	36.1	36.1	36.2	0.560		6.1	6.1	6.1	ST
37781	10/12/2000	1628	2840.7	9036.9	14	17	9	17	25.6	25.6	25.6	35.7	35.7	35.7			6.4	6.4	6.4	ST
37782	10/12/2000	1923	2837.9	9021.7	14	29	15	29	26.2	26.2	26.2	36.2	36.2	36.2	0.511		6.2	6.2	6.2	ST
37783	10/12/2000	2217	2848.7	9009.8	14	30	15	30	26.0	26.0	26.0	35.9	34.9	35.1	0.969		6.1	6.0	6.0	ST
37784	10/13/2000	119	2903.8	9011.0	14	9	5	9	22.7	22.7	22.7	33.0	33.0	33.0	2.953		6.8	6.8	6.8	ST
37785	10/13/2000	338	2910.1	9001.7	14	8	4	8	23.0	23.0	23.0	33.1	33.1	33.1	2.961		6.8	6.8	6.8	ST
37786	10/13/2000	507	2904.6	9001.8	14	16	8	16	24.4	24.3	24.4	33.8	33.8	33.8	1.481		6.7	6.7	6.5	ST
37787	10/13/2000	710	2900.1	9000.2	14	23	11	23	23.9	24.5	24.7	32.7	33.3	33.8	1.471		6.7	6.4	6.2	PN
37788	10/13/2000	853	2904.6	9001.8	14	16	8	16	24.3	24.3	24.3	33.8	33.8	33.8	1.946		6.6	6.7	6.5	ST
37789	10/13/2000	1035	2910.1	9001.7	14	7	4	7	21.0	21.5	22.6	32.1	32.4	33.1	6.486		7.2	7.1	6.7	ST
37790	10/13/2000	1227	2903.3	9011.0	14	10	5	10	22.4	22.3	21.8	32.8	32.8	32.7			6.6	6.6	6.6	ST
37791	10/13/2000	1510	2900.0	9030.0	14	10	5	10	23.1	23.0	22.4	33.0	33.0	32.9	1.968		6.6	6.6	6.5	PN

Table 2. Selected environmental parameters (continued)

TOMMY MUNRO, FALL PLANKTON SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
17001	10/13/2000	1618	3000.5	8830.8	11	25	12	24	24.2	24.0	23.4	34.6	34.9	34.6			6.6	6.2	6.5	PN
17002	10/13/2000	2040	2929.9	8830.7	11	52	26	48	25.5	25.5	24.7	35.6	35.8	36.1			6.2	7.8	6.4	PN
17003	10/14/2000	48	2859.9	8830.0	99	606	100	175	26.4	20.4	19.7	36.7	36.3	36.6			5.2	6.1	5.3	PN
17004	10/14/2000	539	2830.2	8830.0	99	1804	100	200	26.3	22.8	21.0	36.4	36.5	36.3			5.4	5.6	5.2	PN
17005	10/14/2000	1101	2900.0	8800.4	11	1425	100	200	26.0	23.0	16.9	36.0	36.4	36.5			5.8	5.1	5.5	PN
17006	10/14/2000	1534	2930.0	8800.0	10	44	22	43	25.8	25.1	25.5	36.0	36.2	36.4			4.9	5.0	5.7	PN
17007	10/14/2000	1925	3000.0	8800.1	11	23	11	22	24.5	24.1	24.3	35.7	36.2	36.1			5.7	6.1	6.0	PN
17008	10/14/2000	2249	3000.0	8730.0	10	25	12	23	24.6	24.6	24.5	36.2	36.2	36.2			5.9	5.9	6.0	PN
17009	10/15/2000	222	2930.0	8730.0	10	70	35	69	25.4	24.5	20.2	36.3					4.9	4.6	4.2	PN
17010	10/15/2000	603	2900.5	8730.0	99	1665	100	200	26.2	21.4	16.4	36.5	36.5	36.1			5.8	5.5	5.2	PN
17011	10/15/2000	1000	2830.1	8730.0	99	2489	100	200	26.7	17.4	21.5	36.5	36.2	36.8			5.8	5.6	5.5	PN

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	10/14/2000	1752	2602.4	9626.3	21	69	35	69	27.8	27.8	27.1	36.6	36.6	36.5			5.9	5.9	5.8	ST/PN
2	10/14/2000	2040	2603.4	9625.9	21	70	35	69	27.8	27.8	27.1	36.6	36.6	36.5			5.9	5.9		ST
3	10/14/2000	2318	2617.4	9629.4	21	64	32	63	27.0	27.0	27.0	36.6	36.6	36.6				5.9	5.8	ST
5	10/15/2000	355	2622.4	9656.1	21	37	18	36	24.0	25.4	24.7	35.2	36.7	36.7			6.9	5.8	5.8	ST
6	10/15/2000	606	2615.0	9709.7	21	14	7	14	23.7	23.7	22.9	34.0	34.0	34.1			9.4	11.8	14.9	ST
7	10/15/2000	845	2600.0	9700.1	21	26	13	26	23.5	24.3	23.3	34.3	35.6	36.1			6.6	5.9	5.7	PN
8	10/15/2000	1057	2606.4	9656.8	21	31	15	30	23.1	23.6	24.9	34.1	35.3	36.0			6.7	6.0	5.2	ST
9	10/15/2000	1315	2617.0	9701.8	21	13	6	13	23.1	23.0	23.8	33.6	33.6	35.4			7.1	7.1	5.9	ST
10	10/15/2000	1726	2630.8	9627.4	21	96	48	96	27.1	27.0	18.9	36.6	36.6	36.4			6.1	6.1	3.3	ST/PN
11	10/15/2000	2322	2645.1	9640.9	21	81	40	79	26.9	26.9	26.0	36.6	36.6	36.8			6.0	6.0	5.7	ST
12	10/16/2000	410	2639.1	9710.3	21	21	10	20	22.7	22.5	23.3	33.6	34.6	35.6			6.8	6.2	6.2	ST
13	10/16/2000	540	2635.9	9711.1	21	20	10	19	23.0	22.7	23.0	33.3	34.9	35.2			7.0	6.3	6.1	ST
14	10/16/2000	851	2631.4	9657.5	21	35	17	35	25.4	25.5	25.0	35.8	36.6	36.6			6.5	6.3	5.8	ST/PN
16	10/16/2000	1251	2619.4	9704.2	21	20	10	19	23.4	23.3	23.4	33.8	35.6	35.6			7.2	6.2	6.0	ST
17	10/16/2000	1537	2633.0	9706.3	21	24	12	23	23.2	23.4	23.7	34.5	35.7	35.9			7.0	6.1	6.1	ST
18	10/16/2000	1750	2645.4	9709.2	21	31	15	29	24.7	24.4	23.9	34.8	36.4	36.2			7.0	6.3	1.4	ST
19	10/16/2000	2243	2659.9	9629.9	21	136	68	135	26.7	26.5	17.8	36.5	36.5	36.4			6.1	6.3	3.3	PN
20	10/17/2000	301	2652.9	9657.4	21	45	22	44	26.1	25.9	25.7	36.7	36.7	36.7			6.3	6.2	6.0	ST
21	10/17/2000	629	2658.9	9719.2	21	16	8	16	23.5	22.8	22.6	33.0	33.6	33.7			7.4	7.1	6.6	ST
22	10/17/2000	809	2654.1	9721.3	21	12	6	11	23.1	23.1	22.5	33.1	33.1	33.4			7.3	7.3	6.8	ST
23	10/17/2000	913	2652.3	9717.4	21	18	9	18	22.9	22.7	22.9	33.7	34.3	34.8			6.8	6.3	6.2	ST
24	10/17/2000	1025	2650.0	9719.4	21	15	7	14	23.2	22.8	22.7	33.1	33.9	34.0			7.1	6.6	7.2	ST
25	10/17/2000	1410	2647.3	9651.4	21	55	27	54	25.4	25.2	25.0	36.1	36.6	36.6			6.6	6.1	5.7	ST
27	10/17/2000	1749	2658.1	9700.8	21	40	19	38	26.4	26.2	25.5	36.7	36.7	36.6			6.3	6.2	5.9	ST/PN
28	10/17/2000	2148	2704.4	9657.3	20	45	22	45	26.5	26.1	25.4	36.6	36.7	36.6			6.2	6.3	6.0	ST
30	10/18/2000	214	2712.0	9708.9	20	27	13	26	24.8	24.5	24.0	35.8	36.1	36.0			6.8	6.5	5.9	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
31	10/18/2000	730	2706.2	9721.3	20	12	5	11	24.5	23.6	23.1	32.7	32.6	32.7			7.3	7.5	7.3	ST
32	10/18/2000	932	2702.4	9707.4	20	31	15	29	25.1	25.1	24.8	36.4	36.4	36.4			6.5	6.4	5.9	ST
33	10/18/2000	1229	2703.3	9648.5	20	65	32	65	26.6	26.5	26.1	36.6	36.6	36.7			6.1	6.1	5.8	ST
35	10/18/2000	1726	2723.9	9657.2	20	36	19	36	26.0	25.9	24.9	36.6	36.6	36.3			6.3	6.3	5.8	ST
36	10/18/2000	1849	2729.9	9660.0	20	27	13	27	24.8	24.6	24.2	36.0	36.0	35.9			5.6	6.4	6.0	PN
37	10/18/2000	2029	2733.0	9656.7	20	29	14	28	25.7	25.2	24.5	36.4	36.2	36.0			6.3	6.2	6.0	ST
38	10/18/2000	2215	2739.5	9655.9	20	25	12	24	24.9	24.8	24.7	35.9	35.9	35.9			6.4	6.4	6.3	ST
39	10/19/2000	42	2744.6	9705.4	20	11	5	10	23.5	23.5	23.5	32.0	32.0	32.0			7.4	7.5	7.5	ST
40	10/19/2000	225	2737.1	9708.2	20	14	7	13	23.2	23.2	23.2	32.2	32.2	32.2			7.3	7.4	7.4	ST
41	10/19/2000	400	2733.4	9702.5	20	24	11	24	24.4	24.5	24.5	35.8	35.8	35.8			6.6	6.4	6.4	ST
42	10/19/2000	736	2729.0	9712.8	20	14	7	13	23.6	23.6	23.0	32.3	32.2	33.4			7.4	7.4	6.6	ST
43	10/19/2000	1103	2729.9	9645.8	20	45	22	44	26.6	26.6	25.8	36.6	36.6	36.5			6.1	6.1	5.6	ST
45	10/19/2000	1558	2729.0	9630.2	20	75	37	74	26.9	26.6	25.9	36.6	36.6	36.6			6.1	6.2	5.7	PN
46	10/19/2000	1928	2730.2	9616.7	20	109	55	109	29.8	25.7	17.8	36.5	36.5	36.3			6.2	6.1	3.4	ST
48	10/19/2000	2232	2737.3	9623.7	20	73	36	73	26.9	26.9	26.4	36.6	36.6	36.7			6.0	6.0	5.6	ST
49	10/20/2000	141	2739.0	9642.2	20	40	20	40	26.4	26.4	25.8	36.6	36.6	36.5			6.2	6.2	5.9	ST
50	10/20/2000	241	2741.2	9646.0	20	29	14	28	24.3	24.3	24.6	35.8	0.5	35.9			6.1	6.1	6.2	ST
51	10/20/2000	451	2742.4	9652.7	20	26	13	25	24.1	24.2	24.1	35.5	35.5	35.5			6.2	6.2	6.3	ST
52	10/20/2000	809	2746.5	9638.8	20	32	16	32	25.3	25.4	25.4	36.3	36.3	36.3			6.2	6.1	6.2	ST
53	10/20/2000	928	2748.0	9644.7	20	27	13	27	24.7	24.7	24.6	35.9	35.9	35.9			6.4	6.4	6.3	ST
54	10/20/2000	1120	2751.8	9653.4	20	18	10	17	22.9	23.7	24.0	31.7	34.7	35.0			6.9	6.6	6.2	ST
55	10/20/2000	1528	2759.7	9629.1	19	27	13	26	24.9	24.8	26.0	35.9	35.8	36.5			6.3	6.4	6.1	ST/PN
56	10/20/2000	1618	2802.2	9631.6	19	22	11	22	24.7	24.7	24.6	35.6	35.6	35.6			6.6	6.3	6.5	ST
57	10/20/2000	1910	2754.5	9630.8	20	33	16	33	26.7	26.7	26.0	36.6	36.6	36.5			6.2	6.2	6.0	ST
58	10/20/2000	2209	2753.2	9655.4	20	14	7	13	23.1	23.1	23.5	31.5	31.5	34.1			6.9	6.9	6.2	ST
59	10/21/2000	5	2801.0	9651.9	19	11	5	10	23.4	23.3	23.1	31.3	31.3	31.7			7.1	7.1	6.7	ST
60	10/21/2000	229	2803.6	9638.9	19	18	9	18	23.4	23.6	23.9	34.1	34.6	35.2			6.8	6.6	6.4	ST
61	10/21/2000	411	2803.1	9633.3	19	21	11	21	24.6	24.6	24.6	35.6	35.6	35.6			6.5	6.6	6.6	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
62	10/21/2000	607	2805.0	9624.9	19	25	12	25	24.4	24.4	24.7	35.6	35.6	35.8			6.5	6.5	6.4	ST
63	10/21/2000	903	2809.5	9640.6	19	10	5	9	23.7	22.9	23.0	31.2	32.7	33.3			7.0	5.9	5.9	ST
64	10/21/2000	1021	2809.8	9634.6	19	14	7	13	23.0	22.7	22.9	32.2	32.6	33.3			6.9	6.9	6.2	ST
65	10/21/2000	1409	2807.3	9606.5	19	31	15	31	25.5	25.5	25.5	36.4	36.4	36.4			6.3	6.2	6.2	ST
67	10/21/2000	1650	2759.9	9559.4	19	45	22	44	26.9	26.9	26.2	36.6	36.6	36.6			6.1	6.1	5.8	ST/PN
68	10/21/2000	1950	2806.9	9604.3	19	33	17	32	25.8	25.7	25.6	36.5	36.4	36.4			6.2	6.3	6.3	ST
69	10/21/2000	2035	2809.2	9605.1	19	29	14	28	24.9	25.0	25.5	36.1	36.1	36.3			6.2	6.2	6.2	ST
70	10/21/2000	2230	2814.8	9605.4	19	23	11	22	24.9	24.9	24.9	35.9	35.9	35.9			6.4	6.4	6.4	ST
71	10/22/2000	248	2834.9	9555.2	19	11	5	11	23.4	23.2	22.8	31.4	31.7	33.2			7.2	7.2	6.4	ST
72	10/22/2000	618	2827.9	9527.4	19	30	15	29	24.3	24.8	24.2	35.4	35.5	36.6			6.5	6.4	5.9	ST/PN
73	10/22/2000	1110	2843.6	9537.4	19	9	4	8	23.1	23.1	23.1	30.9	30.9	30.9			7.3	7.2	7.1	ST
74	10/22/2000	1320	2830.9	9546.2	19	18	9	17	23.4	24.1	24.2	33.8	35.1	35.2			6.8	6.7	6.6	ST
75	10/22/2000	1558	2832.4	9556.5	19	12	6	10	23.4	23.0	23.0	32.9	33.0	33.4			7.0	7.0	6.8	ST/PN
76	10/22/2000	1828	2813.1	9554.9	19	30	15	29	24.5	24.4	24.7	35.6	35.6	35.8				5.5	13.7	ST
77	10/22/2000	2249	2812.6	9527.4	19	39	19	38	25.3	25.3	25.2	36.0	36.0	36.1			6.4	6.4	6.1	ST
78	10/23/2000	308	2801.5	9504.2	19	68	34	67	26.8	26.5	25.9	36.6	36.6	36.6			6.1	6.2	6.0	ST
79	10/23/2000	610	2757.2	9518.7	19	77	38	76	26.7	26.7	26.0	36.6	36.6	36.6			6.1	6.1	6.0	ST
80	10/23/2000	1005	2745.1	9530.7	20	111	55	110	26.6	26.6	21.5	36.5	36.6	36.5			6.1	6.2	4.4	ST
81	10/23/2000	1253	2800.0	9529.9	19	59	29	58	27.0	26.9	28.2	36.6	36.6	36.1			6.1	6.1	5.7	PN
82	10/23/2000	1541	2810.7	9532.5	19	40	19	39	25.0	24.8	24.8	35.5	35.8	35.9			6.5	6.4	6.0	ST
84	10/23/2000	2107	2826.7	9511.2	19	35	17	34	25.4	25.4	25.4	36.3	36.3	36.3			6.2	6.2	6.2	ST
85	10/24/2000	18	2843.8	9508.3	19	20	10	20	24.0	24.0	24.0	35.0	35.0	35.0			6.6	6.6	6.6	ST
87	10/24/2000	404	2855.3	9514.8	19	14	6	13	23.1	23.1	13.1	32.4	32.4	32.4			6.9	6.9	6.9	ST
88	10/24/2000	608	2855.6	9503.8	19	18	9	17	23.4	23.4	23.4	34.5	34.5	34.5			6.2	6.8	6.2	ST/PN
89	10/24/2000	915	2845.0	9500.4	19	22	11	21	24.5	24.5	24.5	35.1	35.1	35.1			6.4	6.5	6.5	ST
90	10/24/2000	1309	2829.4	9506.8	19	32	15	31	25.5	25.4	5.4	36.3	36.3	36.3			6.2	6.2	6.2	ST/PN
91	10/24/2000	1550	2819.6	9521.9	19	34	17	33	25.8	25.6	25.6	36.5	36.5	36.5			6.2	6.1	6.1	ST
92	10/24/2000	1723	2810.7	9513.9	19	47	23	46	26.4	26.0	25.9	36.6	36.6	36.6			6.2	6.2	6.1	ST
94	10/25/2000	220	2759.5	9414.5	18	82	41	81	26.5	26.1	23.6	36.6	36.6	36.4			6.2	6.0	5.0	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
95	10/25/2000	502	2755.2	9406.1	18	91	45	90	26.5	26.2	21.9	36.6	36.6	36.4			6.2	6.3	4.6	ST
96	10/25/2000	950	2754.7	9427.0	18	89	44	88	26.3	26.3	26.1	36.6	36.6	36.6			6.1	6.1	6.0	ST/PN
97	10/25/2000	1337	2759.8	9449.1	18	82	41	81	26.7	26.4	26.0	36.6	36.6	36.6			6.2	6.2	5.9	ST
98	10/25/2000	1612	2759.7	9501.0	19	82	41	81	26.8	26.6	25.9	36.6	36.6	36.7			6.2	6.2	5.9	ST/PN
99	10/25/2000	2129	2803.4	9432.4	18	55	27	54	26.1	26.1	26.1	36.6	36.6	36.6			6.1	6.2	6.1	ST
100	10/26/2000	149	2820.7	9422.2	18	43	21	42	25.9	25.9	25.7	36.5	36.5	36.5			6.2	6.2	6.1	ST
104	10/26/2000	742	2810.0	9419.6	18	55	27	54	26.3	26.3	26.0	36.6	36.6	36.5			6.1	6.2	6.0	ST
109	10/26/2000	1545	2804.1	9358.9	18	72	35	71	26.6	26.5	25.8	36.6	36.6	36.6			6.2	6.2	5.9	ST/PN
110	10/26/2000	2158	2830.1	9430.0	18	36	18	35	25.5	25.4	25.5	36.4	36.4	36.5			6.2	6.2	6.1	PN
111	10/27/2000	205	2859.8	9430.0	18	18	9	17	24.7	24.7	24.6	35.1	35.1	35.2			6.5	6.5	6.4	PN
112	10/28/2000	2257	2915.0	9402.2	18	14	7	13	24.1	24.1	24.1	34.1	34.1	34.1			6.6	6.6	6.4	ST
113	10/29/2000	325	2933.6	9357.7	17	11	5	10	23.8	23.7	23.5	27.5	28.3	31.2			6.8	6.7	6.1	ST/PN
114	10/29/2000	809	2902.6	9417.7	18	16	7	15	24.7	24.7	24.7	35.5	35.5	35.5			6.4	6.4	6.1	ST
115	10/29/2000	1125	2849.8	9433.7	18	19	9	18	24.6	24.6	24.8	35.4	35.4	35.7			6.4	6.4	6.0	ST
116	10/29/2000	1516	2841.1	9405.4	18	29	14	28	25.8	25.8	25.7	36.6	36.1	36.6			6.3	6.3	6.3	ST
117	10/29/2000	1727	2829.9	9400.0	18	40	20	39	25.9	25.8	25.7	36.6	36.6	36.6			6.3	6.3	6.2	PN
118	10/29/2000	2005	2835.5	9414.3	18	34	17	33	25.5	25.6	25.5	36.6	36.6	36.6			6.3	6.3	6.3	ST
120	10/29/2000	2234	2829.3	9410.6	18	40	20	39	25.8	25.8	25.7	36.6	36.6	36.6			6.2	6.2	6.2	ST
121	10/30/2000	328	2838.6	9342.1	17	31	15	30	25.5	25.5	25.5	36.4	36.4	36.4			6.3	6.3	6.3	ST
122	10/30/2000	523	2829.9	9330.1	17	43	21	42	25.5	25.6	25.6	36.5	36.6	36.6			6.3	6.3	6.2	PN
123	10/30/2000	810	2838.3	9323.1	17	34	17	33	25.7	25.7	25.7	36.6	36.6	36.6			6.2	6.2	6.2	ST
124	10/30/2000	1257	2800.0	9329.7	17	95	47	94	26.6	26.2	21.1	36.6	36.5	36.5			6.2	6.4	4.0	PN
125	10/30/2000	1858	2804.1	9341.9	17	73	36	72	26.6	26.5	25.7	36.6	36.6	36.5			6.2	6.2	5.6	ST
129	10/31/2000	56	2821.6	9337.3	17	54	27	53	26.1	26.1	25.9	36.6	36.6	36.5			6.2	6.2	6.1	ST
132	10/31/2000	821	2819.4	9305.1	17	53	26	52	26.4	26.4	26.0	36.5	36.5	36.6			6.2	6.2	6.0	ST
134	10/31/2000	1153	2814.3	9258.5	16	62	31	61	26.6	26.5	26.1	36.5	36.5	36.6			6.2	6.2	5.7	ST
136	10/31/2000	1503	2810.3	9303.4	17	70	35	70	26.8	26.6	25.8	36.5	36.5	36.6			6.2	6.2	5.8	ST
138	11/1/2000	316	2935.6	9340.2	17	11	5	10	23.9	23.9	23.6	31.2	31.2	31.9			6.9	6.9	5.7	ST/PN
139	11/1/2000	1127	2937.9	9328.9	17	10	5	10	24.3	24.3	24.2	31.6	31.6	31.6			6.7	6.6	6.5	ST
140	11/1/2000	1613	2915.1	9336.5	17	15	7	14	24.3	24.3	24.4	34.3	34.3	36.6			6.6	6.5	5.7	ST
141	11/1/2000	1851	2906.0	9347.3	17	18	8	17	25.2	25.2	25.2	35.8	35.8	35.8			6.4	6.4	6.4	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
142	11/1/2000	2143	2906.8	9333.2	17	19	9	18	24.8	24.9	25.0	35.2	35.3	35.4			6.4	6.4	6.4	ST
143	11/2/2000	114	2904.2	9311.3	17	23	11	22	24.5	24.7	24.9	34.9	35.3	35.6			6.5	6.5	6.0	ST
144	11/2/2000	517	2920.3	9245.3	16	16	8	15	24.7	24.7	24.7	35.0	35.0	35.0			6.3	6.3	6.3	ST
146	11/2/2000	708	2925.7	9246.1	16	14	6	13	24.3	24.4	24.6	33.9	34.1	34.6			6.4	6.4	6.2	ST
148	11/2/2000	1057	2926.6	9307.7	17	14	7	13	24.1	24.3	24.4	34.1	34.3	34.5			6.4	6.4	6.3	ST/PN
149	11/2/2000	1337	2919.6	9304.9	17	16	8	16	24.3	24.3	25.5	34.3	34.3	34.7			6.4	6.4	6.1	ST
151	11/2/2000	1716	2904.2	9259.8	16	23	11	22	24.2	24.2	24.4	34.7	34.7	35.1			6.4	6.4	4.6	ST/PN
152	11/2/2000	2135	2842.2	9307.3	17	31	15	30	25.3	25.3	25.5	36.3	36.3	36.4			6.2	6.2	6.2	ST
153	11/2/2000	2351	2842.4	9320.6	17	30	15	30	24.8	24.9	25.5	35.7	35.8	36.4			6.0	5.7	5.5	ST
155	11/3/2000	310	2848.4	9329.4	17	25	12	25	25.1	25.1	25.6	36.1	36.1	36.5			6.3	6.3	6.2	ST
156	11/3/2000	646	2859.9	9400.0	18	20	10	19	25.2	25.2	25.2	36.1	36.1	36.1			6.3	6.3	6.4	PN
157	11/3/2000	934	2857.9	9338.1	17	20	10	19	24.7	24.7	24.8	36.4	35.4	35.5			6.4	6.4	6.3	ST/PN
158	11/3/2000	1411	2854.6	9310.7	17	23	11	22	24.8	24.7	24.9	35.3	35.4	35.6			6.4	6.2	5.8	ST
159	11/3/2000	1603	2846.2	9311.1	17	27	13	26	24.6	24.5	24.5	35.4	35.4	36.4			6.5	6.4	5.9	ST
160	11/3/2000	1731	2842.5	9306.3	17	33	16	32	25.2	25.2	25.5	36.2	36.2	36.4			6.3	6.2	6.2	ST
161	11/3/2000	2253	2808.1	9323.8	17	82	41	82	26.3	26.3	22.5	36.6	36.6	36.4			6.2	6.3	5.2	ST
162	11/4/2000	211	2804.3	9311.5	17	89	44	88	26.7	26.7	22.7	36.4	36.4	36.4			6.2	6.3	5.3	ST
164	11/4/2000	555	2759.1	9258.0	16	111	55	110	26.8	26.9	21.1	36.5	36.5	36.5			6.2	6.3	4.1	PN
167	11/4/2000	1256	2800.6	9233.3	16	111	55	110	26.6	26.3	20.2	36.5	36.6	36.5			6.2	6.3	3.6	ST/PN
168	11/4/2000	1609	2804.9	9240.5	16	92	45	91	26.5	26.4	21.2	36.5	36.5	36.5			6.2	6.3	3.7	ST
169	11/4/2000	2109	2808.9	9201.2	16	95	47	94	26.4	26.3	21.1	36.5	36.6	36.4			6.2	6.3	3.5	ST/PN
170	11/5/2000	46	2812.8	9154.2	15	73	36	72	26.3	26.3	25.8	36.5	36.5	36.5			6.2	6.2	5.8	ST
172	11/5/2000	640	2824.6	9224.3	16	56	28	56	25.8	25.8	25.8	36.5	36.5	36.5			6.1	6.1	6.0	ST
173	11/5/2000	1019	2833.7	9229.2	16	40	20	40	25.9	25.9	25.9	36.6	36.6	36.6			6.1	6.1	6.2	ST/PN
174	11/5/2000	1140	2832.0	9231.0	16	44	22	44	25.9	25.8	25.8	36.6	36.6	36.6			6.2	6.1	6.2	ST
176	11/5/2000	1551	2834.3	9239.9	16	40	20	40	25.5	25.2	25.5	36.4	36.3	36.5			6.3	6.2	6.2	ST
177	11/5/2000	1829	2832.4	9236.5	16	45	22	44	25.8	25.3	25.3	36.5	36.4	36.4			6.3	6.3	6.3	ST
178	11/5/2000	2141	2837.7	9218.5	16	40	20	40	25.9	25.9	25.9	36.6	36.6	36.6			6.2	6.2	6.2	ST
180	11/6/2000	149	2845.4	9210.4	16	34	16	33	25.6	25.6	25.6	36.6	36.6	36.6			6.2	6.2	6.3	ST
181	11/6/2000	415	2854.2	9216.1	16	27	13	26	25.5	25.5	25.5	36.5	36.5	36.5			6.2	6.3	6.3	ST
182	11/6/2000	1346	2911.6	9238.5	16	18	9	18	24.9	24.8	24.9	35.5	35.5	35.6			6.4	6.3	5.6	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
183	11/6/2000	1702	2851.7	9231.3	16	28	13	27	25.0	25.0	25.0	36.1	36.2	36.2			6.4	6.3	6.2	ST
184	11/6/2000	2119	2903.9	9204.6	16	17	8	17	24.6	24.7	25.2	35.1	35.1	36.0			6.1	6.1	6.2	ST
185	11/6/2000	2312	2901.5	9159.3	15	18	9	18	24.7	24.8	25.4	35.3	35.4	36.2			6.3	6.2	5.6	ST
186	11/7/2000	257	2845.1	9149.5	15	28	14	27	25.7	25.7	25.7	36.5	36.5	36.5			6.2	6.2	6.2	ST
187	11/7/2000	821	2911.1	9222.3	16	13	6	13	24.3	24.3	24.5	34.7	34.7	34.9			6.0	6.1	5.8	ST
188	11/7/2000	1223	2846.0	9241.6	16	32	16	32	25.0	24.9	25.1	36.1	36.2	36.2			2.4	2.4	5.8	ST
189	11/7/2000	1551	2841.7	9258.2	16	33	16	32	25.2	25.2	25.2	36.0	35.3	32.9			4.0	2.3	3.5	ST/PN
190	11/8/2000	41	2830.2	9159.5	15	54	27	54	26.1	26.1	25.9	36.5	36.5	36.5			6.2	6.2	6.2	ST
192	11/8/2000	638	2817.9	9139.2	15	71	35	71	26.1	26.1	24.8	36.5	36.5	36.4			6.2	6.2	5.4	ST
193	11/8/2000	1033	2824.9	9125.2	15	53	26	53	25.8	25.8	25.8	36.5	36.5	36.5			6.1	6.1	4.9	ST
196	11/8/2000	1528	2825.8	9131.1	15	54	26	53	29.0	26.0	25.8	36.5	36.5	36.5			6.2	6.2	6.0	ST
197	11/8/2000	1806	2832.6	9141.6	15	45	22	44	25.8	25.8	25.8	36.5	36.5	36.5			6.2	6.2	6.2	ST
198	11/8/2000	2317	2840.7	9127.9	15	27	13	26	25.3	25.3	25.3	36.5	36.5	36.5			6.1	6.1	6.1	ST
199	11/9/2000	230	2842.0	9115.0	15	18	9	17	25.5	25.5	25.5	36.5	36.5	36.5			6.2	6.2	6.3	ST
200	11/9/2000	345	2838.9	9113.7	15	21	10	20	25.5	25.5	25.5	36.5	36.5	36.5			5.7	6.2	6.3	ST
201	11/9/2000	517	2834.2	9105.9	15	27	13	26	25.5	25.6	25.6	36.5	36.5	36.5			6.1	6.2	6.3	ST
202	11/9/2000	638	2830.6	9103.2	15	33	16	32	25.8	25.8	25.8	36.5	36.5	36.5			6.2	6.2	6.3	ST
203	11/9/2000	759	2829.7	9103.6	15	32	15	31	25.6	25.5	25.6	36.5	36.5	36.5			6.1	6.1	6.2	ST
204	11/9/2000	1035	2835.4	9113.6	15	27	13	26	25.3	25.3	25.3	36.5	36.5	36.5			4.7	6.2	6.2	ST
205	11/9/2000	1227	2840.5	9121.9	15	25	12	24	25.0	25.0	25.0	36.4	36.4	36.4			6.1	6.1	6.1	ST
206	11/9/2000	1519	2833.9	9120.2	15	34	16	33	25.4	25.4	25.4	36.5	36.5	36.5			6.1	6.1	6.1	ST
207	11/9/2000	1809	2835.8	9139.8	15	36	18	35	25.4	25.5	25.5	36.5	36.5	36.5			6.2	6.2	6.4	ST
208	11/9/2000	2133	2859.3	9146.4	15	13	6	12	23.8	23.8	23.9	34.8	34.8	34.8			6.2	6.2	6.3	ST
209	11/9/2000	2254	2901.3	9142.6	15	13	6	12	23.6	23.6	24.4	34.6	34.6	35.4			6.2	6.2	6.0	ST/PN
211	11/10/2000	552	2821.0	9130.4	15	64	32	64	25.7	25.7	25.7	36.5	36.5	36.5			6.1	6.2	6.3	ST
212	11/10/2000	826	2813.2	9122.4	15	95	47	95	25.8	25.8	21.6	36.5	36.5	36.4			3.2	6.2	4.1	ST
213	11/10/2000	1212	2810.5	9108.6	15	89	44	89	25.9	25.9	24.0	36.5	36.5	36.4			6.1	6.2	5.2	ST
215	11/10/2000	1754	2815.0	9036.6	14	71	35	70	25.7	25.7	25.6	36.5	36.5	36.5			6.2	6.1	6.2	ST
216	11/10/2000	2021	2812.1	9035.1	14	82	40	81	25.8	25.8	23.0	36.5	36.5	36.4			6.1	6.2	5.2	ST/PN
217	11/11/2000	1	2810.4	9054.3	14	90	45	90	25.8	25.8	21.4	36.5	36.5	36.4			6.1	6.2	4.2	ST/PN
219	11/11/2000	525	2833.0	9031.5	14	31	15	30	24.8	24.8	24.8	36.4	36.4	36.4			6.2	6.2	6.0	ST/PN

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
220	11/11/2000	729	2836.0	9027.7	14	27	13	26	24.8	24.8	24.8	36.4	36.4	36.4			6.2	6.2	5.9	ST
221	11/11/2000	853	2833.5	9033.3	14	31	15	31	24.8	24.8	24.8	36.4	36.4	36.4			6.2	6.2	6.2	ST
222	11/11/2000	1144	2836.3	9053.5	14	20	10	20	24.0	24.3	24.3	15.6	35.3	35.8			5.4	5.6	5.3	ST
223	11/11/2000	1403	2838.2	9100.0	14	18	9	18	23.8	24.4	24.6	16.6	35.9	36.4			8.9	10.3	10.3	ST/PN
224	11/11/2000	1636	2851.6	9052.1	14	9	5	9	23.3	23.4	23.1	14.9	32.3	34.1			6.0	6.1	6.6	ST
225	11/11/2000	2036	2854.0	9018.8	14	21	10	21	23.5	24.7	25.0	15.6	34.4	36.0			8.9	10.4	10.5	ST/PN
226	11/11/2000	2347	2846.2	9007.1	14	34	17	34	25.3	25.3	25.3	36.4	36.4	36.4			6.3	6.3	6.3	ST
227	11/12/2000	252	2857.9	8952.6	13	36	18	36	23.0	24.7	25.4	33.2	35.7	36.3			6.8	6.7	6.0	ST
229	11/12/2000	558	2857.7	8945.2	13	45	22	44	22.0	25.0	25.8	30.9	35.6	36.2			6.8	6.2	5.0	ST
230	11/12/2000	928	2901.0	8955.2	13	27	13	27	23.5	24.5	25.3	33.8	35.4	36.2			6.7	6.4	5.7	ST/PN
231	11/12/2000	1152	2855.9	9012.8	14	18	9	18	23.1	24.0	25.0	32.7	33.5	35.9			6.8	6.1	5.3	ST
232	11/12/2000	1400	2848.8	9015.9	14	23	12	23	24.8	24.8	24.8	36.1	36.1	36.2			6.4	6.3	6.3	ST
233	11/12/2000	1733	2845.2	8946.1	13	82	41	82	25.3	25.4	23.1	36.2	36.2	36.4			6.7	6.3	4.8	ST
234	11/14/2000	2035	2959.4	8813.3	11	29	14	28	22.8	22.8	22.8	35.4	35.4	35.4			6.6	6.6	6.7	ST
235	11/14/2000	2249	3000.1	8759.5	10	24	12	23	22.4	22.4	22.4	35.5	35.5	35.5			5.9	6.7	6.8	PN
236	11/15/2000	225	2935.5	8804.3	11	40	20	39	23.7	23.8	23.8	36.0	36.0	36.0			6.5	6.6	6.7	ST
238	11/15/2000	1106	3010.8	8830.4	11	10	5	10	19.8	19.7	19.1	34.2	34.2	34.1			7.0	6.7	7.0	ST
239	11/15/2000	1543	2931.8	8814.1	11	40	20	39	23.7	23.7	23.7	35.8	35.8	35.8			6.5	6.6	6.6	ST
240	11/15/2000	1944	2926.0	8802.2	11	55	22	55	24.5	24.6	24.6	36.4	36.4	36.4			6.4	6.4	6.4	ST/PN
241	11/15/2000	2159	2923.1	8805.2	11	71	35	70	24.4	24.4	23.2	36.3	36.3	36.3			6.4	6.4	5.1	ST
242	11/16/2000	123	2916.5	8820.0	11	77	38	76	24.6	24.6	24.7	36.3	36.3	36.3			6.4	6.4	6.4	ST
244	11/16/2000	439	2915.7	8823.3	11	79	39	78	24.4	24.5	24.5	36.2	36.2	36.2			6.3	6.4	6.3	ST
245	11/16/2000	758	2924.9	8802.0	11	58	27	56	24.4	24.3	24.0	36.3	36.3	32.2			6.4	6.4	6.5	ST
246	11/16/2000	1020	2918.0	8814.3	11	79	39	77	24.3	24.3	24.3	36.1	36.1	36.1			6.4	6.4	6.4	ST
247	11/16/2000	1341	2912.8	8830.5	11	113	56	111	24.6	24.6	17.0	36.3	36.3	36.3			6.4	6.5	3.8	PN
248	11/16/2000	1555	2909.0	8838.9	11	90	44	89	24.8	24.9	23.0	36.3	36.4	36.4			6.4	6.4	5.4	ST
249	11/16/2000	2022	2859.9	8859.3	11	67	33	63	22.8	25.5	22.5	32.2	36.3	36.4			6.5	6.2	4.9	PN
250	11/17/2000	204	2900.3	8928.4	13	13	6	13	21.7	21.7	22.3	31.5	31.5	33.3			6.8	6.8	2.9	PN
251	11/17/2000	635	2906.9	8934.1	13	12	6	12	21.4	22.2	22.3	31.2	33.1	33.6			6.9	6.8	6.7	ST
252	11/17/2000	918	2911.0	8948.7	13	13	6	13	21.7	21.9	22.3	33.3	33.6	34.5			6.6	6.6	6.3	ST
253	11/17/2000	1105	2910.7	8958.3	13	9	4	8	20.7	20.7	20.7	33.0	33.0	33.0			6.7	6.8	6.8	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
260	11/17/2000	1712	2908.0	9004.6	14	11	6	10	20.4	20.4	20.4	33.3	33.3	33.3			4.8	7.0	8.5	ST
261	11/17/2000	2109	2909.8	8938.3	13	11	5	10	21.8	21.9	22.0	33.5	33.5	33.6			6.5	6.5	6.6	ST
262	11/17/2000	2256	2904.3	8940.8	13	24	11	23	22.6	22.5	25.0	34.3	34.2	36.0			6.5	6.5	4.6	ST
279	11/19/2000	1214	2906.5	8858.8	11	18	9	16	15.9	16.6	17.7	30.5	31.5	34.2			6.9	6.9	7.1	ST
280	11/19/2000	1350	2904.7	8852.0	11	88	44	88	24.4	24.3	22.1	36.1	36.2	35.7			6.3	6.3	6.5	ST
281	11/19/2000	1637	2921.8	8904.9	11	10	5	10	15.1	15.1	15.2	33.8	33.8	33.9			8.0	8.1	8.1	ST
282	11/19/2000	1924	2904.5	8858.7	11	49	24	49	17.1	22.9	17.0	31.8	35.7	34.4			7.0	6.6	7.1	ST

Table 2. Selected environmental parameters (continued)

A.E. VERRILL, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
2301	10/19/2000	828	3010.6	8803.7	11	6	3	6	22.3	22.3	22.3	32.7	32.8	32.9			7.2	7.2	7.2	ST
2302	10/19/2000	1022	3008.4	8817.6	11	19	9	19	22.6	23.0	23.6	34.2	34.5	35.7			7.1	7.0	6.9	ST
2303	10/19/2000	1227	2956.7	8821.8	11	32	16	32	24.6	24.9	24.1	35.5	35.9	35.9			6.8	6.7	6.8	ST
2304	10/19/2000	1559	3002.3	8826.3	11	23	11	23	23.5	23.0	24.1	34.8	34.8	35.9			6.9	7.0	6.8	ST
2305	10/19/2000	1819	3005.5	8823.5	11	19	9	19	24.1	23.3	23.5	34.9	34.9	35.4			6.9	7.0	6.9	ST
2306	10/19/2000	1943	3004.0	8818.0	11	20	10	20	22.9	22.8	24.0	34.5	34.6	35.8			7.0	7.0	6.9	ST
2307	10/19/2000	2131	3009.9	8815.5	11	17	8	17	23.3	22.8	23.5	33.8	34.6	35.7			7.0	7.0	6.9	ST
2308	10/19/2000	2323	3012.4	8805.2	11	4	2	4	22.9	22.9	22.9	31.5	31.6	31.8			7.2	7.2	7.1	ST
2309	10/30/2000	1412	3011.1	8804.1	11	5	3	5	23.9	23.7	23.5	32.1	34.5	34.8			7.0	6.9	6.9	ST
2310	10/30/2000	1552	3003.9	8811.7	11	22	11	22	24.4	24.0	24.1	34.2	35.8	35.8			6.9	6.8	6.8	ST
2311	10/30/2000	1722	3002.4	8812.6	11	24	12	24	24.5	24.0	24.1	35.8	35.8	35.8			6.8	6.8	6.8	ST
2312	10/30/2000	1915	3009.1	8804.1	11	13	7	13	23.6	23.5	23.8	32.9	34.7	35.7			7.0	6.9	6.9	ST
2313	10/19/2000	1412	2953.8	8821.4	11	34	17	34	25.2	24.4	24.7	35.7	35.8	35.9			6.7	6.8	6.8	ST

Table 2. Selected environmental parameters (continued)

TOMMY MUNRO, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
17001	10/20/2000	753	2918.8	8855.4	11	27	13	26	25.0	25.0	25.2	35.8	35.8	36.0			5.6	5.6	5.3	ST
17002	10/20/2000	907	2914.7	8858.9	11	13	6	12	21.7	25.2	25.3	23.7	35.7	35.8			7.9	5.2	4.8	ST
17003	10/20/2000	1016	2911.4	8855.2	11	37	18	36	22.6	25.0	25.7	24.4	35.6	36.2			6.6	5.4	5.1	ST
17004	10/20/2000	1229	2924.6	8846.8	11	30	15	29	25.6	25.4	25.6	35.4	35.7	35.7			5.9	5.6	5.5	ST
17005	10/20/2000	1405	2926.2	8838.6	11	47	24	46	25.4	24.8	25.2	35.4	35.4	36.0			6.0	6.1	4.9	ST
17006	10/20/2000	1627	2924.3	8830.7	11	57	28	56	25.8	25.8	24.6	35.8	36.1	36.5			5.9	5.8	5.3	ST
17007	10/20/2000	1830	2930.0	8830.0	11	50	25	49	24.1	24.1	23.7	35.1	35.2	36.4			5.9	5.9	4.9	PN
17008	10/20/2000	2115	2917.1	8841.7	11	64	32	63	24.8	25.2	22.8	35.8	35.8	36.4			5.7	5.5	4.6	ST
17009	10/20/2000	2345	2923.5	8846.2	11	37	18	36	25.5	25.6	25.4	36.5	36.3	36.1			5.6	5.3	5.1	ST
17010	10/21/2000	145	2922.4	8848.1	11	34	17	33	25.4	25.3	25.4	35.9	35.9	36.0			5.9	5.8	5.6	ST
17011	10/21/2000	335	2922.5	8850.3	11	25	12	24	25.0	25.1	25.3	35.1	34.7	35.8			6.0	6.0	5.6	ST
17012	10/21/2000	455	2926.3	8846.2	11	24	12	23	24.2	24.8	24.9	35.7	35.5	35.8			5.9	5.8	5.8	ST
17013	10/21/2000	558	2928.3	8840.5	11	37	18	36	24.9	24.6	25.1	35.8	35.6	35.7			5.8	5.0	5.3	ST
17014	10/21/2000	827	2943.9	8836.9	11	24	13	23	24.7	24.8	24.3	35.5	35.6	35.9			5.5	5.8	5.1	ST
17015	10/21/2000	1109	2946.3	8815.3	11	36	18	35	24.5	24.8	25.1	35.5	35.8	36.2			5.8	5.8	4.9	ST
17016	10/21/2000	1312	2949.4	8811.3	11	33	16	32	23.8	25.1	24.7	35.2	36.1	33.8			6.3	6.0	5.8	ST
17017	10/21/2000	1601	2955.2	8831.2	11	28	14	27	23.8	24.0	24.2	35.2	35.1	35.9			6.0	6.2	5.7	ST
17018	10/21/2000	1920	2939.7	8845.2	11	15	8	14	24.8	24.9	24.9	36.1	35.8	35.9			5.4	6.1	6.0	ST
17019	10/21/2000	2131	2934.0	8831.4	11	45	22	44	25.1	25.3	25.3	35.1	36.1	36.4			5.3	5.0	4.3	ST
17020	10/22/2000	43	2947.9	8811.5	11	35	17	34	25.0	24.8	24.7	35.3	36.2	36.1			5.5	5.5	5.3	ST
17021	10/22/2000	408	2957.4	8838.4	11	21	10	20	24.7	24.7	24.7	35.9	35.4	35.7			5.3	5.3	5.1	ST
17022	10/22/2000	650	3000.4	8844.5	11	16	7	15	24.0	24.1	24.1	35.2	35.2	35.2			5.4	5.4	5.5	ST
17023	10/22/2000	900	3000.0	8830.1	11	26	13	25	23.5	23.7	23.9	35.2	35.0	35.4			5.7	5.3	5.0	PN
17024	10/31/2000	1809	3009.5	8853.8	11	10	5	9	24.0	23.5	23.6	33.7	34.1	34.2			5.9	5.8	5.8	ST

Table 2. Selected environmental parameters (continued)

R. J. KEMP, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
31001	11/11/2000	1017	2746.8	9703.9	20	9	4	9	21.9	21.9	21.9	33.0	33.0	32.8			8.9	9.0	8.8	ST
31002	11/11/2000	1114	2742.8	9707.4	20	10	5	10	22.1	22.1	22.1	33.1	33.1	33.1			9.0	9.1	9.0	ST
31003	11/11/2000	1157	2741.8	9705.9	20	13	7	13	22.3	22.3	22.3	33.1	33.1	33.1			8.4	9.0	9.1	ST
31004	11/11/2000	1302	2736.8	9704.8	20	19	10	19	22.5	22.9	22.8	33.2	33.3	33.2			8.3	8.5	8.3	ST
31005	11/11/2000	1340	2736.9	9703.8	20	20	10	20	22.9	22.9	22.9	33.0	33.1	33.1			8.2	8.7	8.5	ST
31006	11/11/2000	1426	2737.8	9702.8	20	21	10	21	22.9	22.9	22.7	33.1	33.1	33.2			8.4	8.3	8.0	ST
31007	11/11/2000	1507	2739.6	9701.9	20	21	10	21	22.8	22.8	22.6	33.1	33.1	33.1			8.4	8.6	8.4	ST
31008	11/11/2000	1602	2742.5	9658.7	20	21	10	21	22.7	22.7	22.7	32.9	32.9	33.0			8.6	8.6	8.4	ST
31009	11/21/2000	909	2752.6	9700.7	20	8	4	8	16.6	16.7	16.7	29.9	30.0	30.6			9.8	10.1	9.9	ST
31010	11/21/2000	1009	2757.4	9656.7	20	8	4	8	16.5	16.7	16.7	30.5	30.5	30.5			9.9	9.9	9.9	ST
31011	11/21/2000	1051	2757.8	9653.8	20	12	6	12	17.4	17.4	17.5	30.5	30.7	30.6			9.6	9.8	9.8	ST
31012	11/21/2000	1124	2757.5	9652.8	20	12	6	12	17.1	17.3	17.4	30.5	30.5	30.5			9.9	10.0	9.9	ST
31013	11/21/2000	1230	2750.4	9654.8	20	18	9	18	17.8	18.3	17.9	31.0	31.6	32.0			9.6	9.6	9.5	ST
31014	11/21/2000	1319	2746.4	9654.0	20	21	10	21	19.2	19.6	19.5	33.4	33.9	33.9			9.0	9.1	9.2	ST
31015	11/21/2000	1400	2744.4	9658.0	20	20	10	20	18.1	18.9	18.8	31.7	31.6	32.6			9.4	9.4	9.5	ST
31016	11/21/2000	1440	2745.3	9700.8	20	16	8	16	18.4	18.4	18.4	31.9	31.9	32.0			9.3	9.4	9.6	ST

Table 2. Selected environmental parameters (continued)

MATAGORDA BAY, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
32001	11/10/2000	937	2824.6	9615.5	19	12	6	12	22.0	22.0	22.0	32.2	32.3	32.4			6.0	6.0	6.0	ST
32002	11/10/2000	1024	2826.5	9615.5	19	9	5	9	21.5	21.5	20.7	32.2	32.2	31.9			5.9	5.9	6.1	ST
32003	11/10/2000	1121	2828.6	9612.5	19	9	4	9	20.7	20.6	20.3	31.9	31.9	32.0			6.1	6.1	6.0	ST
32004	11/10/2000	1202	2829.3	9612.5	19	6	3	6	20.7	20.6	20.5	31.8	31.8	31.8			6.2	6.1	6.2	ST
32005	11/10/2000	1327	2830.5	9606.5	19	11	5	11	22.4	22.3	22.1	32.3	32.3	32.3			5.8	5.8	5.8	ST
32006	11/10/2000	1408	2828.5	9605.5	19	13	7	13	21.7	21.7	21.7	31.9	31.9	33.1			6.2	5.9	5.9	ST
32007	11/10/2000	1513	2822.5	9609.4	19	18	9	18	22.4	22.3	23.1	32.5	32.5	33.7			6.2	6.1	5.4	ST
32008	11/10/2000	1543	2822.5	9610.5	19	17	9	17	22.2	22.2	22.6	32.3	32.4	33.5			6.2	6.1	5.8	ST
32009	11/20/2000	950	2823.4	9620.7	19	7	4	7	16.1	16.1	16.1	29.4	29.4	29.4			7.8	7.7	7.6	ST
32010	11/20/2000	1021	2823.5	9621.6	19	5	3	5	14.9	14.8	14.7	29.0	29.1	29.3			8.3	8.3	8.3	ST
32011	11/20/2000	1104	2820.5	9620.5	19	12	6	12	16.5	16.5	17.3	29.8	30.3	30.7			7.7	7.7	7.4	ST
32012	11/20/2000	1201	2817.5	9620.5	19	17	9	17	17.6	17.7	18.3	31.0	31.5	32.1			7.5	7.5	7.3	ST
32013	11/20/2000	1247	2816.5	9623.5	19	16	8	16	16.7	17.3	18.5	30.0	31.5	30.9			7.9	7.5	7.3	ST
32014	11/20/2000	1325	2814.5	9624.5	19	17	9	17	17.3	17.4	18.6	30.6	31.8	32.2			7.7	7.4	7.2	ST
32015	11/20/2000	1403	2814.5	9626.6	19	15	8	15	16.5	17.1	18.3	29.9	30.8	32.0			7.8	7.3	7.1	ST
32016	11/20/2000	1437	2812.4	9627.5	19	17	8	17	17.4	17.6	18.6	30.5	31.8	32.3			6.8	7.3	7.0	ST

Table 2. Selected environmental parameters (continued)

LAGUNA MADRE, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
33001	11/11/2000	846	2559.5	9708.5	22	11	6	11	22.5	22.5	22.6	36.4	36.7	36.5			6.4	6.4	6.0	ST
33002	11/11/2000	819	2558.5	9708.4	22	6	3	6	22.4	22.4	22.3	36.6	36.7	36.5			6.5	6.5	6.5	ST
33003	11/15/2000	817	2604.6	9707.6	21	14	7	14	22.2	22.1	22.1	35.3	35.3	35.6			6.4	6.4	6.4	ST
33004	11/15/2000	857	2609.7	9706.6	21	17	9	17	22.4	22.0	22.0	34.9	34.8	34.9			6.4	6.4	6.4	ST
33005	11/15/2000	1029	2606.6	9659.7	21	27	14	27	22.4	22.6	22.5	34.9	34.9	34.8			6.2	6.3	6.2	ST
33006	11/15/2000	1110	2605.5	9702.5	21	23	12	23	22.5	22.5	22.4	34.7	34.8	34.7			6.1	6.3	6.3	ST
33007	11/15/2000	1146	2604.6	9702.5	21	23	12	23	22.3	22.3	22.3	34.8	34.8	35.1			6.4	6.5	6.2	ST
33008	11/15/2000	1226	2604.5	9704.5	21	22	11	22	22.2	22.2	22.0	34.9	34.9	35.1			6.6	6.4	6.3	ST
33009	11/22/2000	846	2610.6	9702.6	21	22	11	22	19.0	19.1	19.0	33.2	34.0	34.1			6.9	6.4	6.5	ST
33010	11/22/2000	926	2611.5	9703.6	21	20	10	20	19.7	19.7	19.8	33.8	33.8	34.1			6.2	6.7	6.4	ST
33011	11/22/2000	1013	2614.6	9704.6	21	20	10	20	18.9	19.1	20.1	33.0	33.2	33.3			6.4	6.4	5.8	ST
33012	11/22/2000	1107	2619.5	9705.6	21	18	9	18	18.7	18.7	19.7	32.7	32.8	32.8			6.4	6.4	6.0	ST
33013	11/22/2000	1147	2621.6	9705.5	21	19	10	19	18.9	19.0	19.9	33.0	32.3	33.0			6.6	6.5	6.0	ST
33014	11/22/2000	1235	2621.5	9709.6	21	17	9	17	18.0	18.0	19.1	32.5	32.5	32.5			6.5	6.8	6.0	ST
33015	11/22/2000	1312	2620.6	9711.5	21	11	6	11	18.1	18.2	18.2	32.5	32.5	32.5			6.8	6.8	6.9	ST
33016	11/22/2000	1414	2616.5	9708.5	21	15	8	15	18.2	18.2	18.3	32.4	32.5	32.3			6.6	6.7	6.7	ST

Table 2. Selected environmental parameters (continued)

SABINE, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
40001	11/10/2000	837	2935.6	9346.2	17	10	5	10	21.0	21.1	21.3	30.4	30.5	31.8			6.8	6.8	6.8	ST
40002	11/10/2000	954	2935.6	9353.9	17	8	4	8	20.4	20.4	21.0	29.6	29.5	30.7			7.0	7.0	6.7	ST
40003	11/10/2000	1049	2936.6	9358.4	17	6	3	6	21.1	21.1	21.0	30.6	30.5	30.6			6.7	6.7	6.6	ST
40004	11/10/2000	1136	2937.5	9400.8	18	6	3	6	21.1	21.0	21.0	30.4	30.3	30.4			6.1	6.0	5.9	ST
40005	11/10/2000	1221	2939.5	9403.3	18	4	2	4	20.4	20.2	19.8	29.4	29.4	29.3			6.3	6.2	6.0	ST
40006	11/10/2000	1329	2940.6	9357.7	17	2	1	2	20.0	18.9	18.2	29.2	29.2	29.1			6.5	6.4	5.3	ST
40007	11/10/2000	1409	2939.6	9355.3	17	4	2	4	20.9	20.4	20.2	29.3	29.4	29.3			7.0	7.0	5.9	ST
40008	11/10/2000	1451	2940.5	9353.8	17	2	1	2	19.9	19.3	17.1	29.0	29.1	29.0			7.2	7.1	6.9	ST
40009	11/20/2000	926	2934.4	9344.7	17	12	6	12	17.1	17.1	17.1	34.7	34.8	34.8			7.6	7.7	7.6	ST
40010	11/20/2000	1033	2939.5	9339.3	17	9	4	9	16.1	16.0	16.0	34.0	34.0	33.9			8.0	7.8	7.7	ST
40011	11/20/2000	1113	2940.6	9338.8	17	8	4	8	14.9	15.6	15.8	32.5	33.7	33.8			7.9	7.4	7.5	ST
40012	11/20/2000	1208	2940.6	9335.4	17	9	4	9	14.4	15.7	15.9	31.0	33.2	33.5			8.5	7.9	7.7	ST
40013	11/20/2000	1305	2942.5	9339.8	17	7	4	7	14.6	14.5	15.5	32.5	32.6	33.3			8.1	7.8	7.2	ST
40014	11/20/2000	1340	2943.5	9339.2	17	6	3	6	14.0	13.6	13.8	32.1	32.2	32.5			8.4	8.1	8.2	ST
40015	11/20/2000	1423	2943.5	9342.7	17	4	2	4	14.8	14.6	14.7	32.1	32.2	32.7			8.0	7.7	7.2	ST
40016	11/20/2000	1509	2940.5	9344.5	17	7	4	7	15.1	15.0	15.2	32.7	33.1	33.3			8.0	7.8	7.6	ST

Table 2. Selected environmental parameters (continued)

TRINITY BAY, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
65001	11/15/2000	928	2921.6	9438.1	18	8	4	8	16.9	17.0	17.0	29.5	29.4	29.4			7.0	6.9	7.0	ST
65002	11/15/2000	952	2922.9	9439.9	18	8	4	8	16.9	17.0	17.0	29.4	29.3	29.3			7.0	7.0	7.1	ST
65003	11/15/2000	1018	2925.1	9437.8	18	6	3	6	17.0	17.0	17.0	29.4	29.3	29.4			7.0	7.0	7.1	ST
65004	11/15/2000	1052	2928.5	9433.6	18	4	2	4	16.8	16.8	16.8	29.3	29.3	29.3			7.1	7.1	7.0	ST
65005	11/15/2000	1118	2927.0	9431.8	18	8	4	8	16.9	16.9	16.9	29.2	29.2	29.3			7.3	7.3	7.2	ST
65006	11/20/2000	1008	2920.7	9432.1	18	13	7	13	16.3	16.4	16.9	32.5	32.7	32.7			7.0	7.0	6.8	ST
65007	11/20/2000	1043	2919.1	9433.6	18	13	7	13	16.3	16.4	16.9	32.7	32.6	32.7			7.0	7.0	7.0	ST
65008	11/28/2000	1003	2917.8	9436.5	18	13	7	13	18.2	18.2	18.1	33.9	33.9	33.9			6.9	6.7	6.6	ST
65009	11/28/2000	1035	2915.6	9437.8	18	13	7	13	17.9	18.0	18.1	32.6	33.3	33.9			6.6	6.6	6.5	ST
65010	11/28/2000	1050	2915.8	9439.5	18	13	7	13	17.9	18.0	18.1	32.6	33.3	33.9			6.6	6.6	6.4	ST
65011	11/28/2000	1110	2915.2	9443.0	18	11	6	11	18.0	18.0	18.1	32.5	33.3	33.8			6.4	6.5	6.6	ST
65012	11/28/2000	1157	2909.9	9445.5	18	15	8	15	18.4	18.3	18.2	34.0	34.0	34.0			6.6	6.8	6.5	ST
65013	11/28/2000	1214	2907.7	9446.8	18	16	8	16	18.0	18.1	18.1	34.0	34.0	34.0			6.4	6.6	6.6	ST

Table 2. Selected environmental parameters (continued)

PELICAN, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
37792	11/27/2000	1034	2900.1	9030.0	14	9	5	9	17.4	17.1	17.1	33.3	33.3	33.3	2.364		8.4	8.3	8.3	PN
37793	11/27/2000	1359	2859.9	9100.0	14	6	3	6	17.8	17.6	17.5	33.4	33.6	34.2	2.869		8.9	8.8	8.2	PN
37794	11/27/2000	1725	2900.0	9130.0	15	10	5	10	18.3	18.6	18.3	25.5	33.7	34.4	4.337		7.7	8.1	11.1	PN
37795	11/27/2000	2120	2833.8	9124.0	15	35	17	35	22.7	22.7	22.6	36.5	36.5	36.5			7.1	7.1	7.0	ST
37796	11/27/2000	0	2835.5	9107.7	15	25	13	25	20.9	21.0	21.3	35.7	35.8	35.9			7.5	7.4	7.2	ST
37797	11/28/2000	145	2839.8	9105.8	15	16	8	16	20.0	20.0	20.8	35.1	35.1	35.6			7.9	7.9	7.3	ST
37798	11/28/2000	358	2835.2	9055.9	14	21	11	21	20.2	20.2	21.2	34.9	34.9	35.6			7.8	7.7	7.1	ST
37799	11/28/2000	557	2830.3	9047.7	14	31	16	31	22.3	21.3	20.3	36.4	35.8	35.2	0.899		7.2	7.4	7.8	ST
37800	11/28/2000	1020	2834.9	9124.7	15	33	16	33	22.7	22.7	22.5	36.5	36.5	36.5	0.266		7.1	7.1	7.1	ST
37801	11/28/2000	1304	2835.6	9107.9	15	24	12	24	20.8	21.0	21.0	35.6	35.8	35.8	1.096		7.7	7.4	7.4	ST
37802	11/28/2000	1436	2839.9	9105.1	15	16	7	16	20.0	19.9	20.9	35.0	35.0	35.7	2.012		8.2	8.1	7.2	ST
37803	11/28/2000	1620	2830.0	9100.0	15	33	16	33	20.5	21.0	22.1	35.2	35.6	36.1	1.388		8.1	7.6	7.1	PN
37804	11/28/2000	2023	2847.9	9032.9	14	18	10	18	20.8	21.0	21.2	35.3	35.5	35.6	1.109		8.1	7.5	7.2	ST
37805	11/28/2000	2305	2859.9	9025.0	14	10	6	10	17.1	20.3	20.7	32.8	34.9	35.1	4.435		9.4	7.5	7.2	ST
37806	11/29/2000	107	2854.0	9016.8	14	19	10	19	21.1	20.9	22.2	34.6	34.6	36.1	2.353		8.5	8.5	6.8	ST
37807	11/29/2000	248	2848.0	9015.8	14	24	12	24	21.5	21.5	23.0	34.5	34.5	36.1	1.816		7.7	7.7	6.8	ST
37808	11/29/2000	507	2851.1	9008.7	14	27	14	27	20.4	21.6	23.3	33.6	34.6	35.6	3.227		8.2	7.5	6.5	ST
37809	11/29/2000	613	2850.1	9006.7	14	30	15	30	20.0	21.8	23.9	33.0	34.7	36.0	3.272		8.4	7.3	6.2	ST
37810	11/29/2000	726	2850.0	9006.8	14	30	15	30	20.0	21.8	23.9	33.0	34.7	36.0	3.272		8.4	7.3	6.2	ST
37811	11/29/2000	908	2851.3	9008.7	14	27	13	27	20.6	21.7	23.3	33.7	34.6	35.6	2.341		8.2	7.5	6.2	ST
37812	11/29/2000	1049	2848.1	9015.9	14	23	11	23	21.6	21.5	22.7	34.5	34.5	36.1	1.051		7.8	7.7	6.7	ST
37813	11/29/2000	1247	2854.1	9016.8	14	19	9	19	21.3	19.9	22.2	34.7	34.5	36.0	2.285		9.1	8.2	6.6	ST
37814	11/29/2000	1512	2847.7	9032.9	14	18	9	18	21.7	21.5	21.5	35.1	35.3	35.8	1.022		9.1	9.0	7.1	ST
37815	11/29/2000	1718	2858.7	9025.0	14	10	5	10	19.1	19.7	19.7	34.5	34.5	33.9	4.244		9.2	8.0	8.0	ST
37816	11/30/2000	155	2901.9	8944.4	13	34	17	34	19.3	21.9	23.9	31.4	34.7	36.3	5.615		9.3	7.0	6.0	ST
37817	11/30/2000	647	2900.1	8930.0	13	14	7	14	18.5	20.0	23.2	28.3	33.5	35.9	4.605		8.4	7.5	5.1	PN
37818	11/30/2000	904	2902.3	8944.9	13	34	18	34	19.2	21.8	23.8	30.5	34.8	36.3	4.459		8.7	7.1	6.0	ST
37819	11/30/2000	1113	2900.0	9000.0	13	23	12	23	21.0	21.0	20.9	34.4	34.5	34.9	4.043		8.7	8.5	7.3	PN
37820	11/30/2000	1550	2830.1	9030.0	14	38	20	38	23.5	23.5	22.1	36.5	36.5	36.3	0.635		7.0	7.1	7.1	PN
37821	12/1/2000	35	2831.4	9047.7	14	28	14	28	22.1	22.1	22.1	36.2	36.2	36.2	0.624		7.2	7.3	7.3	ST

Table 2. Selected environmental parameters (continued)

PELICAN, FALL SHRIMP/GROUNDFISH SURVEY

STA#	DATE MM/DD/YY	TIME	POSITION LAT	POSITION LONG	STAT ZONE	DEPTH (M)	SAMPLE DEPTHS (M) MID	SAMPLE DEPTHS (M) MAX	TEMPERATURE, C SUR	TEMPERATURE, C MID	TEMPERATURE, C MAX	SALINITY, PPT SUR	SALINITY, PPT MID	SALINITY, PPT MAX	CL, MG/M3 SUR	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
37822	12/1/2000	224	2835.2	9056.3	14	21	11	21	21.1	21.1	21.1	35.7	35.7	35.7	0.735		7.6	7.6	7.6	ST
37823	12/1/2000	711	2831.4	9047.7	14	28	14	28	22.4	22.4	22.3	36.3	36.3	36.3	0.367		7.1	7.1	7.2	ST
37824	12/1/2000	849	2835.3	9056.1	14	21	10	21	20.9	20.9	20.9	35.7	35.7	35.7	0.693		7.6	7.6	7.6	ST

Table 3. 2000 Summer Shrimp/Groundfish Survey species composition list, 343 trawl stations, for those vessels that used either a 40-ft or 20-ft trawl. Species with a total weight of less than 0.0227 kg (0.05 lb) are indicated on the table as 0.0 kg.

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Finfishes					
Chloroscombrus chrysurus	Atlantic bumper	65460	1510.3	185	48.3
Micropogonias undulatus	Atlantic croaker	50270	1986.3	184	48.0
Stenotomus caprinus	longspine porgy	34149	1070.1	242	63.2
Peprilus burti	gulf butterfish	11018	765.6	167	43.6
Serranus atrobranchus	blackear bass	9638	88.0	120	31.3
Anchoa hepsetus	striped anchovy	5600	79.6	74	19.3
Upeneus parvus	dwarf goatfish	5126	100.9	175	45.7
Saurida brasiliensis	largescale lizardfish	4759	26.7	162	42.3
Trachurus lathami	rough scad	4072	127.5	111	29.0
Cynoscion nothus	silver seatrout	3763	118.1	88	23.0
Cynoscion arenarius	sand seatrout	3628	141.0	130	33.9
Centropristis philadelphica	rock sea bass	2816	92.5	143	37.3
Leiostomus xanthurus	spot	2686	192.4	88	23.0
Prionotus stearnsi	shortwing searobin	2575	27.0	79	20.6
Sardinella aurita	Spanish sardine	2540	38.0	31	8.1
Pristipomoides aquilonaris	wenchman	2344	131.7	93	24.3
Trichiurus lepturus	Atlantic cutlassfish	2271	94.1	93	24.3
Synodus foetens	inshore lizardfish	2257	243.5	206	53.8
Diplectrum bivittatum	dwarf sand perch	2049	35.1	110	28.7
Lagodon rhomboides	pinfish	1997	118.4	152	39.7
Prionotus longispinosus	bigeye searobin	1631	48.6	91	23.8
Anchoa lyolepis	dusky anchovy	1426	2.3	24	6.3

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Stellifer lanceolatus	star drum	1421	10.6	37	9.7
Prionotus paralatus	Mexican searobin	1151	24.2	67	17.5
Selene setapinnis	Atlantic moonfish	1023	44.5	94	24.5
Harengula jaguana	scaled sardine	1002	33.0	72	18.8
Sphoeroides parvus	least puffer	982	3.0	88	23.0
Syacium gunteri	shoal flounder	966	27.5	125	32.6
Opisthonema oglinum	Atlantic thread herring	873	58.6	47	12.3
Engraulis eurystole	silver anchovy	861	2.8	9	2.3
Brevoortia patronus	gulf menhaden	764	32.7	38	9.9
Lutjanus campechanus	red snapper	758	75.0	121	31.6
Arius felis	hardhead catfish	695	113.2	55	14.4
Larimus fasciatus	banded drum	664	18.2	48	12.5
Polydactylus octonemus	Atlantic threadfin	641	27.1	50	13.1
Trichopsetta ventralis	sash flounder	581	13.2	42	11.0
Lepophidium brevibarbe	blackedge cusk-eel	548	14.5	67	17.5
Conodon nobilis	barred grunt	497	21.1	14	3.7
Mullus auratus	red goatfish	470	29.4	22	5.7
Balistes capriscus	gray triggerfish	442	18.2	55	14.4
Lutjanus synagris	lane snapper	408	17.4	51	13.3
Monacanthus hispidus	planehead filefish	378	3.2	84	21.9
Bollmannia communis	ragged goby	365	1.0	22	5.7
Steindachneria argentea	luminous hake	353	4.2	3	0.8
Cynoscion spp.	seatrouts	330	1.8	12	3.1
Etropus crossotus	fringed flounder	324	3.6	51	13.3
Scorpaena calcarata	smoothhead scorpionfish	320	4.0	21	5.5
Eucinostomus gula	silver jenny	316	12.3	29	7.6

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Halieutichthys aculeatus	pancake batfish	315	2.5	65	17.0
Anchoviella perfasciata	flat anchovy	303	1.9	4	1.0
Anchoa nasuta	longnose anchovy	302	0.8	3	0.8
Decapterus punctatus	round scad	299	5.5	31	8.1
Lagocephalus laevigatus	smooth puffer	286	13.2	79	20.6
Synodus poeyi	offshore lizardfish	282	2.3	59	15.4
Etrumeus teres	round herring	281	3.0	14	3.7
Peprilus alepidotus	harvestfish	278	3.6	27	7.0
Prionotus rubio	blackwing searobin	266	11.5	29	7.6
Porichthys plectrodon	Atlantic midshipman	239	4.1	55	14.4
Orthopristis chrysoptera	pigfish	238	10.5	27	7.0
Anchoa mitchilli	bay anchovy	236	0.5	20	5.2
Caranx crysos	blue runner	216	14.6	37	9.7
Urophycis floridana	southern hake	213	15.7	27	7.0
Cyclopsetta chittendeni	Mexican flounder	198	22.3	52	13.6
Bagre marinus	gafftopsail catfish	188	1.9	4	1.0
Citharichthys spilopterus	bay whiff	167	2.2	45	11.7
Menticirrhus americanus	southern kingfish	157	16.6	29	7.6
Hildebrandia flava	yellow conger	116	7.8	29	7.6
Rhomboplites aurorubens	vermilion snapper	115	5.6	10	2.6
Scomberomorus maculatus	Spanish mackerel	112	12.8	16	4.2
Chaetodipterus faber	Atlantic spadefish	111	4.7	18	4.7
Etropus cyclosquamus	shelf flounder	111	0.8	11	2.9
Bairdiella chrysoura	silver perch	100	4.5	15	3.9
Pontinus longispinis	longspine scorpionfish	99	2.9	13	3.4
Sphyraena guachancho	guaguanche	98	7.4	33	8.6

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Hoplunnis macrurus	freckled pike-conger	97	0.8	30	7.8
Bellator militaris	horned searobin	89	0.7	14	3.7
Lepophidium jeannae	mottled cusk-eel	87	4.1	8	2.1
Hemicaranx amblyrhynchus	bluntnose jack	80	7.1	16	4.2
Bregmaceros atlanticus	antenna codlet	75	0.0	26	6.8
Ophidion welshi	crested cusk-eel	67	1.3	5	1.3
Diplectrum formosum	sand perch	63	5.3	16	4.2
Peprilus triacanthus	butterfish	61	4.2	3	0.8
Dorosoma petenense	threadfin shad	55	2.9	6	1.6
Ancylopsetta dilecta	three-eye flounder	55	4.4	17	4.4
Symphurus civitatus	offshore tonguefish	55	0.8	10	2.6
Symphurus plagiusa	blackcheek tonguefish	54	0.5	16	4.2
Prionotus roseus	bluespotted searobin	52	2.2	2	0.5
Engyophrys senta	spiny flounder	52	0.1	21	5.5
Haemulon aurolineatum	tomtate	51	1.9	11	2.9
Rhizoprionodon terraenovae	Atlantic sharpnose shark	48	41.2	28	7.3
Selar crumenophthalmus	bigeye scad	48	2.2	21	5.5
Equetus wamotoi	blackbar drum	48	5.4	12	3.1
Ancylopsetta quadrocellata	ocellated flounder	46	5.8	16	4.2
Syacium papillosum	dusky flounder	45	2.1	10	2.6
Prionotus tribulus	bighead searobin	43	2.0	16	4.2
Ogcocephalus declivirostris	slantbrow batfish	43	0.8	18	4.7
Umbrina coroides	sand drum	40	1.5	3	0.8
Kathetostoma albigutta	lancer stargazer	39	2.3	16	4.2
Brotula barbata	bearded brotula	37	7.0	16	4.2
Selene vomer	lookdown	36	0.2	11	2.9

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Priacanthus arenatus	bigeye	35	1.6	18	4.7
Scomberomorus cavalla	king mackerel	34	20.3	16	4.2
Sphoeroides dorsalis	marbled puffer	33	0.5	11	2.9
Alosa chrysochloris	skipjack herring	32	2.3	7	1.8
Caulolatilus intermedius	anchor tilefish	31	2.5	17	4.4
Peristedion gracile	slender searobin	30	0.7	5	1.3
Gymnachirus texae	fringed sole	30	0.5	11	2.9
Symphurus diomedianus	spottedfin tonguefish	30	0.6	9	2.3
Neomerinthe hemingwayi	spinycheek scorpionfish	29	9.4	8	2.1
Paralichthys lethostigma	southern flounder	29	11.4	21	5.5
Mustelus canis	smooth dogfish	28	41.4	23	6.0
Raja texana	roundel skate	26	12.1	18	4.7
Prionotus ophryas	bandtail searobin	23	0.1	9	2.3
Engraulidae	anchovies	22	0.0	7	1.8
Synagrops bellus	blackmouth bass	22	0.1	1	0.3
Equetus umbrosus	cubbyu	19	1.0	6	1.6
Citharichthys macrops	spotted whiff	19	0.2	2	0.5
Etropus microstomus	smallmouth flounder	17	0.2	3	0.8
Urophycis cirrata	gulf hake	15	2.6	5	1.3
Scorpaena brasiliensis	barbfish	15	0.9	1	0.3
Gymnothorax saxicola	honeycomb moray	14	1.4	2	0.5
Decodon puellaris	red hogfish	14	0.9	5	1.3
Neobythites gillii	cusk-eel	14	0.0	5	1.3
Squatina dumeril	Atlantic angel shark	12	7.3	6	1.6
Pristigenys alta	short bigeye	12	0.1	10	2.6
Calamus bajonado	jolthead porgy	12	2.2	2	0.5

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Rhinoptera bonasus	cownose ray	11	73.9	9	2.3
Sphoeroides spengleri	bandtail puffer	11	0.1	2	0.5
Antennarius radiosus	singlespot frogfish	11	0.0	8	2.1
Calamus leucosteus	whitebone porgy	10	1.3	3	0.8
Gymnothorax nigromarginatus	blackedge moray	9	0.7	7	1.8
Hippocampus erectus	lined seahorse	9	0.0	9	2.3
Rypticus maculatus	whitespotted soapfish	9	0.3	5	1.3
Seriola dumerili	greater amberjack	9	1.0	5	1.3
Phaeoptyx xenus	sponge cardinalfish	8	0.0	4	1.0
Seriola rivoliana	almaco jack	8	2.0	5	1.3
Paraconger caudilimbatus	margintail conger	7	0.4	2	0.5
Physiculus fulvus	metallic codling	7	0.0	3	0.8
Equetus acuminatus	high-hat	7	0.0	1	0.3
Centropristis ocyura	bank sea bass	6	0.2	1	0.3
Eucinostomus argenteus	spotfin mojarra	6	0.3	3	0.8
Ophidion holbrooki	bank cusk-eel	6	0.7	1	0.3
Etropus rimosus	gray flounder	6	0.0	1	0.3
Bathyanthias mexicanus	yellowtail bass	5	0.0	1	0.3
Centropristis striata	black sea bass	5	0.1	1	0.3
Remora remora	remora	5	1.7	4	1.0
Aluterus monoceros	unicorn filefish	5	0.7	2	0.5
Trachinocephalus myops	snakefish	4	0.2	2	0.5
Prionotus scitulus	leopard searobin	4	0.0	2	0.5
Serraniculus pumilio	pygmy sea bass	4	0.0	3	0.8
Seriola zonata	banded rudderfish	4	0.4	1	0.3
Trinectes maculatus	hogchoker	4	0.0	2	0.5

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Aluterus heudeloti	dotterel filefish	4	0.0	2	0.5
Aluterus scriptus	scrawled filefish	4	0.0	1	0.3
Ogcocephalus parvus	roughback batfish	4	0.2	2	0.5
Carcharhinus acronotus	blacknose shark	3	9.4	3	0.8
Raja laevis	barndoor skate	3	0.2	1	0.3
Dasyatis americana	southern stingray	3	0.7	3	0.8
Gymnothorax ocellatus	ocellated moray	3	0.1	1	0.3
Ophichthus gomesi	shrimp eel	3	1.3	3	0.8
Prionotus alatus	spiny searobin	3	0.0	3	0.8
Hemanthias leptus	longtail bass	3	1.1	1	0.3
Apogon aurolineatus	bridle cardinalfish	3	0.0	2	0.5
Apogon pseudomaculatus	twospot cardinalfish	3	0.0	3	0.8
Echeneis naucrates	sharksucker	3	0.1	2	0.5
Pogonias cromis	black drum	3	12.4	1	0.3
Mulloidichthys martinicus	yellow goatfish	3	0.0	2	0.5
Ariomma bondi	silver-rag	3	0.0	2	0.5
Gobionellus hastatus	sharptail goby	3	0.0	1	0.3
Paralichthys albigutta	gulf flounder	3	0.4	1	0.3
Paralichthys squamilentus	broad flounder	3	0.2	2	0.5
Chilomycterus schoepfi	striped burrfish	3	0.4	2	0.5
Opsanus pardus	leopard toadfish	3	0.0	1	0.3
Ogcocephalus pantostictus	spotted batfish	3	0.0	3	0.8
Ogcocephalus corniger	longnose batfish	3	0.0	1	0.3
Myliobatis fremin	bullnose ray	2	1.8	2	0.5
Sardinella brasiliensis	orangespot sardine	2	0.2	1	0.3
Conger oceanicus	conger eel	2	0.9	2	0.5

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Parexocoetus brachypterus	sailfin flyingfish	2	0.0	2	0.5
Cypselurus furcatus	spotfin flyingfish	2	0.0	2	0.5
Syngnathus louisianae	chain pipefish	2	0.0	1	0.3
Hemanthias vivanus	red barbier	2	0.0	2	0.5
Apogonidae	cardinalfishes	2	0.0	2	0.5
Archosargus probatocephalus	sheepshead	2	1.7	1	0.3
Chromis enchrysurus	yellowtail reeffish	2	0.0	1	0.3
Lonchopisthus micrognathus	swordtail jawfish	2	0.0	2	0.5
Ophidion grayi	blotched cusk-eel	2	0.1	1	0.3
Symphurus pelicanus	longtail tonguefish	2	0.0	2	0.5
Symphurus urospilus	spottail tonguefish	2	0.0	1	0.3
Lactophrys quadricornis	scrawled cowfish	2	0.3	2	0.5
Sphyrna lewini	scalloped hammerhead	1	0.4	1	0.3
Raja eglanteria	clearnose skate	1	1.8	1	0.3
Dasyatis say	bluntnose stingray	1	0.1	1	0.3
Narcine brasiliensis	lesser electric ray	1	0.3	1	0.3
Cypselurus cyanopterus	margined flyingfish	1	0.0	1	0.3
Cypselurus exsiliens	bandwing flyingfish	1	0.0	1	0.3
Hirundichthys affinis	fourwing fylingfish	1	0.0	1	0.3
Mugil cephalus	striped mullet	1	0.0	1	0.3
Epinephelus flavolimbatus	yellowedge grouper	1	0.0	1	0.3
Serranus phoebe	tattler	1	0.0	1	0.3
Apogon maculatus	flamefish	1	0.0	1	0.3
Pomatomus saltatrix	bluefish	1	0.2	1	0.3
Rachycentron canadum	cobia	1	0.5	1	0.3
Caranx hippos	crevalle jack	1	0.1	1	0.3

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Seriola fasciata	lesser amberjack	1	0.1	1	0.3
Trachinotus carolinus	Florida pompano	1	0.4	1	0.3
Pseudupeneus maculatus	spotted goatfish	1	0.0	1	0.3
Scomber japonicus	chub mackerel	1	0.1	1	0.3
Citharichthys cornutus	horned whiff	1	0.0	1	0.3
Cyclopsetta fimbriata	spotfin flounder	1	0.0	1	0.3
Syacium micrurum	channel flounder	1	0.0	1	0.3
Monolene sessilicauda	deepwater flounder	1	0.0	1	0.3
Bothus robinsi	twospot flounder	1	0.0	1	0.3
Gymnachirus melas	naked sole	1	0.0	1	0.3
Monacanthus spp.	filefishes	1	0.0	1	0.3
Aluterus schoepfi	orange filefish	1	0.0	1	0.3
Opsanus beta	gulf toadfish	1	0.0	1	0.3
Antennarius striatus	striated frogfish	1	0.0	1	0.3
Histrio histrio	sargassumfish	1	0.0	1	0.3
Ogcocephalus spp.	batfishes	1	0.0	1	0.3
Ogcocephalus radiatus	polka-dot batfish	1	0.3	1	0.3
Crustaceans					
Penaeus aztecus	brown shrimp	49500	737.4	306	79.9
Trachypenaeus similis	roughback shrimp	26132	99.5	127	33.2
Portunus spinicarpus	longspine swimming crab	5630	28.4	79	20.6
Sicyonia brevirostris	brown rock shrimp	2797	27.9	57	14.9
Squilla empusa	mantis shrimp	2299	20.0	125	32.6
Xiphopenaeus kroyeri	seabob	2252	8.5	41	10.7

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Callinectes similis	lesser blue crab	2165	27.7	174	45.4
Penaeus duorarum	pink shrimp	1511	29.8	54	14.1
Solenocera vioscai	humpback shrimp	1203	4.6	44	11.5
Portunus gibbesii	irridescent swimming crab	1150	5.2	96	25.1
Penaeus setiferus	white shrimp	950	40.9	84	21.9
Sicyonia dorsalis	lesser rock shrimp	665	1.6	67	17.5
Squilla chydaea	mantis shrimp	585	3.2	74	19.3
Callinectes sapidus	blue crab	225	29.8	58	15.1
Trachypenaeus constrictus	roughneck shrimp	173	0.5	11	2.9
Portunus spinimanus	blotched swimming crab	120	2.4	30	7.8
Calappa sulcata	yellow box crab	116	31.5	38	9.9
Sicyonia burkenroadi	spiny rock shrimp	96	0.0	9	2.3
Anasimus latus	stilt spider crab	83	0.5	19	5.0
Parapenaeus politus	deepwater rose shrimp	59	0.0	6	1.6
Plesionika longicauda	pandalid shrimp	53	0.1	8	2.1
Parthenope granulata	bladetooth elbow crab	49	0.0	22	5.7
Arenaeus cribrarius	speckled swimming crab	47	1.1	10	2.6
Hepatus epheliticus	calico crab	34	3.5	14	3.7
Raninoides louisianensis	gulf frog crab	33	0.1	11	2.9
Stenorhynchus seticornis	yellowline arrow crab	29	0.0	11	2.9
Squilla neglecta	mantis shrimp	22	0.2	2	0.5
Portunus sayi	sargassum swimming crab	20	0.0	13	3.4
Persephona crinita	pink purse crab	19	0.0	15	3.9
Leiolambrus nitidus	white elbow crab	18	0.0	7	1.8
Libinia dubia	longnose spider crab	17	0.0	10	2.6
Pagurus pollicaris	flatclaw hermit crab	16	0.3	10	2.6

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Paguristes triangulatus	hermit crab	14	0.1	4	1.0
Petrochirus diogenes	giant hermit crab	13	1.7	1	0.3
Podochela sidneyi	shortfinger neck crab	13	0.0	6	1.6
Persephona mediterranea	mottled purse crab	10	0.0	8	2.1
Libinia emarginata	portly spider crab	10	1.0	8	2.1
Ovalipes floridanus	Florida lady crab	10	0.0	7	1.8
Dardanus insignis	red brocade hermit	10	0.1	5	1.3
Euphrosynoplax clausa	craggy bathyal crab	9	0.0	4	1.0
Pagurus bullisi	hermit crab	8	0.0	3	0.8
Speocarcinus lobatus	gulf squareback crab	7	0.0	1	0.3
Paguridae	right-handed hermit crabs	5	0.0	2	0.5
Phimochirus holthuisi	red-striped hermit	4	0.0	2	0.5
Myropsis quinquespinosa	fivespine purse crab	4	0.0	1	0.3
Collodes robustus	spider crab	4	0.0	3	0.8
Alpheus spp.	snapping shrimps	3	0.0	1	0.3
Xanthidae	mud crabs	3	0.0	2	0.5
Majidae	spider crabs	3	0.1	1	0.3
Metoporhaphis calcarata	false arrow crab	3	0.0	1	0.3
Pseudorhombilia quadridentata	goneplacid crab	3	0.0	3	0.8
Sicyonia stimpsoni	eyespot rock shrimp	2	0.0	2	0.5
Dyspanopeus texana	gulf grassflat crab	2	0.0	1	0.3
Menippe adina	Gulf stone crab	2	0.0	2	0.5
Scyllarides nodifer	ridged slipper lobster	2	0.8	2	0.5
Munida forceps	squat lobster	2	0.0	2	0.5
Coelocerus spinosus	channelnose spider crab	2	0.0	1	0.3
Stenocionops furcata	furcate crab	2	0.3	2	0.5

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Stenocionops spinosissimus	tenspine spider crab	2	0.0	1	0.3
Porcellana sayana	spotted porcelain crab	2	0.0	2	0.5
Lironeca ovalis	isopod	1	0.0	1	0.3
Latreutes fucorum	slender sargassum shrimp	1	0.0	1	0.3
Sicyonia parri	rock shrimp	1	0.0	1	0.3
Iliacantha liodactylus	purse crab	1	0.0	1	0.3
Stenocionops spinimanus	prickly spider crab	1	0.0	1	0.3
Porcellana sigsbeiana	striped porcelain crab	1	0.0	1	0.3
Dromidia antillensis	hairy sponge crab	1	0.0	1	0.3
Parthenope serrata	sawtooth elbow crab	1	0.0	1	0.3
Paguristes hummi	left-handed hermit crabs	1	0.0	1	0.3
Paguristes sericeus	blue-eyed hermit	1	0.0	1	0.3
Others					
Loligo pleii	arrow squid	15300	176.9	153	39.9
Loligo pealeii	longfin squid	9696	124.8	96	25.1
Aurelia aurita	moon jellyfish	3177	482.6	36	9.4
Amusium papyraceum	paper scallop	2452	22.1	74	19.3
Lolliguncula brevis	Atlantic brief squid	2234	23.1	120	31.3
Renilla mulleri	short-stemmed sea pansy	1866	3.5	49	12.8
Chrysaora quinquecirrha	sea nettle	1543	22.5	65	17.0
Loligo spp.	squids	1067	14.2	11	2.9
Astropecten duplicatus	spiny beaded sea star	996	0.6	81	21.1
Actinidae	sea anemones	304	0.5	13	3.4
Luidia clathrata	sea star	240	2.7	48	12.5

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Mellita quinquiesperforata	five-slotted sand dollar	204	0.5	8	2.1
Ophiolepis elegans	brittle star	193	0.4	17	4.4
Paranthus rapiformis	onion anemone	189	0.3	4	1.0
Astropecten cingulatus	starfish	118	1.1	32	8.4
Phyllorhiza punctata	jellyfish	71	25.5	13	3.4
Pitar cordatus	Schwengel's pitar	68	1.3	10	2.6
Aurelia spp.	jellyfishes	61	1.6	3	0.8
Polystira albida	white giant turris	49	0.5	6	1.6
Anadara baughmani	Baughman's ark	34	0.5	10	2.6
Neverita duplicata	shark eye	26	0.2	10	2.6
Polychaeta	bristleworms	23	0.0	2	0.5
Actiniaria spp.	sea anemones	22	0.0	10	2.6
Anthozoa	anthozoans	18	0.0	10	2.6
Stomolophus meleagris	many-mouthed sea jelly	16	0.9	6	1.6
Chione clenchi	Clench venus	15	0.1	5	1.3
Encope aberrans	sand dollar	14	1.5	3	0.8
Argopecten gibbus	calico scallop	13	0.0	4	1.0
Tethyaster grandis	starfish	12	0.6	5	1.3
Semirossia equalis	greater shining bobtail	10	0.0	3	0.8
Anadara ovalis	blood ark	9	0.0	3	0.8
Aplysia spp.	sea hares	7	0.0	4	1.0
Laevicardium laevigatum	egg cockle	7	0.2	1	0.3
Muricanthus fulvescens	giant eastern murex	6	0.2	2	0.5
Holothuriidae	sea cucumbers	6	0.0	1	0.3
Strombus alatus	Florida fighting conch	4	0.3	2	0.5
Simnia marferula	sea-whip simnia	4	0.0	1	0.3

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Distorsio clathrata	Atlantic distorsio	4	0.0	2	0.5
Eucrassatella speciosa	beautiful crassatella	4	0.1	1	0.3
Calliactris tricolor	common sea anemone	4	0.0	2	0.5
Amphinomidae	polychaet worm	4	0.0	1	0.3
Gastropoda	snails	3	0.0	1	0.3
Thais spp.	rock snail	3	0.0	1	0.3
Thais haemastoma	rocksnail	3	0.0	2	0.5
Cantharus cancellarius	cancellate cantharus	3	0.0	2	0.5
Conus austini	cone shell	3	0.0	2	0.5
Ostreola equestris	crested oyster	3	0.0	2	0.5
Laevicardium sybariticum	delicate eggcockle	3	0.1	1	0.3
Octopus vulgaris	common Atlantic octopus	3	0.1	2	0.5
Tamoya haplonema	sea wasp	3	0.8	2	0.5
Mnemiopsis mccradyi	comb jelly	3	0.0	2	0.5
Zoobotryon pelluc	sauerkraut grass	3	5.0	3	0.8
Clypeaster ravenelii	cake urchin	3	0.1	2	0.5
Sinum perspectivum	white baby-ear	2	0.0	1	0.3
Phalium granulatum	scotch bonnet	2	0.0	1	0.3
Tonna galea	giant tun	2	1.1	2	0.5
Aplysia brasiliana	Florida seahare	2	0.1	1	0.3
Pseudochama radians	Atlantic jewelbox	2	0.0	1	0.3
Styela plicata	tunicate	2	0.4	1	0.3
Porifera	sponges	2	0.0	2	0.5
Renilla spp.	sea pansies	2	0.0	1	0.3
Beroe ovata	comb jelly	2	0.0	1	0.3
Asteroidea	starfishes	2	0.0	2	0.5

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Luidia alternata	banded luidia	2	0.0	2	0.5
Anthenoides piercei	starfish	2	0.3	1	0.3
Stylocidaris affinis	sea urchin	2	0.0	1	0.3
Busycon coarctatum	whelk	1	0.0	1	0.3
Busycon sinistrum	lightning whelk	1	0.0	1	0.3
Busycon pulleyi	prickly whelk	1	0.0	1	0.3
Fasciolaria lilium	banded tulip	1	0.0	1	0.3
Pleuroploca gigantea	horse conch	1	0.0	1	0.3
Arcinella cornuta	Florida spiny jewelbox	1	0.0	1	0.3
Macoma brevifrons	short macoma	1	0.0	1	0.3
Tunicata	tunicates	1	0.0	1	0.3
Gorgonidae	gorgonians	1	0.3	1	0.3
Ctenophora	comb jellies	1	0.0	1	0.3
Annelida	annelid worm	1	0.0	1	0.3
Astropecten articulatus	plated-margined sea star	1	0.0	1	0.3
Echinaster spp.	thorny sea stars	1	0.0	1	0.3
Astrophyton muricatum	basket star	1	0.0	1	0.3
Astrocyclus caecilia	basket star	1	0.2	1	0.3
Holothuroidea	sea cucumbers	1	0.0	1	0.3

Table 4a

Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	1.4	1.43	0.0	0.00	6	52.4	23.59	0.2	0.10	10	1232.9	529.52	4.5	2.00	20
Penaeus aztecus	17.4	15.11	0.1	0.14	6	238.2	114.57	3.3	1.66	10	123.3	35.76	2.2	0.68	20
Squilla spp.	2.2	1.48	0.0	0.00	6	55.5	30.36	0.4	0.17	10	97.3	38.97	0.8	0.29	20
Penaeus duorarum	4.3	4.29	0.0	0.02	6	94.8	49.22	1.6	0.84	10	38.7	20.27	0.8	0.40	20
Callinectes similis	5.2	2.65	0.0	0.04	6	58.8	32.59	0.7	0.33	10	73.9	30.94	0.6	0.22	20
Portunus gibbesii	16.9	8.56	0.1	0.05	6	70.9	52.30	0.4	0.30	10	59.7	23.89	0.2	0.09	20
Stenotomus caprinus	4.8	4.76	0.0	0.04	6	74.8	45.50	0.8	0.55	10	556.0	197.86	5.0	1.58	20
Micropogonias undulatus	137.0	128.67	5.4	5.05	6	12.7	11.08	0.3	0.25	10	1.7	0.83	0.1	0.05	20
Chloroscombrus chrysurus	346.1	223.33	12.3	7.82	6	1425.0	1359.72	46.3	43.56	10	4.3	2.70	0.3	0.16	20
Peprilus burti	1.0	1.00	0.0	0.00	6	8.4	4.35	0.5	0.31	10	66.8	39.67	5.5	3.30	20
Anchoa hepsetus	12.5	10.75	0.1	0.09	6	201.6	148.15	1.7	1.19	10	537.8	276.28	9.7	5.62	20
Serranus atrobranchus	4.6	4.62	0.0	0.03	6	0.0	0.00	0.0	0.00	10	174.4	72.37	0.8	0.34	20
Saurida brasiliensis	0.0	0.00	0.0	0.00	6	8.8	4.87	0.0	0.02	10	205.7	122.37	1.1	0.63	20
Centropristis philadelphica	9.5	8.32	0.1	0.10	6	17.2	12.53	0.2	0.11	10	61.6	22.93	0.6	0.24	20
Squid	82.1	28.19	0.9	0.38	6	196.7	98.71	1.6	0.76	10	244.1	77.54	1.9	0.58	20

Table 4a (continued)

Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	512.8	509.60	1.9	1.94	8	0.0	0.00	0.0	0.00	5	1072.0	1068.80	2.5	2.48	4
Penaeus aztecus	69.1	35.51	1.4	0.67	8	25.6	12.57	1.2	0.56	5	10.7	3.10	0.6	0.26	4
Squilla spp.	31.9	24.08	0.4	0.31	8	0.0	0.00	0.0	0.00	5	15.6	10.28	0.2	0.13	4
Penaeus duorarum	7.9	4.46	0.3	0.16	8	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	4
Callinectes similis	21.6	13.55	0.2	0.13	8	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	4
Portunus gibbesii	1.4	1.00	0.0	0.01	8	2.7	1.67	0.0	0.03	5	0.0	0.00	0.0	0.00	4
Stenotomus caprinus	1455.6	942.48	67.6	46.35	8	909.2	744.78	52.3	42.67	5	358.6	185.74	27.1	14.11	4
Micropogonias undulatus	363.2	275.66	25.4	18.50	8	1260.7	1255.41	127.3	126.88	5	817.9	756.81	81.8	75.42	4
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	4
Peprilus burti	306.3	198.61	27.3	17.74	8	951.3	642.08	70.5	47.83	5	2.2	2.18	0.2	0.19	4
Anchoa hepsetus	140.7	136.46	2.9	2.79	8	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	4
Serranus atrobranchus	66.9	48.16	0.8	0.64	8	13.9	5.86	0.3	0.13	5	210.9	161.06	4.4	3.62	4
Saurida brasiliensis	137.2	106.49	0.9	0.61	8	11.5	5.58	0.0	0.03	5	0.8	0.83	0.0	0.00	4
Centropristis philadelphica	66.9	33.05	1.5	0.63	8	24.4	12.60	1.8	0.77	5	53.0	13.72	4.5	1.47	4
Squid	180.3	88.47	1.5	0.71	8	187.5	127.07	2.1	1.40	5	18.3	11.55	0.2	0.10	4

Table 4b

Statistical Zone 11

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	31.9	10.44	6	73.3	48.93	10	49.6	11.35	20	184.9	67.14	8	276.9	124.19	5	188.6	69.94	4
Total finfish kg	28.7	9.94	6	62.4	49.93	10	37.0	10.87	20	178.1	68.79	8	273.4	123.98	5	184.5	71.72	4
Total crustacean kg	0.3	0.35	6	7.5	2.35	10	10.0	2.79	20	5.1	3.38	8	1.4	0.77	5	4.0	2.95	4
Total others kg	2.5	1.29	6	3.3	1.9	10	2.3	0.66	20	1.7	0.73	8	2.0	1.38	5	0.1	0.12	4
Surface temperature	28.6	0.64	7	28.9	0.3	10	28.2	0.2	19	28.3	0.25	9	27.7	0.06	4	28.0	0.11	4
Midwater temperature	28.9	0.44	7	27.7	0.68	10	26.5	0.37	19	22.9	0.26	9	21.9	0.57	4	21.3	0.63	4
Bottom temperature	28.7	0.51	7	26.1	0.5	9	23.4	0.25	19	21.0	0.34	9	20.3	0.42	4	19.2	0.62	4
Surface salinity	32.7	0.6	7	32.4	0.41	10	33.5	0.29	19	32.8	0.56	9	32.7	0.57	4	33.6	1.12	4
Midwater salinity	32.9	0.56	7	33.9	0.45	10	35.3	0.16	19	36.3	0.03	9	36.4	0.05	4	36.4	0.02	4
Bottom salinity	33.4	0.65	7	35.5	0.19	9	36.2	0.13	19	36.5	0.03	9	36.4	0.01	4	36.4	0.02	4
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.3	0.24	7	6.6	0.21	10	6.8	0.19	19	6.9	0.24	9	6.7	0.23	4	6.6	0.14	4
Midwater oxygen	6.7	0.32	7	6.3	0.31	10	6.8	0.19	19	6.4	0.13	9	5.8	0.38	4	5.3	0.38	4
Bottom oxygen	6.7	0.3	7	5.7	0.45	9	5.9	0.24	19	4.8	0.28	9	4.8	0.5	4	3.8	0.45	4

Table 5a

Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	25.2	15.69	0.0	0.00	5	0.0	0.00	0.0	0.00	1	1388.5	1115.82	4.3	3.29	9
Penaeus aztecus	517.3	259.96	4.2	2.08	5	900.0	0.00	7.4	0.00	1	20.0	13.38	0.2	0.14	9
Squilla spp.	1.8	1.39	0.0	0.00	5	2.0	0.00	0.0	0.00	1	449.3	265.06	2.3	1.46	9
Callinectes sapidus	12.1	6.65	2.3	1.23	5	42.0	0.00	6.5	0.00	1	7.9	4.10	0.1	0.09	9
Portunus gibbesii	2.4	2.40	0.0	0.00	5	6.0	0.00	0.0	0.00	1	16.0	9.32	0.0	0.03	9
Callinectes similis	6.7	6.72	0.0	0.02	5	10.0	0.00	0.1	0.00	1	5.8	5.39	0.1	0.06	9
Cynoscion arenarius	3.3	2.07	0.2	0.21	5	8.0	0.00	0.2	0.00	1	852.7	783.24	4.4	3.85	9
Chloroscombrus chrysurus	606.6	323.92	15.6	8.83	5	20.0	0.00	0.4	0.00	1	0.8	0.83	0.0	0.02	9
Cynoscion nothus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	1	535.3	391.27	2.6	1.95	9
Anchoa nasuta	128.3	84.07	0.4	0.23	5	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	9
Prionotus longispinosus	7.4	5.47	0.0	0.02	5	12.0	0.00	0.2	0.00	1	99.4	88.48	1.6	1.44	9
Bollmannia communis	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	1	102.0	92.65	0.2	0.18	9
Trichiurus lepturus	12.2	9.68	0.3	0.31	5	0.0	0.00	0.0	0.00	1	10.7	7.33	0.2	0.18	9
Anchoa hepsetus	122.4	122.40	0.5	0.55	5	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	9
Squid	51.0	36.04	0.5	0.38	5	28.0	0.00	0.3	0.00	1	37.3	25.02	0.2	0.18	9

Table 5a (continued)

Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Penaeus aztecus	0.0	0.00	0.0	0.00	0	42.2	0.00	1.2	0.00	1	0.0	0.00	0.0	0.00	0
Squilla spp.	0.0	0.00	0.0	0.00	0	3.3	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	0
Callinectes sapidus	0.0	0.00	0.0	0.00	0	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	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Callinectes similis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Cynoscion arenarius	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Cynoscion nothus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Anchoa nasuta	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Prionotus longispinosus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Bollmannia communis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Trichiurus lepturus	0.0	0.00	0.0	0.00	0	71.1	0.00	0.9	0.00	1	0.0	0.00	0.0	0.00	0
Anchoa hepsetus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0
Squid	0.0	0.00	0.0	0.00	0	486.7	0.00	7.2	0.00	1	0.0	0.00	0.0	0.00	0

Table 5b

Statistical Zone 13

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, and oxygen in ppm. No trawl samples were taken in depths greater than 40 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	31.8	10.75	5	16.4	0	1	23.7	13	9	0.0	0	0	20.7	0	1	0.0	0	0
Total finfish kg	24.6	9.25	5	1.8	0	1	16.4	8.54	9	0.0	0	0	12.1	0	1	0.0	0	0
Total crustacean kg	6.5	3.32	5	14.5	0	1	7.2	5.01	9	0.0	0	0	1.5	0	1	0.0	0	0
Total others kg	0.4	0.36	5	0.0	0	1	0.3	0.3	9	0.0	0	0	7.1	0	1	0.0	0	0
Surface temperature	28.6	0.34	5	29.9	0.42	2	30.2	0.1	10	0.0	0	0	31.0	0	1	30.4	0	1
Midwater temperature	28.6	0.27	5	29.7	0.6	2	29.2	0.36	10	0.0	0	0	23.9	0	1	18.5	0	1
Bottom temperature	27.8	0.04	5	27.4	0.34	2	22.9	0.46	10	0.0	0	0	18.4	0	1	15.4	0	1
Surface salinity	33.4	1.48	5	33.7	0.68	2	32.7	0.72	10	0.0	0	0	31.8	0	1	33.9	0	1
Midwater salinity	35.5	0.24	5	35.1	0.53	2	35.4	0.17	10	0.0	0	0	36.2	0	1	36.4	0	1
Bottom salinity	35.8	0.14	5	36.0	0.02	2	36.2	0.03	10	0.0	0	0	36.4	0	1	36.0	0	1
Surface chlorophyll	6.1	2.61	3	9.4	0.87	2	5.5	2.76	9	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	5.1	0.34	5	5.8	0.15	2	6.0	0.06	10	0.0	0	0	5.9	0	1	5.9	0	1
Midwater oxygen	4.4	0.52	5	5.8	0.05	2	5.0	0.64	10	0.0	0	0	6.2	0	1	4.2	0	1
Bottom oxygen	2.9	0.24	5	2.6	0.8	2	0.6	0.2	10	0.0	0	0	2.9	0	1	3.8	0	1

Table 6a

Statistical Zone 14

Summary of dominant organisms taken in statistical zone 14 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths between 21 fm and 40 fm.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	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	2	567.5	236.11	5.7	2.28	10	279.4	109.61	4.6	1.77	15
Trachypenaeus similis	0.0	0.00	0.0	0.00	2	96.7	36.65	0.3	0.11	10	145.5	73.50	0.9	0.45	15
Squilla spp.	2.7	2.73	0.0	0.00	2	55.1	24.46	0.5	0.25	10	23.1	10.05	0.2	0.08	15
Portunus gibbesii	0.0	0.00	0.0	0.00	2	108.8	74.31	0.4	0.30	10	7.7	3.34	0.0	0.02	15
Callinectes similis	0.0	0.00	0.0	0.00	2	13.9	8.06	0.2	0.15	10	8.7	7.28	0.1	0.10	15
Penaeus duorarum	0.0	0.00	0.0	0.00	2	14.5	13.08	0.4	0.36	10	0.7	0.40	0.0	0.01	15
Chloroscombrus chrysurus	608.7	603.27	19.4	19.36	2	1989.6	909.67	30.9	13.09	10	139.6	89.80	3.2	2.19	15
Micropogonias undulatus	3.0	3.00	0.0	0.00	2	721.0	347.26	26.3	12.17	10	417.4	219.93	20.0	10.39	15
Stenotomus caprinus	0.0	0.00	0.0	0.00	2	27.2	6.74	0.2	0.05	10	212.3	69.93	3.4	1.17	15
Peprilus burti	0.0	0.00	0.0	0.00	2	0.4	0.44	0.0	0.00	10	10.4	6.21	0.7	0.46	15
Anchoa hepsetus	267.0	267.00	0.7	0.68	2	3.4	3.38	0.0	0.02	10	108.2	73.35	1.7	1.18	15
Centropristis philadelphica	0.0	0.00	0.0	0.00	2	75.2	31.45	0.6	0.27	10	24.8	12.80	0.5	0.22	15
Serranus atrobranchus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	10	42.1	29.42	0.2	0.18	15
Saurida brasiliensis	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	10	47.3	26.88	0.2	0.11	15
Squid	42.0	42.00	0.4	0.41	2	41.0	18.05	0.6	0.24	10	67.1	21.24	0.7	0.24	15

Table 6a (continued)

Statistical Zone 14

Summary of dominant organisms taken in statistical zone 14 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths between 21 fm and 40 fm.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	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	0.0	0.00	0.0	0.00	0	11.1	1.66	0.5	0.10	2
Trachypenaeus similis	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	2
Squilla spp.	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	2
Portunus gibbesii	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	2
Callinectes similis	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	2
Penaeus duorarum	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	2
Chloroscombrus chrysurus	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	2
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	982.8	273.69	69.1	26.46	2
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	212.6	54.44	13.1	2.31	2
Peprilus burti	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	434.4	23.80	39.5	2.81	2
Anchoa hepsetus	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	2
Centropristis philadelphica	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	2.4	2.35	0.4	0.37	2
Serranus atrobranchus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	2.4	2.35	0.1	0.05	2
Saurida brasiliensis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	5.1	0.37	0.0	0.00	2
Squid	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	294.1	222.30	4.7	3.34	2

Table 6b

Statistical Zone 14

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, and oxygen in ppm. No trawl samples were taken in depths between 21 fm and 40 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	36.8	36.82	2	91.7	21.32	10	53.3	13.71	15	0.0	0	0	0.0	0	0	142.4	25.01	2
Total finfish kg	20.5	20.45	2	78.6	18.85	10	45.8	12.34	15	0.0	0	0	0.0	0	0	137.4	28.34	2
Total crustacean kg	0.0	0	2	12.7	6.57	10	6.2	2.01	15	0.0	0	0	0.0	0	0	0.7	0.15	2
Total others kg	15.0	15	2	0.6	0.28	10	1.3	0.42	15	0.0	0	0	0.0	0	0	4.7	3.6	2
Surface temperature	29.3	0.92	4	30.6	0.08	11	30.6	0.06	15	0.0	0	0	0.0	0	0	30.8	0.14	3
Midwater temperature	29.2	0.63	4	29.4	0.24	11	28.9	0.14	15	0.0	0	0	0.0	0	0	24.6	1.25	3
Bottom temperature	28.4	0.4	4	25.9	0.45	11	22.5	0.18	15	0.0	0	0	0.0	0	0	18.3	0.19	3
Surface salinity	30.5	2.96	4	28.8	0.62	11	30.1	0.43	15	0.0	0	0	0.0	0	0	29.6	0.84	3
Midwater salinity	33.6	0.8	4	34.3	0.5	11	35.3	0.12	15	0.0	0	0	0.0	0	0	36.1	0.08	3
Bottom salinity	35.3	0.63	4	36.1	0.04	11	36.3	0.01	15	0.0	0	0	0.0	0	0	36.4	0.02	3
Surface chlorophyll	8.6	0	1	2.3	0.24	4	0.8	0.06	5	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	7.0	1.02	4	7.0	0.33	11	6.3	0.12	15	0.0	0	0	0.0	0	0	6.0	0.17	3
Midwater oxygen	4.8	0.84	4	4.6	0.45	11	5.1	0.18	15	0.0	0	0	0.0	0	0	6.2	0.45	3
Bottom oxygen	2.9	0.78	4	2.7	0.38	11	3.5	0.17	15	0.0	0	0	0.0	0	0	3.6	0	3

Table 7a

Statistical Zone 15

Summary of dominant organisms taken in statistical zone 15 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	92.3	85.27	0.7	0.68	3	5.0	0.00	0.1	0.00	1	450.9	180.38	7.4	2.80	10
Trachypenaeus similis	1.3	1.33	0.0	0.00	3	0.0	0.00	0.0	0.00	1	318.9	172.96	1.7	0.97	10
Sicyonia dorsalis	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	1	21.0	16.42	0.1	0.07	10
Callinectes similis	4.8	4.83	0.0	0.00	3	0.0	0.00	0.0	0.00	1	18.8	8.50	0.4	0.18	10
Squilla spp.	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	1	17.4	10.42	0.1	0.09	10
Penaeus setiferus	51.7	51.72	2.0	1.97	3	0.0	0.00	0.0	0.00	1	0.7	0.47	0.0	0.02	10
Micropogonias undulatus	1511.3	1463.47	39.4	38.11	3	0.0	0.00	0.0	0.00	1	723.1	460.59	22.7	13.73	10
Chloroscombrus chrysurus	1863.8	1268.92	40.5	30.13	3	4430.0	0.00	92.8	0.00	1	127.2	81.58	3.4	2.10	10
Serranus atrobranchus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	1	278.1	181.24	1.6	1.03	10
Stenotomus caprinus	0.0	0.00	0.0	0.00	3	56.7	0.00	1.0	0.00	1	192.9	37.08	2.7	0.60	10
Peprilus burti	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	1	7.0	4.66	0.5	0.35	10
Trachurus lathami	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	1	9.2	7.32	0.2	0.17	10
Upeneus parvus	0.0	0.00	0.0	0.00	3	10.0	0.00	0.2	0.00	1	60.5	21.42	1.1	0.39	10
Centropristis philadelphica	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	1	46.2	16.85	1.3	0.66	10
Squid	217.2	152.41	1.5	1.01	3	53.3	0.00	0.6	0.00	1	226.5	168.69	3.2	2.65	10

Table 7a (continued)

Statistical Zone 15

Summary of dominant organisms taken in statistical zone 15 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	108.3	81.28	1.8	1.27	4	187.8	115.64	4.4	2.34	5	32.0	18.18	1.9	0.96	3
Trachypenaeus similis	74.4	74.42	0.6	0.63	4	1.1	1.14	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Sicyonia dorsalis	25.4	25.01	0.1	0.13	4	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Callinectes similis	12.4	5.90	0.2	0.08	4	8.7	4.49	0.1	0.07	5	0.0	0.00	0.0	0.00	3
Squilla spp.	2.0	2.02	0.0	0.03	4	5.0	3.17	0.1	0.05	5	0.0	0.00	0.0	0.00	3
Penaeus setiferus	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	3
Micropogonias undulatus	2.5	1.74	0.1	0.12	4	28.2	17.10	1.7	0.92	5	3.8	1.02	0.6	0.21	3
Chloroscombrus chrysurus	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	3
Serranus atrobranchus	228.5	214.99	1.3	1.15	4	299.0	245.83	2.1	1.56	5	140.0	24.62	2.1	0.51	3
Stenotomus caprinus	80.5	12.63	1.3	0.22	4	257.6	60.69	11.6	4.73	5	248.2	80.23	12.4	3.52	3
Peprilus burti	5.2	2.83	0.4	0.22	4	152.1	64.75	9.6	3.79	5	61.5	16.81	4.8	1.13	3
Trachurus lathami	75.9	27.03	1.5	0.50	4	87.1	63.68	2.0	1.26	5	65.6	31.70	2.5	1.46	3
Upeneus parvus	10.8	7.21	0.1	0.06	4	21.0	7.71	0.5	0.20	5	49.5	25.01	1.3	0.59	3
Centropristis philadelphica	16.6	12.55	0.5	0.21	4	62.9	31.97	2.0	0.61	5	10.6	3.94	1.0	0.36	3
Squid	274.7	91.59	2.2	0.64	4	122.4	88.05	0.7	0.40	5	91.9	45.97	1.8	0.92	3

Table 7b

Statistical Zone 15

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	118.4	39.12	3	106.1	0	1	65.4	24.68	10	13.8	2.11	4	44.5	6.61	5	44.0	4.81	3
Total finfish kg	114.1	37.88	3	104.5	0	1	51.7	22.59	10	8.5	0.87	4	35.8	7.07	5	39.9	4.43	3
Total crustacean kg	2.8	2.82	3	0.0	0	1	10.3	3.63	10	2.9	2.2	4	4.8	2.35	5	1.7	0.96	3
Total others kg	1.5	1.09	3	1.5	0	1	3.4	2.68	10	2.5	0.67	4	3.8	2.72	5	2.3	0.91	3
Surface temperature	30.0	0.14	5	30.1	0.17	3	30.5	0.04	10	30.7	0.2	3	30.5	0.21	2	30.6	0.17	3
Midwater temperature	29.0	0.49	5	29.0	0.59	3	29.7	0.09	10	28.7	0.48	3	27.2	0.92	2	23.9	0.08	3
Bottom temperature	28.9	0.53	5	26.8	0.72	3	23.9	0.55	10	21.3	0.47	3	20.0	0.11	2	18.6	0.41	3
Surface salinity	31.1	1.6	5	32.7	0.63	3	31.9	0.07	10	31.7	0.12	3	31.9	0.34	2	33.6	1.07	3
Midwater salinity	32.7	1.79	5	34.4	0.67	3	34.5	0.18	10	35.9	0.09	3	36.2	0.09	2	36.4	0.08	3
Bottom salinity	34.2	0.7	5	36.0	0.06	3	36.2	0.02	10	36.3	0.04	3	36.4	0	2	36.4	0	3
Surface chlorophyll	6.5	3.45	2	0.5	0	1	0.5	0.09	4	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.1	0.68	5	6.0	0.12	3	5.9	0.07	10	5.8	0.03	3	5.8	0	2	5.8	0.06	3
Midwater oxygen	4.0	1.1	5	4.2	1.19	3	5.7	0.1	10	5.9	0.19	3	6.4	0.25	2	6.6	0.26	3
Bottom oxygen	2.9	0.87	5	2.3	0.4	3	4.3	0.19	10	4.1	0.25	3	3.7	0.05	2	3.6	0.15	3

Table 8a

Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	69.6	39.38	0.6	0.33	5	229.7	95.72	2.1	0.98	7	222.6	91.46	3.2	1.45	9
Trachypenaeus similis	235.4	235.38	0.1	0.15	5	115.5	73.66	0.3	0.14	7	66.5	30.15	0.3	0.13	9
Xiphopenaeus kroyeri	120.5	120.46	0.7	0.69	5	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	9
Callinectes similis	41.5	41.54	0.1	0.08	5	13.2	6.52	0.3	0.17	7	9.4	5.08	0.1	0.04	9
Squilla spp.	14.8	14.77	0.0	0.04	5	14.1	6.55	0.1	0.04	7	2.7	2.46	0.0	0.03	9
Portunus spinicarpus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	9
Chloroscombrus chrysurus	1090.6	457.32	20.9	9.03	5	2872.0	901.80	59.9	18.87	7	664.7	372.96	16.5	9.29	9
Micropogonias undulatus	816.1	561.60	8.0	4.15	5	267.5	156.59	6.2	3.66	7	727.9	385.69	17.9	9.35	9
Stenotomus caprinus	0.0	0.00	0.0	0.00	5	1.6	1.56	0.0	0.02	7	105.4	57.75	1.6	0.74	9
Leiostomus xanthurus	1.3	0.82	0.0	0.00	5	111.0	111.04	9.2	9.19	7	108.8	47.04	8.7	3.77	9
Opisthonema oglinum	1.5	1.16	0.1	0.11	5	60.0	23.50	5.0	2.02	7	48.7	27.92	2.3	1.56	9
Cynoscion nothus	213.5	206.87	0.8	0.79	5	10.7	5.89	0.9	0.52	7	12.1	5.89	0.9	0.42	9
Upeneus parvus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	7	36.4	28.65	0.6	0.49	9
Stellifer lanceolatus	191.2	161.73	0.6	0.43	5	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	9
Squid	116.5	106.83	0.8	0.78	5	109.1	23.45	1.7	0.36	7	39.6	7.94	0.4	0.11	9

Table 8a (continued)

Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	34.3	27.13	1.0	0.89	3	42.1	15.96	1.8	0.61	7	7.0	2.86	0.5	0.20	4
Trachypenaeus similis	4.7	4.73	0.0	0.03	3	0.8	0.51	0.0	0.00	7	0.0	0.00	0.0	0.00	4
Xiphopenaeus kroyeri	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	4
Callinectes similis	0.0	0.00	0.0	0.00	3	0.5	0.47	0.0	0.01	7	0.0	0.00	0.0	0.00	4
Squilla spp.	2.2	2.18	0.0	0.02	3	3.6	1.87	0.0	0.02	7	4.4	4.43	0.1	0.06	4
Portunus spinicarpus	9.8	9.26	0.0	0.05	3	1.7	1.21	0.0	0.01	7	22.6	21.56	0.2	0.21	4
Chloroscombrus chrysurus	18.8	18.82	0.9	0.89	3	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	4
Micropogonias undulatus	1.1	0.68	0.1	0.06	3	1.7	0.79	0.1	0.06	7	1.6	1.64	0.2	0.19	4
Stenotomus caprinus	85.9	4.68	3.6	0.44	3	226.7	45.52	10.3	1.49	7	146.5	46.01	7.2	2.01	4
Leiostomus xanthurus	0.0	0.00	0.0	0.00	3	0.3	0.29	0.0	0.04	7	0.0	0.00	0.0	0.00	4
Opisthonema oglinum	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	4
Cynoscion nothus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	4
Upeneus parvus	12.4	12.36	0.1	0.15	3	17.0	3.53	0.5	0.13	7	48.0	11.66	1.6	0.39	4
Stellifer lanceolatus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	4
Squid	377.7	203.60	3.2	1.80	3	156.0	66.29	1.3	0.51	7	126.1	95.78	1.5	1.16	4

Table 8b

Statistical Zone 16

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	44.0	5.87	5	179.8	52.66	7	65.4	13.83	9	16.2	1.42	3	26.2	2.55	7	32.1	5.98	4
Total finfish kg	41.0	5.34	5	84.6	16.75	7	60.6	13.25	9	11.2	0.86	3	22.0	2.68	7	29.3	5.8	4
Total crustacean kg	1.6	1.22	5	2.9	1.28	7	4.1	1.66	9	1.2	1.16	3	2.2	0.65	7	1.0	0.54	4
Total others kg	0.9	0.91	5	92.1	46.24	7	0.9	0.16	9	4.6	2.77	3	2.1	0.39	7	1.5	1.16	4
Surface temperature	29.1	0.31	5	30.3	0.13	5	30.6	0.07	9	30.8	0.13	4	30.2	0.12	2	30.3	0.18	4
Midwater temperature	29.3	0.27	5	30.2	0.1	5	30.1	0.11	9	28.9	0.43	4	27.4	1.13	2	23.5	0.53	4
Bottom temperature	29.2	0.3	5	28.9	0.1	5	27.3	0.33	9	22.3	0.27	4	20.1	0.26	2	18.7	0.24	4
Surface salinity	30.8	0.32	5	31.2	0.2	5	31.6	0.21	9	32.4	0.78	4	34.0	0.06	2	34.8	0.26	4
Midwater salinity	30.9	0.36	5	31.4	0.31	5	32.7	0.26	9	35.1	0.32	4	35.9	0.22	2	36.3	0.03	4
Bottom salinity	31.5	0.86	5	34.2	0.3	5	36.1	0.41	9	36.3	0.02	4	36.4	0.02	2	36.4	0.01	4
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	5.9	0.38	5	6.2	0.32	5	5.9	0.11	9	5.8	0.03	4	5.8	0	2	5.8	0.04	4
Midwater oxygen	5.9	0.31	5	6.1	0.23	5	5.7	0.03	9	5.9	0.09	4	6.3	0.05	2	6.2	0.18	4
Bottom oxygen	4.3	1.15	5	3.0	0.64	5	4.0	0.48	9	4.6	0.06	4	3.4	0	2	3.7	0.09	4

Table 9a

Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	137.0	28.42	1.0	0.25	12	40.8	14.87	0.4	0.14	12	70.4	31.11	1.4	0.61	15
Xiphopenaeus kroyeri	511.3	288.03	1.0	0.38	12	23.5	12.48	0.1	0.05	12	0.0	0.00	0.0	0.00	15
Sicyonia brevirostris	0.0	0.00	0.0	0.00	12	0.0	0.00	0.0	0.00	12	2.7	0.93	0.0	0.02	15
Portunus spinicarpus	0.0	0.00	0.0	0.00	12	0.0	0.00	0.0	0.00	12	8.6	4.29	0.0	0.03	15
Trachypenaeus similis	0.0	0.00	0.0	0.00	12	0.3	0.34	0.0	0.00	12	34.2	21.89	0.2	0.13	15
Callinectes similis	24.8	21.60	0.1	0.08	12	2.5	0.89	0.0	0.00	12	3.3	2.56	0.1	0.11	15
Chloroscombrus chrysurus	31.4	30.87	0.7	0.68	12	1031.9	522.43	23.1	11.55	12	76.0	39.68	2.3	1.02	15
Micropogonias undulatus	443.8	213.23	6.4	2.99	12	947.8	547.56	21.9	14.09	12	2.6	1.28	0.1	0.07	15
Stenotomus caprinus	0.0	0.00	0.0	0.00	12	0.2	0.18	0.0	0.00	12	194.9	96.02	5.2	2.99	15
Serranus atrobranchus	0.0	0.00	0.0	0.00	12	0.0	0.00	0.0	0.00	12	3.3	3.29	0.0	0.03	15
Stellifer lanceolatus	133.7	80.98	0.7	0.35	12	58.0	31.74	0.9	0.49	12	0.0	0.00	0.0	0.00	15
Upeneus parvus	0.0	0.00	0.0	0.00	12	1.9	1.56	0.0	0.03	12	56.5	21.71	0.8	0.33	15
Peprilus burti	2.5	1.73	0.0	0.02	12	41.7	39.47	2.2	2.17	12	1.3	0.66	0.1	0.06	15
Prionotus stearnsi	0.0	0.00	0.0	0.00	12	0.0	0.00	0.0	0.00	12	0.6	0.57	0.0	0.00	15
Squid	19.3	11.68	0.1	0.04	12	41.7	9.25	0.8	0.17	12	88.0	32.50	1.1	0.45	15

Table 9a (continued)

Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	162.5	57.11	4.3	1.35	8	31.7	15.93	1.8	0.89	3	20.8	11.37	1.2	0.61	2
Xiphopenaeus kroyeri	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Sicyonia brevirostris	176.0	71.25	1.8	0.61	8	2.1	1.26	0.0	0.02	3	0.0	0.00	0.0	0.00	2
Portunus spinicarpus	146.3	51.41	0.7	0.24	8	5.4	2.73	0.0	0.02	3	0.0	0.00	0.0	0.00	2
Trachypenaeus similis	26.8	22.05	0.2	0.15	8	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Callinectes similis	2.4	2.01	0.1	0.06	8	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Chloroscombrus chrysurus	0.9	0.94	0.0	0.04	8	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Micropogonias undulatus	4.4	2.29	0.4	0.21	8	68.1	58.94	5.5	4.70	3	1.1	1.07	0.1	0.15	2
Stenotomus caprinus	343.7	80.79	14.3	2.96	8	239.1	20.96	12.9	0.49	3	127.3	96.67	5.9	3.65	2
Serranus atrobranchus	123.5	71.40	0.5	0.29	8	66.9	47.74	0.5	0.35	3	47.1	47.14	0.6	0.61	2
Stellifer lanceolatus	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Upeneus parvus	0.9	0.54	0.0	0.01	8	27.9	16.15	1.1	0.64	3	14.7	14.71	0.6	0.56	2
Peprilus burti	4.0	1.93	0.3	0.17	8	5.2	3.27	0.4	0.25	3	81.8	71.11	5.9	5.02	2
Prionotus stearnsi	25.1	8.96	0.1	0.06	8	25.8	23.68	0.3	0.28	3	90.0	90.00	1.6	1.56	2
Squid	98.6	57.91	1.0	0.55	8	223.3	223.33	1.4	1.36	3	125.8	123.63	1.1	0.76	2

Table 9b

Statistical Zone 17

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	17.5	4.33	12	68.0	18.64	12	20.7	4.84	15	36.7	6.15	8	32.5	4.88	3	25.1	3.67	2
Total finfish kg	12.1	3.75	12	63.6	19.29	12	17.0	4.34	15	25.7	4.43	8	28.7	5.11	3	22.5	3.79	2
Total crustacean kg	3.4	0.68	12	0.8	0.35	12	2.4	0.88	15	8.7	2.53	8	1.8	0.93	3	1.2	0.71	2
Total others kg	1.8	0.97	12	3.4	1.67	12	1.3	0.47	15	2.1	0.7	8	2.0	1.29	3	1.3	0.83	2
Surface temperature	28.5	0.13	12	29.8	0.23	12	30.4	0.07	14	30.1	0.05	5	30.0	0.16	2	30.1	0.2	3
Midwater temperature	28.5	0.15	12	29.7	0.25	12	29.6	0.11	14	28.8	0.06	5	26.5	1.45	2	23.7	0.16	3
Bottom temperature	28.3	0.17	12	29.2	0.25	12	26.1	0.52	14	22.9	0.28	5	20.6	0.02	2	19.5	0.2	3
Surface salinity	25.8	1.21	12	30.3	0.84	12	33.4	0.21	14	34.3	0.22	5	34.9	0.33	2	35.5	0.08	3
Midwater salinity	26.4	1.02	12	31.0	0.56	12	34.0	0.26	14	36.0	0.18	5	36.2	0	2	36.4	0.02	3
Bottom salinity	27.3	0.78	12	31.5	0.56	12	35.8	0.13	14	36.0	0.07	5	36.4	0	2	36.4	0.04	3
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.0	0.26	12	6.4	0.26	9	4.2	0.44	10	5.8	0.02	5	5.8	0.15	2	6.0	0.03	3
Midwater oxygen	5.9	0.27	12	6.3	0.22	9	4.8	0.33	10	6.0	0.04	5	6.1	0.05	2	6.3	0.06	3
Bottom oxygen	5.3	0.21	12	5.0	0.24	9	4.7	0.32	10	4.0	0.19	5	3.6	0.35	2	3.6	0.06	3

Table 10a

Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	23.5	11.24	0.2	0.08	7	168.7	86.70	1.8	1.01	14	789.9	444.18	12.6	6.38	3
Xiphopenaeus kroyeri	130.5	84.07	0.5	0.37	7	118.6	31.40	0.7	0.19	14	0.0	0.00	0.0	0.00	3
Penaeus setiferus	64.0	40.71	3.1	2.23	7	32.4	19.23	1.3	0.80	14	0.0	0.00	0.0	0.00	3
Trachypenaeus similis	0.0	0.00	0.0	0.00	7	31.9	31.95	0.1	0.12	14	178.3	89.22	1.0	0.54	3
Portunus spinicarpus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	14	0.0	0.00	0.0	0.00	3
Penaeus duorarum	0.0	0.00	0.0	0.00	7	30.9	22.74	0.7	0.51	14	8.0	6.86	0.1	0.07	3
Micropogonias undulatus	1033.7	431.61	21.3	9.77	7	2287.1	594.50	48.5	14.45	14	0.0	0.00	0.0	0.00	3
Chloroscombrus chrysurus	2.4	2.39	0.0	0.04	7	27.9	15.53	0.8	0.48	14	2023.4	2003.28	41.5	41.08	3
Stenotomus caprinus	0.0	0.00	0.0	0.00	7	132.8	132.45	0.8	0.78	14	445.7	126.63	2.4	0.45	3
Cynoscion arenarius	59.1	31.08	1.4	0.95	7	62.4	13.80	1.5	0.36	14	0.0	0.00	0.0	0.00	3
Cynoscion nothus	12.7	10.81	0.5	0.42	7	31.3	26.43	1.3	1.17	14	0.0	0.00	0.0	0.00	3
Polydactylus octonemus	10.5	5.23	0.5	0.25	7	38.1	18.37	1.8	0.93	14	0.0	0.00	0.0	0.00	3
Trichiurus lepturus	50.0	50.03	2.1	2.08	7	2.6	1.55	0.1	0.05	14	0.0	0.00	0.0	0.00	3
Arius felis	27.9	21.07	1.7	1.11	7	14.8	10.21	1.6	1.11	14	0.0	0.00	0.0	0.00	3
Squid	9.6	6.14	0.1	0.11	7	30.6	14.96	0.6	0.26	14	326.7	180.39	5.0	2.79	3

Table 10a (continued)

Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	156.4	0.00	3.6	0.00	1	0.0	0.00	0.0	0.00	0	122.6	0.00	4.7	0.00	1
Xiphopenaeus kroyeri	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Penaeus setiferus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Trachypenaeus similis	38.4	0.00	0.3	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Portunus spinicarpus	156.4	0.00	0.4	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Penaeus duorarum	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Micropogonias undulatus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Chloroscombrus chrysurus	10.8	0.00	0.4	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Stenotomus caprinus	275.4	0.00	10.6	0.00	1	0.0	0.00	0.0	0.00	0	245.2	0.00	6.2	0.00	1
Cynoscion arenarius	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	7.8	0.00	1.3	0.00	1
Cynoscion nothus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Polydactylus octonemus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Trichiurus lepturus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Arius felis	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1
Squid	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	0	7.8	0.00	0.6	0.00	1

Table 10b

Statistical Zone 18

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	34.9	16.79	7	74.3	17.31	14	70.0	36.08	3	52.3	0	1	0.0	0	0	51.0	0	1
Total finfish kg	30.8	14.74	7	66.6	17.02	14	50.4	40.09	3	38.9	0	1	0.0	0	0	43.9	0	1
Total crustacean kg	4.0	2.32	7	5.8	2.25	14	14.2	7.4	3	12.5	0	1	0.0	0	0	5.9	0	1
Total others kg	0.1	0.09	7	2.6	0.83	14	5.5	3.14	3	0.9	0	1	0.0	0	0	1.2	0	1
Surface temperature	28.7	0.1	5	29.4	0.11	16	29.5	0.21	6	29.6	0	1	29.2	0	1	29.3	0.2	3
Midwater temperature	28.5	0.12	5	29.1	0.1	16	29.2	0.21	6	28.5	0	1	25.6	0	1	23.8	0.28	3
Bottom temperature	28.2	0.19	5	29.0	0.11	16	27.0	0.58	6	24.1	0	1	21.5	0	1	20.0	0.4	3
Surface salinity	28.2	0.17	5	32.9	0.38	14	34.0	0.34	6	33.7	0	1	35.0	0	1	35.6	0.42	3
Midwater salinity	28.6	0.18	5	32.5	0.47	16	34.4	0.34	6	36.1	0	1	36.7	0	1	36.5	0.01	3
Bottom salinity	28.6	0.15	5	32.8	0.48	16	35.5	0.25	6	36.0	0	1	36.3	0	1	36.4	0.01	3
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	7.0	0.04	5	4.6	0.38	16	5.2	0.62	5	5.8	0	1	6.0	0	1	6.0	0	3
Midwater oxygen	6.9	0.12	5	4.7	0.33	16	5.6	0.26	5	6.0	0	1	6.8	0	1	6.5	0.15	3
Bottom oxygen	6.4	0.29	5	5.1	0.29	16	5.1	0.26	5	4.3	0	1	4.4	0	1	3.6	0.1	3

Table 11a

Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	24.0	14.70	0.2	0.13	4	61.3	18.05	0.7	0.22	16	379.4	135.09	6.3	2.25	21
Trachypenaeus similis	0.0	0.00	0.0	0.00	4	19.6	10.25	0.0	0.02	16	146.8	61.80	0.6	0.26	21
Portunus spinicarpus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	16	0.4	0.41	0.0	0.00	21
Sicyonia brevirostris	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	16	0.1	0.14	0.0	0.00	21
Callinectes similis	0.0	0.00	0.0	0.00	4	6.6	1.72	0.0	0.02	16	4.5	1.20	0.0	0.02	21
Squilla spp.	1.5	1.50	0.0	0.00	4	11.0	3.77	0.1	0.04	16	6.7	2.01	0.0	0.02	21
Chloroscombrus chrysurus	246.0	218.31	4.8	4.41	4	625.8	263.72	14.8	6.19	16	239.1	92.25	5.1	1.83	21
Micropogonias undulatus	1179.0	1175.00	29.3	29.23	4	466.6	306.60	16.2	12.47	16	0.0	0.00	0.0	0.00	21
Stenotomus caprinus	0.0	0.00	0.0	0.00	4	1.8	1.28	0.0	0.01	16	94.9	23.29	0.6	0.12	21
Peprilus burti	1.5	1.50	0.1	0.07	4	111.0	79.99	5.2	4.09	16	32.1	15.92	0.9	0.46	21
Cynoscion nothus	592.5	592.50	12.1	12.14	4	136.8	45.19	6.7	2.53	16	2.1	0.97	0.1	0.05	21
Serranus atrobranchus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	16	14.2	9.47	0.1	0.06	21
Cynoscion arenarius	114.0	98.65	3.4	3.14	4	138.2	95.85	2.8	1.57	16	0.1	0.10	0.0	0.01	21
Saurida brasiliensis	0.0	0.00	0.0	0.00	4	0.3	0.31	0.0	0.00	16	38.6	17.25	0.2	0.10	21
Squid	22.5	15.56	0.3	0.34	4	177.6	101.97	1.1	0.29	16	400.6	95.71	5.5	1.40	21

Table 11a (continued)

Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	472.4	157.36	9.8	2.99	12	386.5	337.48	10.0	8.68	3	0.0	0.00	0.0	0.00	0
Trachypenaeus similis	139.0	90.59	0.6	0.41	12	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Portunus spinicarpus	180.8	110.74	0.8	0.51	12	40.4	18.86	0.2	0.10	3	0.0	0.00	0.0	0.00	0
Sicyonia brevirostris	109.7	67.66	1.1	0.66	12	2.0	1.25	0.0	0.02	3	0.0	0.00	0.0	0.00	0
Callinectes similis	16.4	8.00	0.2	0.10	12	14.8	14.76	0.2	0.19	3	0.0	0.00	0.0	0.00	0
Squilla spp.	6.8	3.06	0.1	0.03	12	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	12.2	8.96	0.5	0.34	12	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	0.0	0.00	0.0	0.00	12	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	100.9	28.90	3.9	1.18	12	90.8	31.51	4.1	1.17	3	0.0	0.00	0.0	0.00	0
Peprilus burti	18.5	6.76	1.0	0.36	12	62.2	43.56	4.1	3.20	3	0.0	0.00	0.0	0.00	0
Cynoscion nothus	0.0	0.00	0.0	0.00	12	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Serranus atrobranchus	143.5	64.92	1.0	0.38	12	26.3	24.03	0.3	0.25	3	0.0	0.00	0.0	0.00	0
Cynoscion arenarius	0.0	0.00	0.0	0.00	12	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Saurida brasiliensis	10.9	3.16	0.1	0.02	12	60.8	4.42	0.3	0.01	3	0.0	0.00	0.0	0.00	0
Squid	181.4	66.77	2.1	0.71	12	135.1	98.69	1.3	0.72	3	0.0	0.00	0.0	0.00	0

Table 11b

Statistical Zone 19

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, and oxygen in ppm. No trawl samples were taken in depths greater than 40 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	118.6	108.76	4	56.9	23.09	16	23.4	4.1	21	28.4	4.36	12	29.0	11.69	3	0.0	0	0
Total finfish kg	107.7	100.51	4	52.5	23.2	16	10.3	2.53	21	12.5	1.59	12	16.6	4.63	3	0.0	0	0
Total crustacean kg	7.5	7.5	4	1.2	0.37	16	6.9	2.52	21	13.2	4.02	12	10.9	9.15	3	0.0	0	0
Total others kg	2.7	1.57	4	2.9	0.81	16	5.9	1.52	21	2.6	0.61	12	1.4	0.85	3	0.0	0	0
Surface temperature	28.5	0.25	4	28.7	0.11	17	29.0	0.08	22	29.1	0.12	5	29.3	0.21	2	0.0	0	0
Midwater temperature	28.5	0.23	4	28.6	0.12	17	28.6	0.05	22	28.0	0.24	5	28.1	0.11	2	0.0	0	0
Bottom temperature	28.4	0.28	4	28.2	0.18	17	26.0	0.24	22	23.6	0.19	5	21.5	0.31	2	0.0	0	0
Surface salinity	36.1	0.27	4	35.0	0.35	17	35.8	0.12	22	35.4	0.32	5	35.6	0.05	2	0.0	0	0
Midwater salinity	36.2	0.32	4	35.1	0.36	17	36.1	0.08	22	36.1	0.08	5	36.3	0.06	2	0.0	0	0
Bottom salinity	36.2	0.31	4	35.1	0.35	17	36.3	0.08	22	36.3	0.02	5	36.3	0.03	2	0.0	0	0
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.2	0.27	4	5.8	0.11	13	5.9	0.03	16	5.9	0.02	5	5.9	0	2	0.0	0	0
Midwater oxygen	6.1	0.24	4	5.7	0.11	13	6.0	0.04	16	6.1	0.05	5	6.1	0.05	2	0.0	0	0
Bottom oxygen	6.1	0.29	4	5.4	0.15	13	5.2	0.11	16	4.8	0.31	5	4.2	0.1	2	0.0	0	0

Table 12a

Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	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	4	36.7	36.20	0.3	0.30	13	935.1	301.63	12.1	3.88	12
Trachypenaeus similis	1.4	1.36	0.0	0.00	4	0.9	0.92	0.0	0.00	13	233.6	102.60	0.7	0.31	12
Portunus spinicarpus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	13	0.0	0.00	0.0	0.00	12
Callinectes similis	1.4	1.36	0.0	0.00	4	7.8	3.56	0.1	0.06	13	19.3	8.13	0.3	0.13	12
Solenocera vioscai	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	13	0.0	0.00	0.0	0.00	12
Squilla spp.	2.7	2.73	0.1	0.06	4	2.5	2.54	0.0	0.02	13	9.2	7.23	0.1	0.06	12
Chloroscombrus chrysurus	33.0	19.21	1.0	0.57	4	193.4	107.40	4.8	3.01	13	595.1	375.30	12.7	7.92	12
Stenotomus caprinus	0.0	0.00	0.0	0.00	4	5.3	2.04	0.0	0.02	13	221.6	82.52	1.1	0.42	12
Sardinella aurita	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	13	325.3	325.34	2.6	2.63	12
Serranus atrobranchus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	13	61.3	41.43	0.4	0.25	12
Peprilus burti	0.0	0.00	0.0	0.00	4	2.5	2.04	0.1	0.06	13	12.7	6.38	0.3	0.17	12
Upeneus parvus	1.4	1.36	0.0	0.00	4	3.9	2.42	0.1	0.04	13	60.8	24.34	0.8	0.34	12
Pristipomoides aquilonaris	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	13	0.0	0.00	0.0	0.00	12
Trachurus lathami	0.0	0.00	0.0	0.00	4	0.9	0.92	0.0	0.02	13	14.6	11.79	0.3	0.25	12
Squid	8.2	8.18	0.2	0.25	4	116.6	69.00	2.1	1.28	13	267.7	107.26	3.1	0.97	12

Table 12a (continued)

Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	2361.6	945.56	17.6	6.95	5	202.9	77.80	4.2	2.46	6	223.2	77.99	5.3	1.61	10
Trachypenaeus similis	576.9	300.41	2.2	1.10	5	2.2	1.53	0.0	0.01	6	1.9	1.92	0.0	0.01	10
Portunus spinicarpus	3.3	2.34	0.1	0.05	5	14.6	6.12	0.1	0.04	6	255.0	234.33	1.4	1.31	10
Callinectes similis	28.7	10.49	0.3	0.11	5	14.1	5.09	0.2	0.09	6	1.2	0.92	0.0	0.02	10
Solenocera vioscai	8.4	4.67	0.0	0.02	5	0.0	0.00	0.0	0.00	6	20.1	9.13	0.1	0.04	10
Squilla spp.	8.3	5.45	0.0	0.01	5	0.5	0.50	0.0	0.00	6	1.6	0.69	0.0	0.01	10
Chloroscombrus chrysurus	0.7	0.65	0.0	0.01	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	10
Stenotomus caprinus	24.3	10.18	0.5	0.48	5	132.6	37.82	5.4	1.38	6	75.7	19.85	3.5	0.84	10
Sardinella aurita	1.0	0.60	0.0	0.02	5	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	10
Serranus atrobranchus	100.5	45.18	0.8	0.33	5	29.5	14.86	0.3	0.11	6	120.5	31.38	1.9	0.45	10
Peprilus burti	50.7	26.45	2.0	1.21	5	72.5	62.99	3.3	2.81	6	66.5	36.72	4.4	2.48	10
Upeneus parvus	22.2	9.85	0.5	0.25	5	94.8	42.03	2.2	0.90	6	38.5	20.01	1.1	0.54	10
Pristipomoides aquilonaris	29.0	15.79	0.6	0.31	5	15.5	5.34	0.5	0.16	6	104.6	32.65	8.1	2.70	10
Trachurus lathami	48.9	29.87	1.1	0.73	5	73.9	34.40	1.9	0.95	6	31.6	14.85	1.1	0.50	10
Squid	230.2	61.64	2.9	0.81	5	339.3	91.60	3.0	0.79	6	114.0	47.32	1.4	0.52	10

Table 12b

Statistical Zone 20

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	11.2	10.33	4	16.5	9.51	13	37.1	8.11	12	35.2	6.95	5	30.4	4.83	6	39.3	3.26	10
Total finfish kg	11.2	10.33	4	13.9	8.76	13	20.7	8.48	12	11.6	3.37	5	22.3	4.33	6	30.7	3.09	10
Total crustacean kg	0.0	0	4	0.8	0.56	13	13.2	4.28	12	20.5	7.96	5	4.7	2.64	6	7.1	2.19	10
Total others kg	0.0	0	4	2.0	1.25	13	3.0	0.95	12	3.2	0.84	5	3.3	0.96	6	1.6	0.47	10
Surface temperature	28.1	0.09	4	28.2	0.17	14	27.6	0.14	13	28.0	0.08	5	28.8	0.22	4	28.7	0.16	8
Midwater temperature	28.1	0.07	4	28.0	0.14	14	27.4	0.13	13	27.8	0.09	5	27.6	0.35	4	25.7	0.51	8
Bottom temperature	28.0	0.1	4	27.4	0.29	14	24.7	0.37	13	23.5	0.22	5	22.3	0.31	4	20.1	0.29	8
Surface salinity	36.5	0.04	4	35.7	0.37	14	35.9	0.34	13	36.4	0.01	5	36.0	0.29	4	36.0	0.14	8
Midwater salinity	36.5	0.03	4	35.7	0.37	14	35.9	0.35	13	36.5	0.02	5	36.3	0.2	4	36.4	0.03	8
Bottom salinity	36.5	0.04	4	35.7	0.38	14	36.1	0.26	13	36.3	0.08	5	36.2	0.18	4	36.5	0.01	8
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.4	0.15	4	5.3	0.4	14	5.8	0.21	12	6.0	0.02	5	5.7	0.14	4	6.0	0.03	8
Midwater oxygen	6.6	0.08	4	5.8	0.3	14	6.1	0.18	12	6.0	0.02	5	6.1	0.1	4	6.6	0.05	8
Bottom oxygen	6.5	0.06	4	5.9	0.38	14	6.3	0.34	12	5.7	0.28	5	4.4	0.31	4	3.6	0.12	8

Table 13a

Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	14.0	14.00	0.1	0.09	3	245.0	120.11	2.3	1.26	8	860.2	351.07	9.6	4.05	19
Trachypenaeus similis	0.0	0.00	0.0	0.00	3	84.8	84.84	0.2	0.21	8	95.1	62.44	0.4	0.28	19
Penaeus duorarum	0.0	0.00	0.0	0.00	3	202.9	117.22	3.3	1.83	8	5.0	3.34	0.1	0.04	19
Solenocera vioscai	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	8	1.7	1.71	0.0	0.01	19
Callinectes similis	0.0	0.00	0.0	0.00	3	13.5	8.59	0.2	0.07	8	19.6	12.67	0.3	0.18	19
Squilla spp.	4.0	4.00	0.1	0.09	3	20.9	14.74	0.3	0.25	8	10.1	4.97	0.1	0.07	19
Stenotomus caprinus	0.0	0.00	0.0	0.00	3	25.5	14.48	0.1	0.10	8	459.3	111.67	2.2	0.53	19
Upeneus parvus	0.0	0.00	0.0	0.00	3	113.8	47.56	1.6	0.74	8	135.9	77.22	1.7	1.07	19
Trachurus lathami	1.8	1.82	0.0	0.00	3	0.0	0.00	0.0	0.00	8	54.8	32.27	1.2	0.71	19
Serranus atrobranchus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	8	11.8	10.30	0.1	0.07	19
Chloroscombrus chrysurus	455.3	443.33	13.6	13.55	3	22.7	12.47	0.5	0.29	8	36.7	31.74	0.9	0.75	19
Prionotus stearnsi	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	8	2.0	1.65	0.0	0.01	19
Lagodon rhomboides	38.9	27.79	0.7	0.54	3	138.1	74.19	2.3	1.31	8	5.3	2.03	0.1	0.04	19
Saurida brasiliensis	0.0	0.00	0.0	0.00	3	0.8	0.53	0.0	0.00	8	27.0	9.34	0.2	0.06	19
Squid	9.3	6.51	0.1	0.08	3	22.3	13.65	0.4	0.22	8	151.2	42.78	2.6	0.71	19

Table 13a (continued)

Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	258.0	210.99	3.9	3.14	4	264.2	181.91	6.0	2.77	3	0.0	0.00	0.0	0.00	0
Trachypenaeus similis	217.6	217.64	1.1	1.09	4	199.2	170.83	1.0	0.94	3	0.0	0.00	0.0	0.00	0
Penaeus duorarum	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	0
Solenocera vioscai	27.3	27.27	0.1	0.10	4	97.7	14.88	0.2	0.05	3	0.0	0.00	0.0	0.00	0
Callinectes similis	9.1	7.93	0.2	0.16	4	18.5	18.46	0.3	0.35	3	0.0	0.00	0.0	0.00	0
Squilla spp.	5.0	3.89	0.0	0.04	4	27.6	12.79	0.2	0.12	3	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	18.7	7.99	0.6	0.39	4	56.0	17.99	3.0	1.05	3	0.0	0.00	0.0	0.00	0
Upeneus parvus	69.9	29.95	2.4	1.17	4	1.7	1.67	0.1	0.08	3	0.0	0.00	0.0	0.00	0
Trachurus lathami	93.2	57.87	2.2	1.36	4	8.8	5.89	0.4	0.27	3	0.0	0.00	0.0	0.00	0
Serranus atrobranchus	62.9	54.48	0.6	0.46	4	245.1	48.35	3.5	0.66	3	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	1.1	1.09	0.0	0.04	4	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Prionotus stearnsi	26.2	17.71	0.2	0.14	4	258.1	51.23	2.5	0.51	3	0.0	0.00	0.0	0.00	0
Lagodon rhomboides	22.0	10.34	1.2	0.53	4	10.7	9.66	0.6	0.51	3	0.0	0.00	0.0	0.00	0
Saurida brasiliensis	42.8	23.66	0.2	0.14	4	3.8	3.85	0.0	0.03	3	0.0	0.00	0.0	0.00	0
Squid	393.1	267.54	6.1	4.84	4	15.8	4.75	0.8	0.41	3	0.0	0.00	0.0	0.00	0

Table 13b

Statistical Zone 21

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, and oxygen in ppm. No trawl samples were taken in depths greater than 40 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	18.5	13.15	3	47.1	21.43	8	23.1	5.44	19	27.0	1.87	4	31.6	6.13	3	0.0	0	0
Total finfish kg	16.7	13.97	3	39.3	20.8	8	9.6	2.35	19	15.3	3.67	4	23.7	7.62	3	0.0	0	0
Total crustacean kg	0.9	0.91	3	6.8	3.65	8	10.9	4.49	19	5.6	4.59	4	7.8	4.02	3	0.0	0	0
Total others kg	0.0	0	3	0.4	0.27	8	2.6	0.73	19	6.3	4.87	4	1.1	0.66	3	0.0	0	0
Surface temperature	25.1	0.84	3	25.7	0.34	7	26.4	0.17	22	27.7	0	2	27.8	0.05	2	0.0	0	0
Midwater temperature	25.0	0.91	3	25.2	0.51	7	25.3	0.21	22	26.3	0.7	2	24.4	0.18	2	0.0	0	0
Bottom temperature	24.8	1.14	3	24.6	0.51	7	23.9	0.22	22	23.0	0.41	2	22.5	0.3	2	0.0	0	0
Surface salinity	36.3	0.08	3	36.4	0.03	7	36.4	0.02	22	36.4	0.04	2	36.3	0.09	2	0.0	0	0
Midwater salinity	36.3	0.11	3	36.4	0.02	7	36.4	0.01	22	36.4	0.02	2	36.4	0.03	2	0.0	0	0
Bottom salinity	36.4	0.04	3	36.5	0.16	7	36.4	0.01	22	36.4	0.02	2	36.4	0.01	2	0.0	0	0
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.5	0.51	3	6.8	0.44	7	6.7	0.24	22	5.9	0.05	2	6.3	0.25	2	0.0	0	0
Midwater oxygen	6.6	0.46	3	6.5	0.42	7	6.7	0.21	22	6.4	0.2	2	6.6	0.05	2	0.0	0	0
Bottom oxygen	6.5	0.54	3	6.5	0.62	7	6.3	0.27	22	4.8	1	2	5.3	0.1	2	0.0	0	0

Table 14a

Statistical Zone 22

Summary of dominant organisms taken in statistical zone 22 during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm or greater than 20 fm.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	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	354.0	102.00	4.1	0.82	2	30.0	0.00	0.3	0.00	1
Penaeus duorarum	0.0	0.00	0.0	0.00	0	87.0	51.00	1.2	0.68	2	0.0	0.00	0.0	0.00	1
Portunus spinimanus	0.0	0.00	0.0	0.00	0	21.0	15.00	0.3	0.00	2	6.0	0.00	0.0	0.00	1
Squilla spp.	0.0	0.00	0.0	0.00	0	18.0	18.00	0.4	0.41	2	0.0	0.00	0.0	0.00	1
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	0	12.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Sicyonia dorsalis	0.0	0.00	0.0	0.00	0	3.0	3.00	0.0	0.00	2	12.0	0.00	0.0	0.00	1
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	516.0	0.00	2.5	0.00	1
Syacium gunteri	0.0	0.00	0.0	0.00	0	150.0	126.00	1.4	1.09	2	72.0	0.00	1.1	0.00	1
Conodon nobilis	0.0	0.00	0.0	0.00	0	54.0	54.00	0.3	0.27	2	0.0	0.00	0.0	0.00	1
Prionotus rubio	0.0	0.00	0.0	0.00	0	30.0	24.00	0.1	0.14	2	12.0	0.00	0.0	0.00	1
Larimus fasciatus	0.0	0.00	0.0	0.00	0	33.0	15.00	0.4	0.14	2	0.0	0.00	0.0	0.00	1
Cynoscion arenarius	0.0	0.00	0.0	0.00	0	24.0	12.00	0.4	0.14	2	0.0	0.00	0.0	0.00	1
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	18.0	6.00	0.3	0.00	2	0.0	0.00	0.0	0.00	1
Polydactylus octonemus	0.0	0.00	0.0	0.00	0	9.0	3.00	0.3	0.00	2	0.0	0.00	0.0	0.00	1
Squid	0.0	0.00	0.0	0.00	0	3.0	3.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1

Table 14b

Statistical Zone 22

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Summer Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, and oxygen in ppm. No trawl samples were taken in depths less than 6 fm or greater than 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	0	9.5	1.36	2	5.5	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish kg	0.0	0	0	2.7	0	2	5.5	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean kg	0.0	0	0	6.8	1.36	2	0.0	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Total others kg	0.0	0	0	0.0	0	2	0.0	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	0.0	0	0	26.2	0.1	2	26.4	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Midwater temperature	0.0	0	0	26.2	0.05	2	26.1	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Bottom temperature	0.0	0	0	25.5	0.2	2	24.8	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Surface salinity	0.0	0	0	35.9	0.22	2	36.4	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Midwater salinity	0.0	0	0	36.2	0.16	2	36.4	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Bottom salinity	0.0	0	0	36.2	0.16	2	36.4	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	0.0	0	0	7.1	0.4	2	6.9	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Midwater oxygen	0.0	0	0	6.9	0.05	2	6.9	0	1	0.0	0	0	0.0	0	0	0.0	0	0
Bottom oxygen	0.0	0	0	6.6	0.1	2	6.4	0	1	0.0	0	0	0.0	0	0	0.0	0	0

Table 15. 2000 Fall Shrimp/Groundfish Survey species composition list, 336 trawl stations, for those vessels that used either a 40-ft or 20-ft trawl. Species with a total weight of less than 0.0227 kg (0.05 lb) are indicated on the table as 0.0 kg.

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Finfishes					
Micropogonias undulatus	Atlantic croaker	28212	1550.0	244	62.1
Chloroscombrus chrysurus	Atlantic bumper	21433	342.5	173	44.0
Stenotomus caprinus	longspine porgy	15551	692.4	152	38.7
Serranus atrobranchus	blackear bass	10032	108.2	115	29.3
Cynoscion spp.	seatrouts	8013	36.5	69	17.6
Diplectrum bivittatum	dwarf sand perch	6447	95.1	167	42.5
Syacium gunteri	shoal flounder	4407	73.7	185	47.1
Leiostomus xanthurus	spot	3947	465.8	146	37.2
Upeneus parvus	dwarf goatfish	3758	115.2	88	22.4
Pristipomoides aquilonaris	wenchman	3164	149.5	84	21.4
Trachurus lathami	rough scad	2936	132.6	66	16.8
Lagodon rhomboides	pinfish	2874	170.2	199	50.6
Synodus foetens	inshore lizardfish	2870	314.4	227	57.8
Peprilus burti	gulf butterfish	2707	200.6	137	34.9
Saurida brasiliensis	largescale lizardfish	2578	10.7	123	31.3
Anchoa hepsetus	striped anchovy	2527	32.9	72	18.3
Stellifer lanceolatus	star drum	2443	27.2	91	23.2
Lutjanus campechanus	red snapper	2244	131.5	208	52.9
Cynoscion arenarius	sand seatrout	2088	180.7	203	51.7
Cynoscion nothus	silver seatrout	2086	80.0	150	38.2
Lutjanus synagris	lane snapper	2060	125.7	130	33.1
Sphoeroides parvus	least puffer	1932	11.5	165	42.0

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Trichiurus lepturus	Atlantic cutlassfish	1737	65.1	90	22.9
Prionotus longispinosus	bigeye searobin	1528	95.4	117	29.8
Centropristis philadelphica	rock sea bass	1371	96.0	145	36.9
Synodus poeyi	offshore lizardfish	1172	8.0	79	20.1
Harengula jaguana	scaled sardine	1169	33.3	69	17.6
Trichopsetta ventralis	sash flounder	1109	24.1	50	12.7
Peprilus alepidotus	harvestfish	1090	19.6	66	16.8
Prionotus paralatus	Mexican searobin	1062	42.7	52	13.2
Halieutichthys aculeatus	pancake batfish	1031	6.1	124	31.6
Arius felis	hardhead catfish	1028	121.4	71	18.1
Eucinostomus gula	silver jenny	954	20.9	132	33.6
Brevoortia patronus	gulf menhaden	940	52.0	61	15.5
Etropus crossotus	fringed flounder	925	15.1	110	28.0
Mullus auratus	red goatfish	896	48.6	30	7.6
Bairdiella chrysoura	silver perch	722	23.6	29	7.4
Lepophidium brevibarbe	blackedge cusk-eel	716	23.0	99	25.2
Scorpaena calcarata	smoothhead scorpionfish	675	6.1	100	25.4
Anchoa mitchilli	bay anchovy	654	1.0	22	5.6
Porichthys plectrodon	Atlantic midshipman	653	10.1	109	27.7
Balistes capriscus	gray triggerfish	615	52.4	101	25.7
Prionotus stearnsi	shortwing searobin	549	5.4	39	9.9
Selene setapinnis	Atlantic moonfish	465	20.0	87	22.1
Eucinostomus argenteus	spotfin mojarra	428	10.9	23	5.9
Menticirrhus americanus	southern kingfish	428	39.9	70	17.8

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Opisthonema oglinum	Atlantic thread herring	381	19.5	47	12.0
Bollmannia communis	ragged goby	369	1.5	46	11.7
Syacium papillosum	dusky flounder	366	14.4	22	5.6
Larimus fasciatus	banded drum	360	15.5	77	19.6
Prionotus rubio	blackwing searobin	359	24.1	57	14.5
Cyclopsetta chittendeni	Mexican flounder	322	22.8	77	19.6
Symphurus plagiusa	blackcheek tonguefish	315	5.4	83	21.1
Chaetodipterus faber	Atlantic spadefish	303	21.0	95	24.2
Orthopristis chrysoptera	pigfish	283	18.7	60	15.3
Hildebrandia flava	yellow conger	282	17.7	47	12.0
Citharichthys spilopterus	bay whiff	222	2.6	61	15.5
Hemicaranx amblyrhynchus	bluntnose jack	158	4.4	47	12.0
Ogcocephalus parvus	roughback batfish	157	3.0	48	12.2
Caranx crysos	blue runner	149	24.5	47	12.0
Monacanthus hispidus	planehead filefish	143	3.3	27	6.9
Bagre marinus	gafftopsail catfish	139	14.5	25	6.4
Symphurus diomedianus	spottedfin tonguefish	129	3.9	22	5.6
Lagocephalus laevigatus	smooth puffer	120	9.5	55	14.0
Hoplunnis macrurus	freckled pike-conger	118	0.8	37	9.4
Bellator militaris	horned searobin	113	0.7	17	4.3
Ophidion welshi	crested cusk-eel	110	4.7	34	8.7
Anchoa lyolepis	dusky anchovy	108	0.1	7	1.8
Rhomboplites aurorubens	vermilion snapper	104	3.2	15	3.8
Bellator brachychir	shortfin searobin	101	0.4	5	1.3
Diplectrum formosum	sand perch	86	9.8	21	5.3
Sardinella aurita	Spanish sardine	78	0.9	15	3.8

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Caulolatilus intermedius	anchor tilefish	78	7.3	20	5.1
Peristedion gracile	slender searobin	76	2.0	5	1.3
Prionotus tribulus	bighead searobin	74	1.8	24	6.1
Prionotus ophryas	bandtail searobin	70	1.1	23	5.9
Paralichthys lethostigma	southern flounder	68	24.8	42	10.7
Rhizoprionodon terraenovae	Atlantic sharpnose shark	65	86.1	27	6.9
Selar crumenophthalmus	bigeye scad	65	6.3	20	5.1
Ancylopsetta dilecta	three-eye flounder	61	4.9	16	4.1
Scomberomorus maculatus	Spanish mackerel	58	4.7	19	4.8
Decapterus punctatus	round scad	56	3.0	14	3.6
Urophycis floridana	southern hake	55	8.2	11	2.8
Pontinus longispinis	longspine scorpionfish	54	1.5	8	2.0
Selene vomer	lookdown	51	0.9	23	5.9
Decodon puellaris	red hogfish	49	1.8	9	2.3
Prionotus roseus	bluespotted searobin	48	1.5	9	2.3
Priacanthus arenatus	bigeye	48	6.1	17	4.3
Haemulon aurolineatum	tomtate	48	2.7	17	4.3
Equetus wamotoi	blackbar drum	46	2.3	10	2.5
Brotula barbata	bearded brotula	45	7.8	17	4.3
Monacanthus setifer	pygmy filefish	45	1.1	7	1.8
Gymnachirus texae	fringed sole	40	0.7	16	4.1
Kathetostoma albigutta	lancer stargazer	39	2.2	13	3.3
Syacium spp.	lefteye flounders	39	0.1	6	1.5
Bregmaceros atlanticus	antenna codlet	37	0.0	18	4.6
Equetus umbrosus	cubbyu	37	1.5	6	1.5
Conodon nobilis	barred grunt	34	0.7	11	2.8

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Ophidion holbrooki	bank cusk-eel	30	3.3	1	0.3
Scomberomorus cavalla	king mackerel	28	7.3	12	3.1
Bathyanthias mexicanus	yellowtail bass	27	0.5	4	1.0
Ancylopsetta quadrocellata	ocellated flounder	26	4.2	11	2.8
Engyophrys senta	spiny flounder	25	0.0	12	3.1
Raja texana	roundel skate	24	9.0	13	3.3
Dasyatis americana	southern stingray	24	17.4	5	1.3
Sphyraena guachancho	guaguanche	24	1.4	15	3.8
Nes longus	orangespotted goby	24	0.1	4	1.0
Sphoeroides spengleri	bandtail puffer	24	0.5	5	1.3
Lepophidium jeannae	mottled cusk-eel	22	1.0	7	1.8
Symphurus civitatus	offshore tonguefish	21	0.1	6	1.5
Antennarius radiosus	singlespot frogfish	21	0.5	6	1.5
Bothidae	lefteye flounders	20	0.0	1	0.3
Mustelus canis	smooth dogfish	19	17.5	12	3.1
Sphyraena borealis	northern sennet	19	2.5	7	1.8
Rypticus maculatus	whitespotted soapfish	19	0.6	7	1.8
Gobionellus hastatus	sharptail goby	15	0.0	2	0.5
Anchoa nasuta	longnose anchovy	13	0.0	2	0.5
Echeneis naucrates	sharksucker	13	5.8	8	2.0
Calamus arctifrons	grass porgy	13	2.6	4	1.0
Etropus cyclosquamus	shelf flounder	13	0.1	5	1.3
Gymnothorax saxicola	honeycomb moray	12	1.1	8	2.0
Centropristis ocyura	bank sea bass	12	2.0	4	1.0
Trachinocephalus myops	snakefish	11	0.6	3	0.8
Ophichthus gomesi	shrimp eel	11	0.6	4	1.0

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Neomerinthe hemingwayi	spinycheek scorpionfish	11	0.7	5	1.3
Citharichthys macrops	spotted whiff	11	0.3	8	2.0
Gymnothorax nigromarginatus	blackedge moray	10	0.9	8	2.0
Mulloidichthys martinicus	yellow goatfish	10	0.7	1	0.3
Pseudupeneus maculatus	spotted goatfish	10	0.6	1	0.3
Sphyrna tiburo	bonnethead	9	6.6	8	2.0
Etrumeus teres	round herring	9	0.2	2	0.5
Alectis ciliaris	African pompano	9	0.2	4	1.0
Ogcocephalus corniger	longnose batfish	9	0.0	4	1.0
Gadidae	cods	8	0.0	2	0.5
Epinephelus flavolimbatus	yellowedge grouper	8	0.5	5	1.3
Lonchopisthus micrognathus	swordtail jawfish	8	0.0	5	1.3
Aluterus monoceros	unicorn filefish	8	3.4	3	0.8
Sphoeroides dorsalis	marbled puffer	8	0.4	3	0.8
Narcine brasiliensis	lesser electric ray	7	1.5	5	1.3
Anchoa spp.	anchovies	7	0.0	1	0.3
Mugil curema	white mullet	7	0.2	2	0.5
Etropus microstomus	smallmouth flounder	7	0.2	3	0.8
Urophycis cirrata	gulf hake	6	0.3	3	0.8
Bellator egretta	streamer searobin	6	0.1	1	0.3
Pomatomus saltatrix	bluefish	6	4.7	5	1.3
Pogonias cromis	black drum	6	27.7	5	1.3
Gobiidae	gobies	6	0.0	4	1.0
Gobionellus boleosoma	darter goby	6	0.0	2	0.5
Dasyatis sabina	Atlantic stringray	5	2.1	3	0.8
Echiophis punctifer	snapper eel	5	3.1	2	0.5

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Hemanthias aureorubens	streamer bass	5	0.0	2	0.5
Serraniculus pumilio	pygmy sea bass	5	0.0	2	0.5
Pristigenys alta	short bigeye	5	0.3	3	0.8
Lutjanus griseus	grey snapper	5	1.0	3	0.8
Ogcocephalus spp.	batfishes	5	0.1	2	0.5
Physiculus fulvus	metallic codling	4	0.0	1	0.3
Prionotus martis	barred searobin	4	0.1	1	0.3
Prionotus scitulus	leopard searobin	4	0.2	2	0.5
Apogon aurolineatus	bridle cardinalfish	4	0.0	2	0.5
Equetus acuminatus	high-hat	4	0.2	1	0.3
Archosargus probatocephalus	sheepshead	4	6.5	1	0.3
Bothus robinsi	twospot flounder	4	0.0	2	0.5
Lactophrys quadricornis	scrawled cowfish	4	0.8	3	0.8
Squatina dumeril	Atlantic angel shark	3	1.8	3	0.8
Carcharhinus acronotus	blacknose shark	3	10.0	3	0.8
Synodus intermedius	sand diver	3	0.1	2	0.5
Hemiramphus balao	balao	3	0.1	1	0.3
Hippocampus erectus	lined seahorse	3	0.0	3	0.8
Epinephelus niveatus	snowy grouper	3	0.3	2	0.5
Rachycentron canadum	cobia	3	13.3	2	0.5
Sciaenops ocellatus	red drum	3	20.7	3	0.8
Gobioides broussoneti	violet goby	3	0.0	1	0.3
Paralichthys squamilentus	broad flounder	3	0.5	2	0.5
Achirus lineatus	lined sole	3	0.0	3	0.8
Aluterus heudeloti	dotterel filefish	3	0.6	1	0.3
Ogcocephalus declivirostris	slantbrow batfish	3	0.0	3	0.8

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Raja eglanteria	clearnose skate	2	2.0	1	0.3
Rhinoptera bonasus	cownose ray	2	16.5	2	0.5
Mugil cephalus	striped mullet	2	0.5	2	0.5
Prionotus spp.	searobins	2	0.7	2	0.5
Priacanthus cruentatus	glasseye snapper	2	0.5	1	0.3
Caranx hippos	crevalle jack	2	8.8	2	0.5
Oligoplites saurus	leatherjack	2	0.1	2	0.5
Menticirrhus littoralis	gulf kingfish	2	0.1	2	0.5
Ophidion grayi	blotched cusk-eel	2	0.0	2	0.5
Otophidium dormitator	sleeper cush-eel	2	0.0	1	0.3
Bythitidae	viviparous brotulas	2	0.0	1	0.3
Trinectes maculatus	hogchoker	2	0.0	2	0.5
Chilomycterus schoepfi	striped burrfish	2	0.4	2	0.5
Ogcocephalus pantostictus	spotted batfish	2	0.0	2	0.5
Carcharhinus limbatus	blacktip shark	1	2.5	1	0.3
Dasyatis say	bluntnose stingray	1	1.0	1	0.3
Gymnura micrura	smooth butterfly ray	1	0.4	1	0.3
Paraconger caudilimbatus	margintail conger	1	0.0	1	0.3
Hyporhamphus unifasciatus	halfbeak	1	0.0	1	0.3
Aulostomus maculatus	trumpetfish	1	0.0	1	0.3
Fistularia petimba	red cornetfish	1	0.5	1	0.3
Syngnathus louisianae	chain pipefish	1	0.0	1	0.3
Polydactylus octonemus	Atlantic threadfin	1	0.1	1	0.3
Scorpaena plumieri	spotted scorpionfish	1	0.0	1	0.3
Prionotus alatus	spiny searobin	1	0.0	1	0.3
Serranus subligarius	belted sandfish	1	0.0	1	0.3

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Priacanthus cruentatus	glasseye	1	0.1	1	0.3
Apogon spp.	cardinalfishes	1	0.0	1	0.3
Trachinotus carolinus	Florida pompano	1	0.3	1	0.3
Calamus leucosteus	whitebone porgy	1	0.1	1	0.3
Ariomma regulus	spotted driftfish	1	0.0	1	0.3
Aluterus scriptus	scrawled filefish	1	0.1	1	0.3
Crustaceans					
Trachypenaeus similis	roughback shrimp	15989	34.5	193	49.1
Penaeus aztecus	brown shrimp	13502	265.7	279	71.0
Callinectes similis	lesser blue crab	6221	107.4	241	61.3
Portunus spinicarpus	longspine swimming crab	5691	37.1	94	23.9
Portunus gibbesii	irridescent swimming crab	4474	24.1	205	52.2
Penaeus setiferus	white shrimp	4195	81.8	193	49.1
Xiphopenaeus kroyeri	seabob	3742	12.6	42	10.7
Squilla empusa	mantis shrimp	2704	31.5	189	48.1
Trachypenaeus constrictus	roughneck shrimp	2177	3.9	44	11.2
Sicyonia dorsalis	lesser rock shrimp	1953	4.1	96	24.4
Squilla chydaea	mantis shrimp	1519	5.9	99	25.2
Solenocera vioscai	humpback shrimp	921	3.0	44	11.2
Sicyonia brevirostris	brown rock shrimp	835	10.0	56	14.2
Penaeus duorarum	pink shrimp	446	7.7	79	20.1
Portunus spinimanus	blotched swimming crab	286	5.4	52	13.2
Calappa sulcata	yellow box crab	168	33.1	63	16.0
Anasimus latus	stilt spider crab	107	1.0	19	4.8

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Acetes americanus	sergestid shrimp	76	0.0	1	0.3
Sicyonia burkenroadi	spiny rock shrimp	56	0.0	9	2.3
Raninoides louisianensis	gulf frog crab	41	0.5	16	4.1
Calappa flammea	flame box crab	34	3.5	5	1.3
Lysiosquilla scabricauda	mantis shrimp	28	1.2	7	1.8
Arenaeus cribrarius	speckled swimming crab	25	0.6	9	2.3
Callinectes sapidus	blue crab	24	2.8	13	3.3
Exhippolysmata oplophoroides	redleg humpback shrimp	22	0.0	6	1.5
Pagurus pollicaris	flatclaw hermit crab	22	0.3	14	3.6
Hepatus epheliticus	calico crab	20	0.6	17	4.3
Scyllarus chacei	chace slipper lobster	17	0.0	3	0.8
Stenorhynchus seticornis	yellowline arrow crab	17	0.0	11	2.8
Parthenope granulata	bladetooth elbow crab	17	0.2	10	2.5
Squilla neglecta	mantis shrimp	16	0.1	7	1.8
Persephona crinita	pink purse crab	15	0.0	6	1.5
Libinia emarginata	portly spider crab	15	0.6	6	1.5
Raninoides loevis	furrowed frog crab	11	0.0	3	0.8
Alpheidae	snapping shrimps	10	0.0	1	0.3
Pseudorhombilia quadridentata	goneplacid crab	10	0.1	4	1.0
Scyllarides nodifer	ridged slipper lobster	8	0.0	2	0.5
Stenocionops furcata	furcate crab	7	0.1	3	0.8
Parapenaeus politus	deepwater rose shrimp	6	0.0	1	0.3
Petrochirus diogenes	giant hermit crab	6	0.1	4	1.0
Leiolambrus nitidus	white elbow crab	6	0.0	6	1.5
Dardanus insignis	red brocade hermit	6	0.1	3	0.8
Pagurus bullisi	hermit crab	5	0.0	3	0.8

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Plesionika longicauda	pandalid shrimp	4	0.0	1	0.3
Libinia dubia	longnose spider crab	4	0.0	3	0.8
Metoporhaphis calcarata	false arrow crab	4	0.0	4	1.0
Parthenope serrata	sawtooth elbow crab	4	0.0	4	1.0
Rhithropanopeus harrisii	Harris mud crab	3	0.0	1	0.3
Pagurus annulipes	hermit crab	3	0.0	1	0.3
Persephona mediterranea	mottled purse crab	3	0.0	3	0.8
Dromidia antillensis	hairy sponge crab	3	0.0	3	0.8
Pseudorhombila quadridentata	flecked squareback crab	3	0.0	2	0.5
Dardanus fucosus	bareye hermit	3	0.0	2	0.5
Ovalipes floridanus	Florida lady crab	2	0.1	1	0.3
Porcellana sigsbeiana	striped porcelain crab	2	0.0	1	0.3
Calappa spp.	box crabs	2	0.0	1	0.3
Speocarcinus lobatus	gulf squareback crab	2	0.0	2	0.5
Paguristes triangulatus	hermit crab	2	0.0	1	0.3
Crustaceans	Crustaceans	1	0.0	1	0.3
Olencira praegustator	isopod	1	0.0	1	0.3
Trachypenaeus spp.	roughneck shrimps	1	0.0	1	0.3
Alpheus spp.	snapping shrimps	1	0.0	1	0.3
Sicyonia typica	kinglet rock shrimp	1	0.0	1	0.3
Sicyonia laevigata	rock shrimp	1	0.0	1	0.3
Sicyonia parri	rock shrimp	1	0.0	1	0.3
Panulirus argus	Caribbean spiny lobster	1	0.6	1	0.3
Pagurus longicarpus	longwrist hermit crab	1	0.0	1	0.3
Myropsis quinquespinosa	fivespine purse crab	1	0.0	1	0.3
Libinia spp.	spider crabs	1	0.0	1	0.3

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Xanthidae	mud crabs	1	0.0	1	0.3
Menippe mercenaria	Florida stone crab	1	0.0	1	0.3
Menippe adina	Gulf stone crab	1	0.0	1	0.3
Axiopsis hirsutimana	lobster shrimp	1	0.0	1	0.3
Munida forceps	squat lobster	1	0.0	1	0.3
Collodes robustus	spider crab	1	0.0	1	0.3
Podochela sidneyi	shortfinger neck crab	1	0.0	1	0.3
Stenocionops spinimanus	prickly spider crab	1	0.9	1	0.3
Porcellana sayana	spotted porcelain crab	1	0.0	1	0.3
Others					
Aurelia aurita	moon jellyfish	7688	1389.0	140	35.6
Amusium papyraceum	paper scallop	5467	50.0	72	18.3
Loligo pleii	arrow squid	2058	11.9	88	22.4
Lolliguncula brevis	Atlantic brief squid	1560	10.6	123	31.3
Renilla mulleri	short-stemmed sea pansy	1416	2.3	61	15.5
Argopecten gibbus	calico scallop	1071	41.6	4	1.0
Astropecten duplicatus	spiny beaded sea star	1039	0.8	71	18.1
Loligo pealeii	longfin squid	908	21.5	81	20.6
Chrysaora quinquecirrha	sea nettle	600	15.2	31	7.9
Luidia clathrata	sea star	186	2.4	54	13.7
Ophiolepis elegans	brittle star	161	0.2	16	4.1
Astropecten cingulatus	starfish	140	1.5	27	6.9
Mellita quinquiesperforata	five-slotted sand dollar	138	0.7	6	1.5
Anadara baughmani	Baughman's ark	117	1.5	10	2.5

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Loligo spp.	squids	74	1.0	9	2.3
Polystira albida	white giant turris	67	0.6	7	1.8
Clypeaster ravenelii	cake urchin	60	2.2	10	2.5
Actinidae	sea anemones	39	0.0	12	3.1
Encope aberrans	sand dollar	33	2.1	2	0.5
Stomolophus meleagris	many-mouthed sea jelly	31	11.7	6	1.5
Pitar cordatus	Schwengel's pitar	26	0.6	7	1.8
Tethyaster grandis	starfish	25	1.2	13	3.3
Pecten raveneli	Ravenel's scallop	19	0.0	2	0.5
Beroe ovata	comb jelly	19	0.5	8	2.0
Macoma brevifrons	short macoma	18	0.1	4	1.0
Neverita duplicata	shark eye	15	0.3	11	2.8
Mnemiopsis mccradyi	comb jelly	14	0.5	4	1.0
Asteroporpa annulata	starfish	13	0.2	4	1.0
Conus austini	cone shell	11	0.1	2	0.5
Encope michelini	sand dollar	10	0.0	1	0.3
Polystira tellea	delicate giant turret	9	0.1	3	0.8
Luidia alternata	banded luidia	9	0.1	6	1.5
Echinaster serpentarius	starfish	8	0.0	5	1.3
Cantharus cancellarius	cancellate cantharus	6	0.0	5	1.3
Drymonema dalmatinum	jellyfish	6	13.8	5	1.3
Astropecten articulatus	plated-margined sea star	6	0.0	3	0.8
Cymatium parthenopeum	giant triton	5	0.0	1	0.3
Muricanthus fulvescens	giant eastern murex	5	0.1	2	0.5
Busycon sinistrum	lightning whelk	4	0.3	4	1.0
Ctenophora	comb jellies	4	0.1	1	0.3

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Bryozoa	moss animals	4	0.5	4	1.0
Clypeaster prostratus	sea biscuit	4	0.8	2	0.5
Caretta caretta	loggerhead turtle	3	291.4	3	0.8
Cyanea spp.	jellyfish	3	1.5	1	0.3
Paranthus rapiformis	onion anemone	3	0.0	2	0.5
Calliactris tricolor	common sea anemone	3	0.0	3	0.8
Hemipholis elongata	brittle star	3	0.0	2	0.5
Stylocidaris affinis	sea urchin	3	0.1	2	0.5
Sinum perspectivum	white baby-ear	2	0.0	1	0.3
Distorsio clathrata	Atlantic distorsio	2	0.0	1	0.3
Thais haemastoma	rocksnail	2	0.0	2	0.5
Busycon perversum	perverse whelk	2	0.0	1	0.3
Fasciolaria lilium	banded tulip	2	0.2	1	0.3
Atrina spp.	penshells	2	0.3	1	0.3
Atrina seminuda	half-naked penshell	2	1.6	1	0.3
Laevicardium sybariticum	delicate eggcockle	2	0.2	1	0.3
Octopus vulgaris	common Atlantic octopus	2	0.1	2	0.5
Tamoya spp.	jellyfish	2	0.0	1	0.3
Tamoya haplonema	sea wasp	2	0.4	2	0.5
Gorgonidae	gorgonians	2	0.0	1	0.3
Astrogordius cacaoticum	basket star	2	0.0	1	0.3
Molpadia cubana	sea cucumber	2	0.1	1	0.3
Busycotypus spiratus	pearwhelk	1	0.0	1	0.3
Scaphella dubia	dubious volute	1	0.0	1	0.3
Argopecten irradians	bay scallop	1	0.0	1	0.3
Eucrassatella speciosa	beautiful crassatella	1	0.0	1	0.3

Table 15. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Circomphalus strigillinus	empress venus	1	0.0	1	0.3
Styela plicata	tunicate	1	0.0	1	0.3
Anthozoa	anthozoans	1	0.0	1	0.3
Virgularia presbytes	sea pen	1	0.0	1	0.3
Paracaudina chilensis	sea cucumber	1	0.0	1	0.3

Table 16a

Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	68.0	66.02	0.1	0.09	4	178.0	165.79	0.2	0.19	10	191.3	98.13	0.4	0.20	21
Portunus spinicarpus	0.0	0.00	0.0	0.00	4	3.7	3.65	0.0	0.02	10	7.9	6.19	0.0	0.04	21
Penaeus setiferus	13.0	13.00	0.3	0.27	4	235.3	203.73	2.8	2.14	10	53.0	51.66	0.8	0.74	21
Callinectes similis	4.3	1.74	0.0	0.00	4	65.0	59.48	0.5	0.49	10	64.8	44.21	0.6	0.36	21
Squilla spp.	7.5	4.50	0.2	0.13	4	31.2	20.01	0.3	0.19	10	141.6	120.42	0.6	0.43	21
Penaeus aztecus	11.0	9.11	0.1	0.07	4	20.0	10.67	0.2	0.12	10	21.9	13.39	0.3	0.17	21
Stenotomus caprinus	0.0	0.00	0.0	0.00	4	19.3	17.25	0.5	0.43	10	337.1	166.24	10.2	4.81	21
Chloroscombrus chrysurus	2029.4	1097.51	14.3	7.73	4	676.3	562.10	14.2	11.57	10	70.3	34.99	3.1	1.80	21
Micropogonias undulatus	19.5	11.32	1.0	0.65	4	53.5	27.63	3.2	1.63	10	152.7	56.02	10.5	3.91	21
Leiostomus xanthurus	3.0	3.00	0.3	0.27	4	13.9	13.89	1.1	1.15	10	13.2	7.66	1.3	0.72	21
Serranus atrobranchus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	10	4.3	4.00	0.0	0.03	21
Prionotus longispinosus	6.0	6.00	0.1	0.14	4	11.9	8.72	0.2	0.15	10	11.8	4.11	0.6	0.31	21
Synodus foetens	10.7	3.94	0.9	0.43	4	8.9	4.56	0.8	0.38	10	28.5	6.13	2.8	0.55	21
Mullus auratus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	10	0.0	0.00	0.0	0.00	21
Squid	83.3	53.51	0.3	0.18	4	33.8	17.13	0.2	0.10	10	4.0	1.78	0.1	0.06	21

Table 16a (continued)

Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	11.8	8.07	0.0	0.03	8	0.0	0.00	0.0	0.00	4	45.7	45.71	0.1	0.13	2
Portunus spinicarpus	3.6	2.15	0.0	0.02	8	42.6	17.61	0.4	0.18	4	1138.1	1021.88	9.1	8.06	2
Penaeus setiferus	2.0	2.00	0.1	0.08	8	0.0	0.00	0.0	0.00	4	285.7	285.71	8.6	8.57	2
Callinectes similis	32.8	13.93	1.0	0.44	8	68.5	68.50	2.1	2.09	4	175.7	175.71	1.5	1.49	2
Squilla spp.	6.3	4.20	0.1	0.07	8	12.5	10.01	0.1	0.11	4	95.6	84.38	1.0	0.82	2
Penaeus aztecus	24.7	17.35	0.8	0.54	8	111.1	60.32	4.0	2.05	4	59.2	42.05	2.3	2.09	2
Stenotomus caprinus	369.9	226.88	13.0	6.93	8	454.7	101.21	24.8	6.35	4	142.6	131.16	7.4	6.96	2
Chloroscombrus chrysurus	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	2
Micropogonias undulatus	475.3	376.96	33.9	26.59	8	419.6	336.66	30.8	22.27	4	134.4	94.38	10.2	5.95	2
Leiostomus xanthurus	5.2	2.21	0.7	0.31	8	545.8	401.84	74.2	59.81	4	155.1	76.34	17.7	8.45	2
Serranus atrobranchus	33.0	18.13	0.3	0.15	8	262.8	251.18	3.1	2.95	4	280.0	280.00	6.2	6.23	2
Prionotus longispinosus	67.1	19.88	8.1	3.61	8	163.3	118.56	10.0	6.19	4	142.5	142.50	3.6	3.58	2
Synodus foetens	40.4	26.74	5.0	3.30	8	59.9	16.74	7.4	1.58	4	142.5	142.50	19.7	19.69	2
Mullus auratus	0.7	0.71	0.0	0.03	8	140.0	103.38	6.3	4.63	4	315.0	315.00	15.3	15.26	2
Squid	0.0	0.00	0.0	0.00	8	11.8	11.84	0.1	0.11	4	0.0	0.00	0.0	0.00	2

Table 16b

Statistical Zone 11

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	25.0	4.97	4	57.8	13.4	10	93.6	23.93	21	94.8	39.06	8	201.7	75.21	4	188.3	2.6	2
Total finfish kg	23.2	5.75	4	43.5	13.91	10	47.8	7.12	21	90.2	39.51	8	192.6	76.32	4	163.5	20.62	2
Total crustacean kg	1.1	0.68	4	6.0	3.98	10	4.5	1.73	21	3.0	1.34	8	8.1	4.37	4	25.7	17.17	2
Total others kg	0.7	0.68	4	8.0	4.85	10	40.9	25.25	21	1.6	0.91	8	0.5	0.45	4	0.0	0	2
Surface temperature	21.3	1.39	6	22.5	1	8	24.4	0.19	22	23.4	1.08	7	24.4	0.49	5	24.5	0.07	6
Midwater temperature	21.2	1.36	6	22.9	0.95	8	24.5	0.17	22	24.1	0.31	7	25.0	0.29	5	24.5	0.09	6
Bottom temperature	21.1	1.37	6	23.3	0.84	8	24.6	0.15	22	23.3	1.08	7	23.4	0.39	5	22.6	1.2	6
Surface salinity	33.0	0.44	6	32.7	1.41	8	34.9	0.51	22	35.1	0.57	7	35.3	0.77	5	36.2	0.03	6
Midwater salinity	33.5	0.44	6	34.6	0.48	8	35.6	0.1	22	35.8	0.15	7	36.2	0.1	5	36.2	0.04	6
Bottom salinity	33.6	0.45	6	35.4	0.2	8	35.8	0.1	22	35.9	0.27	7	35.6	0.84	5	36.2	0.1	6
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	7.0	0.28	6	6.7	0.31	8	6.1	0.12	22	6.2	0.21	7	6.2	0.16	5	6.4	0.02	6
Midwater oxygen	7.0	0.31	6	6.4	0.27	8	6.0	0.13	22	6.2	0.22	7	6.1	0.18	5	6.4	0.03	6
Bottom oxygen	7.0	0.3	6	6.4	0.3	8	5.8	0.16	22	5.8	0.42	7	5.3	0.33	5	5.8	0.43	6

Table 17a

Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	10.9	0.00	0.0	0.00	1	140.5	80.85	0.1	0.09	12	249.3	80.87	0.4	0.13	8
Penaeus aztecus	10.9	0.00	0.0	0.00	1	39.7	15.46	0.3	0.10	12	113.5	20.43	0.8	0.15	8
Penaeus setiferus	76.4	0.00	0.7	0.00	1	226.3	62.97	2.6	0.56	12	76.8	21.77	1.6	0.39	8
Callinectes similis	174.5	0.00	1.5	0.00	1	73.1	29.35	0.2	0.07	12	65.8	11.23	1.0	0.21	8
Squilla spp.	16.4	0.00	0.0	0.00	1	11.6	5.03	0.1	0.07	12	87.3	28.26	0.9	0.32	8
Portunus gibbesii	32.7	0.00	0.2	0.00	1	21.9	7.19	0.1	0.03	12	81.3	25.80	0.5	0.13	8
Micropogonias undulatus	1740.0	0.00	107.6	0.00	1	430.2	134.69	24.0	7.55	12	107.0	40.25	6.7	2.58	8
Serranus atrobranchus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	12	21.9	20.89	0.3	0.26	8
Lagodon rhomboides	5.5	0.00	0.2	0.00	1	54.9	18.10	2.1	0.70	12	95.0	25.73	4.4	1.37	8
Leiostomus xanthurus	0.0	0.00	0.0	0.00	1	14.3	5.39	1.3	0.50	12	34.8	15.84	3.0	1.35	8
Cynoscion arenarius	54.5	0.00	2.5	0.00	1	37.4	12.17	2.6	0.83	12	40.7	12.01	4.7	1.72	8
Trichiurus lepturus	10.9	0.00	0.0	0.00	1	14.1	7.42	0.4	0.20	12	155.8	114.00	2.5	1.76	8
Cynoscion spp.	932.7	0.00	8.2	0.00	1	51.6	20.14	0.2	0.13	12	17.9	10.62	0.0	0.02	8
Bairdiella chrysoura	441.8	0.00	13.6	0.00	1	88.2	42.51	3.0	1.41	12	0.5	0.50	0.0	0.02	8
Squid	16.4	0.00	0.0	0.00	1	47.6	14.69	0.6	0.17	12	83.5	37.25	0.4	0.15	8

Table 17a (continued)

Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 40 fm.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	119.6	59.64	0.3	0.12	10	190.1	126.73	0.5	0.33	3	0.0	0.00	0.0	0.00	0
Penaeus aztecus	239.9	88.83	1.9	0.54	10	153.3	69.95	2.1	1.27	3	0.0	0.00	0.0	0.00	0
Penaeus setiferus	57.5	6.23	1.5	0.15	10	29.1	14.58	0.8	0.40	3	0.0	0.00	0.0	0.00	0
Callinectes similis	127.1	21.83	3.5	0.59	10	216.5	120.75	6.0	3.25	3	0.0	0.00	0.0	0.00	0
Squilla spp.	103.2	26.01	0.8	0.18	10	181.5	123.25	1.2	0.52	3	0.0	0.00	0.0	0.00	0
Portunus gibbesii	36.8	12.71	0.3	0.09	10	20.0	18.02	0.1	0.12	3	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	215.0	53.76	16.5	4.06	10	57.8	28.92	4.9	2.44	3	0.0	0.00	0.0	0.00	0
Serranus atrobranchus	310.1	79.89	4.0	1.04	10	209.8	63.79	2.7	0.67	3	0.0	0.00	0.0	0.00	0
Lagodon rhomboides	88.7	35.39	4.8	1.74	10	66.7	28.92	4.1	1.58	3	0.0	0.00	0.0	0.00	0
Leiostomus xanthurus	87.5	30.69	9.1	3.63	10	177.8	120.89	21.8	15.27	3	0.0	0.00	0.0	0.00	0
Cynoscion arenarius	69.4	14.11	9.0	2.15	10	77.0	16.30	10.5	2.23	3	0.0	0.00	0.0	0.00	0
Trichiurus lepturus	32.1	19.17	1.9	1.28	10	12.6	4.06	0.4	0.16	3	0.0	0.00	0.0	0.00	0
Cynoscion spp.	19.2	11.26	0.1	0.07	10	1.3	1.33	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Bairdiella chrysoura	0.0	0.00	0.0	0.00	10	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Squid	28.6	12.14	0.1	0.05	10	13.9	13.94	0.5	0.47	3	0.0	0.00	0.0	0.00	0

Table 17b

Statistical Zone 13

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, and oxygen in ppm. No trawl samples were taken in depths greater than 40 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	247.9	0	1	95.1	20.74	12	43.2	8.1	8	67.7	8.9	10	75.3	19.24	3	0.0	0	0
Total finfish kg	171.1	0	1	46.5	10.62	12	28.0	4.98	8	57.6	9.5	10	62.6	21.67	3	0.0	0	0
Total crustacean kg	2.5	0	1	3.5	0.76	12	5.4	0.92	8	8.4	0.84	10	10.9	3.11	3	0.0	0	0
Total others kg	74.4	0	1	45.6	21.26	12	9.7	8.21	8	2.0	1.11	10	1.8	1.05	3	0.0	0	0
Surface temperature	20.7	0	1	21.0	0.63	5	21.4	0.77	6	22.0	0	1	0.0	0	0	25.3	0	1
Midwater temperature	20.7	0	1	21.5	0.4	5	22.7	0.61	6	25.0	0	1	0.0	0	0	25.4	0	1
Bottom temperature	20.7	0	1	22.4	0.21	5	24.0	0.69	6	25.8	0	1	0.0	0	0	23.1	0	1
Surface salinity	33.0	0	1	31.5	0.93	5	32.9	0.67	6	30.9	0	1	0.0	0	0	36.2	0	1
Midwater salinity	33.0	0	1	33.0	0.4	5	34.9	0.23	6	35.6	0	1	0.0	0	0	36.2	0	1
Bottom salinity	33.0	0	1	34.2	0.48	5	36.0	0.23	6	36.2	0	1	0.0	0	0	36.4	0	1
Surface chlorophyll	0.0	0	0	4.6	0	1	4.7	0.47	3	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.7	0	1	7.0	0.35	5	7.8	0.51	6	6.8	0	1	0.0	0	0	6.7	0	1
Midwater oxygen	6.8	0	1	6.8	0.17	5	7.0	0.31	6	6.2	0	1	0.0	0	0	6.3	0	1
Bottom oxygen	6.8	0	1	5.5	0.71	5	5.9	0.35	6	5.0	0	1	0.0	0	0	4.8	0	1

Table 18a

Statistical Zone 14

Summary of dominant organisms taken in statistical zone 14 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths between 21 fm and 30 fm.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	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	1	37.9	25.43	0.3	0.22	6	160.1	34.96	1.8	0.48	22
Trachypenaeus similis	125.0	0.00	0.2	0.00	1	121.1	84.88	0.2	0.16	6	134.0	61.25	0.3	0.12	22
Squilla spp.	0.0	0.00	0.0	0.00	1	22.0	17.03	0.2	0.10	6	27.4	10.50	0.3	0.11	22
Penaeus setiferus	65.0	0.00	0.5	0.00	1	32.3	17.45	0.8	0.35	6	17.1	5.20	0.6	0.16	22
Portunus gibbesii	55.0	0.00	0.2	0.00	1	13.8	8.15	0.1	0.06	6	18.9	5.73	0.1	0.05	22
Callinectes similis	280.0	0.00	0.9	0.00	1	11.4	11.01	0.0	0.05	6	16.2	5.49	0.3	0.11	22
Micropogonias undulatus	425.0	0.00	25.2	0.00	1	493.1	243.09	23.8	11.55	6	715.7	275.26	29.4	10.23	22
Sphoeroides parvus	25.0	0.00	0.0	0.00	1	57.1	50.31	0.4	0.39	6	33.9	12.78	0.2	0.08	22
Anchoa hepsetus	5.0	0.00	0.0	0.00	1	156.7	139.29	2.1	1.78	6	15.9	11.74	0.1	0.13	22
Serranus atrobranchus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	6	1.8	1.75	0.0	0.02	22
Lagodon rhomboides	25.0	0.00	0.9	0.00	1	6.7	3.96	0.2	0.09	6	31.5	8.76	1.4	0.45	22
Trichiurus lepturus	0.0	0.00	0.0	0.00	1	12.3	5.62	0.1	0.04	6	23.9	15.77	0.9	0.63	22
Leiostomus xanthurus	25.0	0.00	1.8	0.00	1	4.9	2.22	0.3	0.15	6	29.2	12.21	2.6	1.10	22
Cynoscion arenarius	65.0	0.00	2.3	0.00	1	40.4	27.26	3.6	2.07	6	18.5	7.98	1.5	0.60	22
Squid	10.0	0.00	0.0	0.00	1	21.0	12.55	0.3	0.17	6	28.9	8.68	0.3	0.09	22

Table 18a (continued)

Statistical Zone 14

Summary of dominant organisms taken in statistical zone 14 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths between 21 fm and 30 fm.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	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	40.0	0.00	1.5	0.00	1	38.4	20.84	2.1	1.11	3
Trachypenaeus similis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	1.9	1.94	0.0	0.00	3
Squilla spp.	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.6	0.65	0.0	0.00	3
Penaeus setiferus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3
Portunus gibbesii	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3
Callinectes similis	0.0	0.00	0.0	0.00	0	3.3	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	26.7	0.00	2.4	0.00	1	1.3	1.29	0.1	0.15	3
Sphoeroides parvus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3
Anchoa hepsetus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3
Serranus atrobranchus	0.0	0.00	0.0	0.00	0	20.0	0.00	0.2	0.00	1	286.8	129.84	4.2	2.53	3
Lagodon rhomboides	0.0	0.00	0.0	0.00	0	40.0	0.00	3.3	0.00	1	0.0	0.00	0.0	0.00	3
Trichiurus lepturus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	3
Leiostomus xanthurus	0.0	0.00	0.0	0.00	0	20.0	0.00	2.4	0.00	1	0.0	0.00	0.0	0.00	3
Cynoscion arenarius	0.0	0.00	0.0	0.00	0	3.3	0.00	0.3	0.00	1	11.9	4.91	2.2	0.92	3
Squid	0.0	0.00	0.0	0.00	0	70.0	0.00	2.3	0.00	1	7.2	3.67	0.5	0.26	3

Table 18b

Statistical Zone 14

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, and oxygen in ppm. No trawl samples were taken in depths between 21 fm and 30 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	68.2	0	1	53.3	13.91	6	51.1	12.65	22	0.0	0	0	66.7	0	1	34.8	3.66	3
Total finfish kg	54.5	0	1	51.1	13.64	6	47.1	12.3	22	0.0	0	0	59.1	0	1	31.0	5.13	3
Total crustacean kg	2.3	0	1	1.7	0.8	6	3.6	0.65	22	0.0	0	0	1.5	0	1	2.5	1.3	3
Total others kg	13.6	0	1	0.4	0.25	6	0.5	0.2	22	0.0	0	0	4.5	0	1	1.4	0.76	3
Surface temperature	18.9	1.15	5	21.8	0.48	7	22.4	0.44	19	23.5	0	1	25.7	0	1	25.8	0.02	2
Midwater temperature	19.6	1.11	5	21.7	0.67	7	22.7	0.39	19	23.5	0	1	25.7	0	1	25.8	0.01	2
Bottom temperature	19.6	1.1	5	22.4	0.65	7	23.3	0.36	19	22.1	0	1	25.6	0	1	22.2	0.78	2
Surface salinity	29.8	3.72	5	31.7	2.54	7	33.2	1.45	19	36.5	0	1	36.5	0	1	36.5	0.03	2
Midwater salinity	33.7	0.45	5	34.7	0.38	7	35.5	0.18	19	36.5	0	1	36.5	0	1	36.5	0.03	2
Bottom salinity	34.1	0.29	5	35.6	0.4	7	36.0	0.08	19	36.3	0	1	36.5	0	1	36.4	0.01	2
Surface chlorophyll	3.5	0.51	4	1.7	0.36	4	1.7	0.35	11	0.6	0	1	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	8.4	0.62	5	7.9	0.6	7	7.3	0.22	19	7.0	0	1	6.2	0	1	6.1	0	2
Midwater oxygen	7.7	0.46	5	8.1	0.52	7	7.2	0.23	19	7.1	0	1	6.1	0	1	6.2	0	2
Bottom oxygen	7.7	0.33	5	7.4	0.6	7	6.8	0.25	19	7.1	0	1	6.2	0	1	4.7	0.5	2

Table 19a

Statistical Zone 15

Summary of dominant organisms taken in statistical zone 15 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	0.0	0.00	0.0	0.00	0	373.0	344.34	0.5	0.45	6	247.4	228.93	0.4	0.39	13
Penaeus aztecus	0.0	0.00	0.0	0.00	0	6.9	2.58	0.0	0.02	6	50.8	20.30	1.0	0.39	13
Callinectes similis	0.0	0.00	0.0	0.00	0	55.6	14.26	0.5	0.17	6	107.4	49.26	2.4	0.99	13
Portunus gibbesii	0.0	0.00	0.0	0.00	0	36.6	13.14	0.2	0.08	6	102.1	20.98	0.8	0.15	13
Squilla spp.	0.0	0.00	0.0	0.00	0	61.8	39.78	0.6	0.37	6	27.3	9.29	0.3	0.12	13
Penaeus setiferus	0.0	0.00	0.0	0.00	0	110.1	70.43	1.9	0.97	6	16.4	5.30	0.7	0.21	13
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	642.8	221.99	28.4	9.48	6	1079.8	207.57	51.5	9.98	13
Serranus atrobranchus	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	13
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	0.5	0.36	0.0	0.02	13
Syacium gunteri	0.0	0.00	0.0	0.00	0	86.7	23.66	1.8	0.47	6	70.4	23.37	1.3	0.40	13
Trachurus lathami	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	0.3	0.34	0.0	0.02	13
Lutjanus synagris	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	13
Centropristis philadelphica	0.0	0.00	0.0	0.00	0	7.4	2.81	0.1	0.04	6	3.7	0.99	0.2	0.06	13
Etropus crossotus	0.0	0.00	0.0	0.00	0	66.9	19.49	1.1	0.32	6	25.7	15.40	0.5	0.29	13
Squid	0.0	0.00	0.0	0.00	0	12.5	10.59	0.1	0.09	6	3.6	3.13	0.0	0.03	13

Table 19a (continued)

Statistical Zone 15

Summary of dominant organisms taken in statistical zone 15 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	27.0	22.88	0.1	0.07	7	3.1	3.13	0.0	0.03	3	0.0	0.00	0.0	0.00	4
Penaeus aztecus	152.3	80.82	3.1	1.32	7	95.2	56.02	2.9	1.46	3	49.2	33.46	2.1	1.41	4
Callinectes similis	34.7	10.80	0.9	0.29	7	5.2	2.75	0.1	0.08	3	0.8	0.78	0.0	0.02	4
Portunus gibbesii	12.0	10.78	0.1	0.07	7	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4
Squilla spp.	9.7	5.36	0.1	0.05	7	4.0	2.17	0.0	0.02	3	0.0	0.00	0.0	0.00	4
Penaeus setiferus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	4
Micropogonias undulatus	236.4	113.03	14.7	6.08	7	5.3	2.64	0.5	0.25	3	0.0	0.00	0.0	0.00	4
Serranus atrobranchus	40.0	20.28	0.4	0.21	7	307.2	243.95	2.3	1.74	3	153.0	147.02	1.3	1.21	4
Stenotomus caprinus	135.2	63.35	4.5	1.80	7	55.5	29.99	2.8	1.65	3	117.0	23.09	6.6	1.28	4
Syacium gunteri	9.5	4.58	0.2	0.11	7	0.7	0.69	0.0	0.00	3	0.0	0.00	0.0	0.00	4
Trachurus lathami	51.9	27.17	2.4	1.19	7	1.4	1.38	0.0	0.03	3	74.2	28.12	5.0	2.02	4
Lutjanus synagris	50.7	31.62	2.7	1.80	7	32.7	10.24	1.7	0.59	3	3.0	2.12	0.2	0.16	4
Centropristis philadelphica	15.5	7.47	1.2	0.61	7	68.7	45.43	4.3	2.77	3	21.0	20.00	1.7	1.62	4
Etropus crossotus	1.1	0.79	0.0	0.04	7	0.7	0.69	0.0	0.00	3	0.0	0.00	0.0	0.00	4
Squid	15.7	7.11	0.2	0.10	7	22.0	21.07	0.1	0.06	3	8.3	3.49	0.3	0.32	4

Table 19b

Statistical Zone 15

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, and oxygen in ppm. No trawl samples were taken in depths less than 6 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	0	99.3	39.99	6	72.7	12.38	13	68.2	18.14	7	37.2	13.27	3	34.5	2.95	4
Total finfish kg	0.0	0	0	48.2	13.16	6	66.1	11.63	13	63.8	17.53	7	28.0	8.92	3	28.4	1.8	4
Total crustacean kg	0.0	0	0	4.2	1.38	6	6.1	1.29	13	4.5	1.72	7	3.9	1.7	3	3.0	1.79	4
Total others kg	0.0	0	0	46.8	44.85	6	0.2	0.15	13	0.3	0.21	7	5.3	4.03	3	3.4	2.05	4
Surface temperature	18.3	0	1	22.9	0.97	6	24.1	0.52	15	26.7	0.77	4	26.0	0.17	3	25.8	0.06	2
Midwater temperature	18.6	0	1	23.0	0.98	6	24.2	0.49	15	25.9	0.08	4	26.1	0.17	3	25.9	0.05	2
Bottom temperature	18.3	0	1	23.5	0.88	6	24.3	0.46	15	25.8	0.02	4	25.4	0.33	3	22.8	1.17	2
Surface salinity	25.5	0	1	35.2	0.27	6	36.3	0.11	15	36.5	0	4	36.5	0	3	36.5	0.01	2
Midwater salinity	33.7	0	1	35.2	0.27	6	36.3	0.08	15	36.5	0	4	36.5	0	3	36.5	0.02	2
Bottom salinity	34.4	0	1	35.7	0.25	6	36.4	0.06	15	36.5	0.01	4	36.5	0.02	3	36.4	0.01	2
Surface chlorophyll	4.3	0	1	2.0	0	1	0.9	0.34	3	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	7.7	0	1	6.8	0.39	6	6.5	0.23	15	6.2	0.02	4	6.2	0.03	3	4.7	1.45	2
Midwater oxygen	8.1	0	1	6.8	0.38	6	6.5	0.15	15	6.2	0.02	4	6.2	0	3	6.2	0	2
Bottom oxygen	11.1	0	1	6.5	0.27	6	6.5	0.12	15	5.8	0.31	4	5.8	0.26	3	4.6	0.55	2

Table 20a

Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	0.0	0.00	0.0	0.00	0	570.6	149.12	0.9	0.20	6	42.7	21.10	0.1	0.06	7
Penaeus aztecus	0.0	0.00	0.0	0.00	0	32.1	25.07	0.2	0.15	6	124.6	37.18	2.5	0.64	7
Callinectes similis	0.0	0.00	0.0	0.00	0	148.7	24.76	0.8	0.12	6	44.6	15.63	0.9	0.28	7
Portunus gibbesii	0.0	0.00	0.0	0.00	0	55.5	16.56	0.3	0.09	6	33.0	21.32	0.2	0.13	7
Penaeus setiferus	0.0	0.00	0.0	0.00	0	87.2	19.76	1.9	0.36	6	0.4	0.43	0.0	0.00	7
Squilla spp.	0.0	0.00	0.0	0.00	0	36.4	11.34	0.4	0.11	6	6.2	4.09	0.1	0.06	7
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	50.8	45.91	2.2	2.01	6	946.2	400.13	48.0	18.13	7
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	242.2	126.71	12.3	7.16	7
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	0	1.3	1.30	0.0	0.02	6	551.8	347.54	9.6	4.74	7
Trachurus lathami	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	30.4	18.76	1.3	0.68	7
Upeneus parvus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	7.9	5.19	0.3	0.18	7
Cynoscion spp.	0.0	0.00	0.0	0.00	0	303.2	107.17	0.6	0.22	6	0.0	0.00	0.0	0.00	7
Peprilus burti	0.0	0.00	0.0	0.00	0	0.9	0.91	0.1	0.07	6	47.9	14.67	4.0	1.20	7
Leiostomus xanthurus	0.0	0.00	0.0	0.00	0	0.3	0.27	0.0	0.04	6	66.4	23.16	6.8	2.45	7
Squid	0.0	0.00	0.0	0.00	0	20.3	12.07	0.2	0.15	6	2.0	1.31	0.0	0.00	7

Table 20a (continued)

Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths less than 6 fm.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	4.1	2.39	0.0	0.01	7	0.0	0.00	0.0	0.00	1	1.1	1.12	0.0	0.00	5
Penaeus aztecus	101.2	29.23	2.9	0.89	7	4.4	0.00	0.1	0.00	1	43.4	28.20	2.1	1.38	5
Callinectes similis	14.3	6.94	0.4	0.20	7	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	5
Portunus gibbesii	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	5
Penaeus setiferus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	5
Squilla spp.	3.4	2.33	0.0	0.02	7	0.0	0.00	0.0	0.00	1	0.5	0.46	0.0	0.01	5
Micropogonias undulatus	159.6	85.50	10.4	4.91	7	1.1	0.00	0.1	0.00	1	0.0	0.00	0.0	0.00	5
Stenotomus caprinus	186.3	48.48	8.7	2.04	7	282.5	0.00	13.2	0.00	1	266.3	49.41	13.5	2.61	5
Chloroscombrus chrysurus	19.0	13.77	0.8	0.57	7	38.2	0.00	2.2	0.00	1	0.0	0.00	0.0	0.00	5
Trachurus lathami	86.5	37.75	3.0	1.30	7	7.6	0.00	0.3	0.00	1	138.9	74.42	6.9	3.49	5
Upeneus parvus	37.0	20.72	1.1	0.64	7	24.0	0.00	0.9	0.00	1	184.4	59.63	5.4	2.02	5
Cynoscion spp.	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	5
Peprilus burti	29.4	15.88	2.4	1.26	7	33.8	0.00	2.7	0.00	1	31.1	9.54	2.4	0.72	5
Leiostomus xanthurus	37.9	24.60	4.1	2.65	7	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	5
Squid	4.7	3.11	0.0	0.02	7	8.7	0.00	0.0	0.00	1	22.5	8.00	0.7	0.37	5

Table 20b

Statistical Zone 16

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, and oxygen in ppm. No trawl samples were taken in depths less than 6 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	0	27.5	5.72	6	105.7	21.61	7	56.1	9.66	7	25.8	0	1	64.4	9.89	5
Total finfish kg	0.0	0	0	15.3	6.01	6	101.1	21.25	7	52.1	9.03	7	24.3	0	1	59.6	11.28	5
Total crustacean kg	0.0	0	0	5.3	0.74	6	4.1	0.99	7	3.5	0.94	7	0.0	0	1	2.1	1.39	5
Total others kg	0.0	0	0	7.1	3.68	6	0.4	0.39	7	0.5	0.2	7	1.5	0	1	2.5	0.87	5
Surface temperature	0.0	0	0	24.6	0.12	5	25.1	0.21	6	25.8	0.07	5	26.2	0.42	2	26.6	0.1	4
Midwater temperature	0.0	0	0	24.6	0.1	5	25.1	0.21	6	25.6	0.15	5	26.2	0.37	2	26.4	0.14	4
Bottom temperature	0.0	0	0	24.8	0.13	5	25.1	0.17	6	25.7	0.11	5	26.0	0.17	2	20.9	0.24	4
Surface salinity	0.0	0	0	34.8	0.26	5	36.0	0.27	6	36.5	0.03	5	36.5	0.02	2	36.5	0.01	4
Midwater salinity	0.0	0	0	34.9	0.24	5	35.9	0.3	6	36.5	0.05	5	36.5	0.02	2	36.5	0.02	4
Bottom salinity	0.0	0	0	35.2	0.25	5	35.6	0.58	6	36.5	0.04	5	36.5	0.02	2	36.5	0	4
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	0.0	0	0	6.2	0.08	5	5.3	0.69	6	6.2	0.04	5	6.1	0.05	2	6.2	0	4
Midwater oxygen	0.0	0	0	6.2	0.06	5	5.0	0.83	6	6.2	0.04	5	6.1	0.05	2	6.3	0	4
Bottom oxygen	0.0	0	0	6.0	0.14	5	5.5	0.47	6	6.2	0.02	5	5.8	0.15	2	3.7	0.13	4

Table 21a

Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	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	14	5.8	3.09	0.1	0.06	9	37.0	13.34	0.7	0.20	12
Penaeus setiferus	79.0	38.70	0.9	0.48	14	45.5	14.39	1.2	0.37	9	0.0	0.00	0.0	0.00	12
Portunus spinicarpus	0.0	0.00	0.0	0.00	14	0.0	0.00	0.0	0.00	9	11.6	6.17	0.0	0.02	12
Xiphopenaeus kroyeri	182.7	55.43	0.6	0.18	14	2.0	2.00	0.0	0.00	9	0.0	0.00	0.0	0.00	12
Sicyonia brevirostris	0.0	0.00	0.0	0.00	14	0.0	0.00	0.0	0.00	9	25.2	11.33	0.2	0.08	12
Trachypenaeus similis	28.6	25.09	0.0	0.02	14	9.4	3.31	0.0	0.01	9	21.8	7.67	0.1	0.02	12
Stenotomus caprinus	0.0	0.00	0.0	0.00	14	0.3	0.27	0.0	0.01	9	69.4	20.42	4.9	1.49	12
Micropogonias undulatus	0.5	0.54	0.0	0.05	14	3.8	2.52	0.3	0.20	9	213.0	135.15	12.4	7.14	12
Cynoscion spp.	102.3	102.32	0.3	0.29	14	52.5	23.22	0.2	0.09	9	0.0	0.00	0.0	0.00	12
Brevoortia patronus	51.5	34.75	1.6	1.20	14	5.3	2.78	0.3	0.24	9	6.4	6.38	0.6	0.62	12
Stellifer lanceolatus	132.1	81.23	1.0	0.66	14	47.6	27.36	0.5	0.29	9	0.0	0.00	0.0	0.00	12
Lutjanus synagris	0.0	0.00	0.0	0.00	14	0.8	0.80	0.0	0.03	9	28.3	8.95	1.9	0.60	12
Serranus atrobranchus	0.0	0.00	0.0	0.00	14	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	12
Anchoa hepsetus	0.4	0.43	0.0	0.00	14	50.8	17.76	0.7	0.28	9	0.6	0.60	0.0	0.00	12
Squid	18.1	5.61	0.2	0.05	14	58.6	17.60	0.5	0.12	9	10.6	4.33	0.1	0.04	12

Table 21a (continued)

Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	61.3	20.07	2.2	0.74	4	24.2	6.71	1.0	0.29	8	32.6	21.98	1.5	1.18	2
Penaeus setiferus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	2
Portunus spinicarpus	82.0	30.04	0.6	0.23	4	21.5	9.08	0.2	0.09	8	16.4	16.36	0.2	0.20	2
Xiphopenaeus kroyeri	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	2
Sicyonia brevirostris	26.1	9.25	0.4	0.14	4	12.8	7.26	0.3	0.14	8	0.0	0.00	0.0	0.00	2
Trachypenaeus similis	3.2	1.78	0.0	0.00	4	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	2
Stenotomus caprinus	120.3	24.80	7.1	1.78	4	221.8	56.92	12.1	3.29	8	151.5	35.04	9.7	2.44	2
Micropogonias undulatus	32.6	19.42	3.1	1.49	4	3.2	1.40	0.4	0.17	8	0.0	0.00	0.0	0.00	2
Cynoscion spp.	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	2
Brevoortia patronus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	2
Stellifer lanceolatus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	2
Lutjanus synagris	68.0	27.71	4.1	1.58	4	19.4	6.04	1.2	0.33	8	0.0	0.00	0.0	0.00	2
Serranus atrobranchus	54.4	28.44	0.4	0.25	4	22.5	13.51	0.2	0.11	8	84.2	48.90	1.1	0.76	2
Anchoa hepsetus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	2
Squid	4.1	3.40	0.0	0.04	4	7.9	5.32	0.0	0.02	8	19.2	12.61	0.3	0.12	2

Table 21b

Statistical Zone 17

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	50.3	14.83	14	33.0	7.18	9	32.8	10.58	12	31.9	7.16	4	36.5	4.72	8	42.1	16.42	2
Total finfish kg	3.4	1.85	14	8.3	2.36	9	31.5	10.42	12	24.9	5.32	4	29.6	4.32	8	35.8	13.32	2
Total crustacean kg	1.7	0.74	14	1.4	0.39	9	1.1	0.34	12	3.2	1.03	4	1.6	0.46	8	1.7	1.74	2
Total others kg	44.7	13.34	14	22.6	6.84	9	0.1	0.09	12	3.7	1.8	4	5.2	2.07	8	4.6	1.37	2
Surface temperature	18.0	0.92	14	23.4	0.92	8	25.0	0.13	10	26.0	0.27	3	26.7	0.11	2	26.5	0.12	3
Midwater temperature	17.9	0.88	14	23.5	0.93	8	25.0	0.12	10	26.1	0.24	3	26.5	0.09	2	26.4	0.15	3
Bottom temperature	17.9	0.84	14	23.6	0.96	8	25.2	0.13	10	25.8	0.11	3	25.8	0.06	2	22.1	0.5	3
Surface salinity	31.2	0.41	14	33.4	0.97	8	35.9	0.18	10	36.5	0.03	3	36.5	0.04	2	36.5	0.04	3
Midwater salinity	31.5	0.47	14	33.6	0.89	8	35.9	0.16	10	36.6	0.01	3	36.6	0.01	2	36.5	0.04	3
Bottom salinity	31.8	0.47	14	34.4	0.66	8	36.2	0.14	10	36.6	0.01	3	36.6	0	2	36.4	0.01	3
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	7.5	0.19	14	6.7	0.15	8	6.3	0.05	10	6.2	0.03	3	6.2	0	2	6.2	0	3
Midwater oxygen	7.3	0.15	14	6.7	0.16	8	6.2	0.07	10	6.2	0.03	3	6.2	0	2	6.3	0.03	3
Bottom oxygen	7.0	0.21	14	6.3	0.21	8	6.1	0.08	10	6.1	0.06	3	5.7	0.1	2	4.8	0.42	3

Table 22a

Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Xiphopenaeus kroyeri	2046.9	698.44	6.4	2.26	7	124.2	87.55	0.6	0.40	10	0.0	0.00	0.0	0.00	4
Portunus spinicarpus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	10	5.0	3.15	0.0	0.01	4
Penaeus aztecus	0.0	0.00	0.0	0.00	7	5.0	4.98	0.1	0.06	10	27.2	15.71	0.8	0.47	4
Penaeus setiferus	134.6	30.51	0.9	0.19	7	20.4	5.81	0.2	0.07	10	0.0	0.00	0.0	0.00	4
Sicyonia brevirostris	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	10	2.3	1.61	0.0	0.03	4
Trachypenaeus similis	0.9	0.86	0.0	0.00	7	41.4	25.94	0.1	0.06	10	9.5	7.83	0.0	0.03	4
Stellifer lanceolatus	696.9	231.51	7.8	3.23	7	39.6	16.25	0.3	0.11	10	0.0	0.00	0.0	0.00	4
Stenotomus caprinus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	10	103.3	60.16	6.3	3.66	4
Upeneus parvus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	10	0.0	0.00	0.0	0.00	4
Micropogonias undulatus	0.0	0.00	0.0	0.00	7	0.5	0.38	0.0	0.02	10	123.5	72.73	8.3	4.81	4
Trachurus lathami	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	10	0.0	0.00	0.0	0.00	4
Diplectrum bivittatum	0.0	0.00	0.0	0.00	7	4.1	2.79	0.1	0.05	10	53.5	38.56	0.7	0.43	4
Lutjanus synagris	0.0	0.00	0.0	0.00	7	0.6	0.62	0.0	0.02	10	50.3	29.77	2.7	1.67	4
Lutjanus campechanus	0.0	0.00	0.0	0.00	7	0.4	0.41	0.0	0.03	10	54.4	20.47	3.1	1.14	4
Squid	0.0	0.00	0.0	0.00	7	17.7	7.92	0.1	0.04	10	1.4	0.83	0.1	0.07	4

Table 22a (continued)

Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Xiphopenaeus kroyeri	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Portunus spinicarpus	439.9	161.30	3.0	1.11	6	2.3	0.70	0.0	0.01	5	30.9	28.83	0.2	0.18	3
Penaeus aztecus	76.7	18.89	2.6	0.64	6	2.9	1.55	0.1	0.05	5	32.9	15.21	1.3	0.66	3
Penaeus setiferus	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Sicyonia brevirostris	33.0	16.44	0.4	0.24	6	0.2	0.22	0.0	0.00	5	0.5	0.50	0.0	0.00	3
Trachypenaeus similis	7.3	5.42	0.0	0.02	6	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Stellifer lanceolatus	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	3
Stenotomus caprinus	33.2	8.01	2.7	1.20	6	21.3	7.73	1.1	0.39	5	104.2	31.94	5.7	1.59	3
Upeneus parvus	12.1	5.66	0.4	0.19	6	37.2	10.71	1.2	0.31	5	177.5	92.95	5.7	2.53	3
Micropogonias undulatus	48.4	22.39	3.3	1.52	6	0.2	0.22	0.0	0.03	5	3.3	3.27	0.2	0.23	3
Trachurus lathami	0.2	0.18	0.0	0.02	6	15.8	14.87	0.4	0.36	5	164.3	157.36	7.1	6.83	3
Diplectrum bivittatum	47.6	22.12	0.4	0.22	6	0.0	0.00	0.0	0.00	5	0.5	0.50	0.0	0.02	3
Lutjanus synagris	33.3	9.88	1.8	0.55	6	14.1	7.10	0.8	0.36	5	0.0	0.00	0.0	0.00	3
Lutjanus campechanus	18.5	5.00	0.8	0.22	6	18.5	6.25	1.4	0.31	5	18.2	16.73	0.9	0.87	3
Squid	7.5	7.45	0.0	0.02	6	3.3	3.27	0.0	0.01	5	44.3	32.79	1.3	1.19	3

Table 22b

Statistical Zone 18

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	20.3	7.48	7	84.5	38.01	10	28.2	11.05	4	24.0	4.89	6	13.2	2.56	5	48.1	20.32	3
Total finfish kg	11.7	5.45	7	1.7	0.82	10	27.2	10.44	4	16.7	5.05	6	12.4	2.59	5	44.3	19.72	3
Total crustacean kg	7.8	2.55	7	1.3	0.6	10	1.2	0.72	4	6.7	1.73	6	0.2	0.2	5	1.9	0.76	3
Total others kg	0.8	0.5	7	81.2	37.96	10	0.1	0.12	4	0.5	0.29	6	0.4	0.27	5	1.7	1.39	3
Surface temperature	18.0	0.71	7	19.9	1	12	25.5	0.13	4	26.0	0.09	5	26.6	0	1	26.5	0.1	4
Midwater temperature	18.0	0.68	7	20.0	0.99	12	25.5	0.13	4	26.0	0.1	5	26.5	0	1	26.3	0.07	4
Bottom temperature	17.9	0.65	7	20.1	0.97	12	25.5	0.11	4	25.8	0.08	5	25.8	0	1	24.4	1.03	4
Surface salinity	29.5	0.16	7	33.7	0.34	12	36.4	0.12	4	36.6	0.01	5	36.6	0	1	36.6	0.01	4
Midwater salinity	29.4	0.14	7	34.0	0.28	12	36.3	0.12	4	36.6	0.01	5	36.6	0	1	36.6	0.01	4
Bottom salinity	29.5	0.16	7	34.1	0.27	12	36.4	0.12	4	36.6	0.02	5	36.6	0	1	36.5	0.04	4
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.8	0.17	7	6.6	0.07	12	6.3	0.03	4	6.2	0.04	5	6.2	0	1	6.2	0.02	4
Midwater oxygen	6.8	0.18	7	6.6	0.06	12	6.3	0.03	4	6.2	0.02	5	6.2	0	1	6.1	0.06	4
Bottom oxygen	6.8	0.21	7	6.5	0.08	12	6.3	0.06	4	6.1	0.04	5	5.9	0	1	5.4	0.34	4

Table 23a

Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	0.9	0.86	0.0	0.00	7	66.6	32.67	0.1	0.06	19	238.6	102.02	0.7	0.28	15
Penaeus aztecus	2.8	2.31	0.0	0.00	7	18.4	9.27	0.2	0.11	19	189.6	46.68	3.3	0.77	15
Callinectes similis	2.2	1.51	0.0	0.00	7	45.5	25.66	0.2	0.15	19	69.1	25.56	0.7	0.17	15
Squilla spp.	17.2	11.94	0.2	0.19	7	58.0	19.85	0.7	0.26	19	38.5	10.72	0.3	0.10	15
Sicyonia dorsalis	0.0	0.00	0.0	0.00	7	6.3	4.76	0.0	0.00	19	78.6	33.32	0.2	0.11	15
Portunus gibbesii	13.2	7.61	0.1	0.05	7	22.8	9.71	0.1	0.04	19	56.2	17.58	0.2	0.06	15
Chloroscombrus chrysurus	59.6	34.39	0.1	0.11	7	618.0	469.97	1.8	1.24	19	260.0	92.90	5.3	1.88	15
Diplectrum bivittatum	0.0	0.00	0.0	0.00	7	0.9	0.54	0.0	0.02	19	229.5	60.39	3.1	0.80	15
Cynoscion spp.	183.5	138.74	1.2	0.84	7	170.0	101.65	0.8	0.53	19	22.3	20.59	0.1	0.07	15
Syacium gunteri	0.0	0.00	0.0	0.00	7	19.5	11.34	0.3	0.16	19	103.0	22.02	1.3	0.27	15
Stenotomus caprinus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	19	13.8	7.76	0.3	0.18	15
Peprilus burti	6.2	3.82	0.2	0.21	7	11.4	5.59	0.3	0.19	19	47.6	25.66	2.7	1.26	15
Upeneus parvus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	19	9.0	8.39	0.2	0.20	15
Synodus foetens	0.0	0.00	0.0	0.00	7	2.6	1.94	0.1	0.05	19	36.8	15.24	2.0	0.76	15
Squid	6.0	5.07	0.0	0.00	7	16.4	3.58	0.2	0.05	19	34.2	12.25	0.2	0.05	15

Table 23a (continued)

Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	1.1	0.77	0.0	0.00	6	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Penaeus aztecus	29.9	26.41	1.1	0.81	6	53.0	25.54	2.1	0.99	3	0.0	0.00	0.0	0.00	0
Callinectes similis	21.8	7.15	0.6	0.21	6	22.6	17.19	0.7	0.60	3	0.0	0.00	0.0	0.00	0
Squilla spp.	2.8	2.83	0.0	0.03	6	2.0	1.32	0.0	0.02	3	0.0	0.00	0.0	0.00	0
Sicyonia dorsalis	11.2	7.10	0.0	0.03	6	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Portunus gibbesii	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	228.2	92.82	8.0	3.31	6	1.3	0.67	0.1	0.04	3	0.0	0.00	0.0	0.00	0
Diplectrum bivittatum	96.4	42.67	1.6	0.78	6	5.9	5.95	0.0	0.02	3	0.0	0.00	0.0	0.00	0
Cynoscion spp.	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Syacium gunteri	51.3	21.34	0.9	0.42	6	0.5	0.54	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	67.8	44.17	0.9	0.36	6	125.8	46.79	6.1	2.19	3	0.0	0.00	0.0	0.00	0
Peprilus burti	37.7	16.41	2.7	1.19	6	6.5	6.55	0.4	0.45	3	0.0	0.00	0.0	0.00	0
Upeneus parvus	50.6	23.33	1.1	0.46	6	122.5	120.92	3.6	3.52	3	0.0	0.00	0.0	0.00	0
Synodus foetens	57.7	23.30	4.1	1.34	6	9.6	3.28	1.7	0.66	3	0.0	0.00	0.0	0.00	0
Squid	35.1	16.30	0.1	0.05	6	2.9	1.58	0.1	0.10	3	0.0	0.00	0.0	0.00	0

Table 23b

Statistical Zone 19

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	143.8	53.32	7	51.5	16.77	19	28.1	2.74	15	31.6	4.31	6	36.6	10.52	3	0.0	0	0
Total finfish kg	11.3	4.36	7	7.8	2.11	19	21.1	3.43	15	26.5	3.97	6	30.7	11.98	3	0.0	0	0
Total crustacean kg	2.7	0.84	7	1.9	0.69	19	6.0	1.09	15	2.5	0.95	6	4.9	1.48	3	0.0	0	0
Total others kg	129.7	52.25	7	41.4	17.34	19	0.8	0.6	15	2.6	2.56	6	0.7	0.14	3	0.0	0	0
Surface temperature	20.1	1.27	7	21.0	0.65	19	24.9	0.14	15	25.9	0.44	4	26.9	0.1	2	26.8	0.06	2
Midwater temperature	20.0	1.23	7	21.1	0.63	19	24.9	0.13	15	25.7	0.46	4	26.7	0.16	2	26.6	0.04	2
Bottom temperature	19.8	1.22	7	20.9	0.68	19	23.7	1.31	15	25.5	0.33	4	27.0	1.12	2	25.9	0.06	2
Surface salinity	30.9	0.48	7	31.9	0.32	19	35.8	0.13	15	36.2	0.26	4	36.6	0.01	2	36.6	0	2
Midwater salinity	31.1	0.53	7	32.3	0.29	19	35.8	0.13	15	36.3	0.21	4	36.6	0.02	2	36.6	0	2
Bottom salinity	31.2	0.55	7	32.9	0.29	19	36.0	0.13	15	36.3	0.19	4	36.4	0.26	2	36.6	0.02	2
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.9	0.35	7	6.9	0.15	19	6.4	0.04	14	6.3	0.09	4	6.1	0	2	6.1	0.05	2
Midwater oxygen	6.7	0.37	7	6.8	0.14	19	6.3	0.07	15	6.3	0.08	4	6.1	0.05	2	6.1	0.05	2
Bottom oxygen	6.7	0.35	7	6.5	0.14	19	6.8	0.5	15	6.0	0.07	4	5.8	0.15	2	5.9	0.05	2

Table 24a

Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	0.0	0.00	0.0	0.00	3	13.0	7.04	0.0	0.00	12	165.4	65.06	0.4	0.15	19
Penaeus aztecus	0.0	0.00	0.0	0.00	3	18.8	9.33	0.1	0.06	12	147.0	40.16	2.1	0.60	19
Portunus gibbesii	2.0	2.00	0.0	0.00	3	23.1	8.91	0.1	0.04	12	62.2	29.08	0.3	0.15	19
Callinectes similis	0.0	0.00	0.0	0.00	3	3.4	1.69	0.0	0.02	12	13.4	3.42	0.2	0.06	19
Trachypenaeus constrictus	4.0	4.00	0.0	0.00	3	107.8	78.14	0.2	0.15	12	0.0	0.00	0.0	0.00	19
Sicyonia dorsalis	0.0	0.00	0.0	0.00	3	0.5	0.50	0.0	0.00	12	1.7	1.07	0.0	0.00	19
Chloroscombrus chrysurus	2.0	2.00	0.0	0.00	3	431.7	242.54	2.6	1.82	12	252.3	147.77	4.7	2.75	19
Serranus atrobranchus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	12	26.9	26.63	0.3	0.32	19
Cynoscion spp.	0.0	0.00	0.0	0.00	3	169.0	167.28	0.4	0.42	12	33.8	17.31	0.0	0.02	19
Diplectrum bivittatum	0.0	0.00	0.0	0.00	3	1.0	1.00	0.0	0.02	12	105.8	33.88	1.3	0.42	19
Cynoscion nothus	376.0	202.77	1.8	0.95	3	58.0	23.59	0.5	0.15	12	94.2	33.29	1.4	0.39	19
Pristipomoides aquilonaris	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	12	0.0	0.00	0.0	0.00	19
Syacium gunteri	0.0	0.00	0.0	0.00	3	2.6	1.46	0.0	0.01	12	58.9	10.43	0.7	0.11	19
Saurida brasiliensis	0.0	0.00	0.0	0.00	3	2.0	2.05	0.0	0.02	12	31.1	8.65	0.1	0.04	19
Squid	64.0	52.46	0.4	0.36	3	22.3	8.75	0.2	0.07	12	69.8	22.16	0.4	0.10	19

Table 24a (continued)

Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Trachypenaeus similis	181.2	90.85	0.5	0.31	5	10.9	8.33	0.0	0.03	3	2.2	2.18	0.0	0.00	2
Penaeus aztecus	97.3	41.59	2.1	0.75	5	69.1	15.14	1.7	0.57	3	11.2	4.11	0.5	0.19	2
Portunus gibbesii	1.3	0.53	0.0	0.00	5	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Callinectes similis	68.9	30.07	1.8	0.85	5	50.3	4.32	1.5	0.21	3	0.0	0.00	0.0	0.00	2
Trachypenaeus constrictus	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	2
Sicyonia dorsalis	129.5	96.94	0.3	0.24	5	3.5	1.61	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Chloroscombrus chrysurus	78.6	48.68	2.9	1.80	5	21.1	14.58	0.9	0.67	3	0.0	0.00	0.0	0.00	2
Serranus atrobranchus	246.7	155.10	1.8	1.10	5	238.0	140.80	2.1	1.07	3	682.3	20.09	8.0	1.61	2
Cynoscion spp.	0.3	0.30	0.0	0.00	5	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Diplectrum bivittatum	153.7	70.87	2.1	0.92	5	1.8	1.82	0.1	0.07	3	0.0	0.00	0.0	0.00	2
Cynoscion nothus	12.2	8.33	1.0	0.61	5	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	2
Pristipomoides aquilonaris	4.5	3.00	0.0	0.02	5	22.5	16.11	0.1	0.03	3	404.7	44.73	25.0	5.46	2
Syacium gunteri	19.7	2.76	0.4	0.05	5	2.5	1.59	0.0	0.02	3	0.0	0.00	0.0	0.00	2
Saurida brasiliensis	18.5	9.36	0.1	0.03	5	58.5	37.34	0.3	0.14	3	0.0	0.00	0.0	0.00	2
Squid	24.6	18.58	0.1	0.07	5	213.4	126.30	1.0	0.60	3	1.1	1.09	0.1	0.07	2

Table 24b

Statistical Zone 20

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	13.6	8.33	3	48.6	25.81	12	20.8	3.53	19	23.2	1.2	5	20.3	2.54	3	47.4	1.68	2
Total finfish kg	5.5	3.15	3	10.4	2.12	12	14.9	3.3	19	17.8	2.24	5	15.8	2.87	3	46.1	1.99	2
Total crustacean kg	0.0	0	3	1.4	0.43	12	3.6	0.93	19	5.3	1.75	5	3.5	0.54	3	0.9	0.09	2
Total others kg	7.3	7.27	3	36.3	26.02	12	2.5	1.46	19	0.2	0.19	5	1.2	0.76	3	0.0	0	2
Surface temperature	19.3	1.57	4	21.4	0.8	12	23.9	0.52	18	26.5	0.05	3	26.7	0.16	2	27.8	1.02	3
Midwater temperature	19.4	1.53	4	21.4	0.78	12	23.9	0.47	18	26.4	0.13	3	26.7	0.24	2	26.3	0.29	3
Bottom temperature	19.4	1.53	4	21.4	0.78	12	23.6	0.45	18	25.7	0.13	3	26.2	0.16	2	21.8	2.36	3
Surface salinity	31.6	0.84	4	31.9	0.25	12	35.0	0.38	18	36.6	0.01	3	36.6	0.01	2	36.5	0.03	3
Midwater salinity	31.6	0.82	4	32.2	0.33	12	33.1	1.95	18	36.6	0.03	3	36.6	0.01	2	36.5	0.02	3
Bottom salinity	31.7	0.7	4	32.6	0.37	12	35.1	0.34	18	36.6	0.02	3	36.7	0	2	36.5	0.06	3
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	9.4	0.26	4	8.2	0.33	12	7.1	0.28	18	6.2	0.03	3	6.1	0.05	2	6.1	0.03	3
Midwater oxygen	9.5	0.28	4	8.3	0.35	12	7.1	0.29	18	6.2	0.06	3	6.1	0.05	2	6.2	0.03	3
Bottom oxygen	9.4	0.29	4	8.1	0.41	12	7.0	0.3	18	5.8	0.12	3	5.7	0.1	2	4.5	0.67	3

Table 25a

Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	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	1	53.6	43.47	0.5	0.36	10	260.4	66.27	3.7	0.98	16
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	1	143.5	83.01	0.4	0.22	10	280.4	154.93	0.5	0.16	16
Portunus gibbesii	150.0	0.00	0.8	0.00	1	11.6	5.83	0.0	0.03	10	219.9	108.62	1.0	0.41	16
Trachypenaeus similis	0.0	0.00	0.0	0.00	1	3.4	2.51	0.0	0.01	10	161.4	94.84	0.3	0.18	16
Portunus spinicarpus	0.0	0.00	0.0	0.00	1	0.6	0.62	0.0	0.00	10	10.4	7.35	0.0	0.03	16
Callinectes similis	54.0	0.00	1.1	0.00	1	4.3	3.07	0.1	0.08	10	29.6	7.98	0.6	0.19	16
Cynoscion spp.	474.0	0.00	0.5	0.00	1	208.0	139.13	1.3	0.87	10	324.2	167.34	2.5	1.31	16
Serranus atrobranchus	0.0	0.00	0.0	0.00	1	0.2	0.21	0.0	0.00	10	76.2	51.82	0.7	0.44	16
Chloroscombrus chrysurus	486.0	0.00	9.0	0.00	1	52.5	35.50	0.3	0.22	10	147.9	81.13	2.1	1.14	16
Saurida brasiliensis	0.0	0.00	0.0	0.00	1	0.2	0.21	0.0	0.00	10	36.5	16.94	0.2	0.09	16
Syacium gunteri	60.0	0.00	0.3	0.00	1	10.2	4.69	0.1	0.05	10	135.7	36.53	1.7	0.48	16
Diplectrum bivittatum	0.0	0.00	0.0	0.00	1	1.6	1.05	0.0	0.01	10	60.5	27.07	0.7	0.41	16
Upeneus parvus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	10	2.5	2.52	0.1	0.07	16
Pristipomoides aquilonaris	0.0	0.00	0.0	0.00	1	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	1	1.2	0.80	0.0	0.00	10	31.2	12.30	0.3	0.10	16

Table 25a (continued)

Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken.

	21-30 FM					31-40 FM					>40 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Penaeus aztecus	96.3	44.04	1.8	0.78	4	239.6	96.25	5.9	2.32	4	84.3	35.60	4.2	2.08	3
Trachypenaeus constrictus	1.3	1.30	0.0	0.00	4	0.0	0.00	0.0	0.00	4	1.6	1.60	0.0	0.00	3
Portunus gibbesii	17.9	17.89	0.1	0.08	4	0.0	0.00	0.0	0.00	4	2.2	2.22	0.0	0.03	3
Trachypenaeus similis	98.5	95.94	0.4	0.43	4	49.6	29.88	0.2	0.14	4	0.0	0.00	0.0	0.00	3
Portunus spinicarpus	2.1	1.49	0.0	0.00	4	243.8	131.08	1.3	0.76	4	107.2	100.65	0.4	0.36	3
Callinectes similis	62.7	45.54	2.2	1.57	4	19.8	11.53	0.8	0.44	4	3.0	1.95	0.1	0.03	3
Cynoscion spp.	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	3
Serranus atrobranchus	98.2	26.69	0.9	0.24	4	295.3	95.23	3.6	0.89	4	366.7	151.70	4.9	2.51	3
Chloroscombrus chrysurus	214.0	154.75	4.8	3.11	4	12.2	11.15	0.5	0.43	4	3.3	3.33	0.2	0.20	3
Saurida brasiliensis	133.4	96.26	0.6	0.40	4	45.7	31.32	0.2	0.19	4	170.0	103.30	0.6	0.35	3
Syacium gunteri	94.2	65.73	1.4	0.94	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	3
Diplectrum bivittatum	180.7	85.88	2.5	1.13	4	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	3
Upeneus parvus	51.9	28.57	1.6	0.98	4	37.5	25.46	1.3	0.93	4	356.8	177.01	10.0	4.87	3
Pristipomoides aquilonaris	27.6	25.36	0.3	0.29	4	201.3	134.15	1.7	0.98	4	297.4	115.91	13.0	3.24	3
Squid	109.9	44.48	0.6	0.25	4	94.5	90.13	0.8	0.59	4	140.1	112.28	2.1	1.54	3

Table 25b

Statistical Zone 21

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, 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	40.9	0	1	14.6	4.54	10	35.2	6.92	16	35.8	5.87	4	38.0	3.66	4	62.7	12.56	3
Total finfish kg	32.7	0	1	7.3	2.72	10	24.5	5.3	16	30.1	7.05	4	23.7	1.54	4	54.7	11.61	3
Total crustacean kg	2.7	0	1	2.1	1.01	10	8.6	1.87	16	4.9	3.15	4	10.5	3.58	4	5.1	2.54	3
Total others kg	5.5	0	1	4.7	3.47	10	2.4	0.96	16	0.7	0.27	4	4.0	1.5	4	2.4	1.46	3
Surface temperature	0.0	0	0	21.2	0.66	13	22.5	0.46	16	25.9	0.29	3	27.5	0.28	3	26.9	0.12	3
Midwater temperature	0.0	0	0	21.1	0.62	13	22.7	0.49	16	25.8	0.29	3	27.5	0.27	3	26.8	0.15	3
Bottom temperature	0.0	0	0	21.3	0.54	13	22.7	0.44	16	25.4	0.2	3	27.1	0.05	3	20.9	2.57	3
Surface salinity	0.0	0	0	33.4	0.25	13	34.3	0.2	16	36.5	0.2	3	36.6	0.03	3	36.6	0.02	3
Midwater salinity	0.0	0	0	33.5	0.27	13	35.1	0.25	16	36.7	0.02	3	36.6	0.03	3	36.6	0.02	3
Bottom salinity	0.0	0	0	33.8	0.31	13	35.3	0.24	16	36.6	0.02	3	36.6	0.01	3	36.5	0.12	3
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	0.0	0	0	7.0	0.22	13	6.7	0.08	16	6.4	0.1	3	5.9	0	2	6.1	0.03	3
Midwater oxygen	0.0	0	0	7.1	0.4	13	6.3	0.06	16	6.2	0.03	3	5.9	0	3	6.1	0.09	3
Bottom oxygen	0.0	0	0	7.1	0.66	13	5.8	0.3	16	5.9	0.09	3	5.8	0	2	4.1	0.8	3

Table 26a

Statistical Zone 22

Summary of dominant organisms taken in statistical zone 22 during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. The mean number (NUM) of organisms per hour, the standard error of the mean (SEM) for numbers, the mean weight (WT) in kg per hour, the SEM for weight and the number (N) of samples taken. No trawl samples were taken in depths greater than 5 fm.

	0- 5 FM					6-10 FM					11-20 FM				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Arenaeus cribrarius	18.0	6.00	1.5	0.14	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	417.0	303.00	1.4	0.55	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Conodon nobilis	54.0	6.00	1.1	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Selene vomer	6.0	6.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Lagodon rhomboides	6.0	0.00	0.1	0.14	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Sphoeroides parvus	3.0	3.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Eucinostomus argenteus	3.0	3.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid	3.0	3.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 26b

Statistical Zone 22

Summary of mean total catch and environmental data (X), the standard error of the mean (SEM) and the number (N) of samples taken during the 2000 Fall Shrimp/Groundfish Survey by depth stratum, collected with either a 40-ft or 20-ft trawl. Catch values in kg per hour, temperature in °C, salinity in ppt, chlorophyll in mg/m³, and oxygen in ppm. No trawl samples were taken in depths greater than 5 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	4.1	1.36	2	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish kg	2.7	0	2	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean kg	1.4	1.36	2	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Total others kg	0.0	0	2	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	22.4	0	1	22.5	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Midwater temperature	22.4	0	1	22.5	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Bottom temperature	22.3	0	1	22.6	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface salinity	36.6	0	1	36.4	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Midwater salinity	36.7	0	1	36.7	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Bottom salinity	36.5	0	1	36.5	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface chlorophyll	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface fluorescence	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Surface oxygen	6.5	0	1	6.4	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Midwater oxygen	6.5	0	1	6.4	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
Bottom oxygen	6.5	0	1	6.0	0	1	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0

Table 27. 2000 Reef Fish Survey species composition list, 11 trap stations where a fish trap was used.
Species with a total weight of less than 0.0227 kg (0.05 lb) are indicated on the table as 0.0 kg.

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Finfishes					
Lutjanus campechanus	red snapper	41	24.5	6	54.5
Haemulon aurolineatum	tomtate	27	2.9	3	27.3
Balistes capriscus	gray triggerfish	5	1.5	2	18.2
Lutjanus synagris	lane snapper	1	0.4	1	9.1
Orthopristis chrysoptera	pigfish	1	0.4	1	9.1

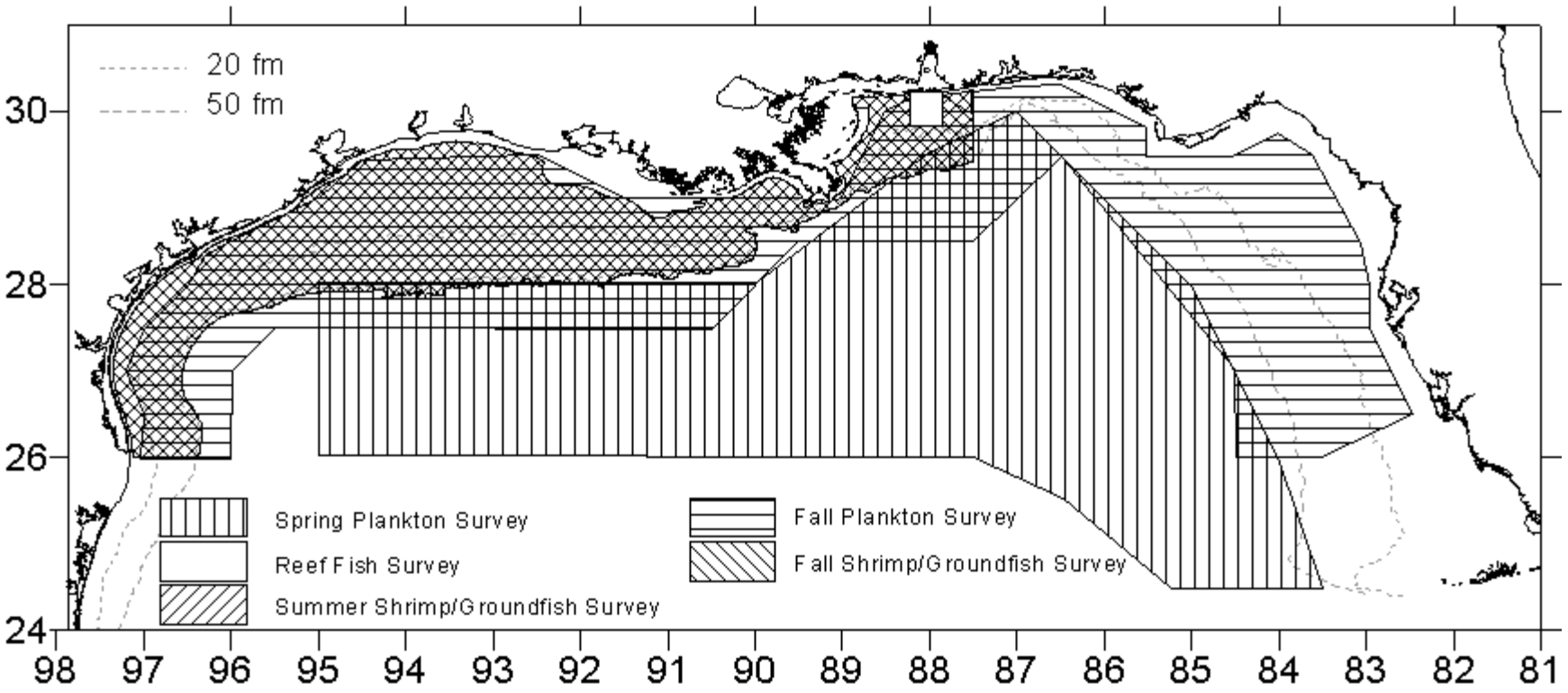

Figure 1. 2000 SEAMAP Surveys, Gulf of Mexico.

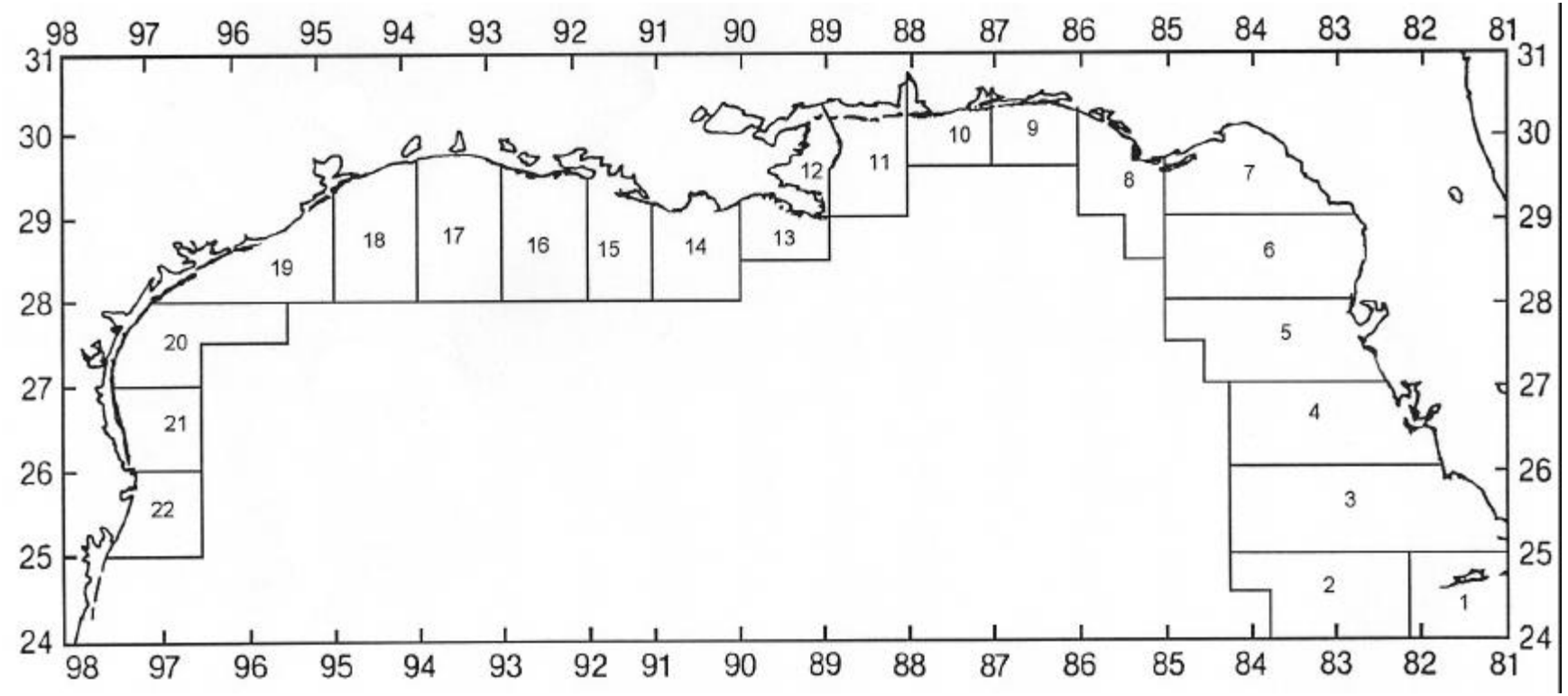

Figure 2. Statistical zones for shrimp in the Gulf of Mexico.

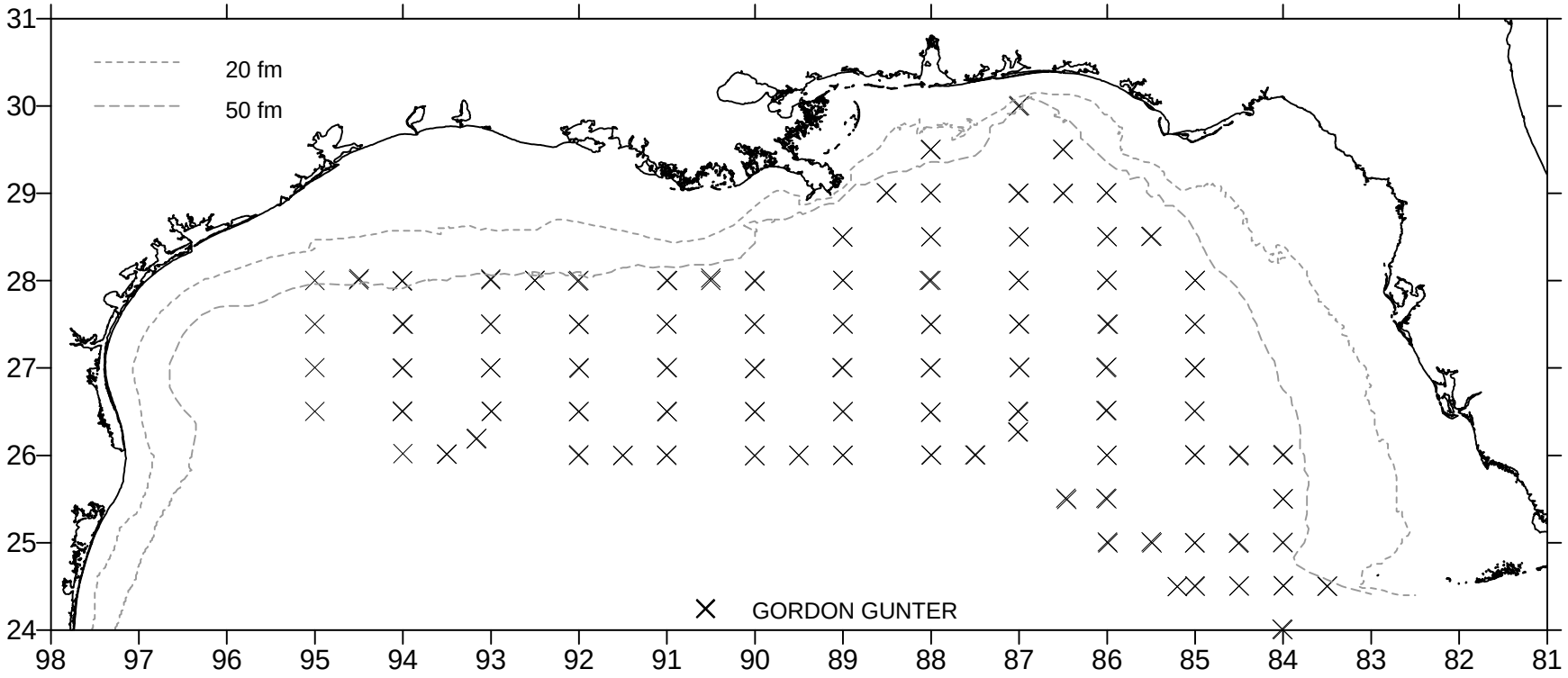

Figure 3. Locations of plankton and environmental stations during the 2000 Spring Plankton Survey.

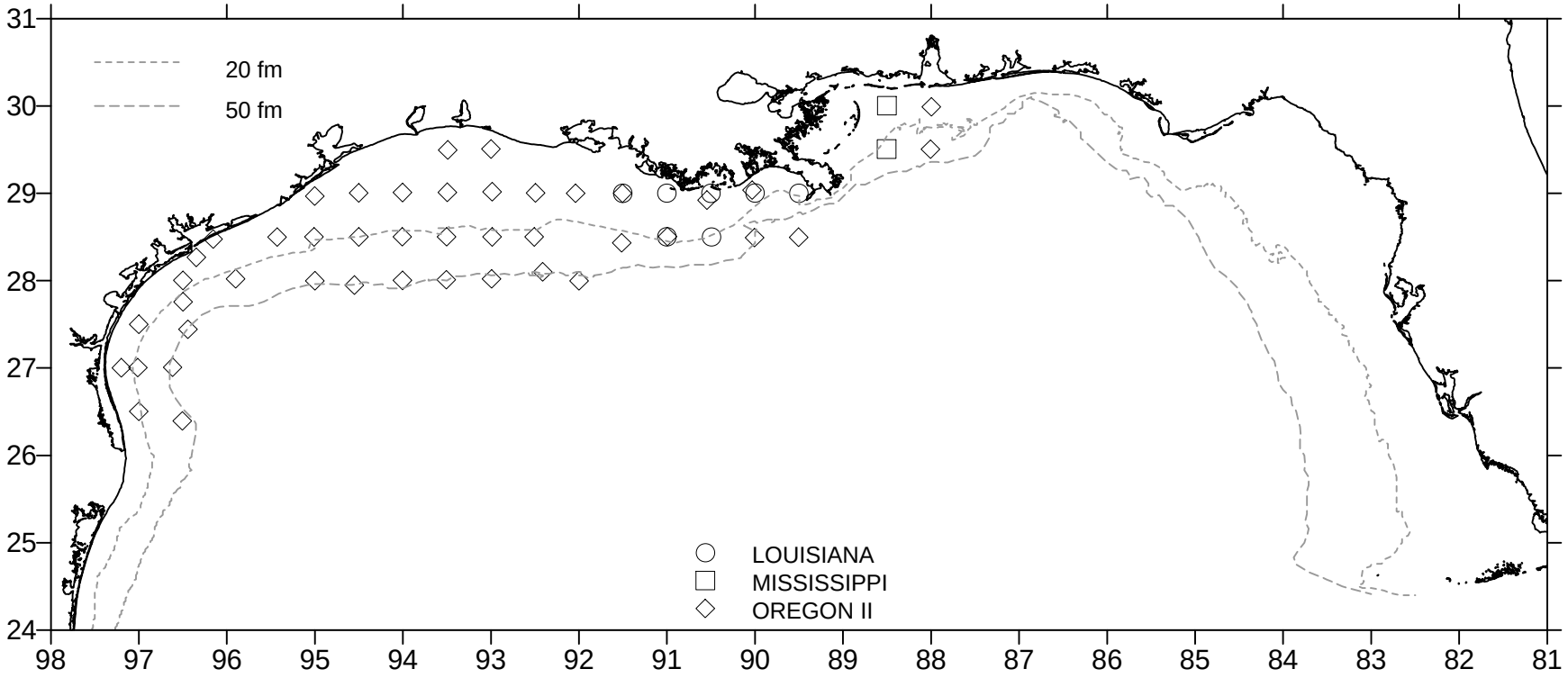

Figure 4. Locations of plankton stations during the 2000 Summer Shrimp/Groundfish Survey.

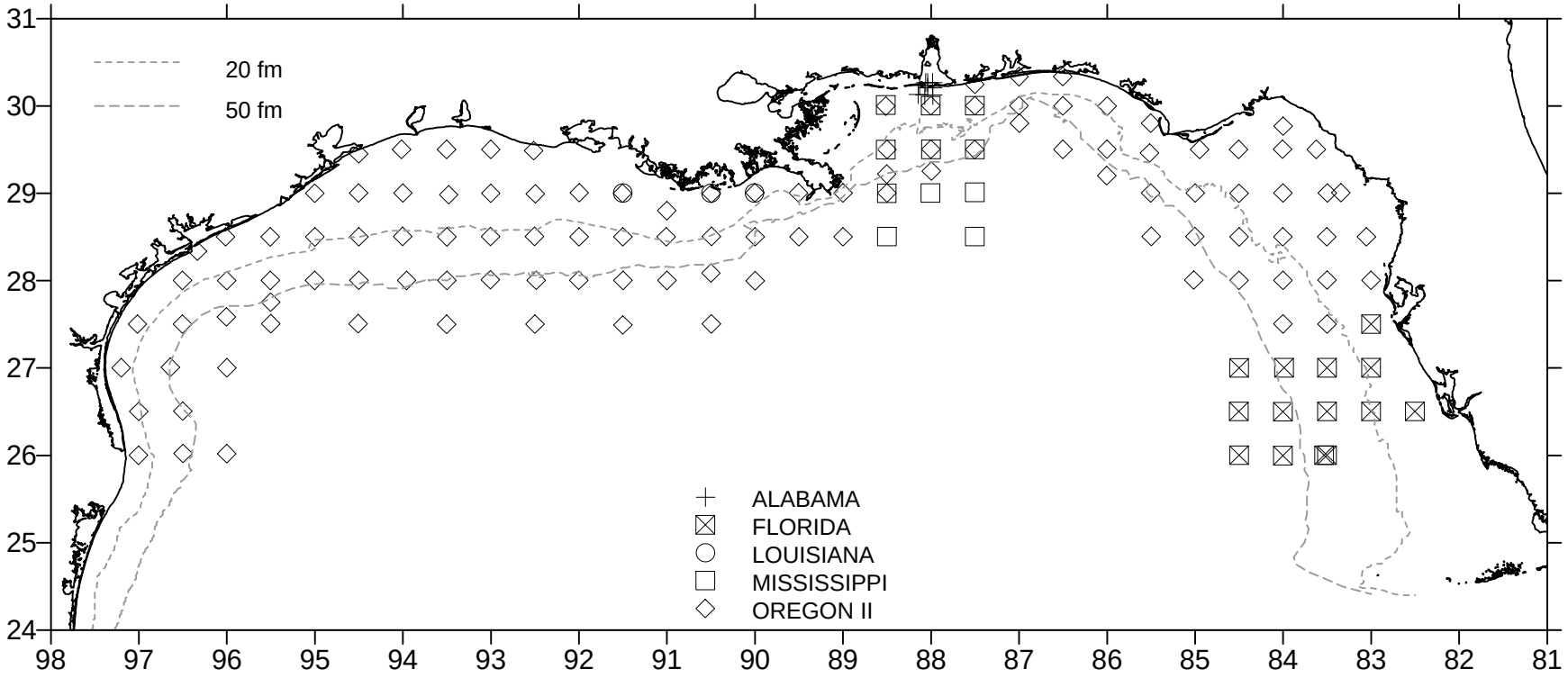

Figure 5. Locations of plankton and environmental stations during the 2000 Fall Plankton Survey.

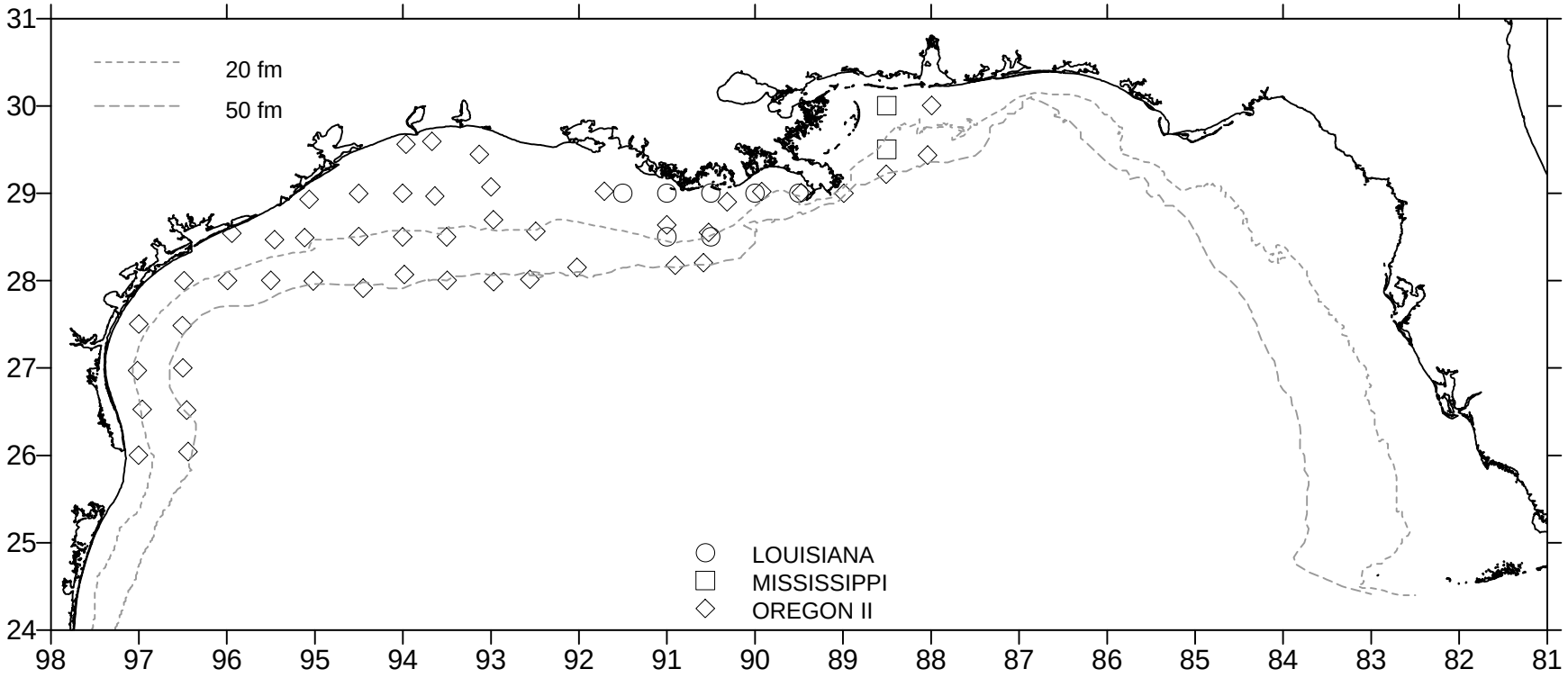

Figure 6. Locations of plankton stations during the 2000 Fall Shrimp/Groundfish Survey.

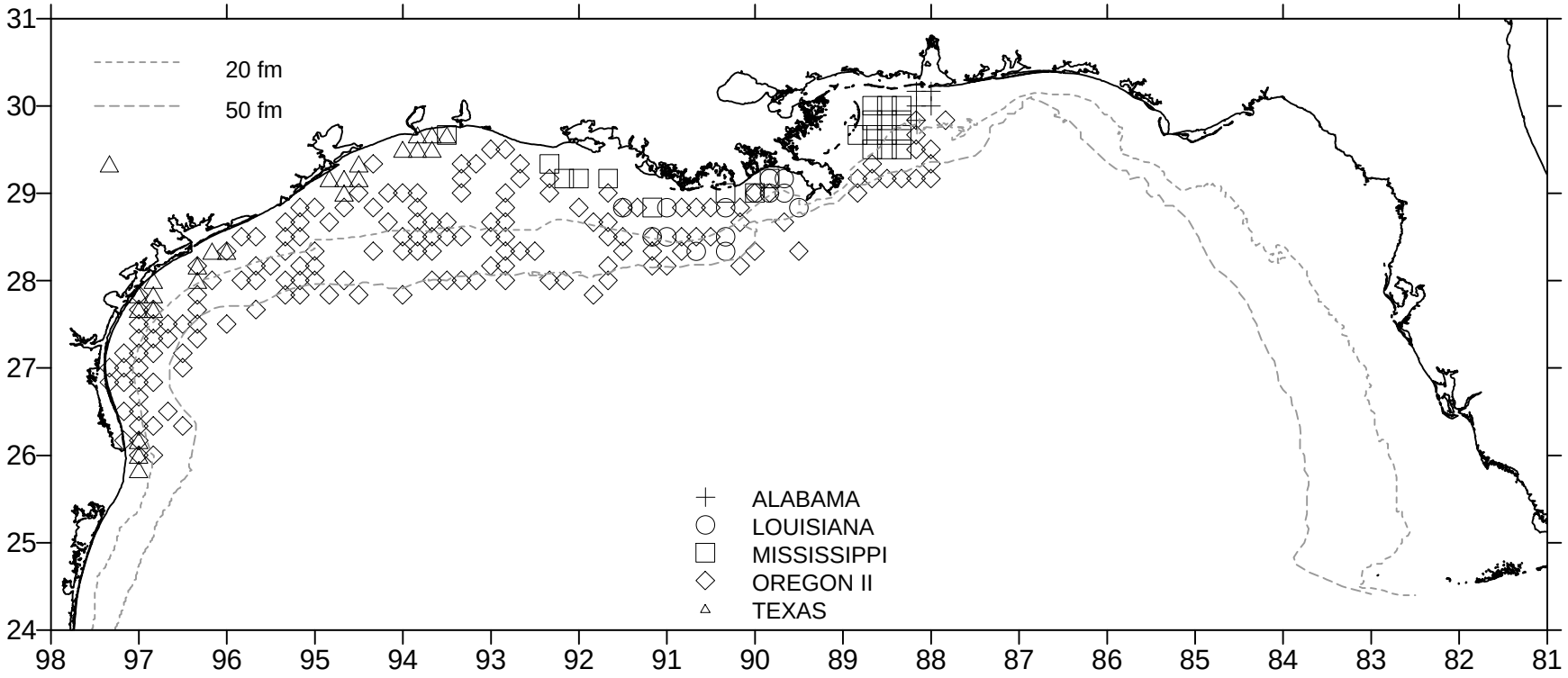

Figure 7. Locations of environmental stations during the 2000 Summer Shrimp/Groundfish Survey summarized by 10-minute squares.

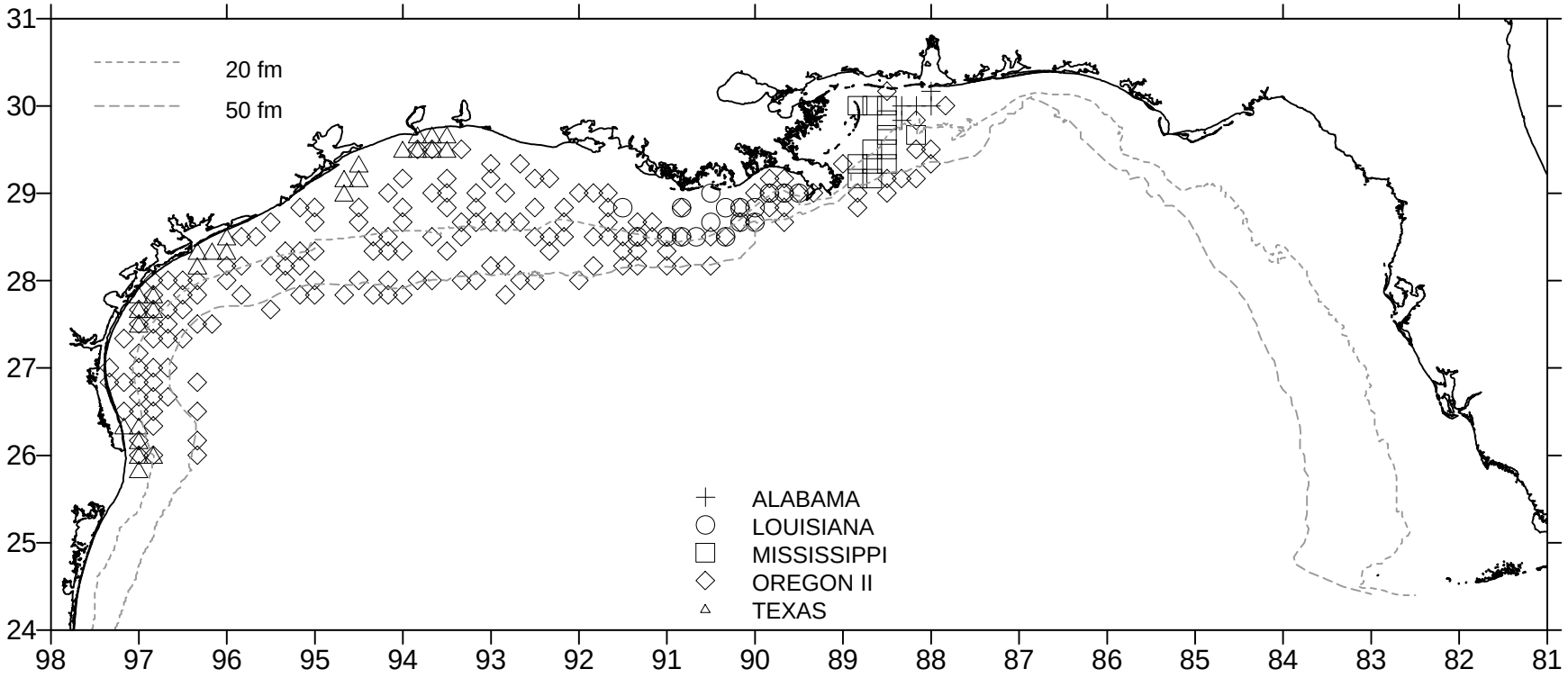

Figure 8. Locations of environmental stations during the 2000 Fall Shrimp/Groundfish Survey summarized by 10-minute squares.

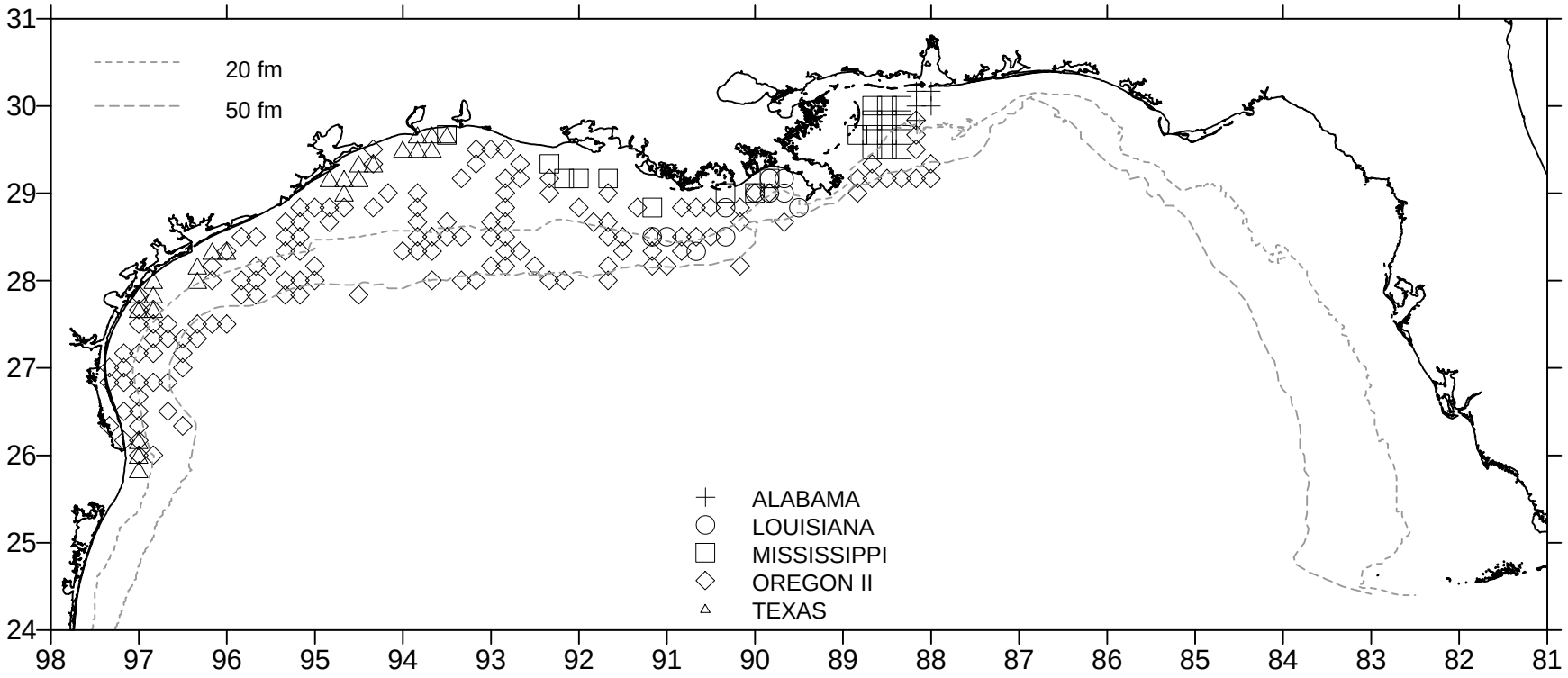

Figure 9. Locations of trawl stations during the 2000 Summer Shrimp/Groundfish Survey summarized by 10-minute squares.

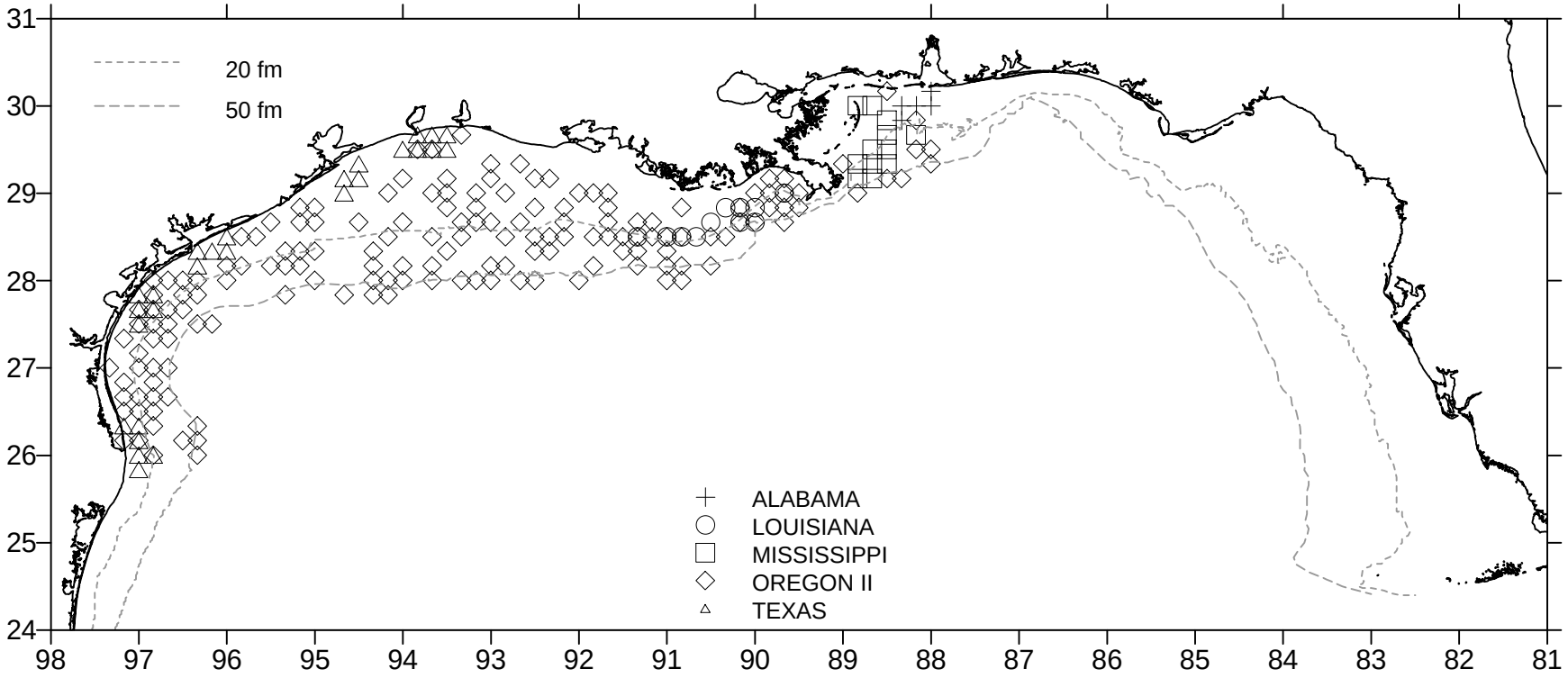

Figure 10. Locations of trawl stations during the 2000 Fall Shrimp/Groundfish Survey summarized by 10-minute squares.

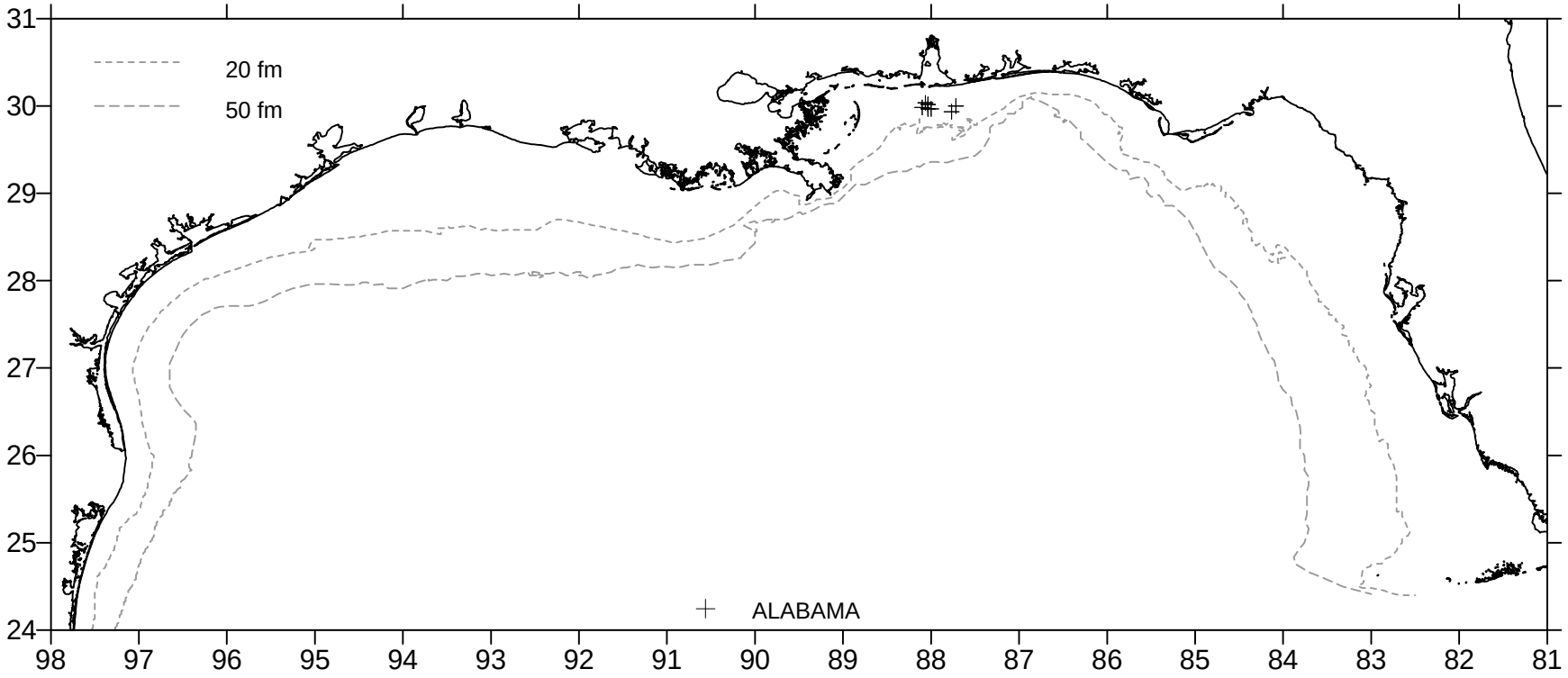

Figure 11. Locations of trap stations during the 2000 Reef Fish Survey.

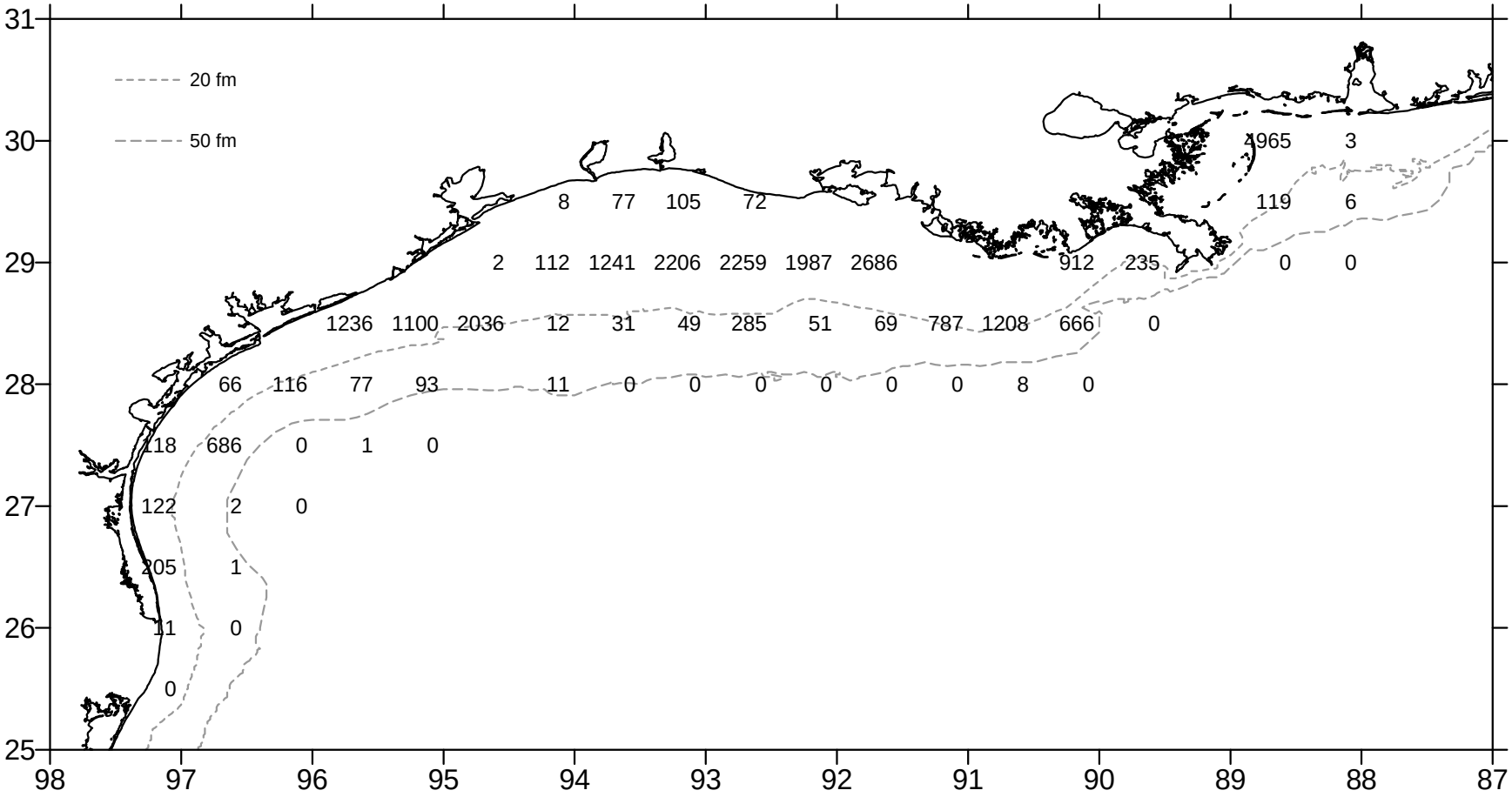

Figure 12. Atlantic bumper, Chloroscombrus chrysurus, number/hour for June-July 2000.

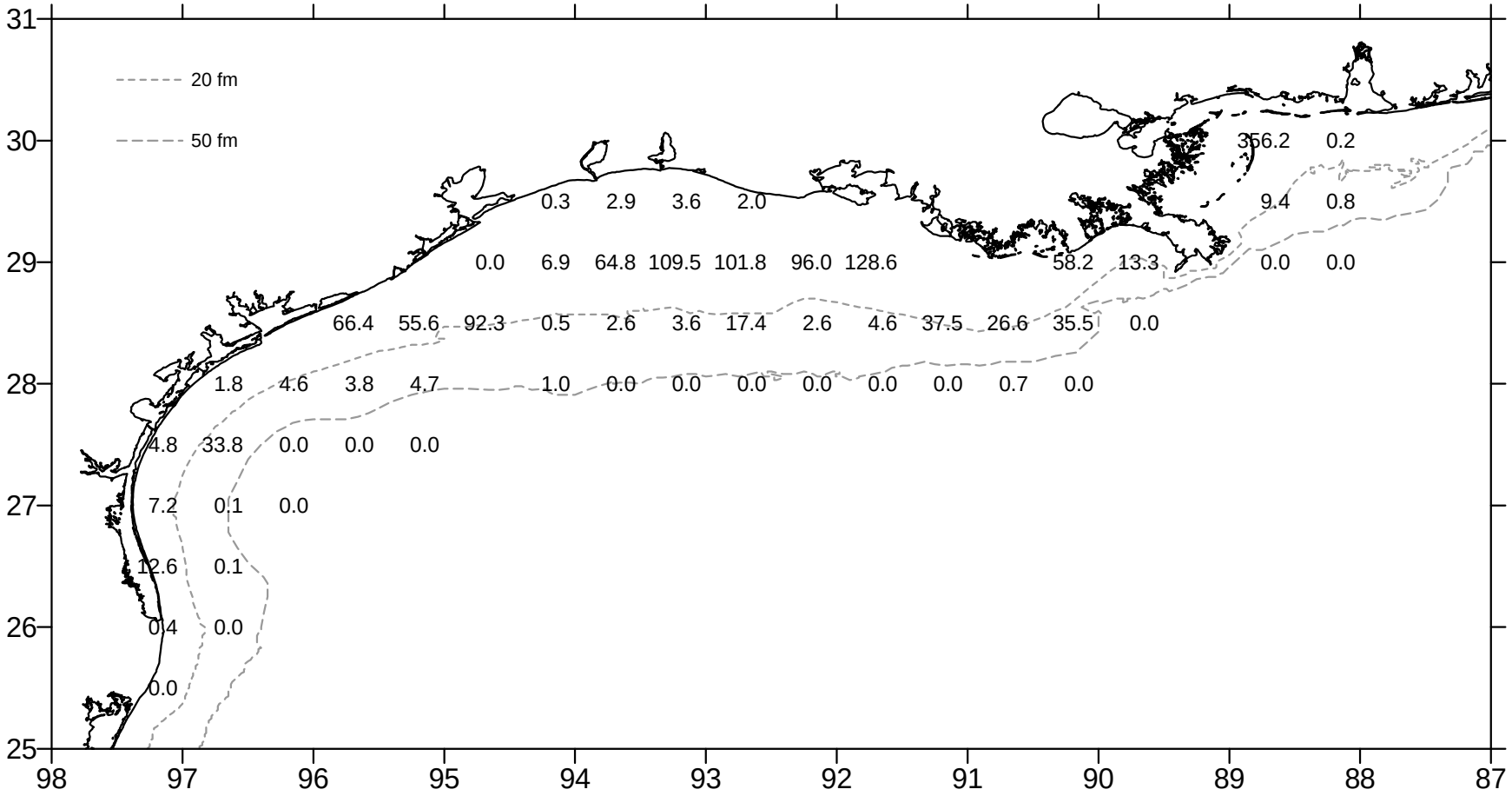

Figure 13. Atlantic bumper, Chloroscombrus chrysurus, lb/hour for June-July 2000.

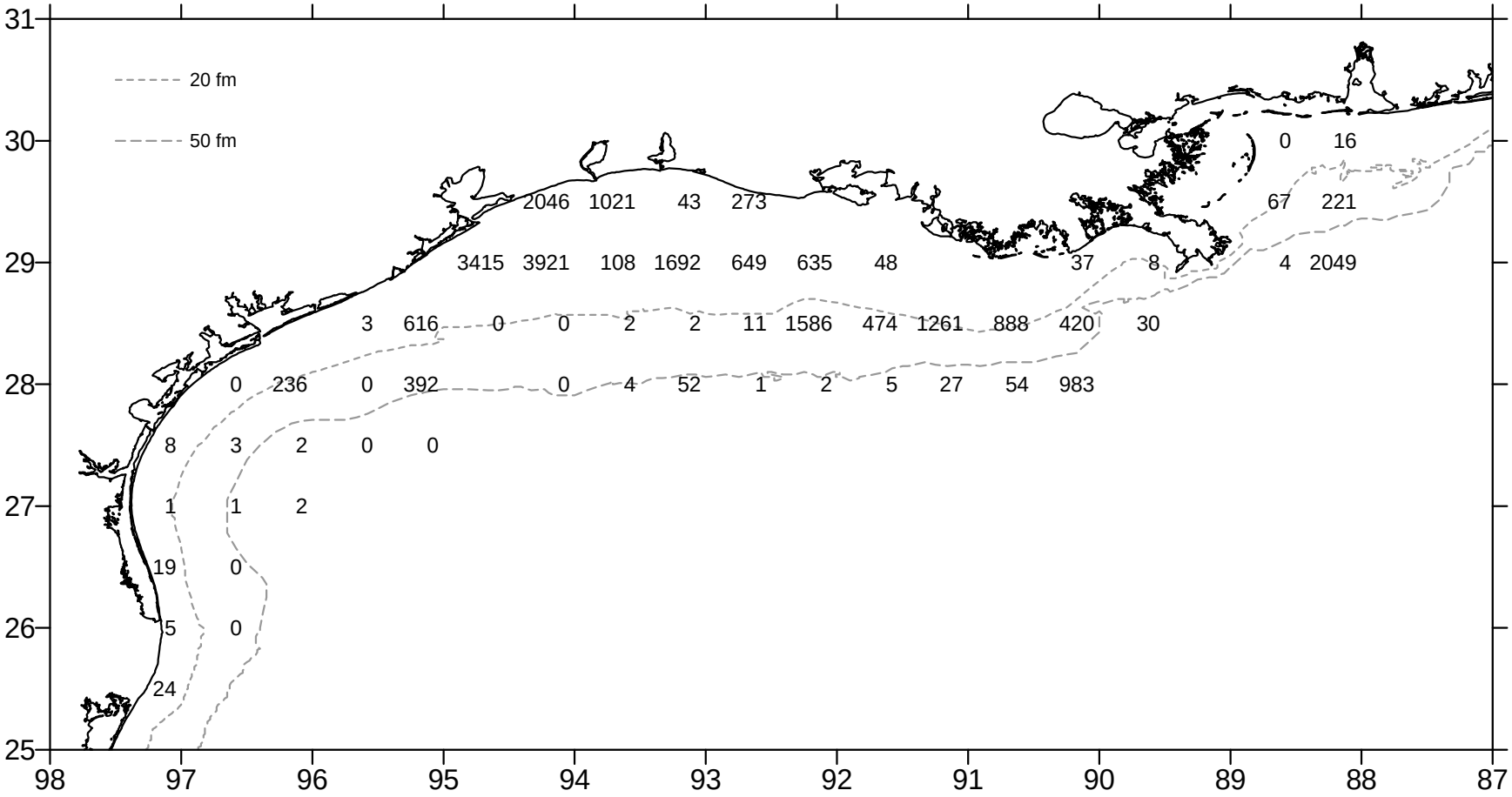

Figure 14. Atlantic croaker, Micropogonias undulatus, number/hour for June-July 2000.

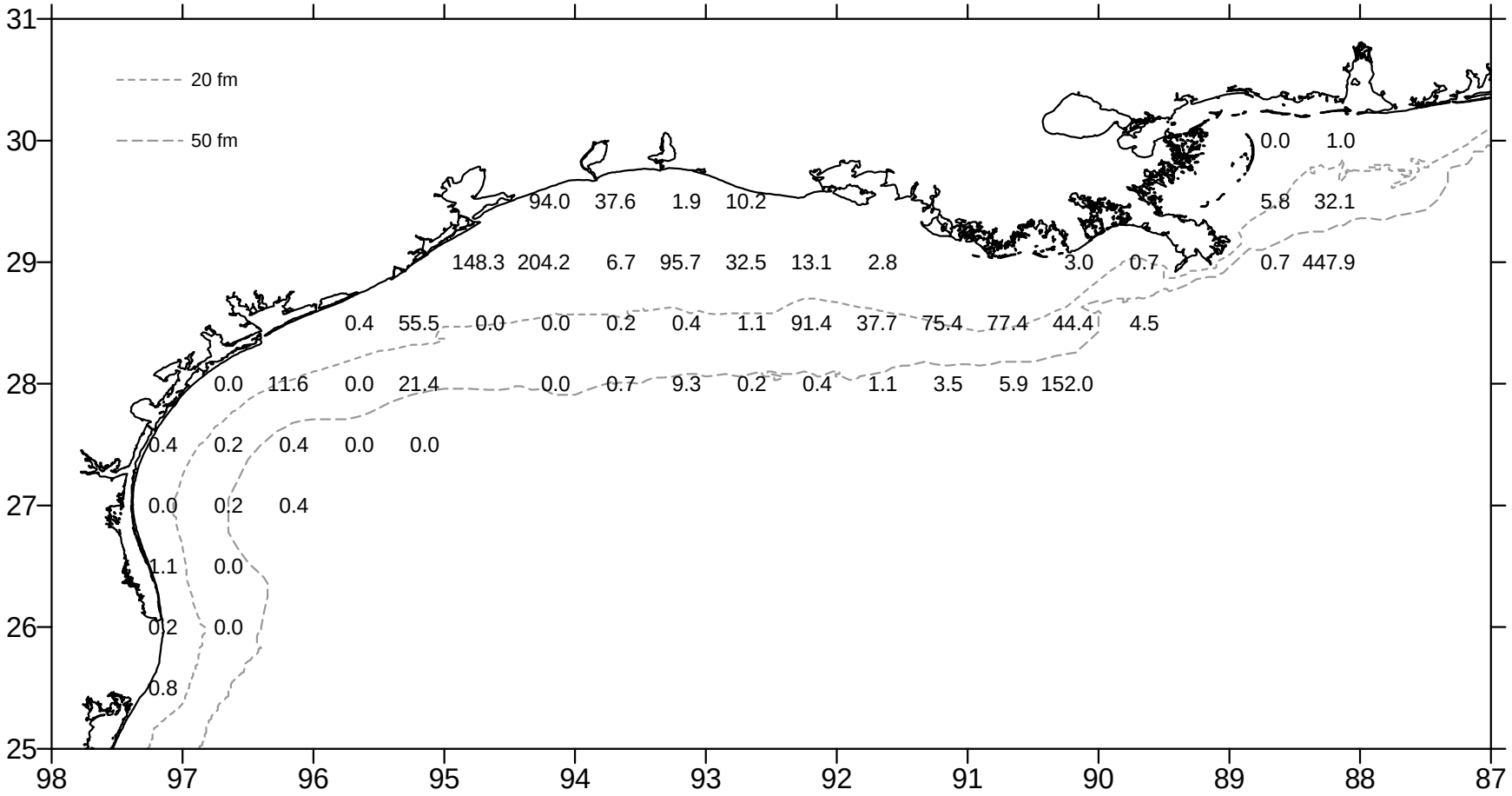

Figure 15. Atlantic croaker, Micropogonias undulatus, lb/hour for June-July 2000.

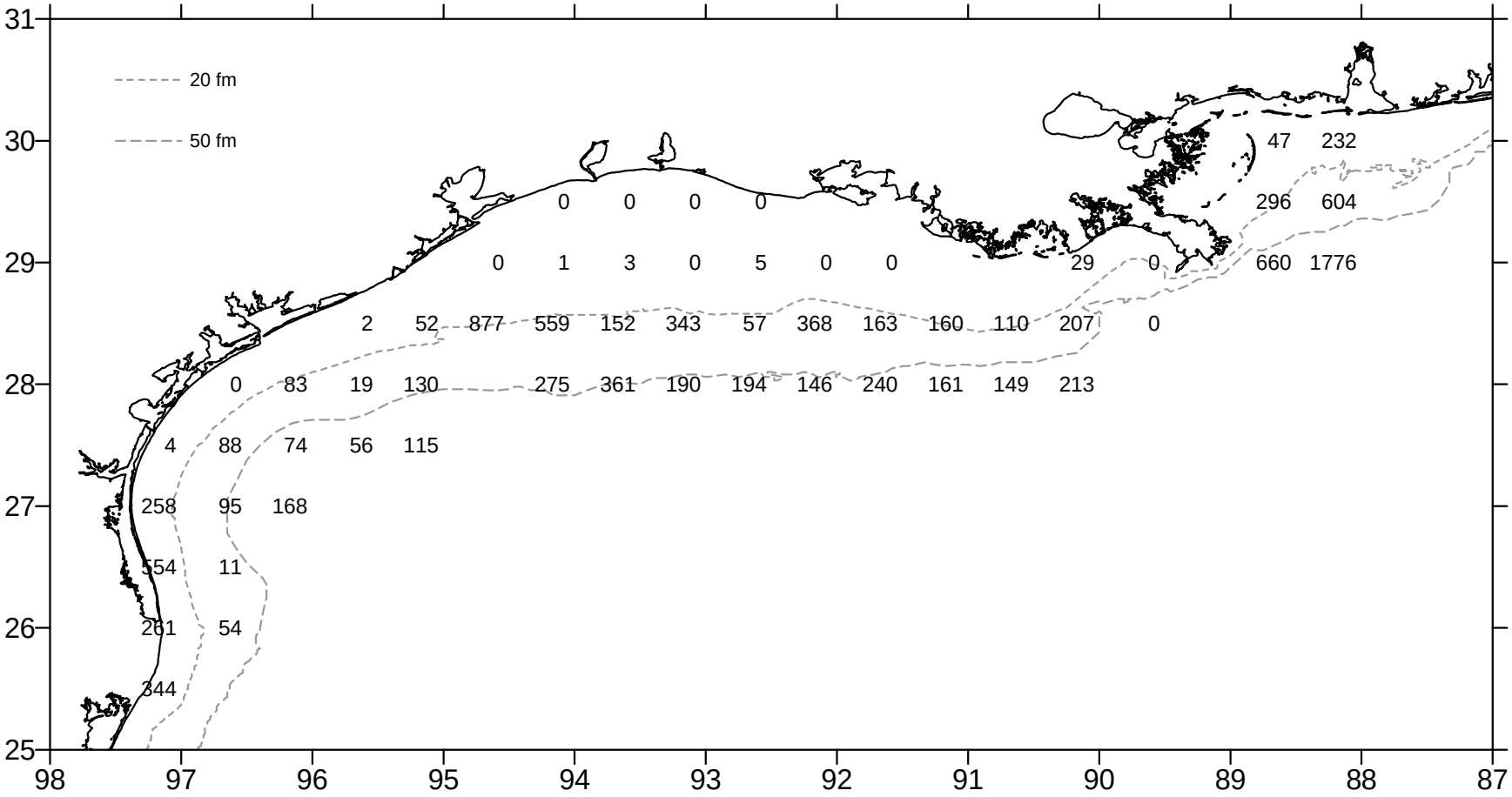

Figure 16. Longspine porgy, Stenotomus caprinus, number/hour for June-July 2000.

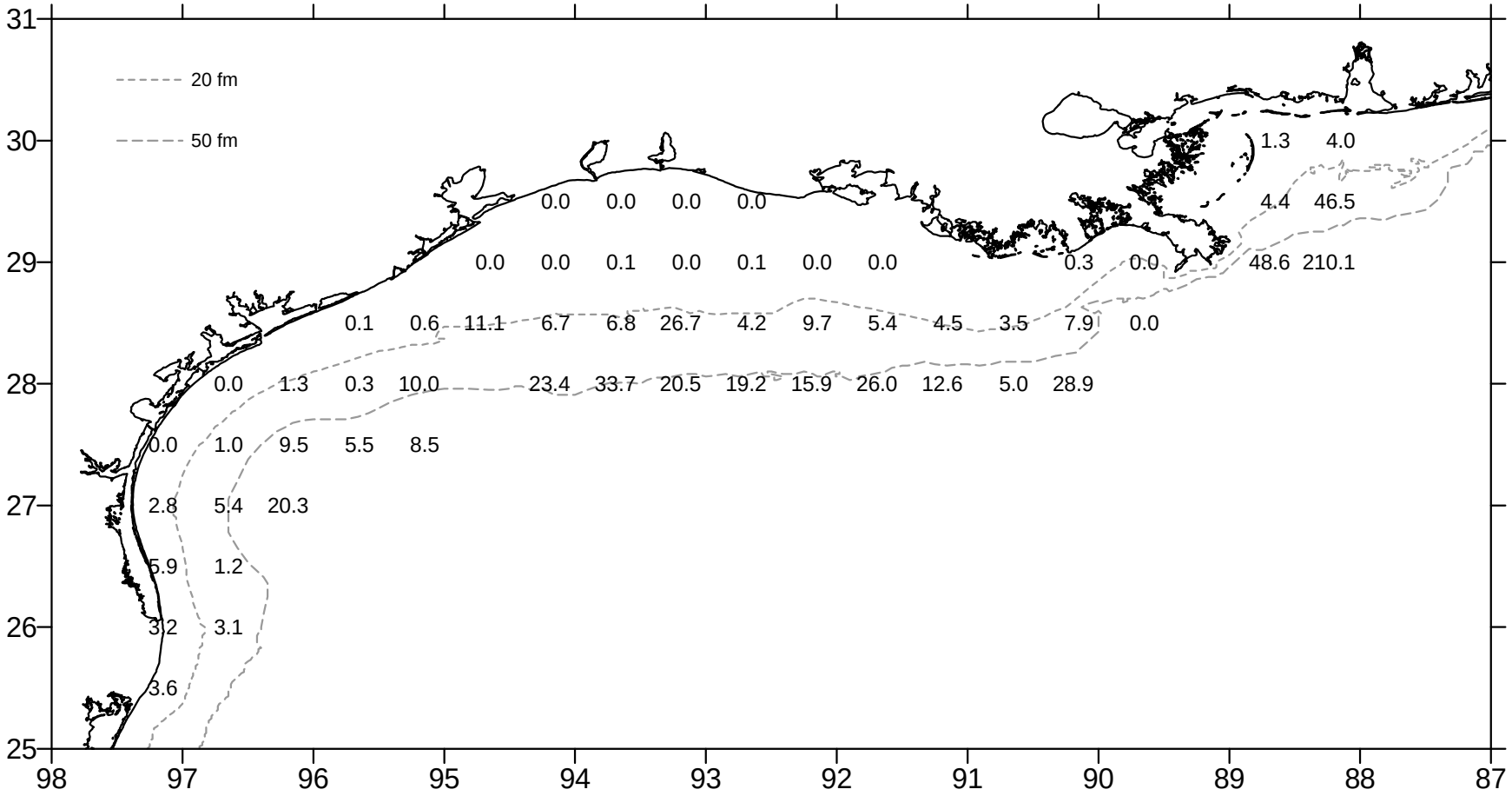

Figure 17. Longspine porgy, Stenotomus caprinus, lb/hour for June-July 2000.

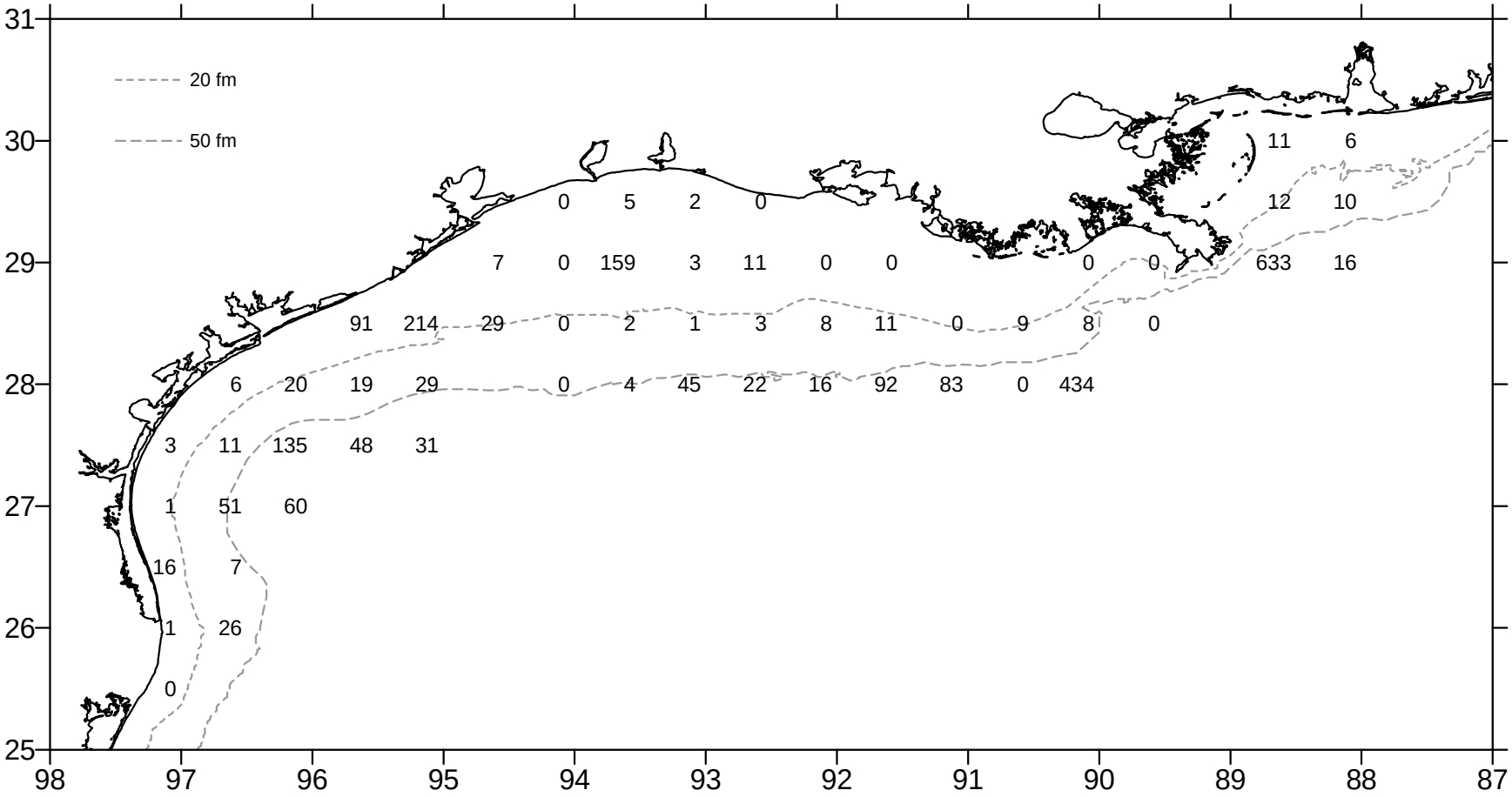

Figure 18. Gulf butterfish, Peprilus burti, number/hour for June-July 2000.

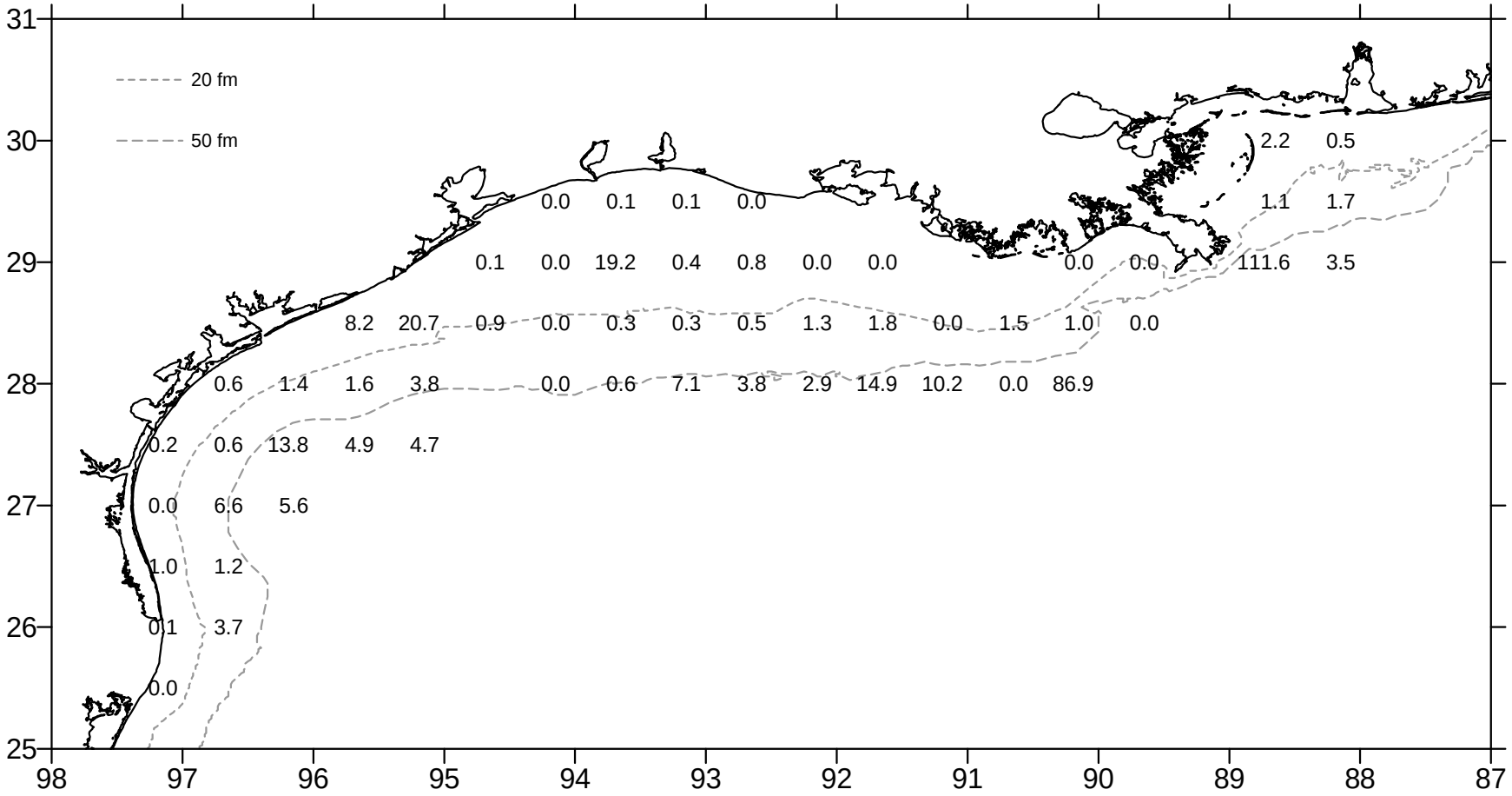

Figure 19. Gulf butterfish, Peprilus burti, lb/hour for June-July 2000.

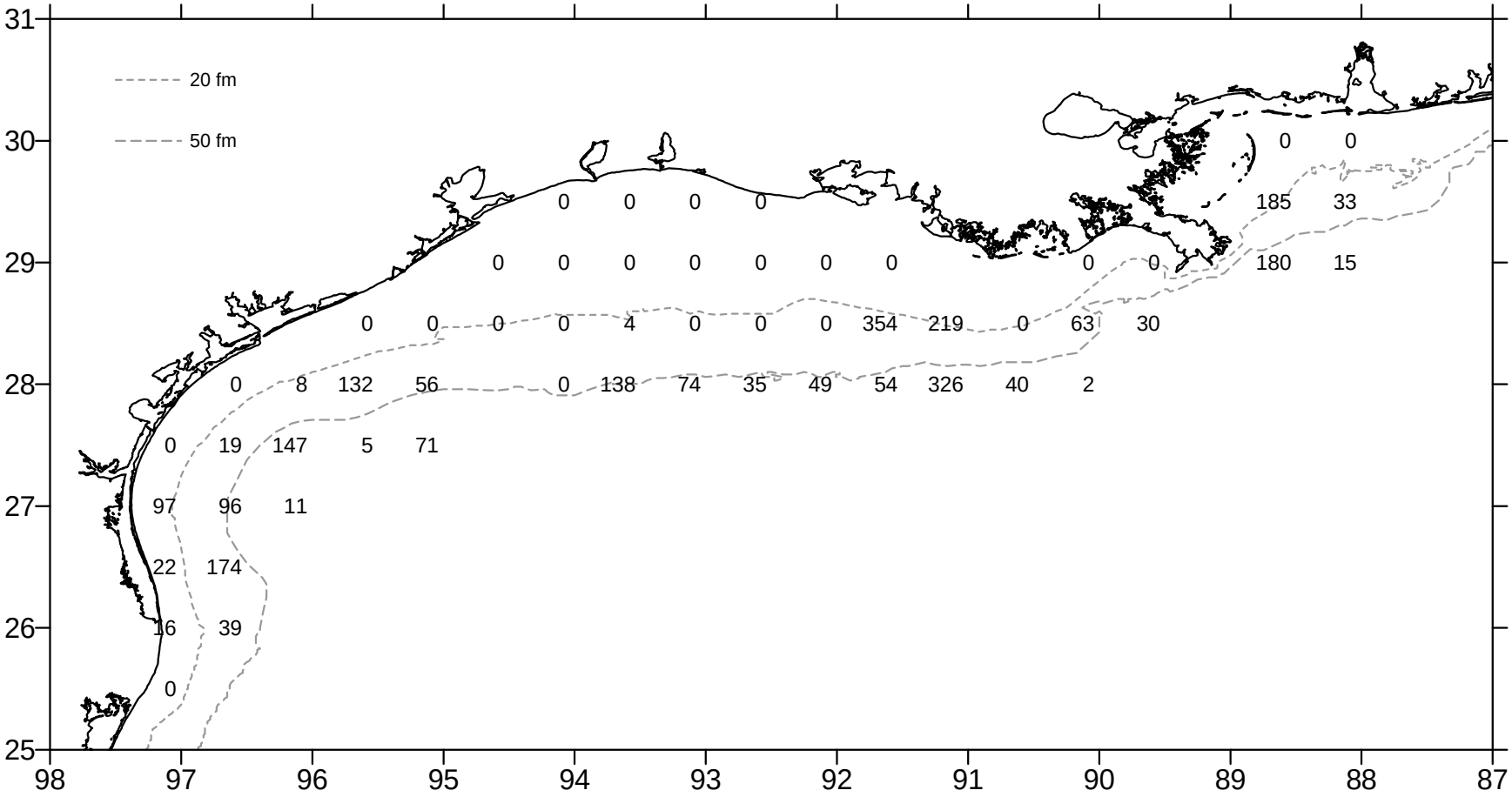

Figure 20. Blackear bass, Serranus atrobranchus, number/hour for June-July 2000.

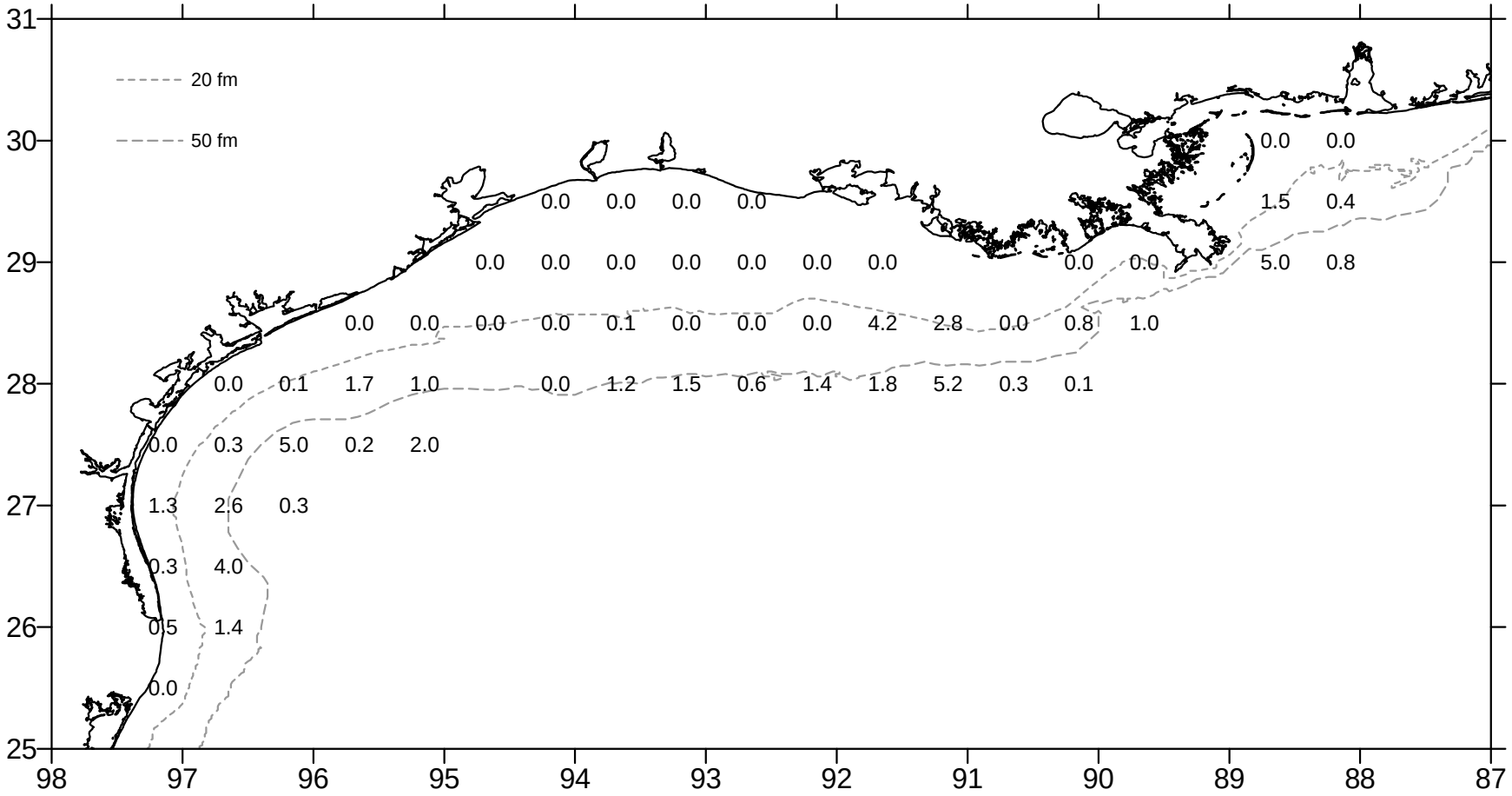

Figure 21. Blackear bass, Serranus atrobranchus, lb/hour for June-July 2000.

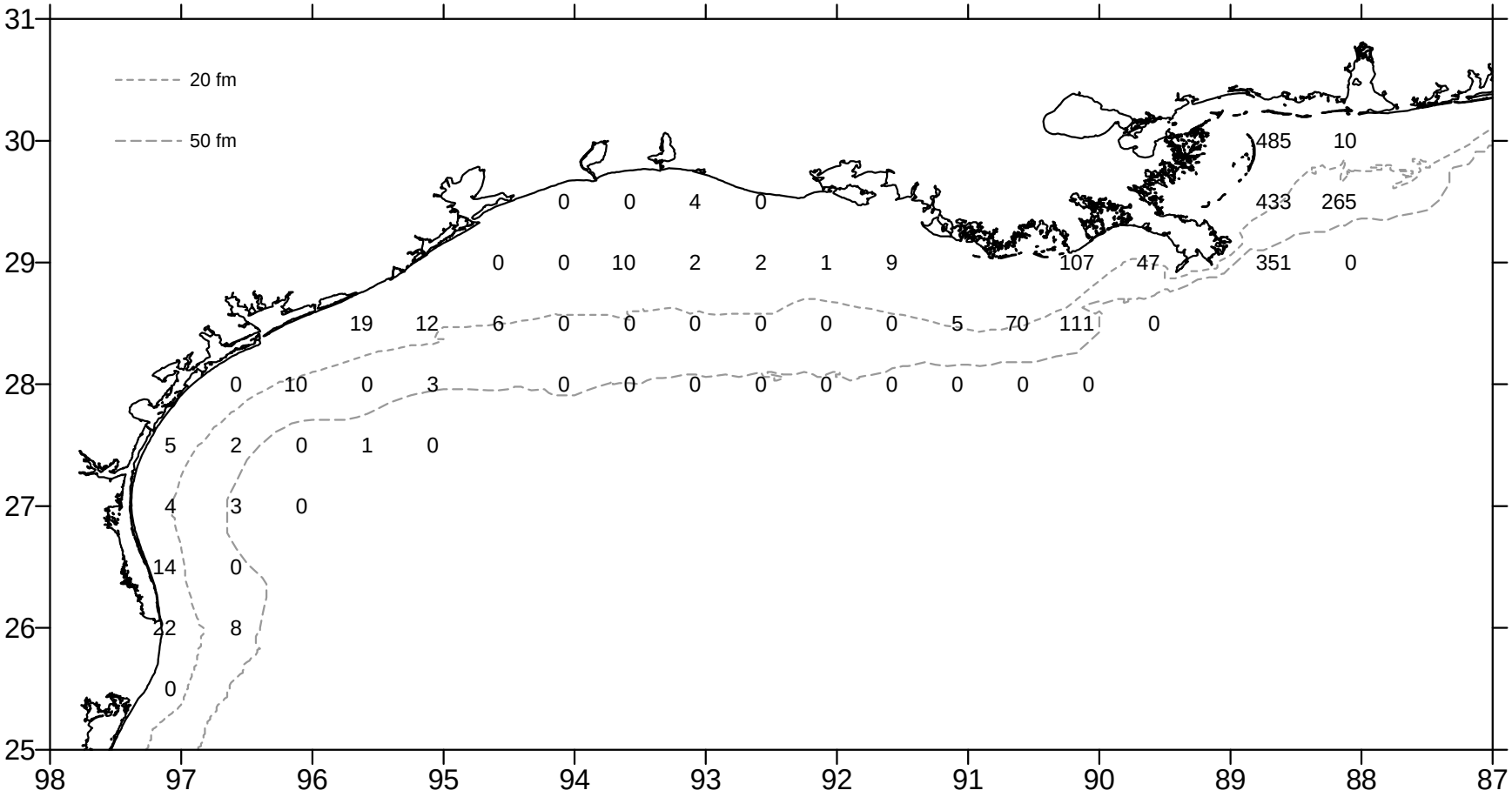

Figure 22. Striped anchovy, Anchoa hepsetus, number/hour June-July 2000.

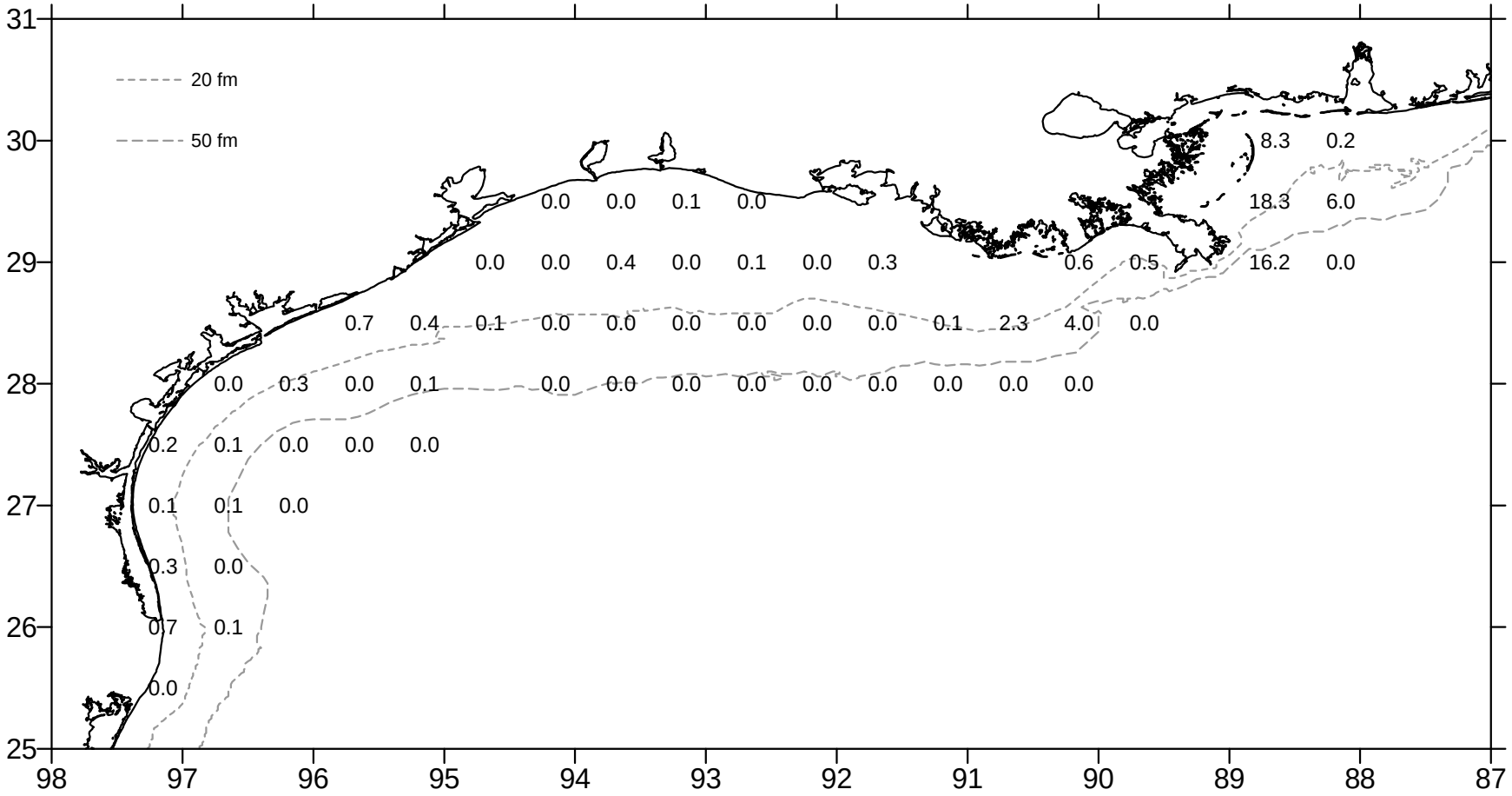

Figure 23. Striped anchovy, Anchoa hepsetus, lb/hour June-July 2000.

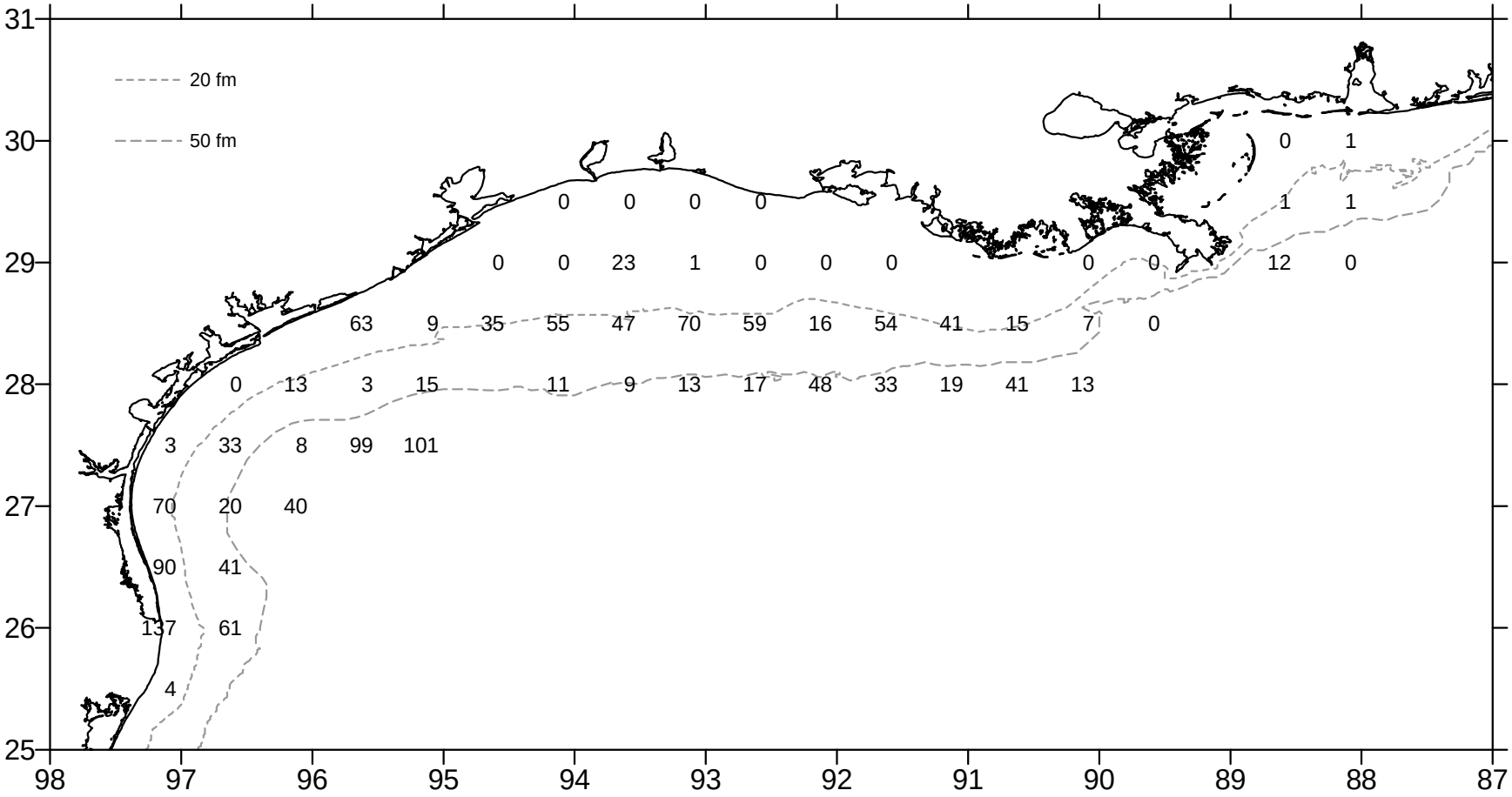

Figure 24. Dwarf goatfish, Upeneus parvus, number/hour June-July 2000.

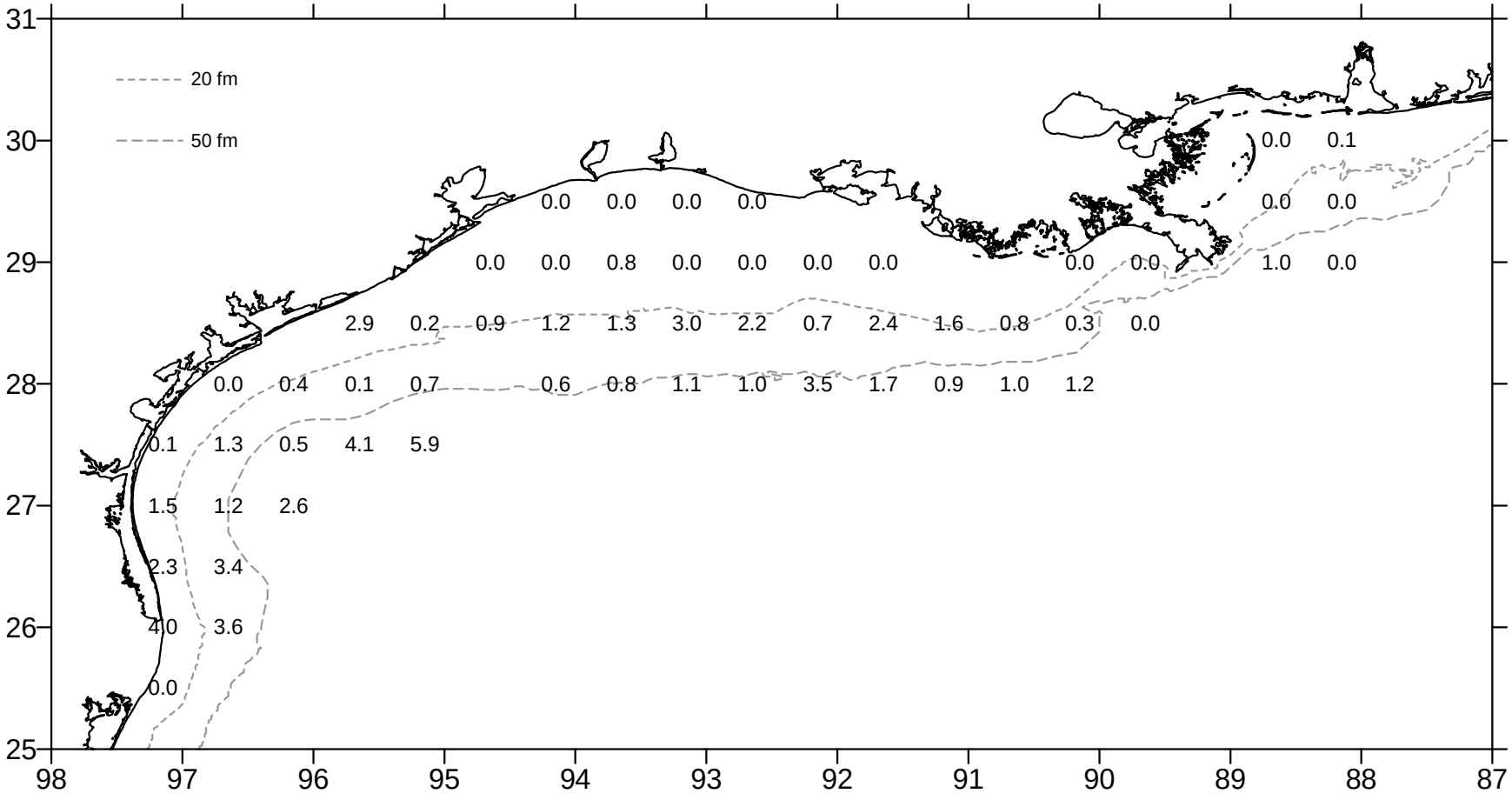

Figure 25. Dwarf goatfish, Upeneus parvus, lb/hour June-July 2000.

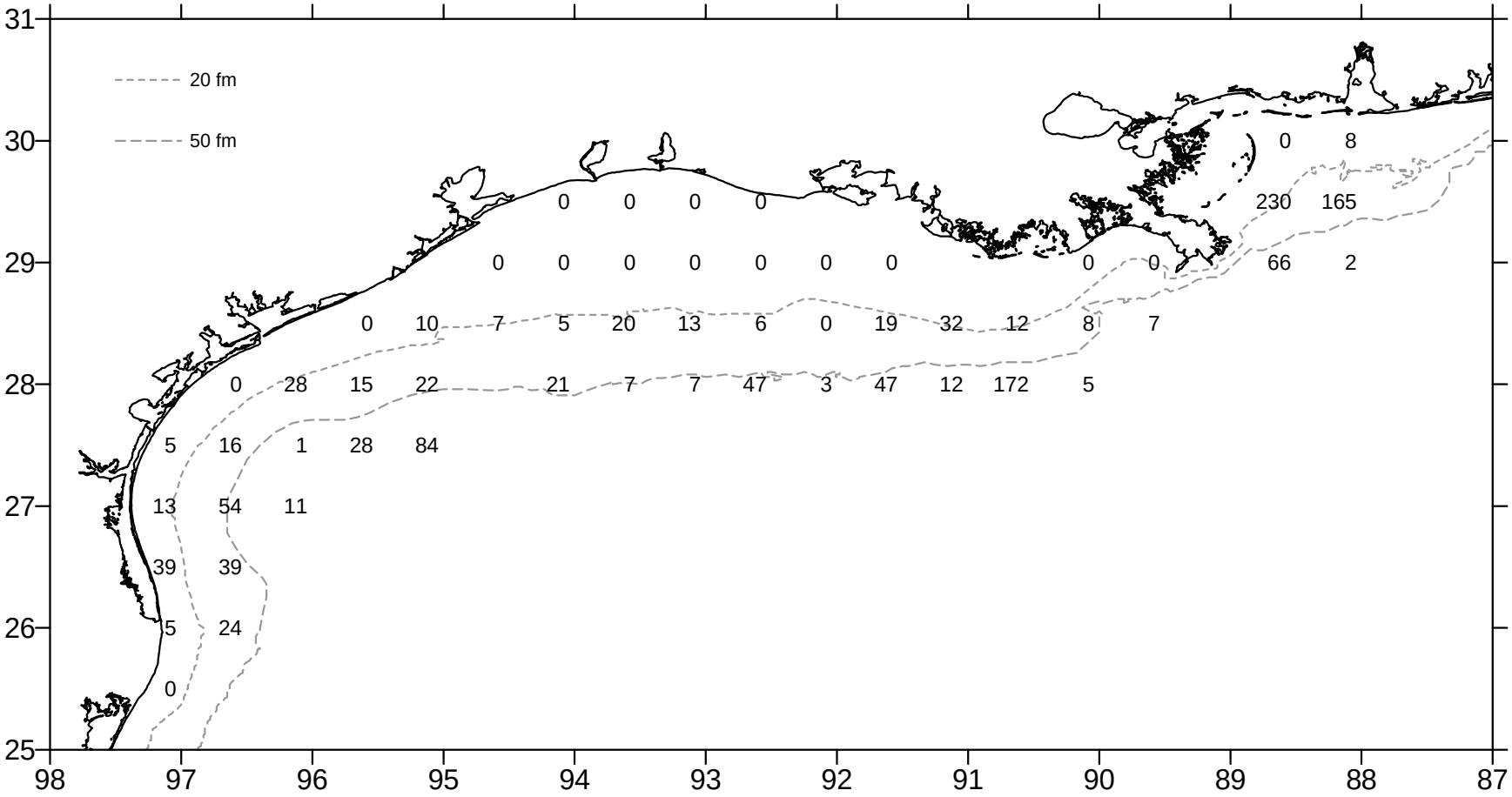

Figure 26. Largescale lizardfish, Saurida brasiliensis, number/hour for June-July 2000.

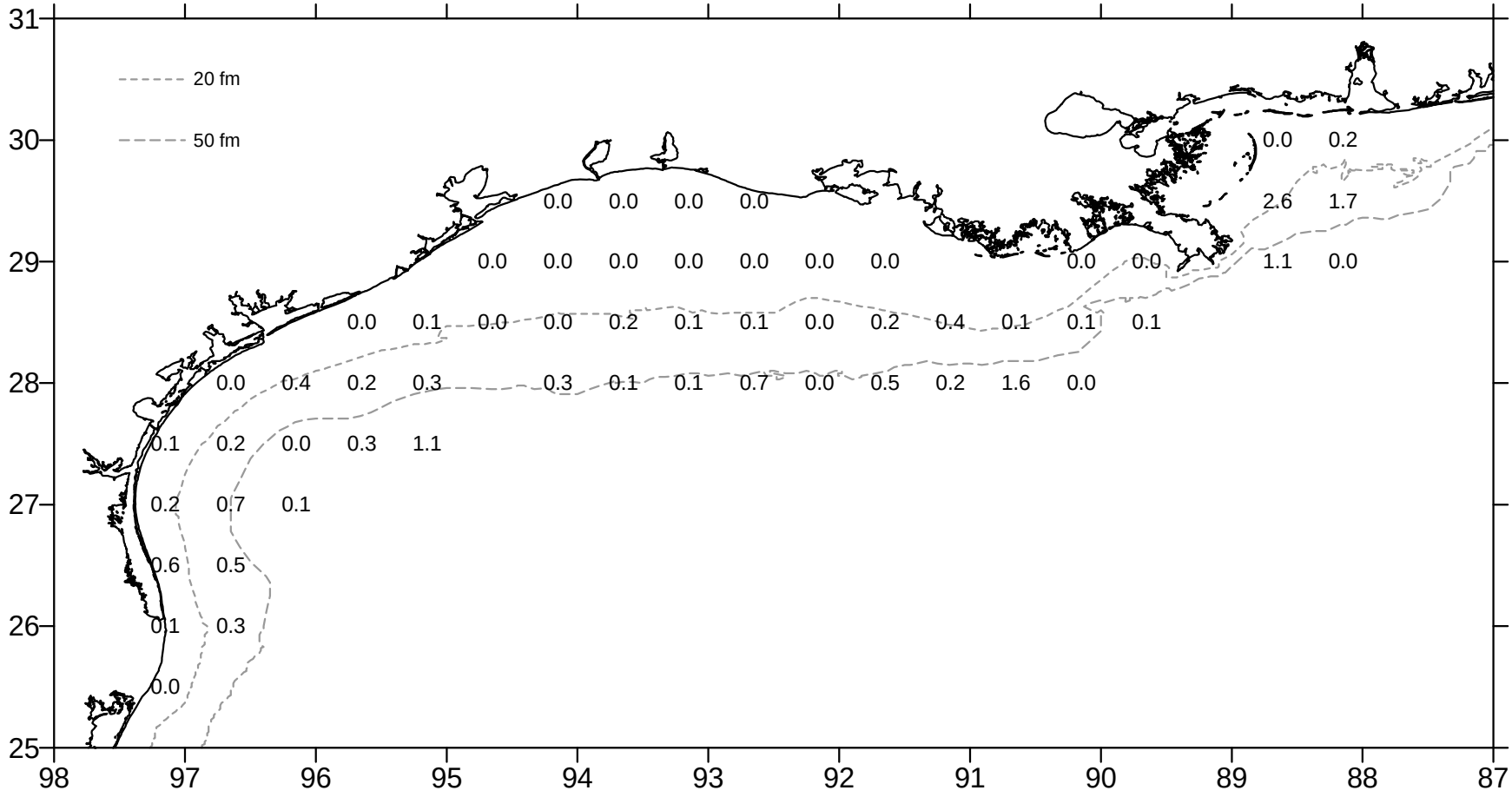

Figure 27. Largescale lizardfish, Saurida brasiliensis, lb/hour for June-July 2000.

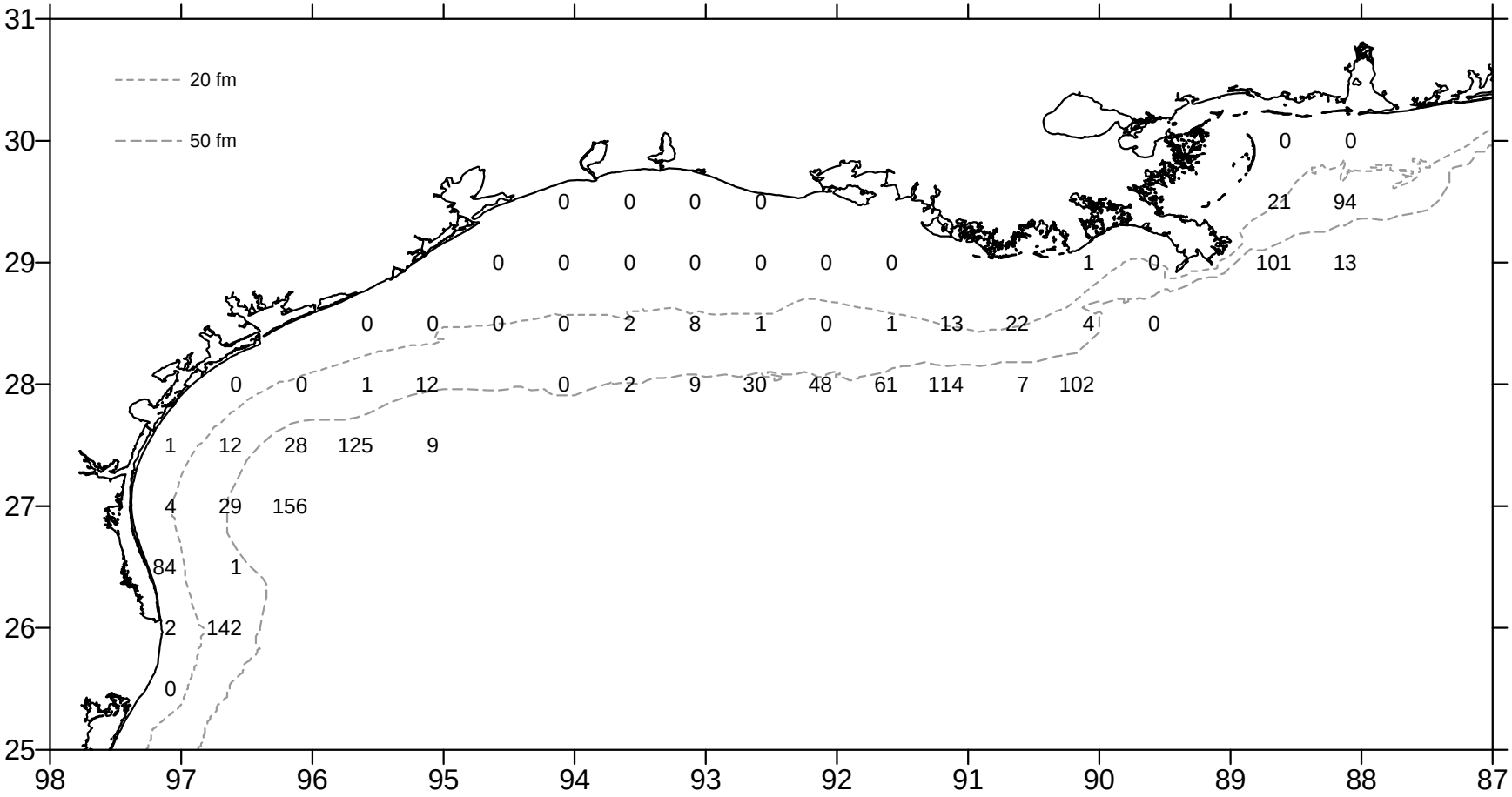

Figure 28. Rough scad, Trachurus lathami, number/hour for June-July 2000.

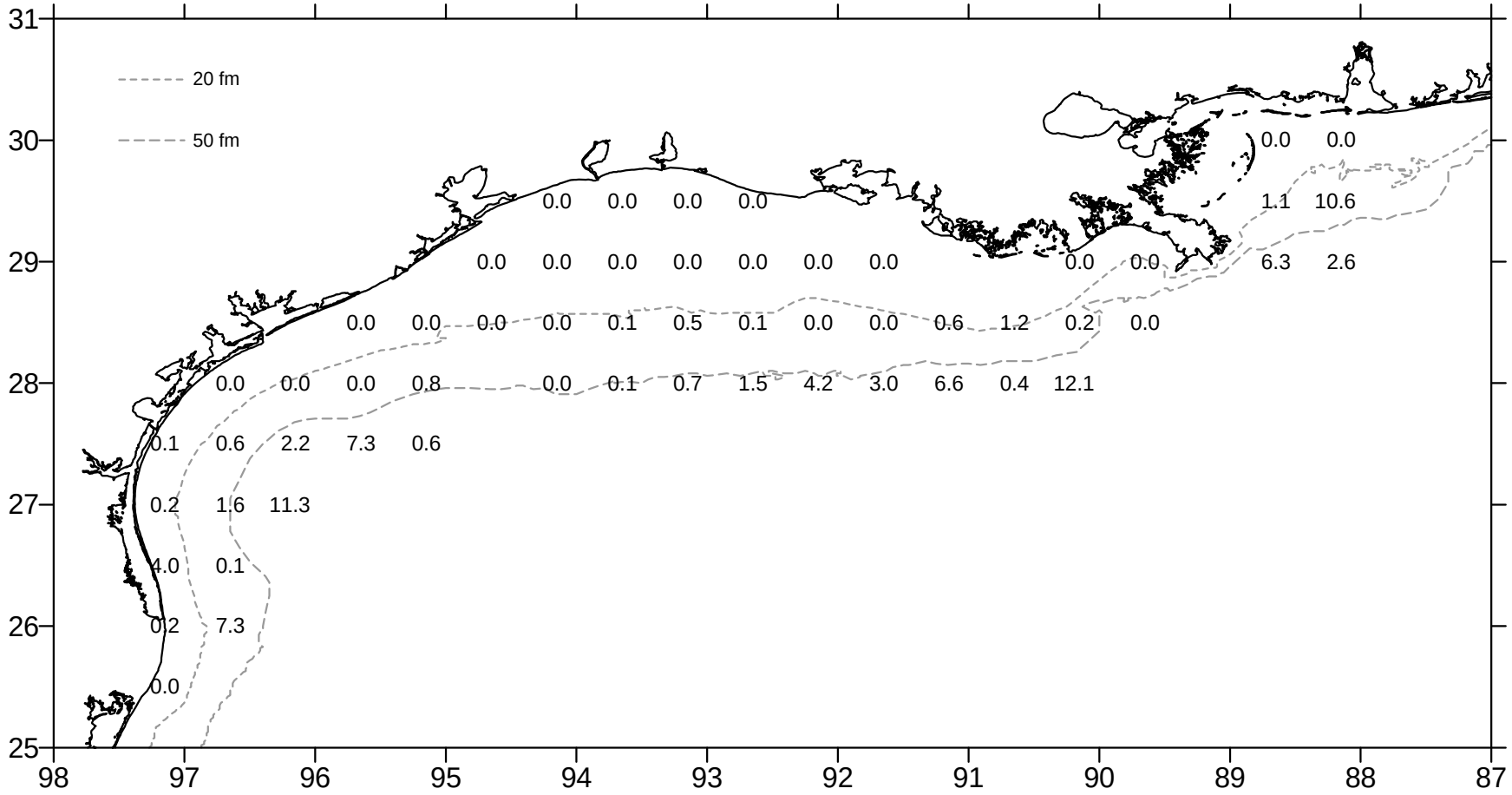

Figure 29. Rough scad, Trachurus lathami, lb/hour for June-July 2000.

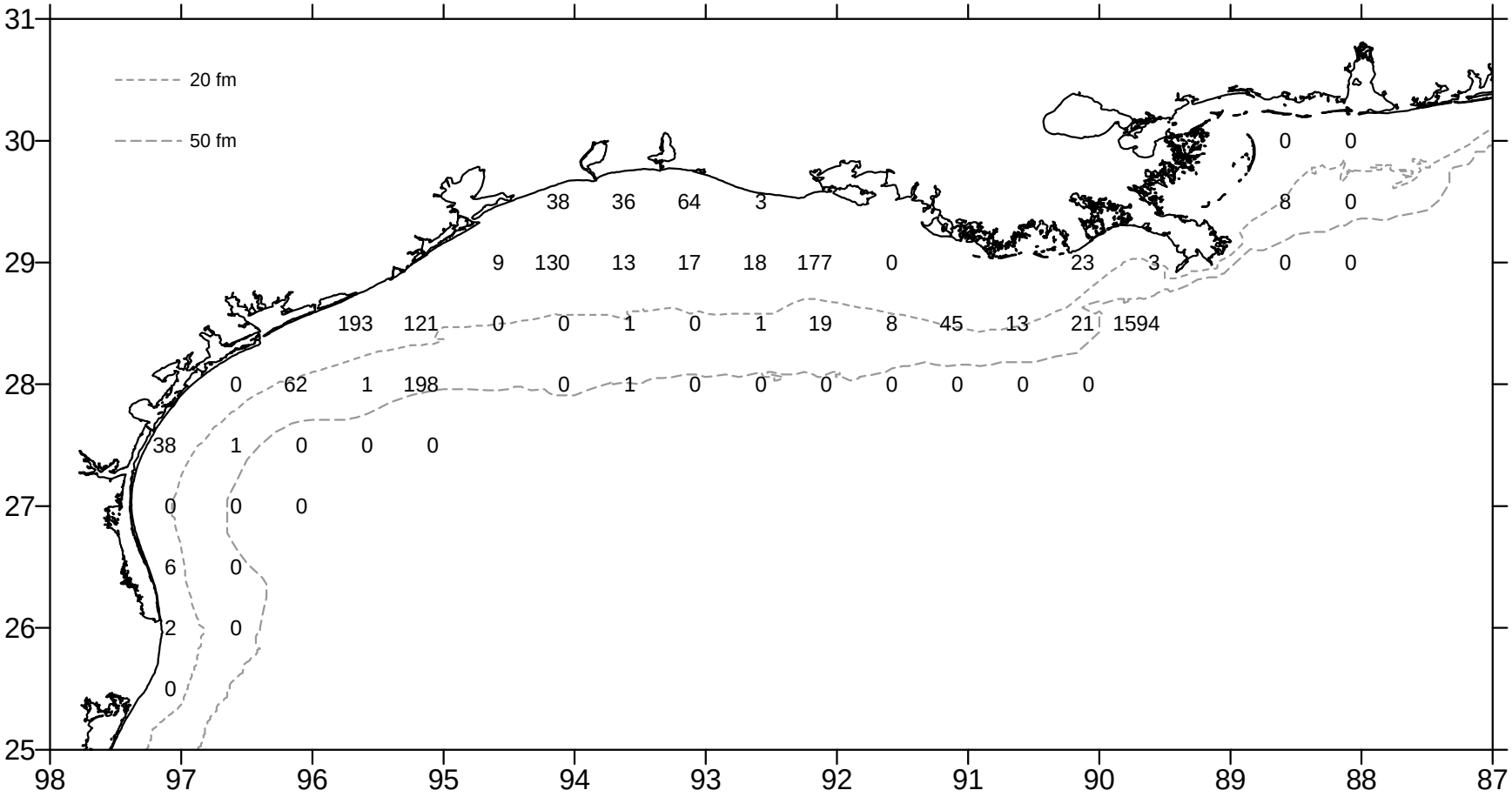

Figure 30. Silver seatrout, Cynoscion nothus, number/hour for June-July 2000.

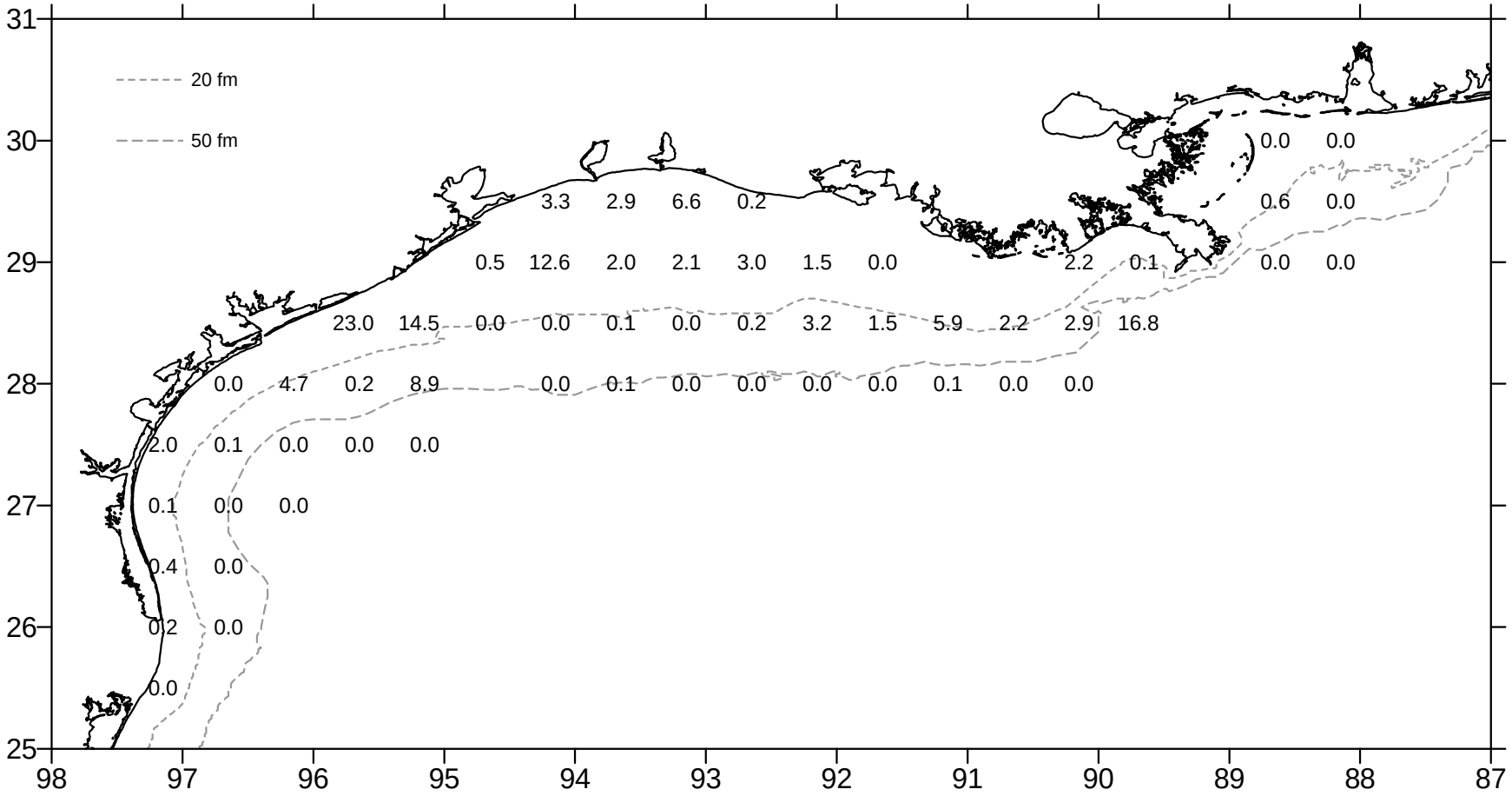

Figure 31. Silver seatrout, Cynoscion nothus, lb/hour for June-July 2000.

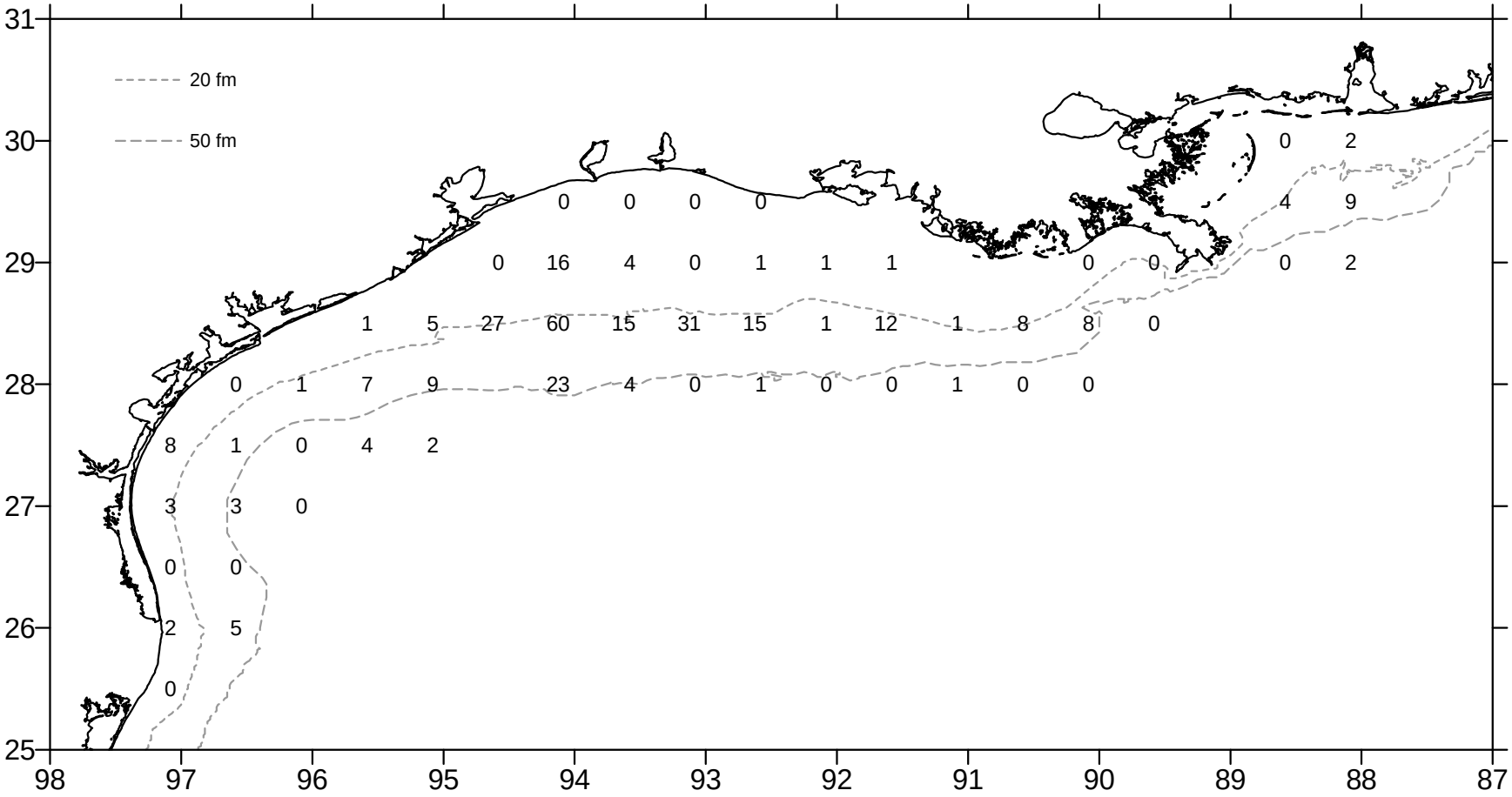

Figure 32. Red snapper, Lutjanus campechanus, number/hour for June-July 2000.

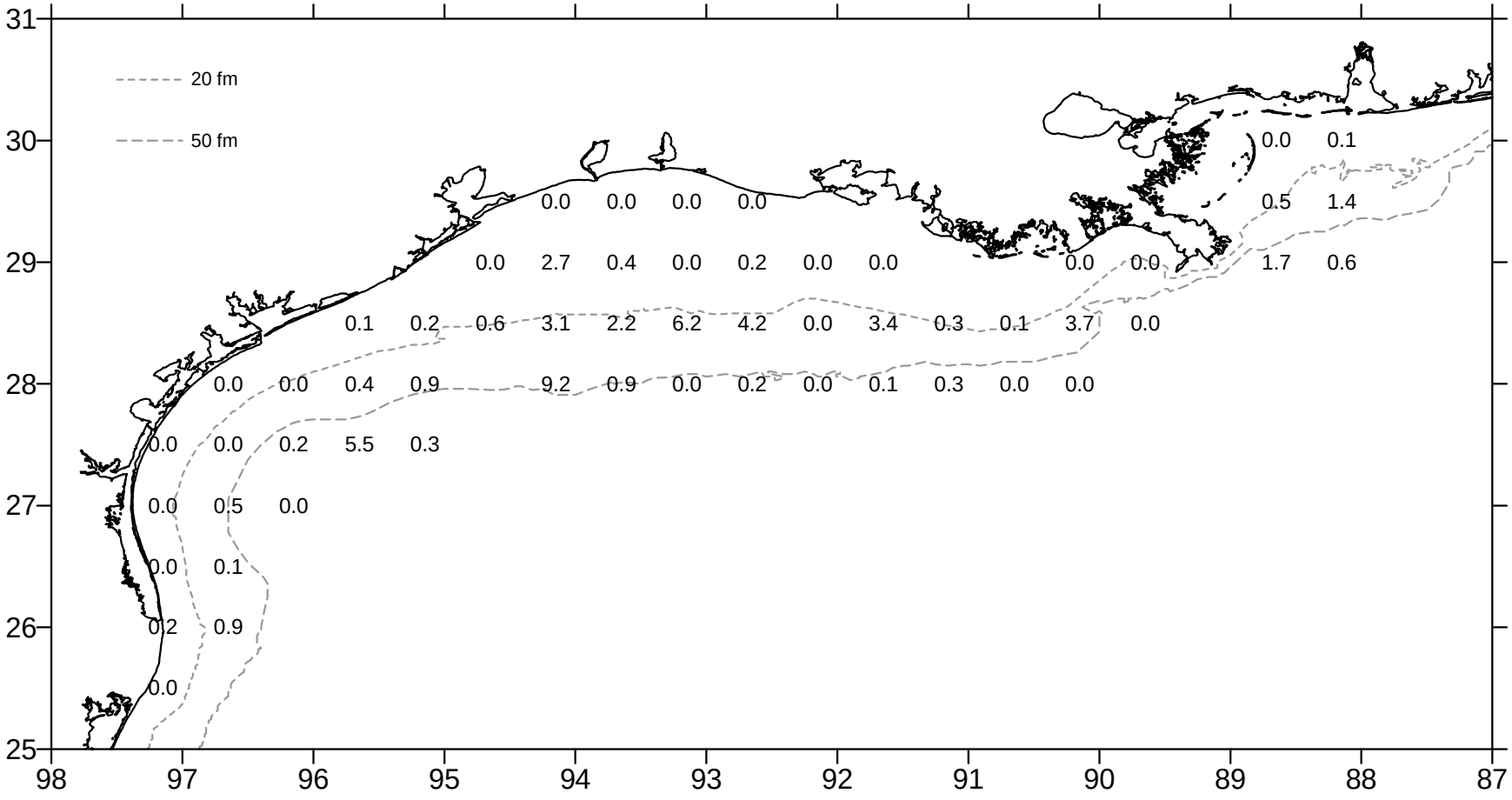

Figure 33. Red snapper, Lutjanus campechanus, lb/hour for June-July 2000.

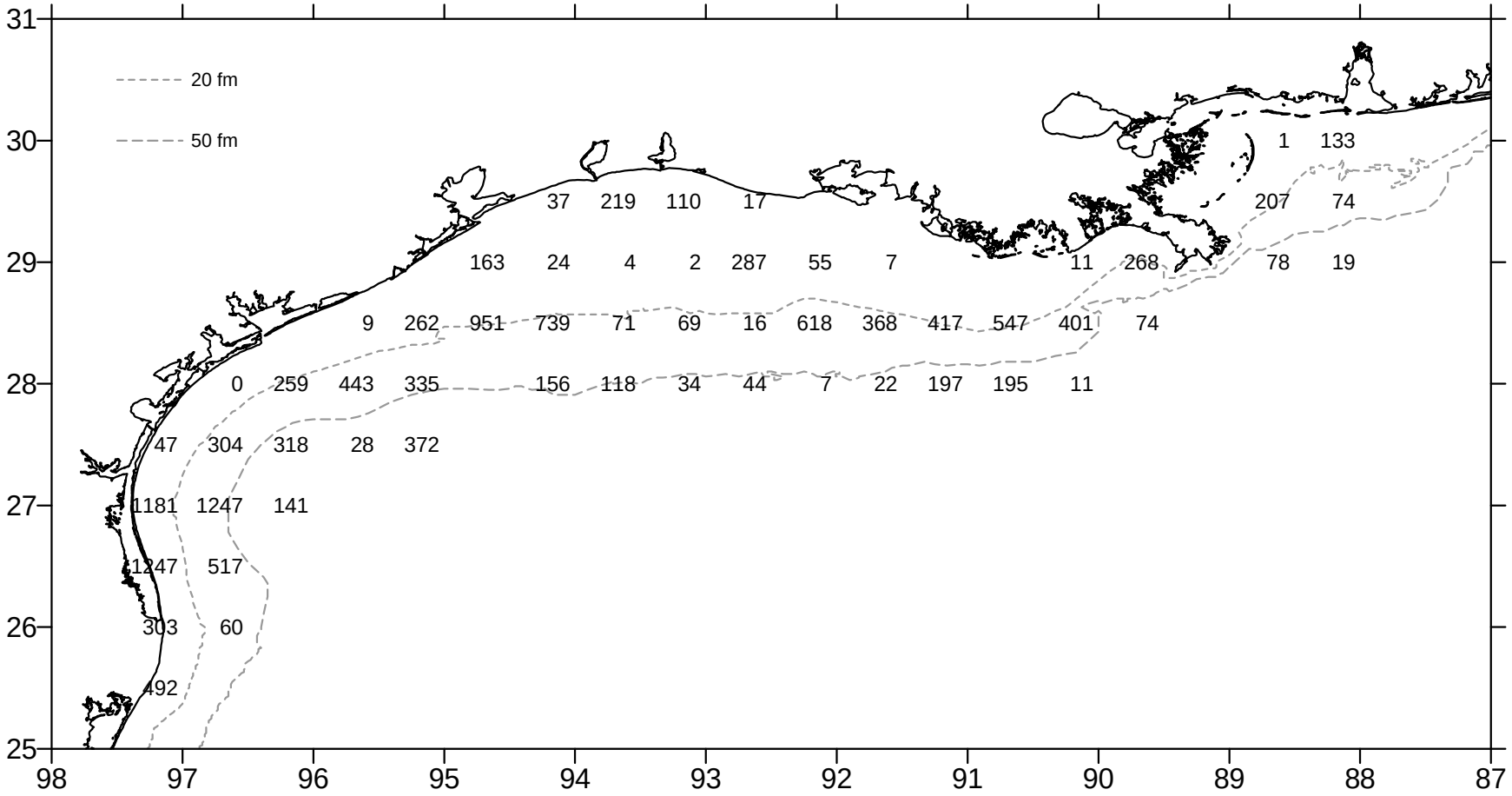

Figure 34. Brown shrimp, Penaeus aztecus, number/hour for June-July 2000.

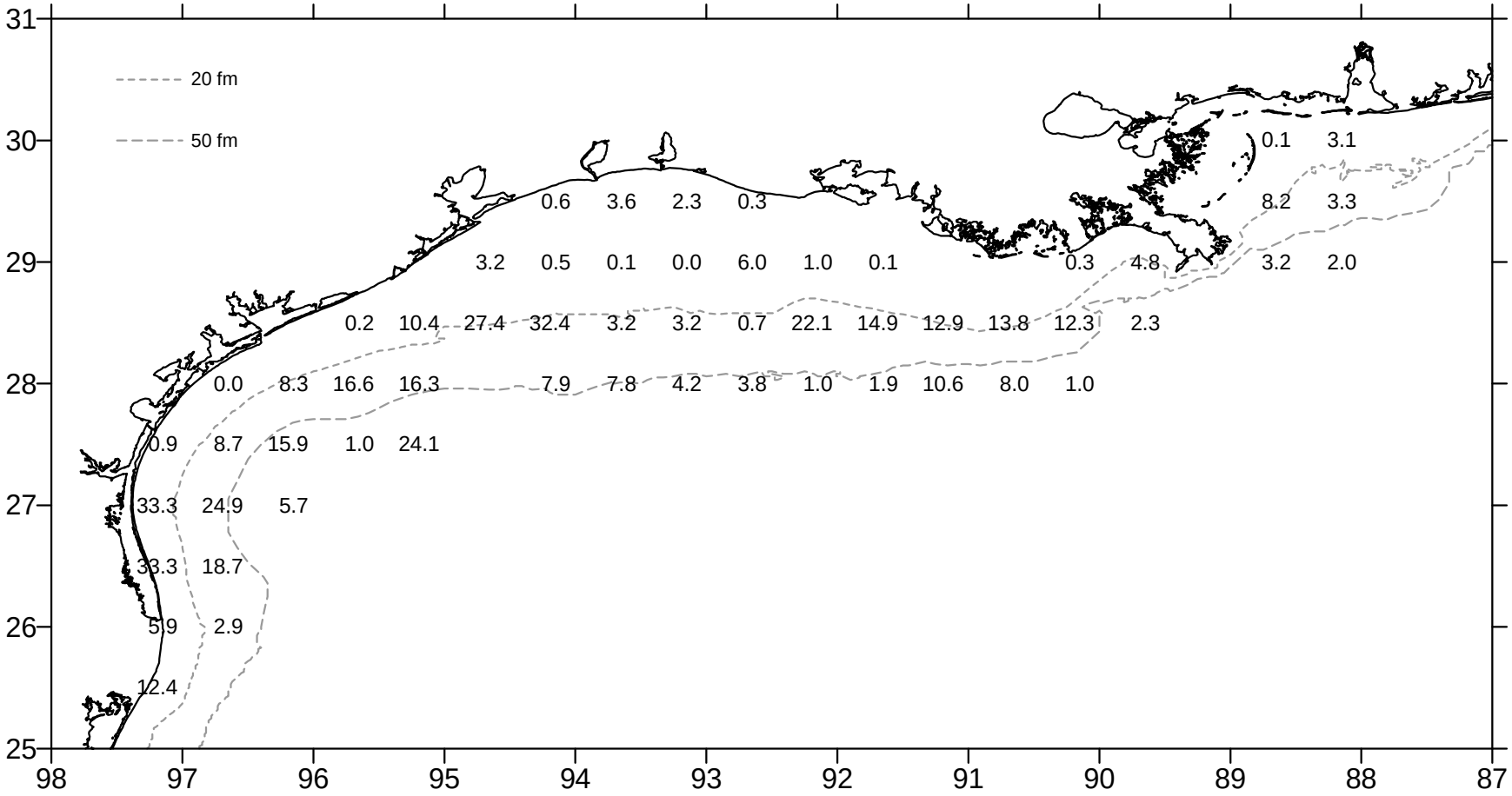

Figure 35. Brown shrimp, Penaeus aztecus, lb/hour for June-July 2000.

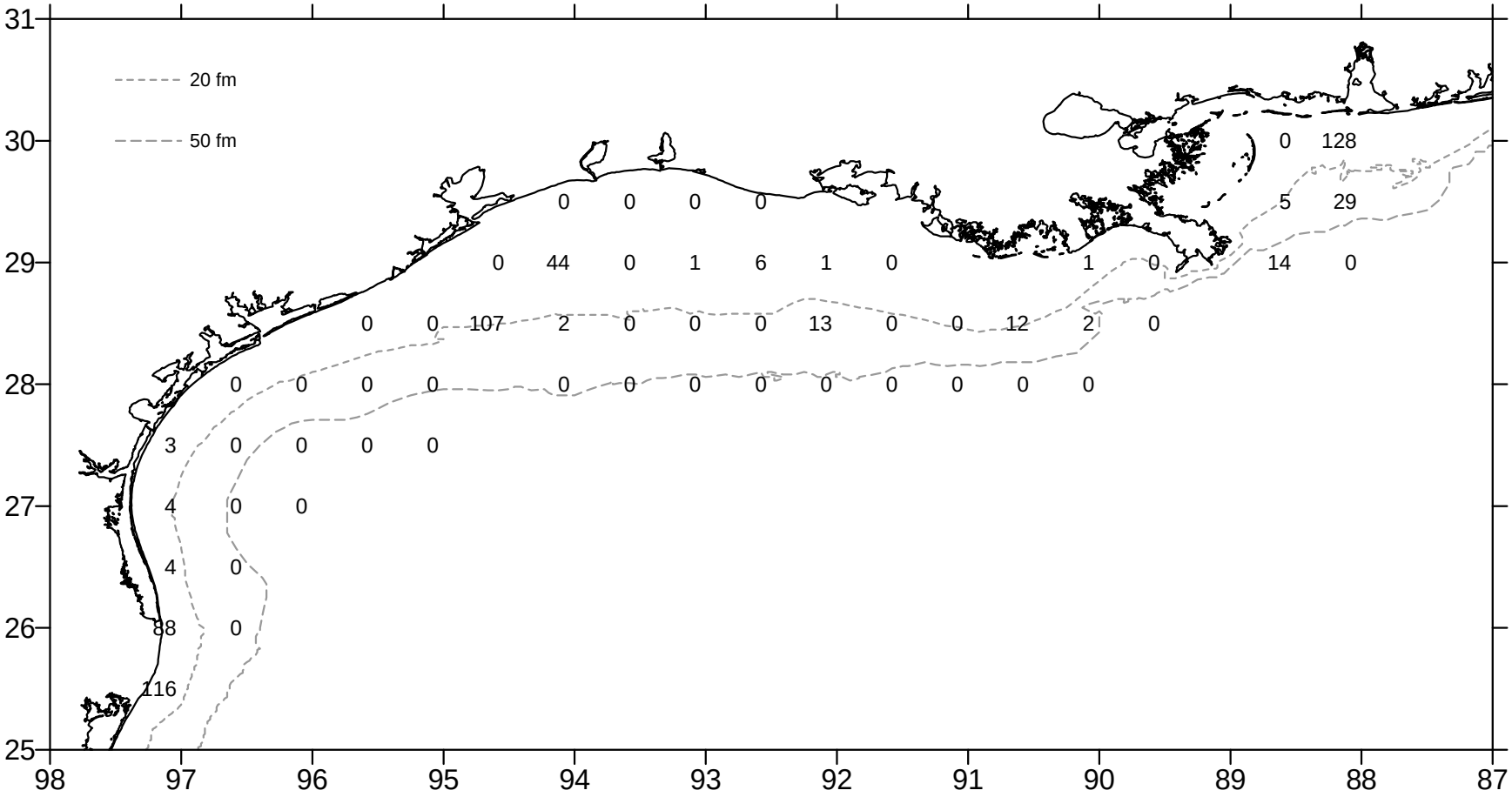

Figure 36. Pink shrimp, Penaeus duorarum, number/hour for June-July 2000.

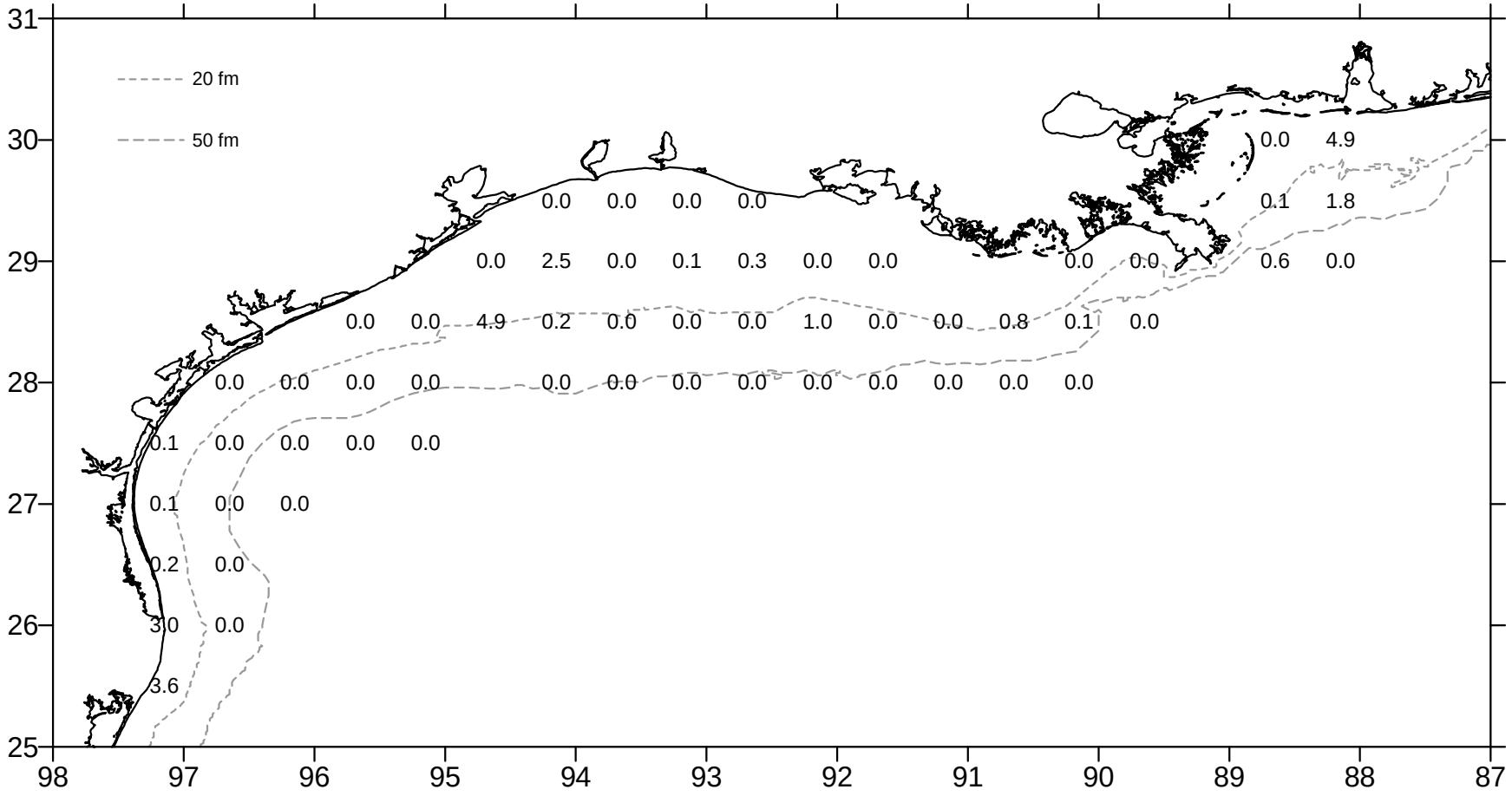

Figure 37. Pink shrimp, Penaeus duorarum, lb/hour for June-July 2000.

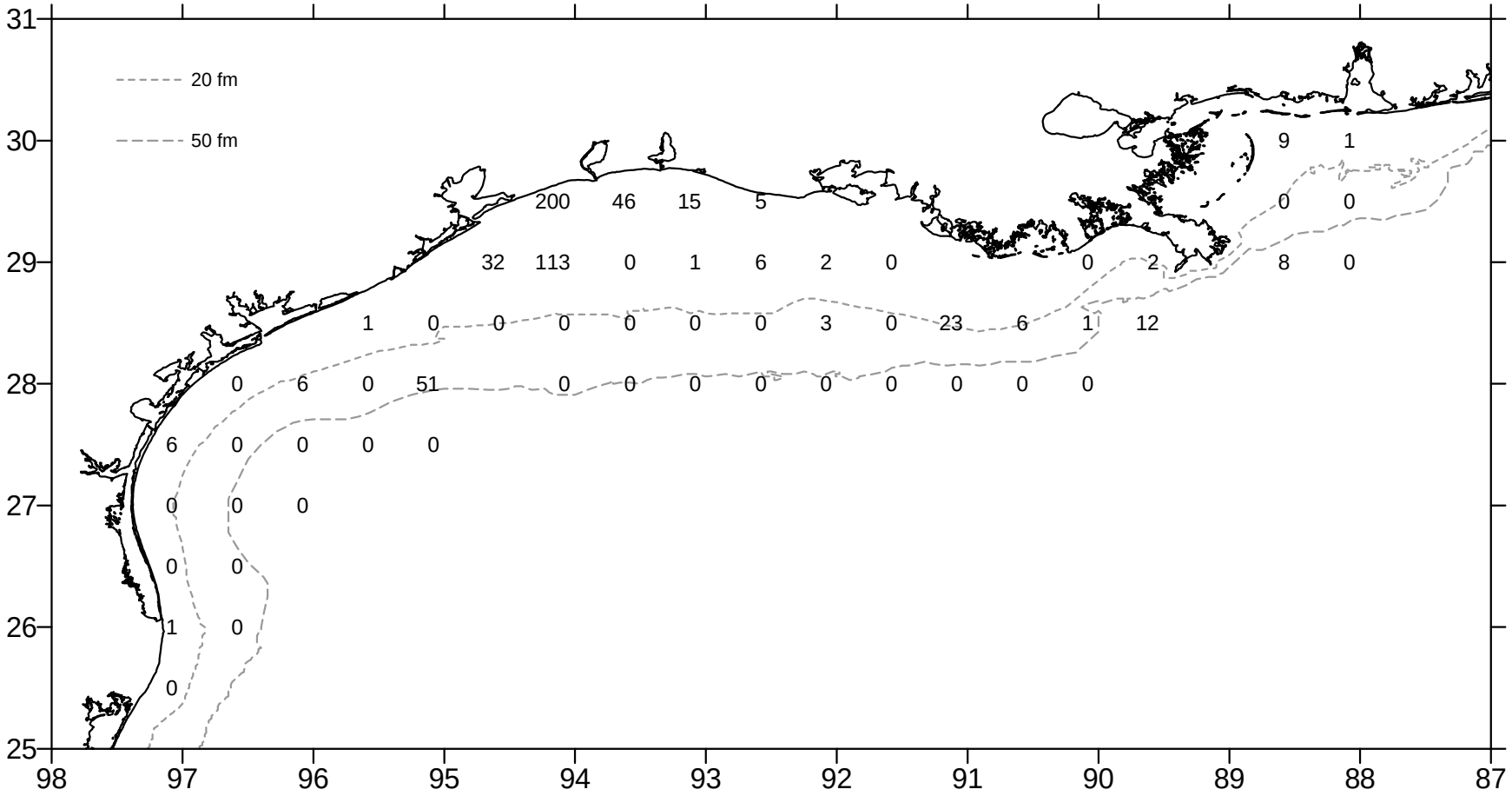

Figure 38. White shrimp, Penaeus setiferus, number/hour for June-July 2000.

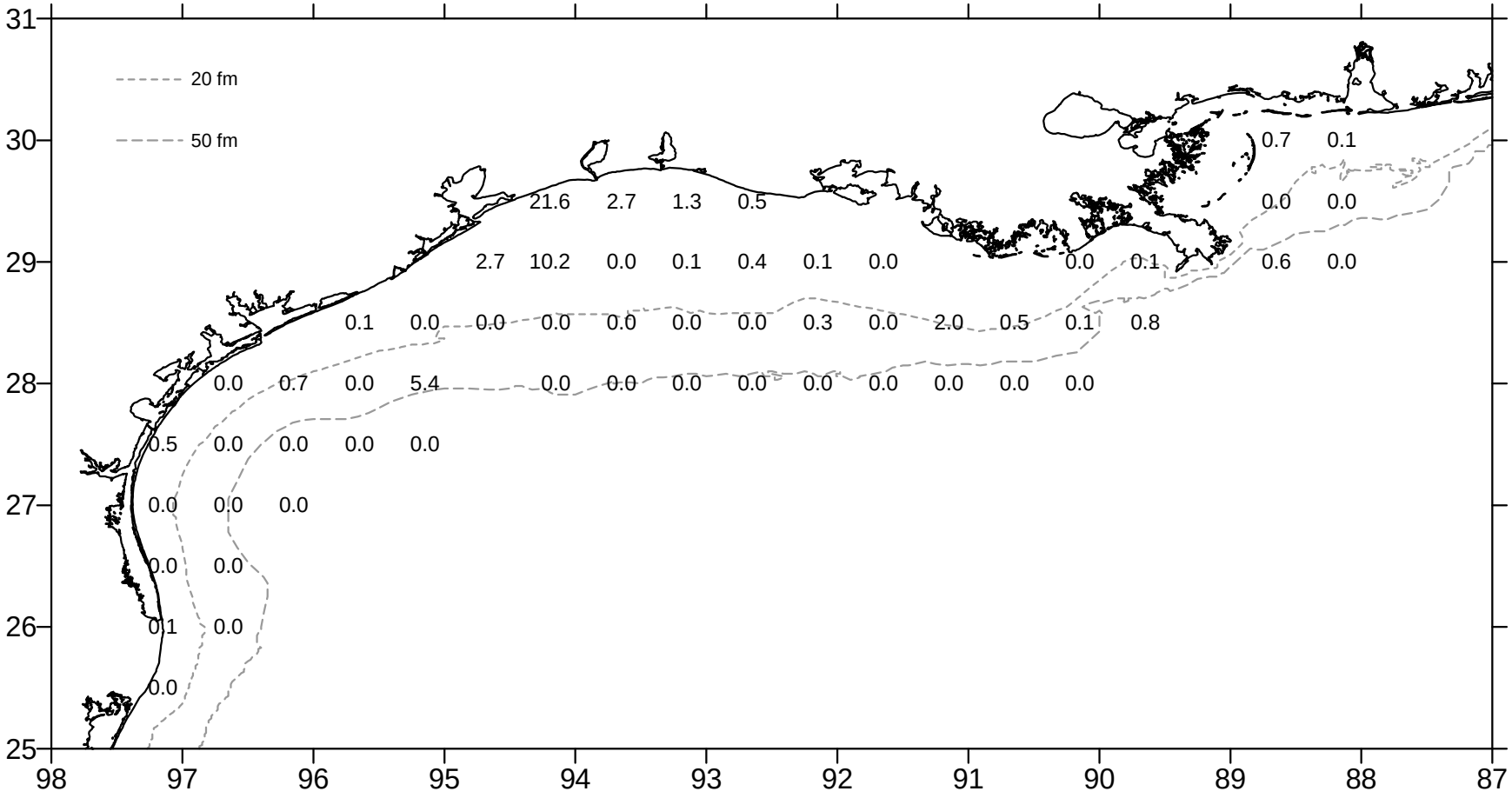

Figure 39. White shrimp, Penaeus setiferus, lb/hour for June-July 2000.

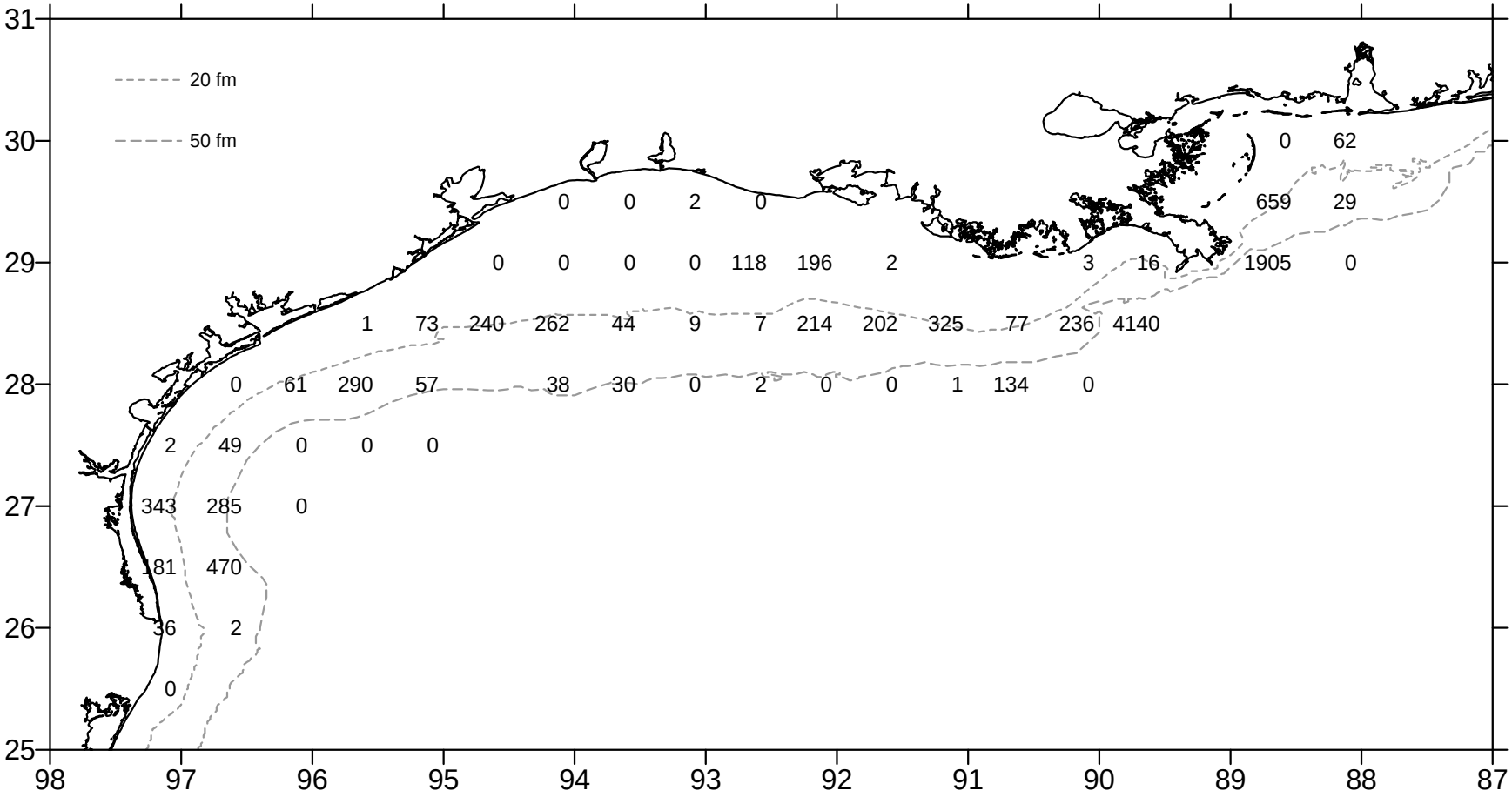

Figure 40. Roughback shrimp, Trachypenaeus similis, number/hour for June-July 2000.

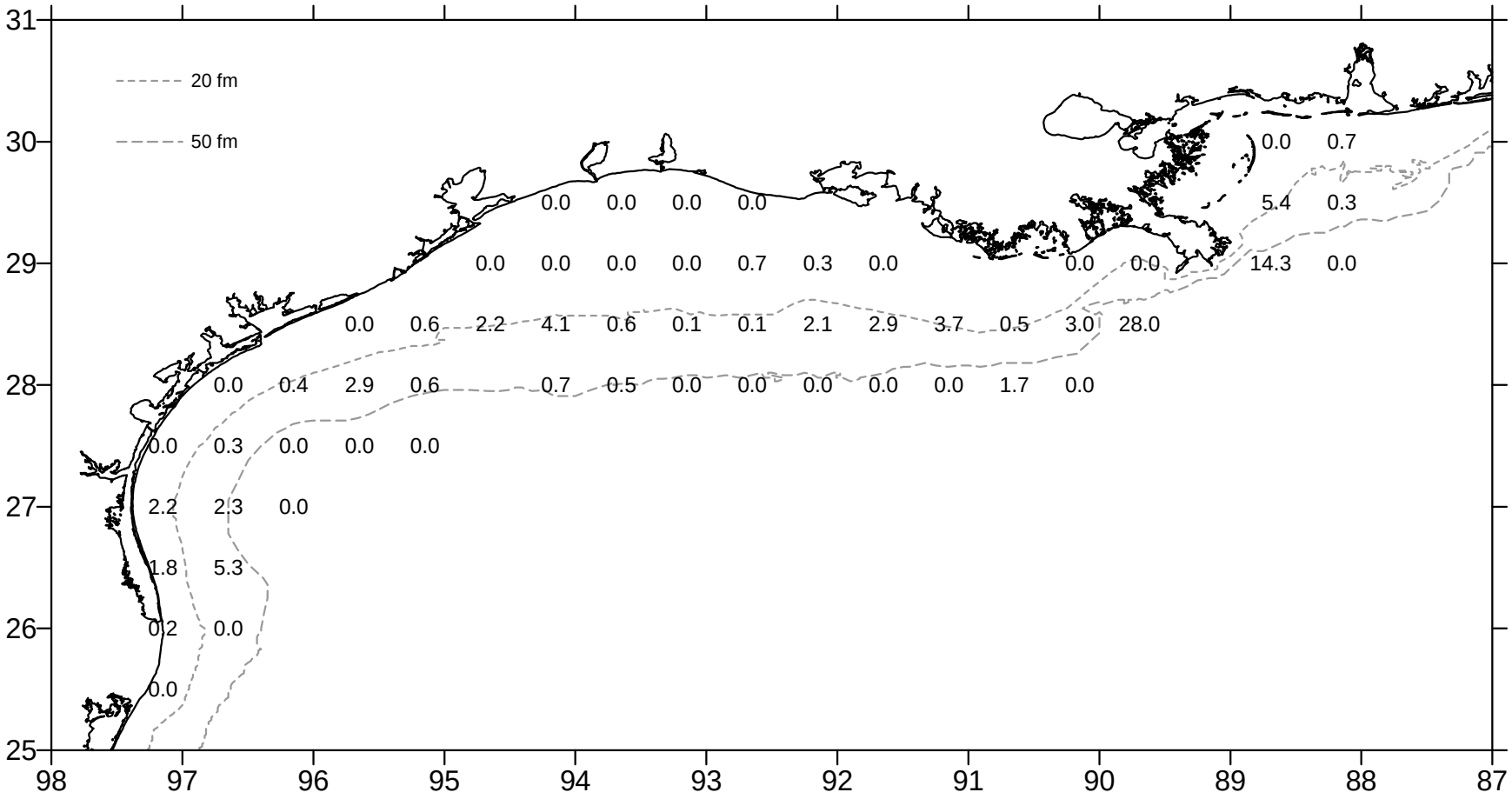

Figure 41. Roughback shrimp, Trachypenaeus similis, lb/hour for June-July 2000.

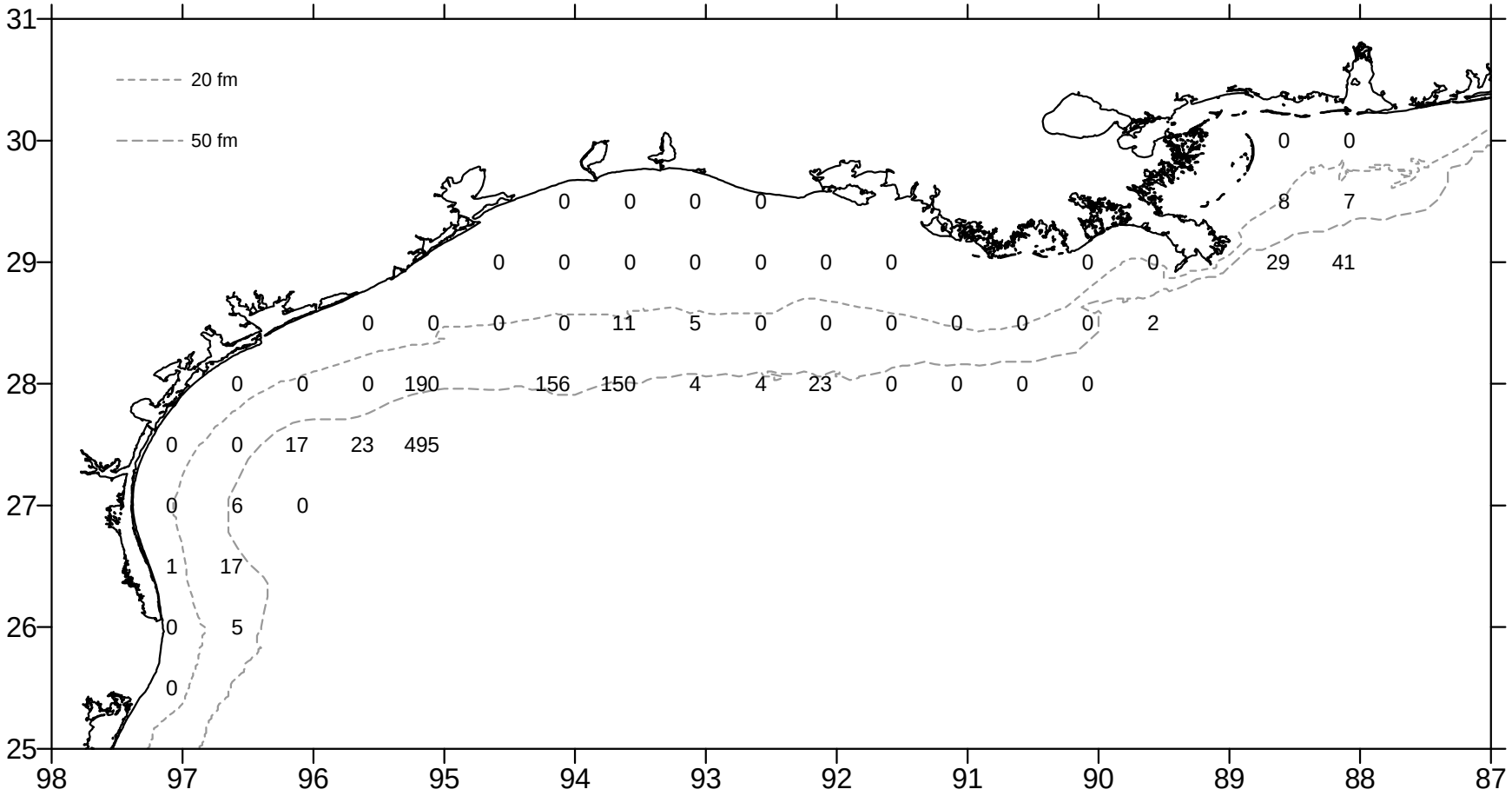

Figure 42. Longspine swimming crab, Portunus spinicarpus, number/hour for June-July 2000.

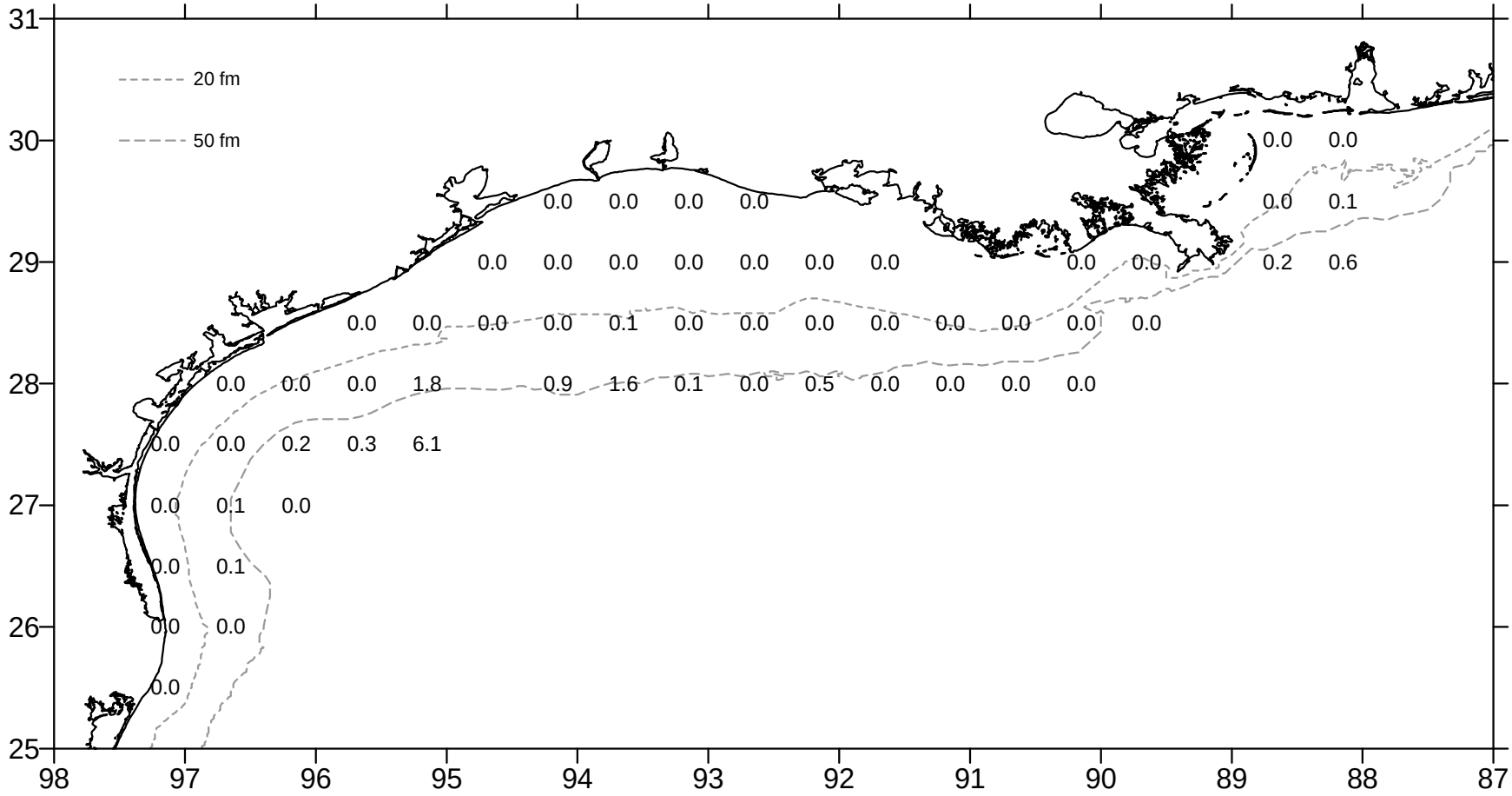

Figure 43. Longspine swimming crab, Portunus spinicarpus, lb/hour for June-July 2000.

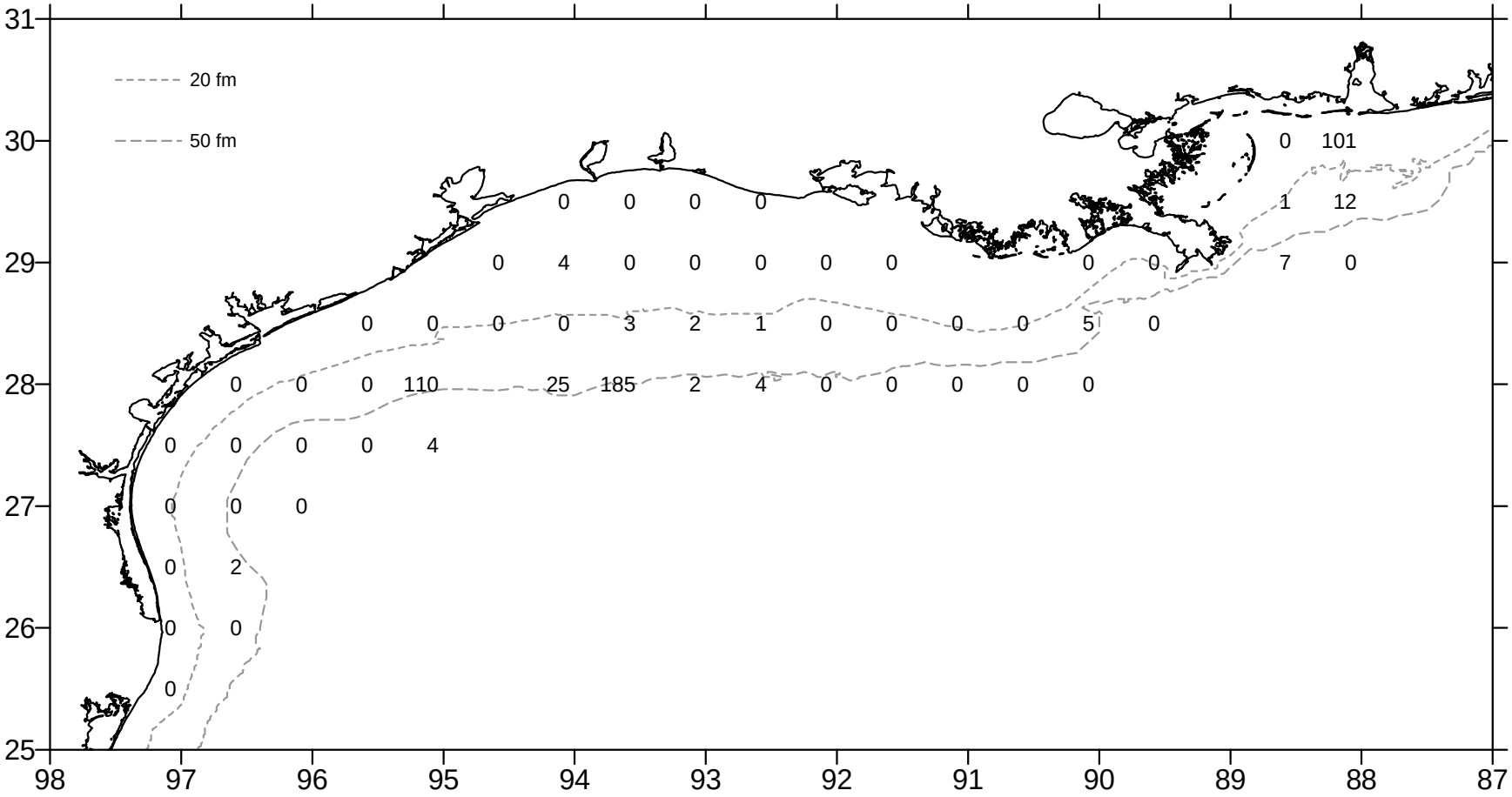

Figure 44. Brown rock shrimp, Sicyonia brevirostris, number/hour for June-July 2000.

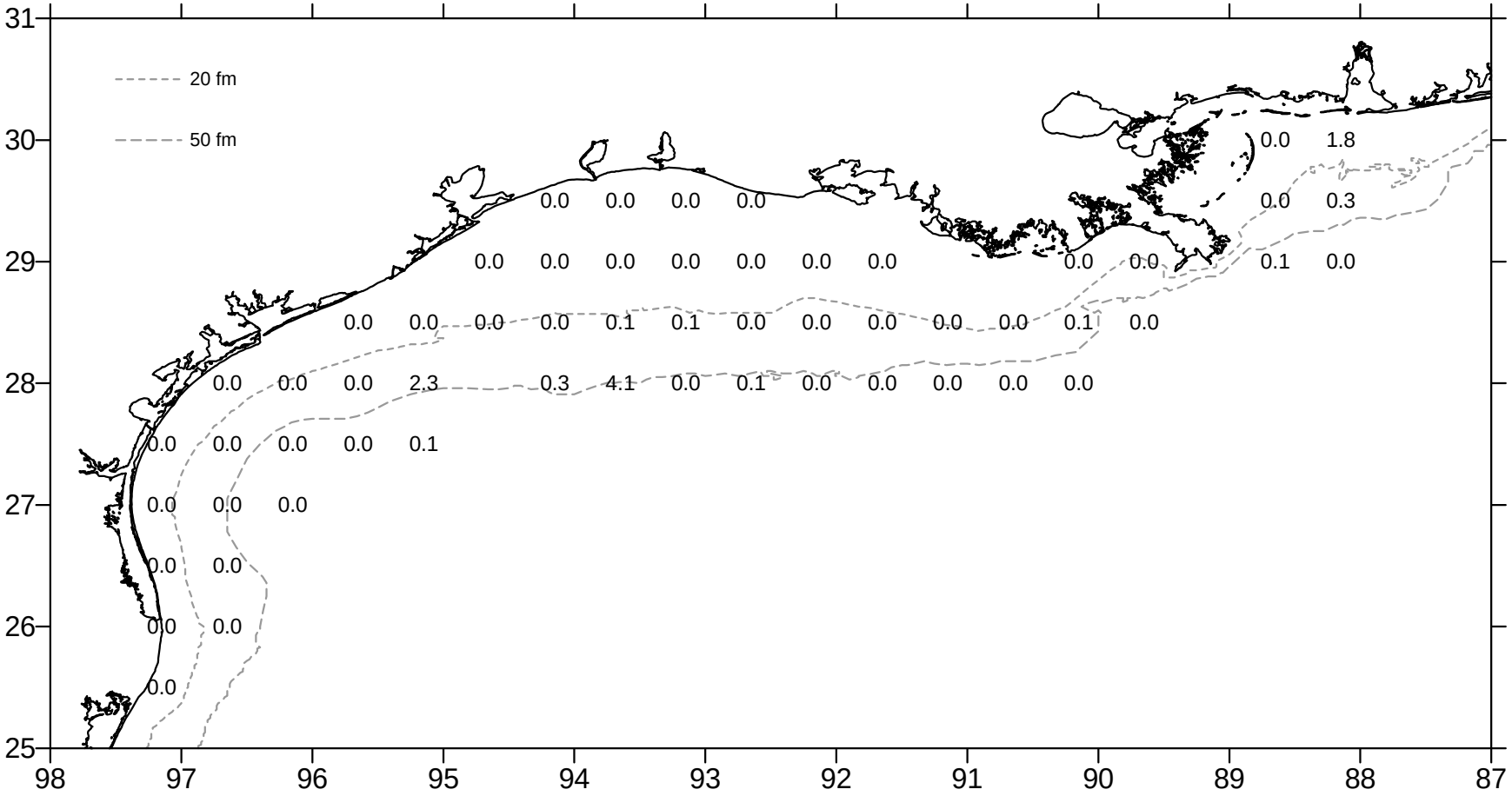

Figure 45. Brown rock shrimp, Sicyonia brevirostris, lb/hour for June-July 2000.

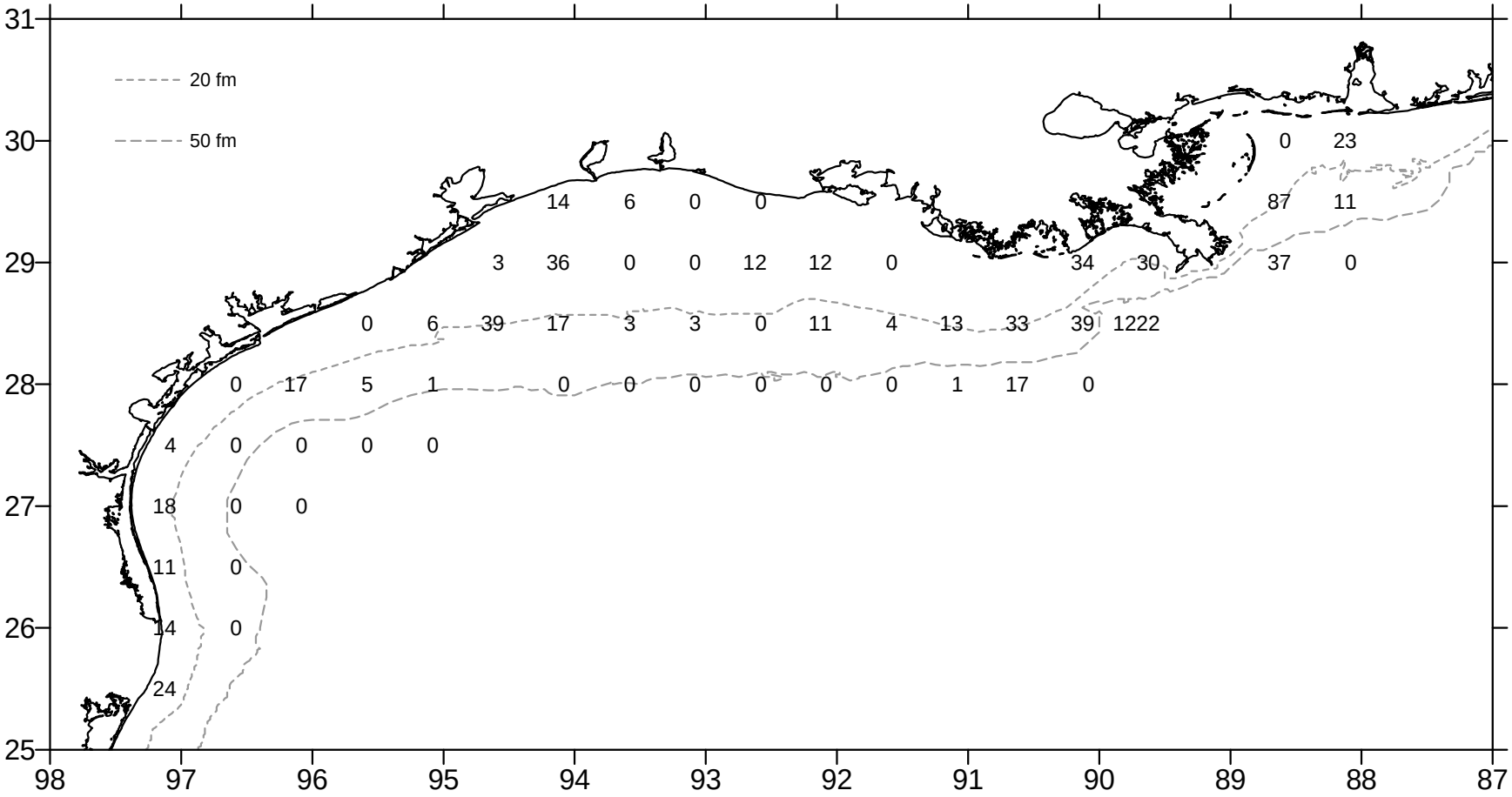

Figure 46. Mantis shrimp, Squilla empusa, number/hour for June-July 2000.

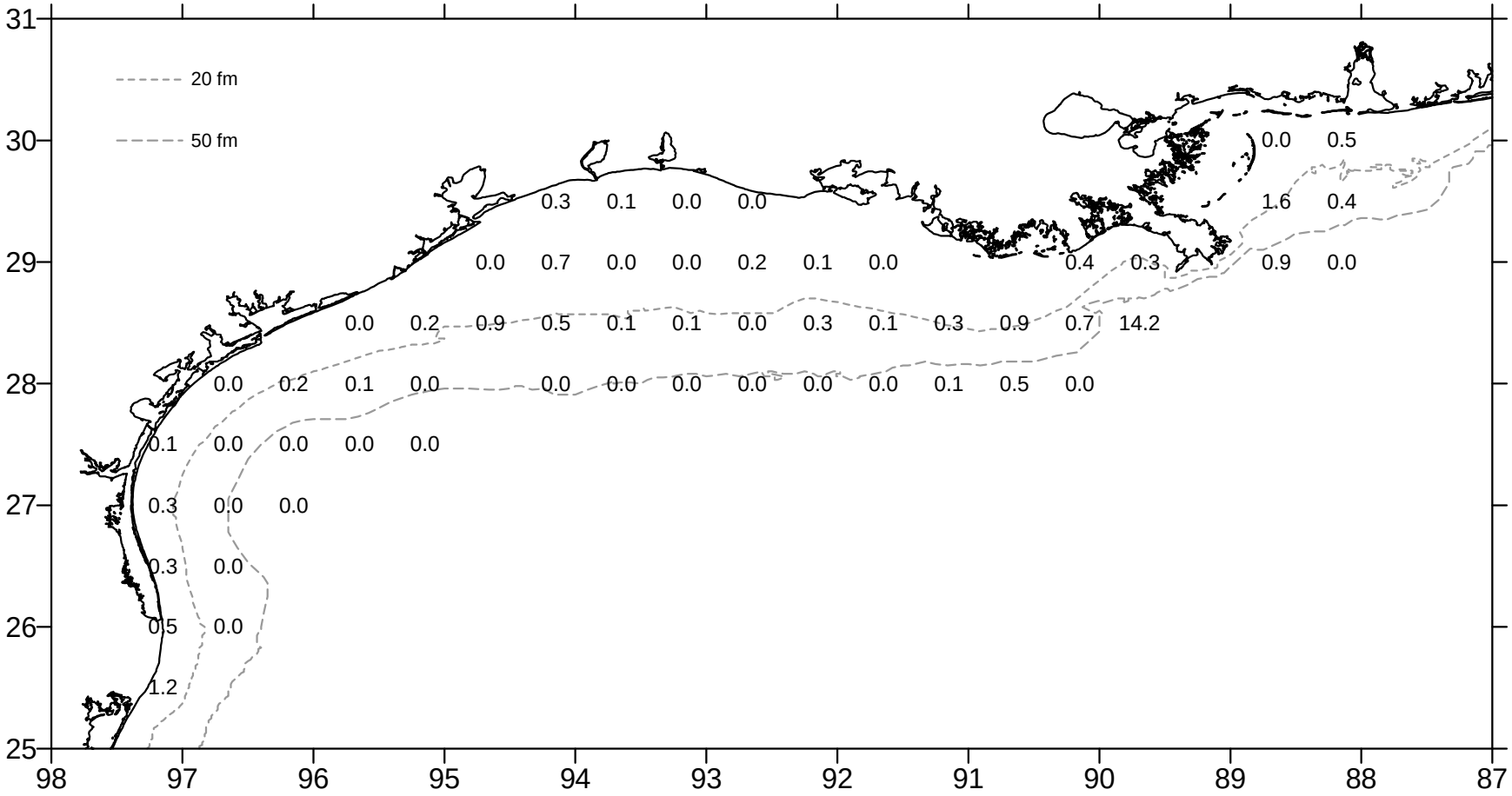

Figure 47. Mantis shrimp, Squilla empusa, lb/hour for June-July 2000.

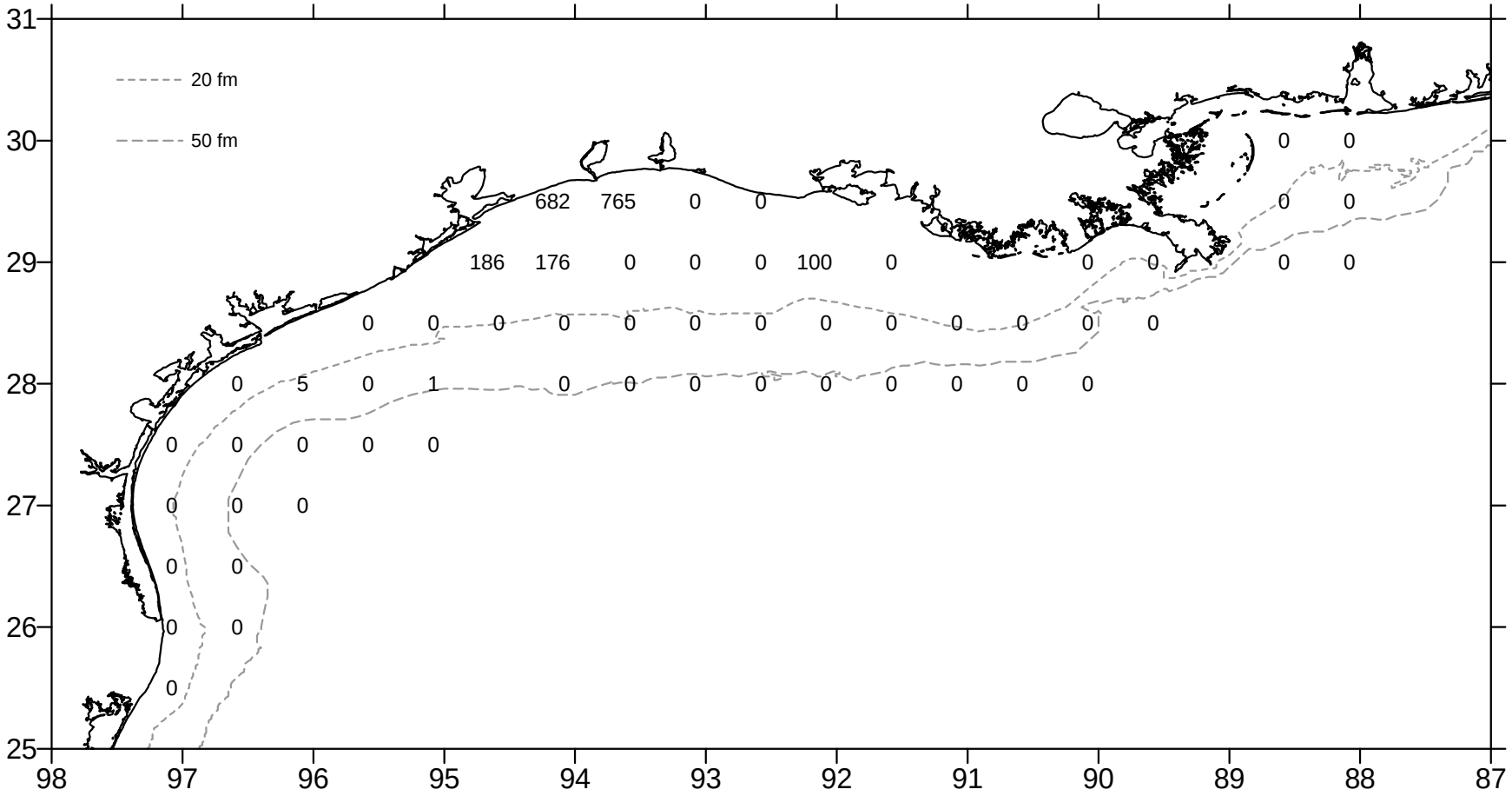

Figure 48. Seabob, Xiphopenaeus kroyeri, number/hour for June-July 2000.

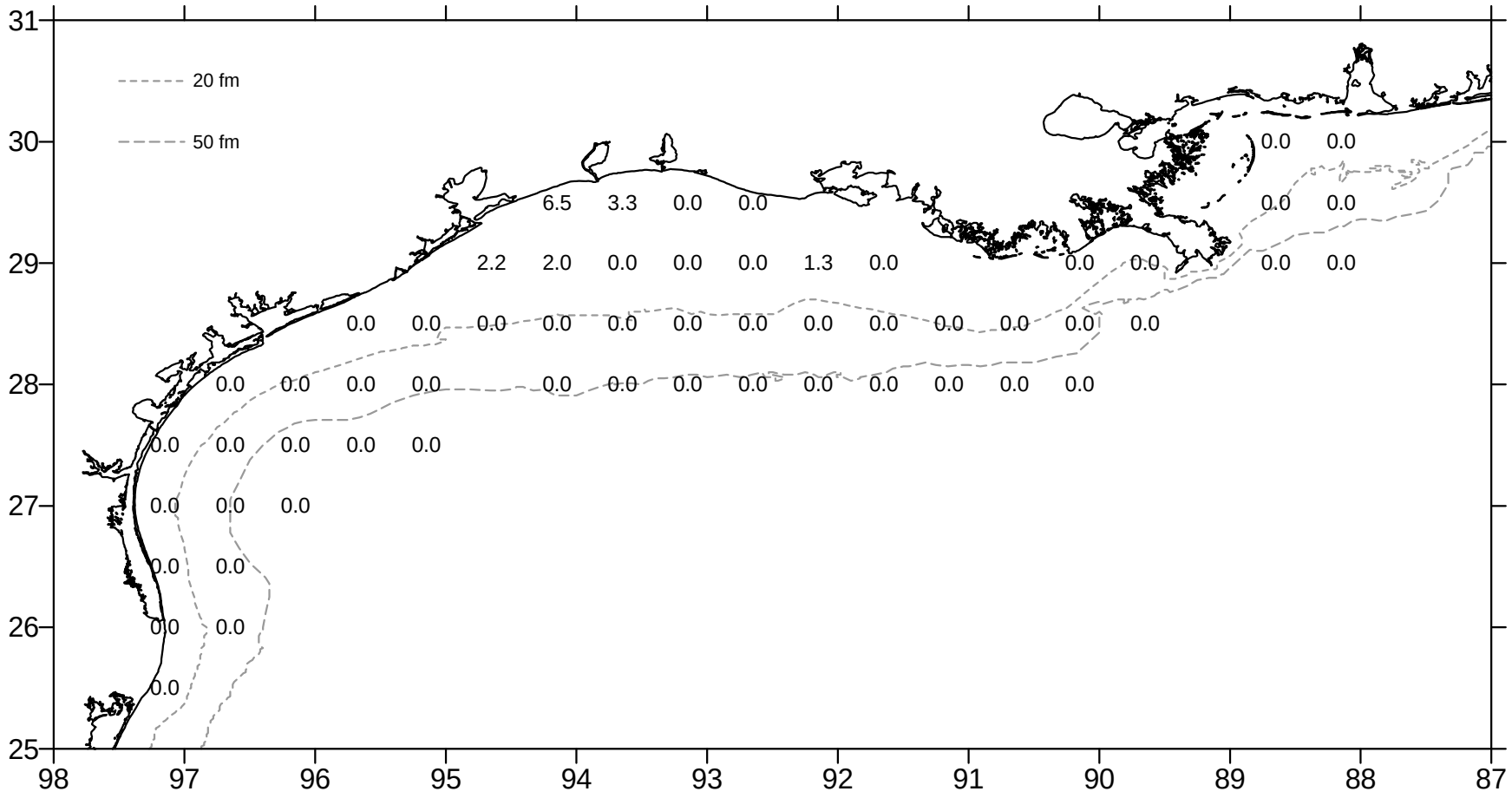

Figure 49. Seabob, Xiphopenaeus kroyeri, lb/hour for June-July 2000.

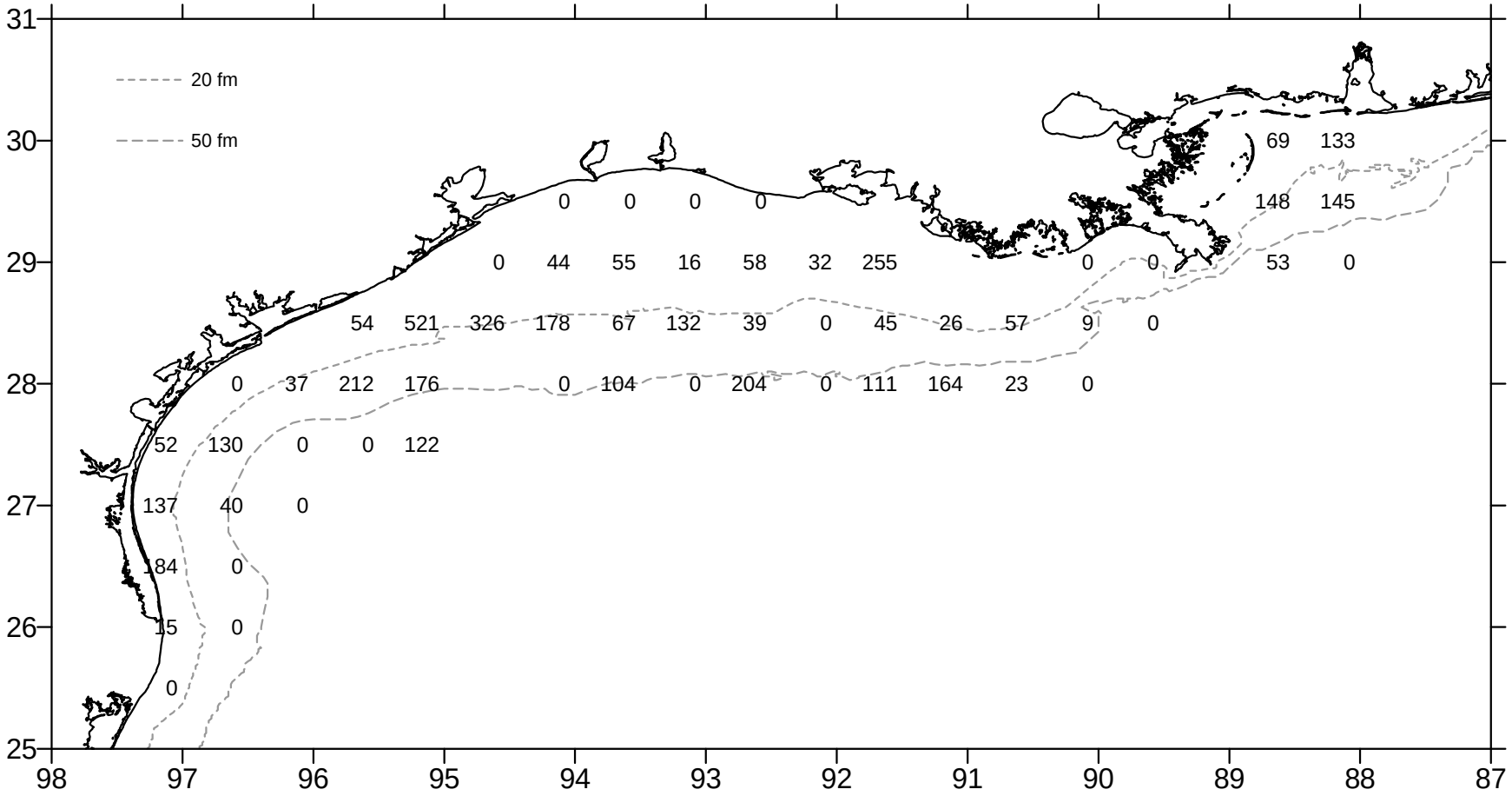

Figure 50. Arrow squid, Loligo pleii, number/hour for June-July 2000.

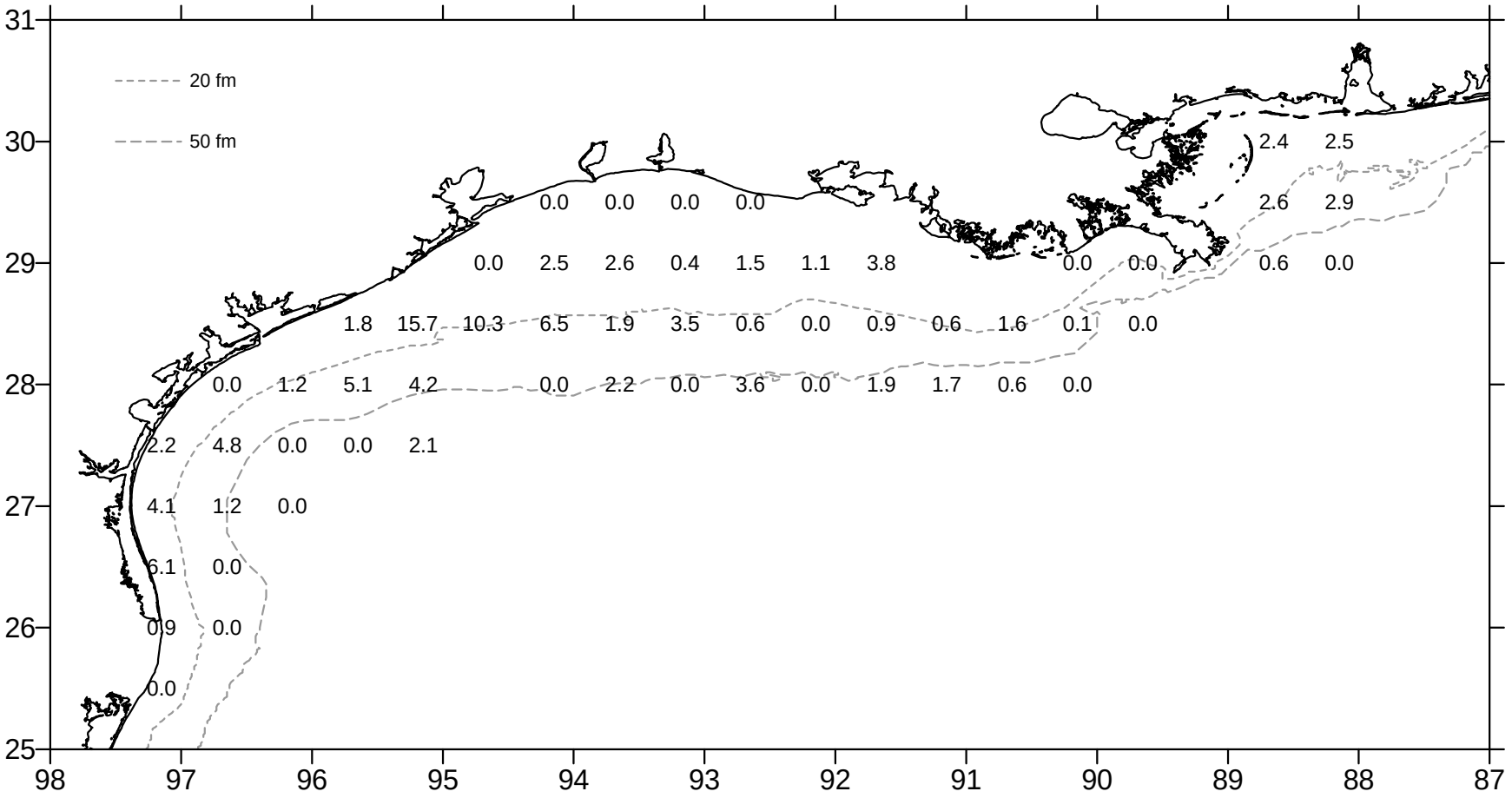

Figure 51. Arrow squid, Loligo pleii, lb/hour for June-July 2000.

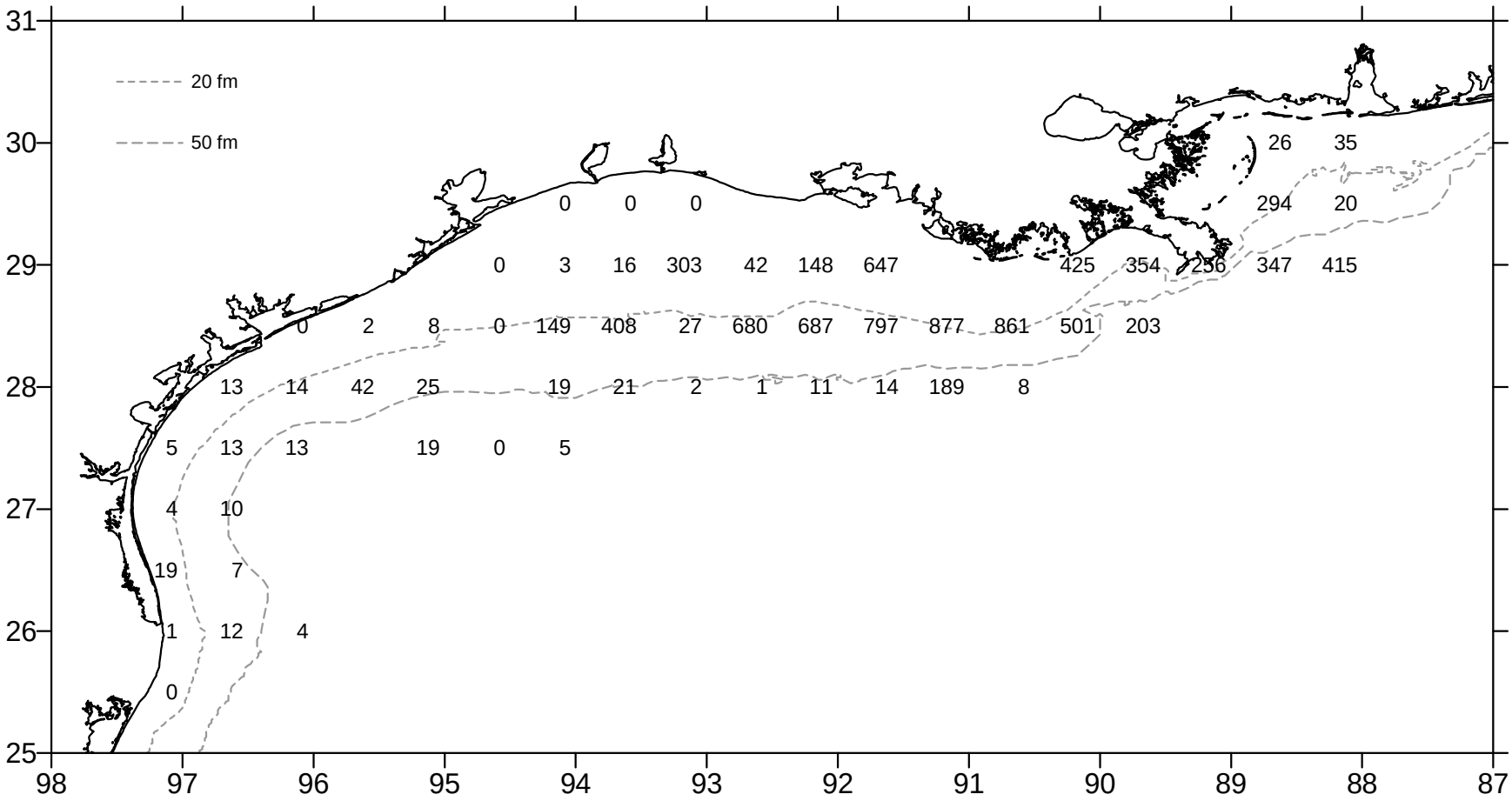

Figure 52. Atlantic croaker, Micropogonias undulatus, number/hour for October-December 2000.

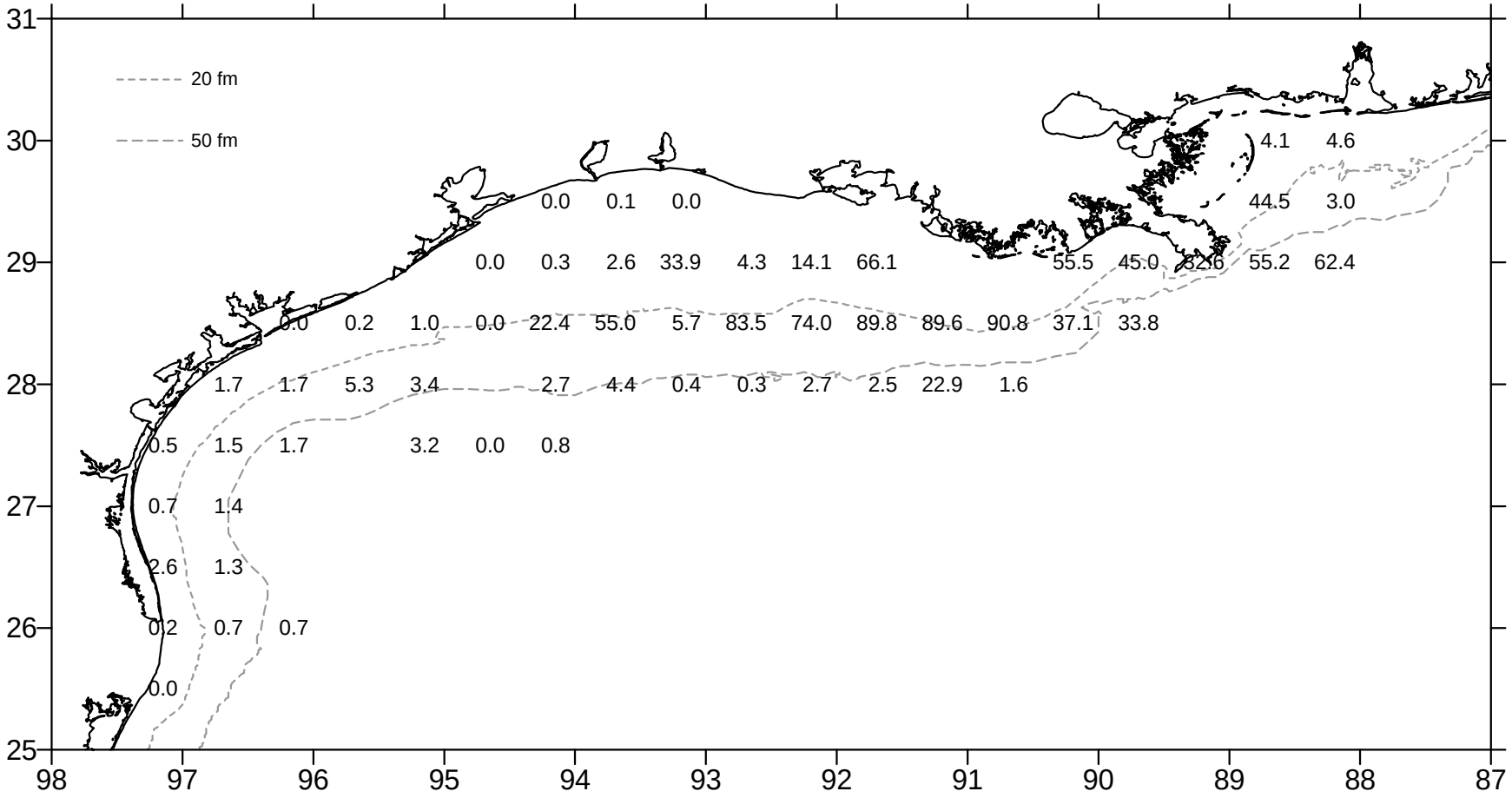

Figure 53. Atlantic croaker, Micropogonias undulatus, lb/hour for October-December 2000.

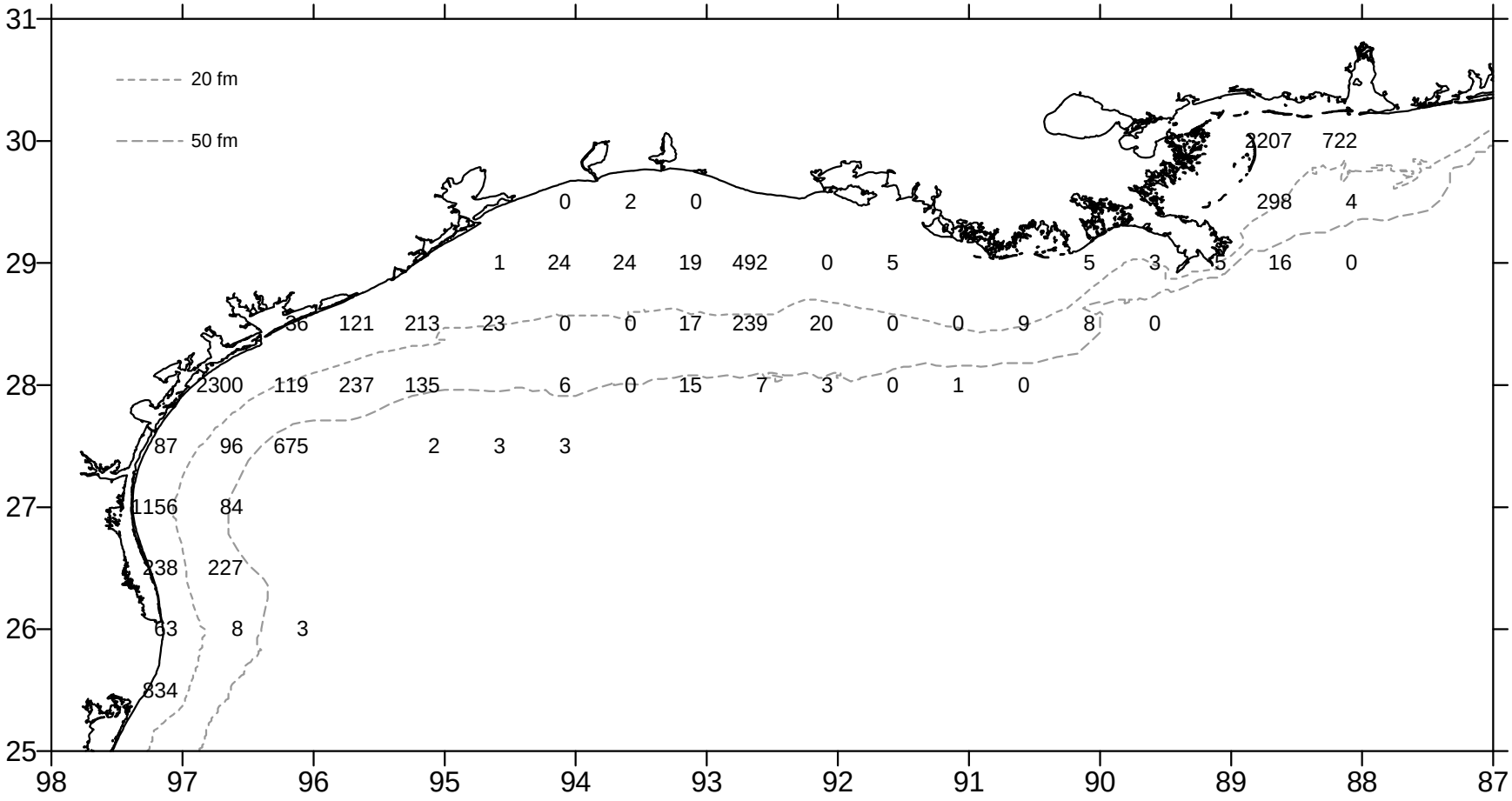

Figure 54. Atlantic bumper, Chloroscombrus chrysurus, number/hour for October-December 2000.

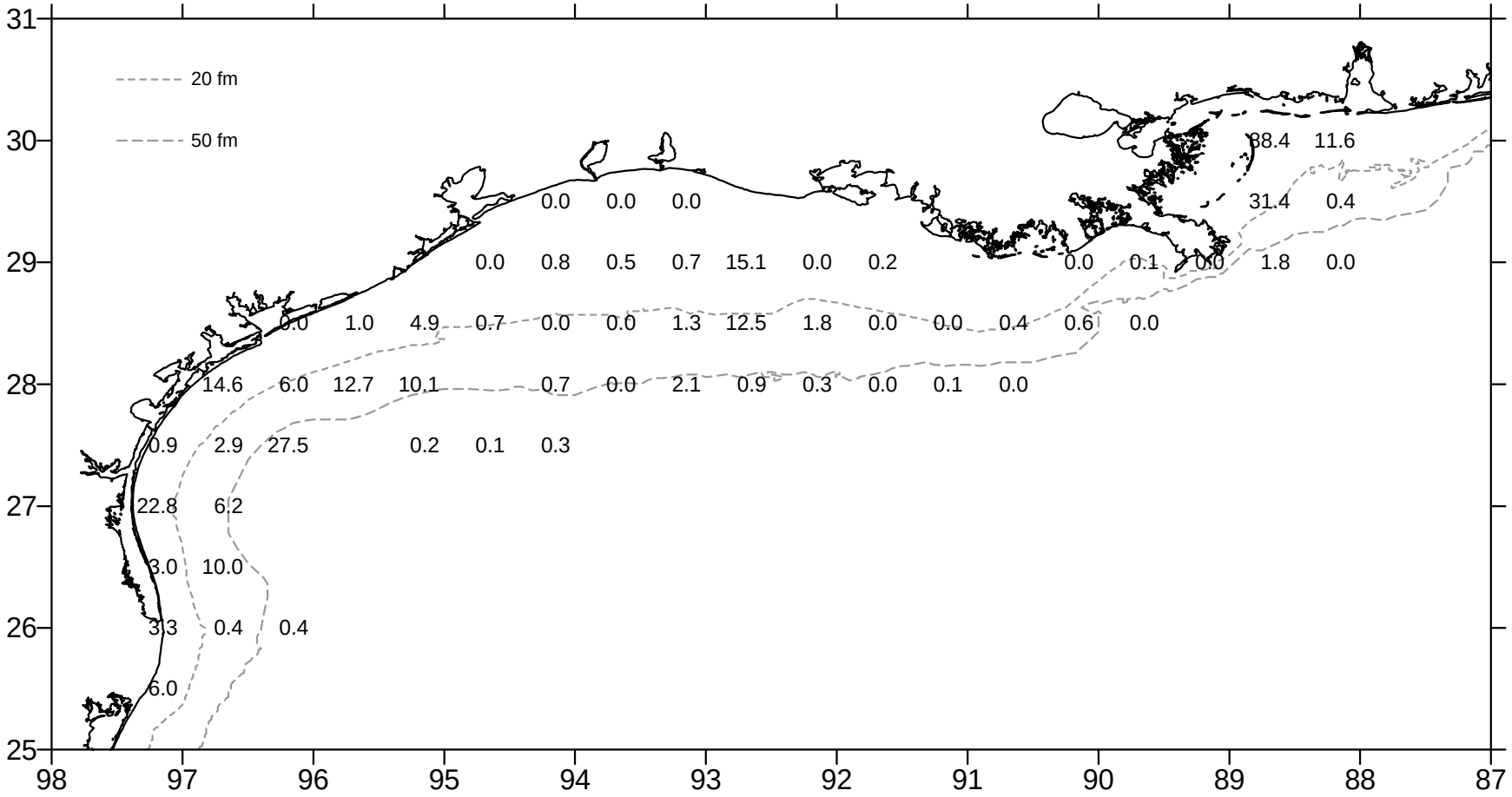

Figure 55. Atlantic bumper, Chloroscombrus chrysurus, lb/hour for October-December 2000.

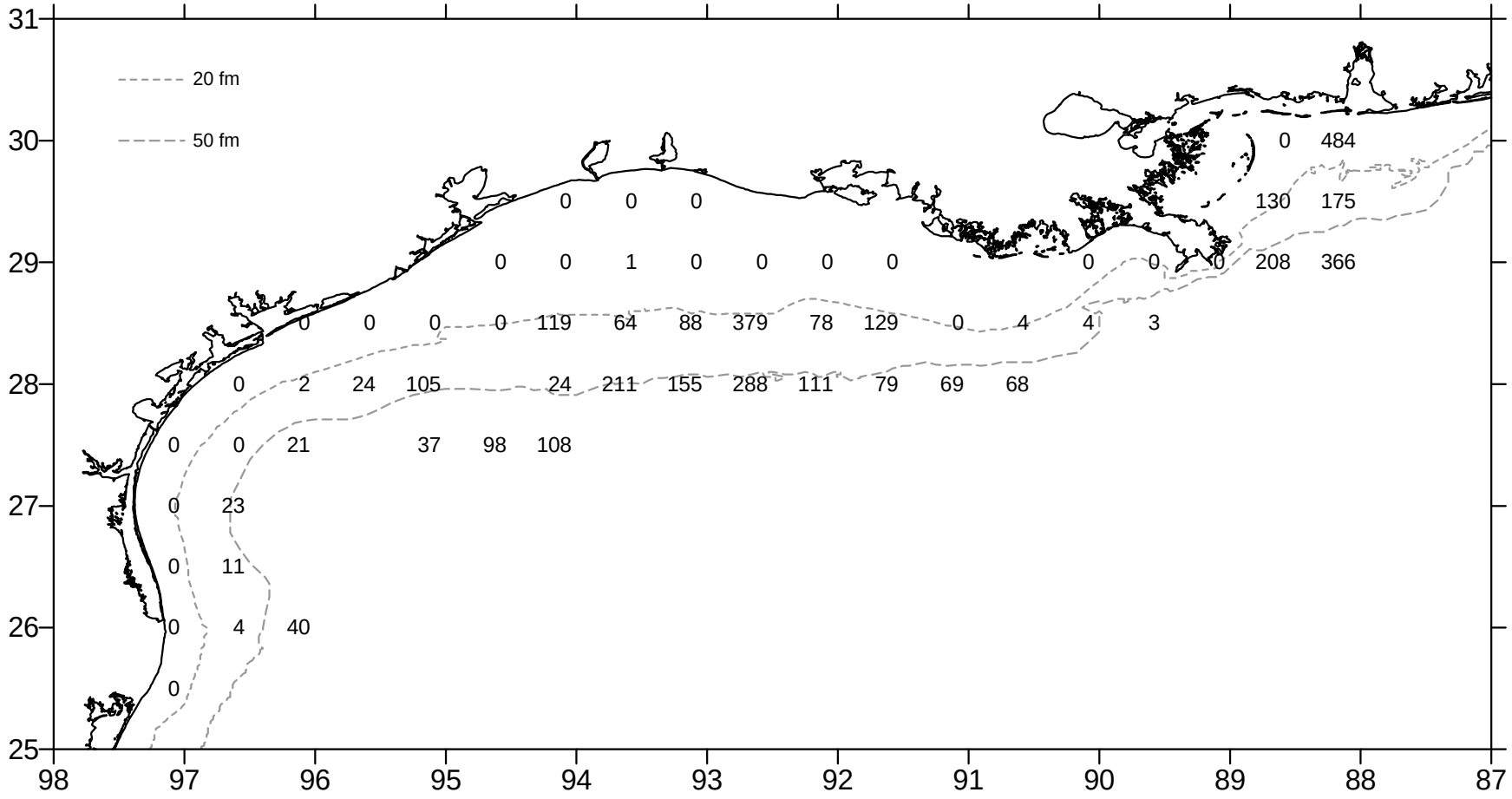

Figure 56. Longspine porgy, Stenotomus caprinus, number/hour for October-December 2000.

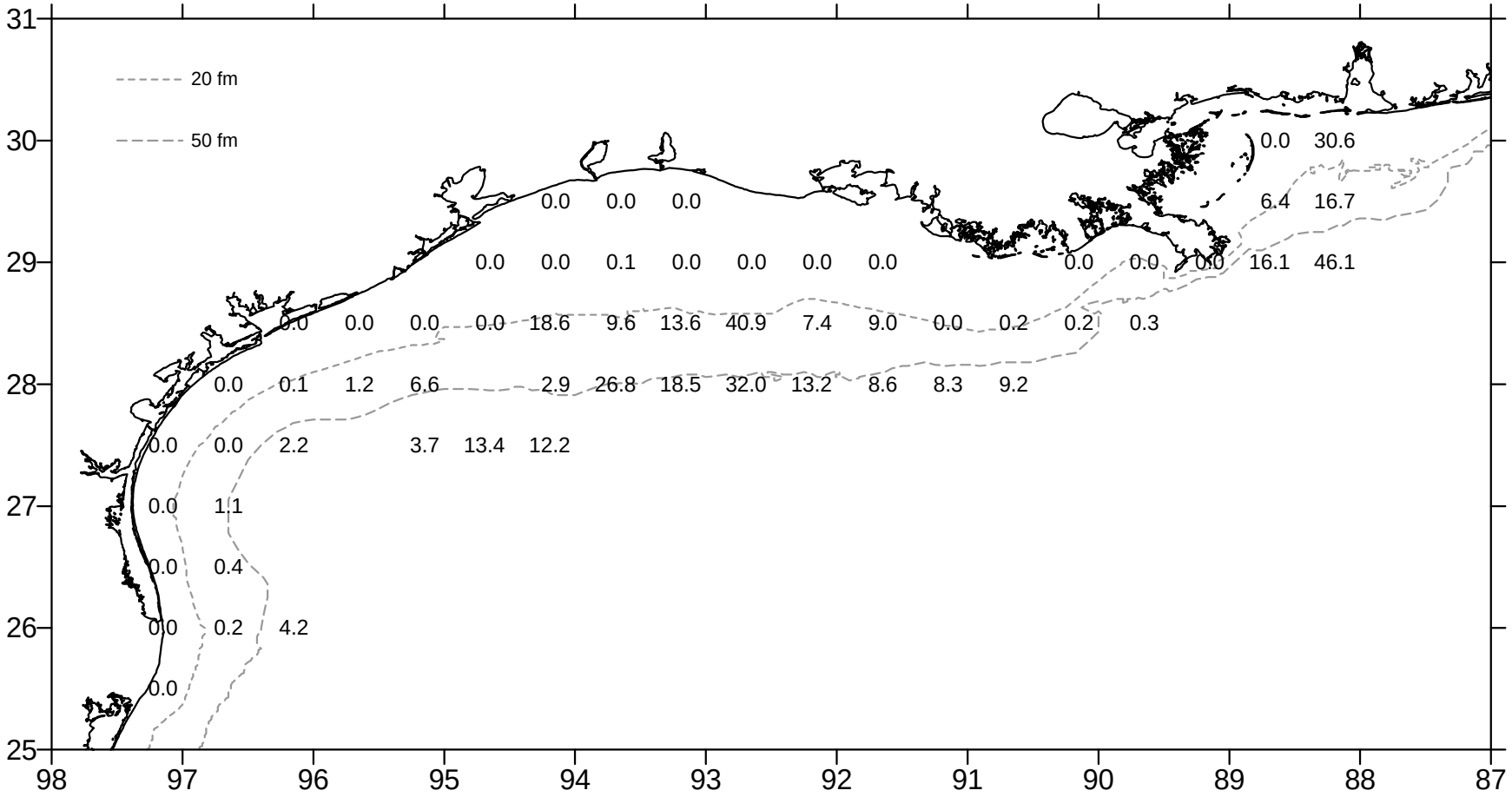

Figure 57. Longspine porgy, Stenotomus caprinus, lb/hour for October-December 2000.

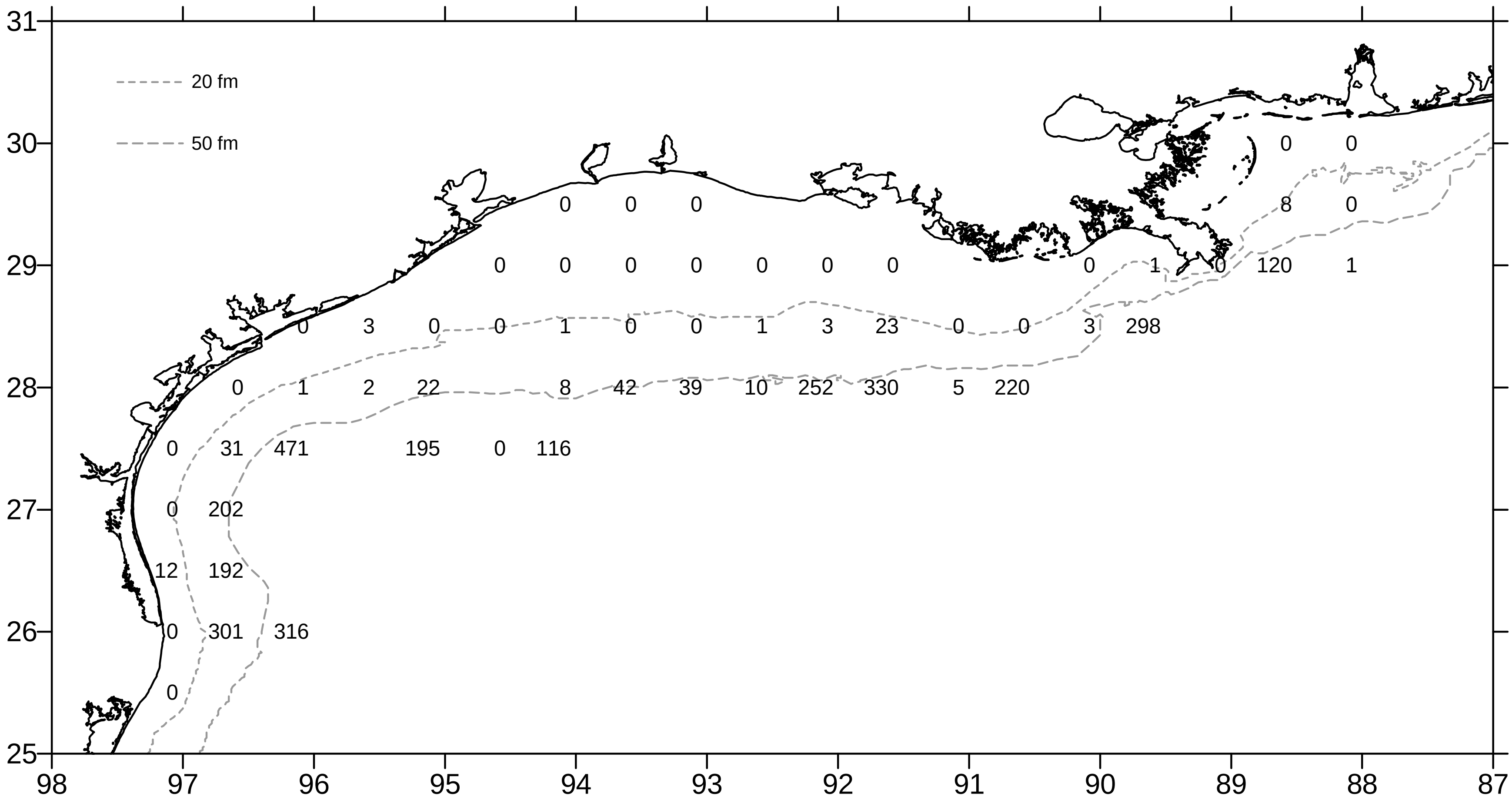

Figure 58. Blackear bass, Serranus atrobranchus, number/hour for October-December 2000.

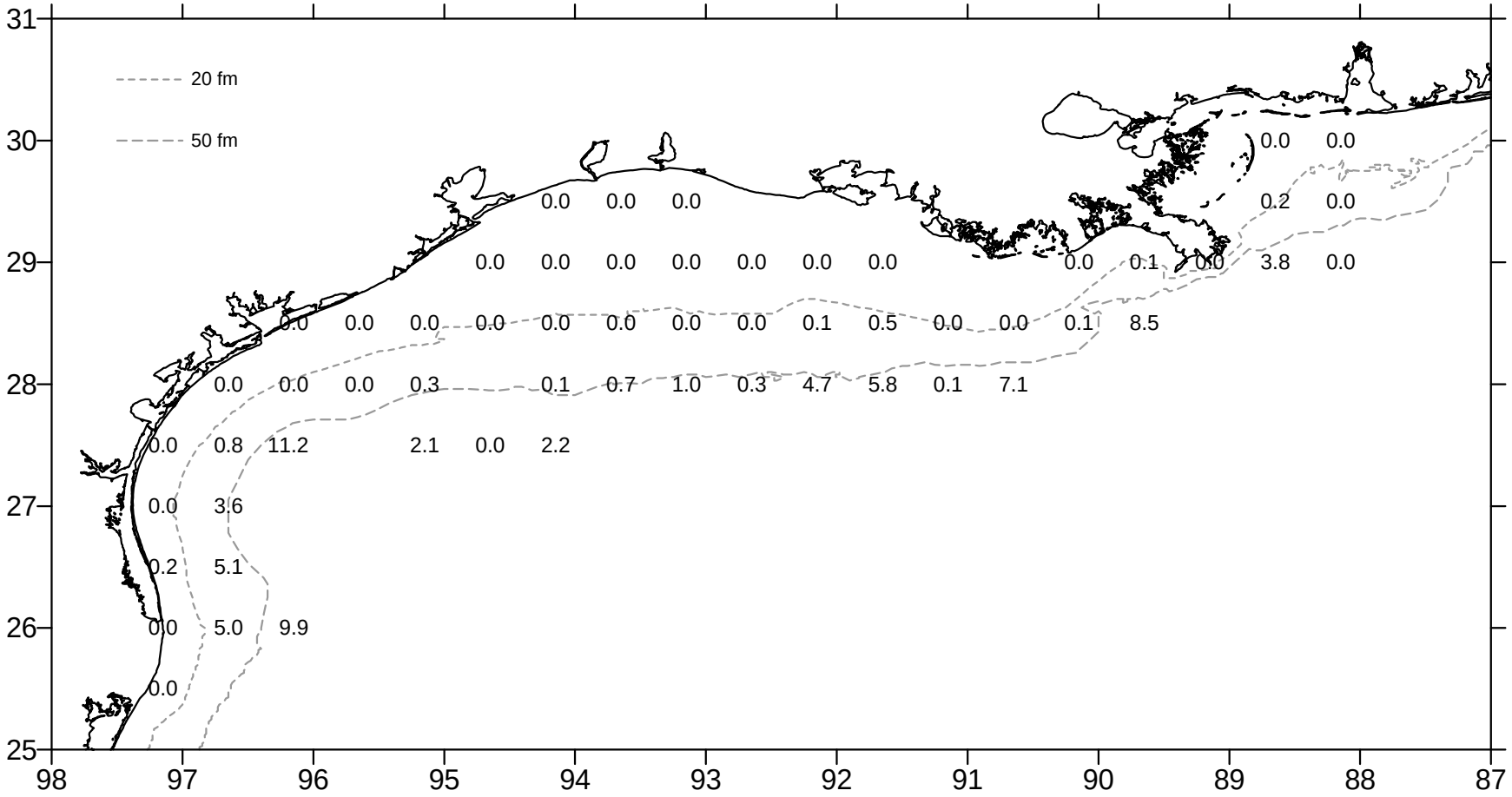

Figure 59. Blackear bass, Serranus atrobranchus, lb/hour for October-December 2000.

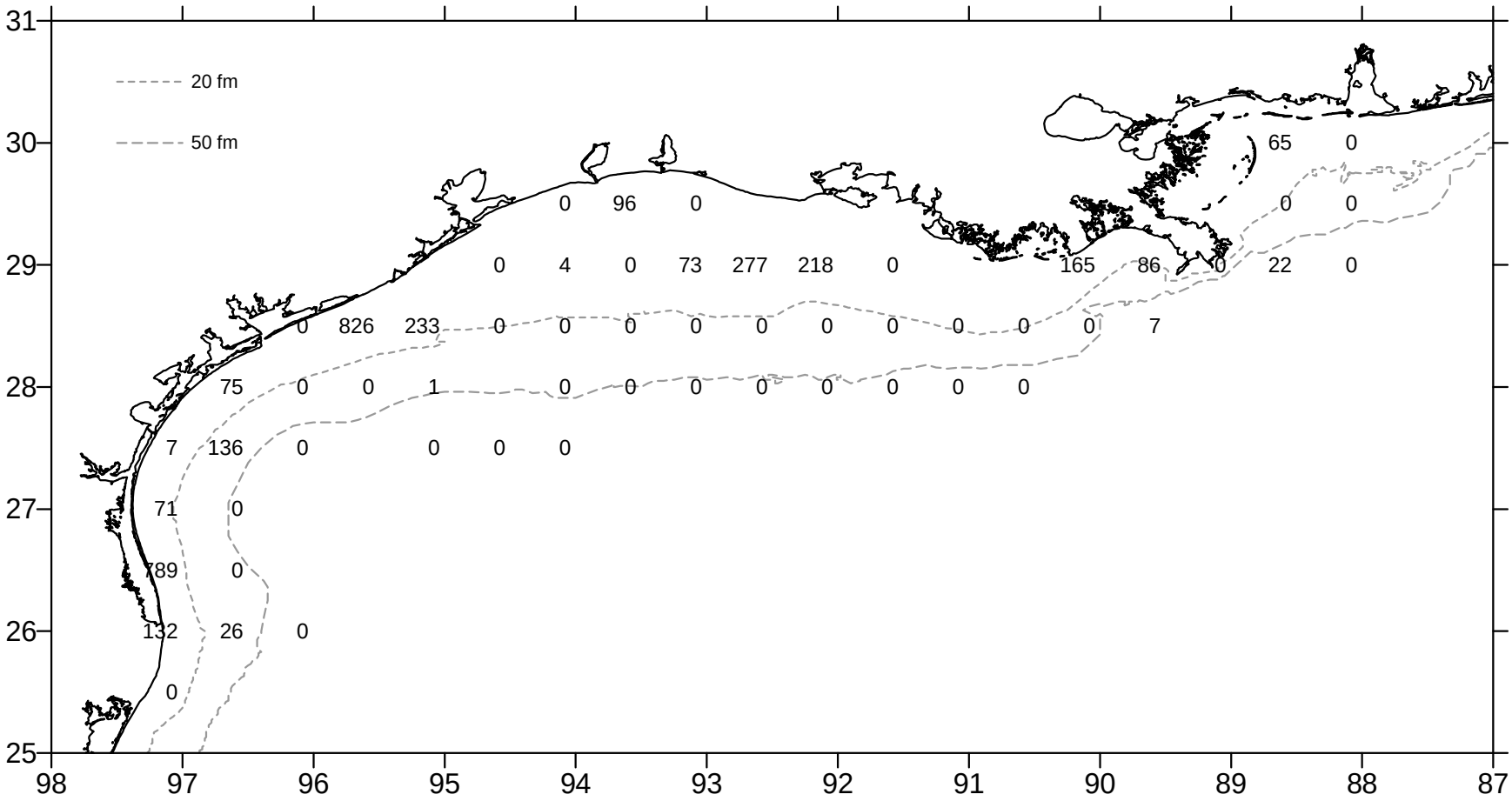

Figure 60. Seatrouts, Cynoscion spp., number/hour for October-December 2000.

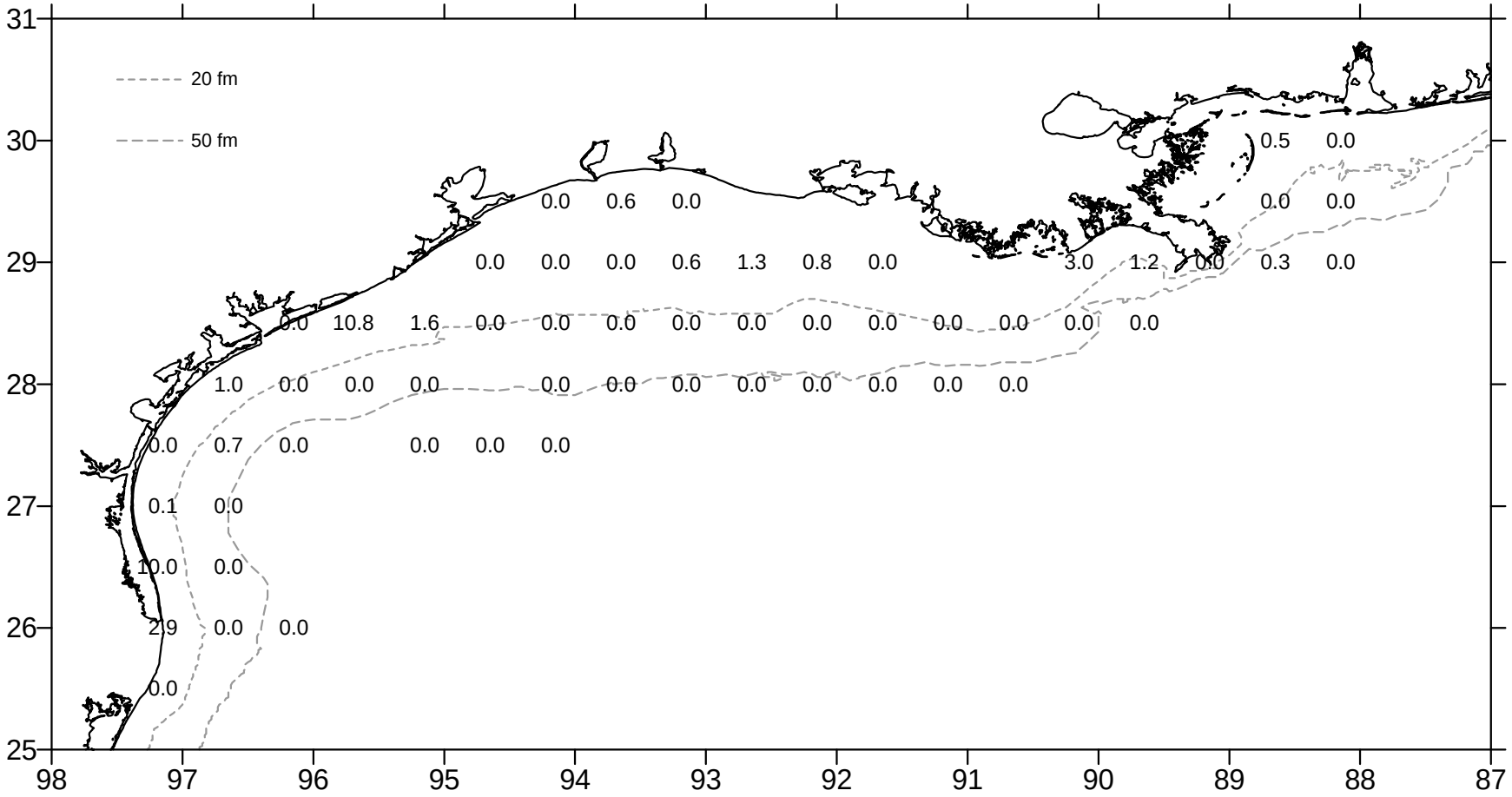

Figure 61. Seatrouts, Cynoscion spp., lb/hour for October-December 2000.

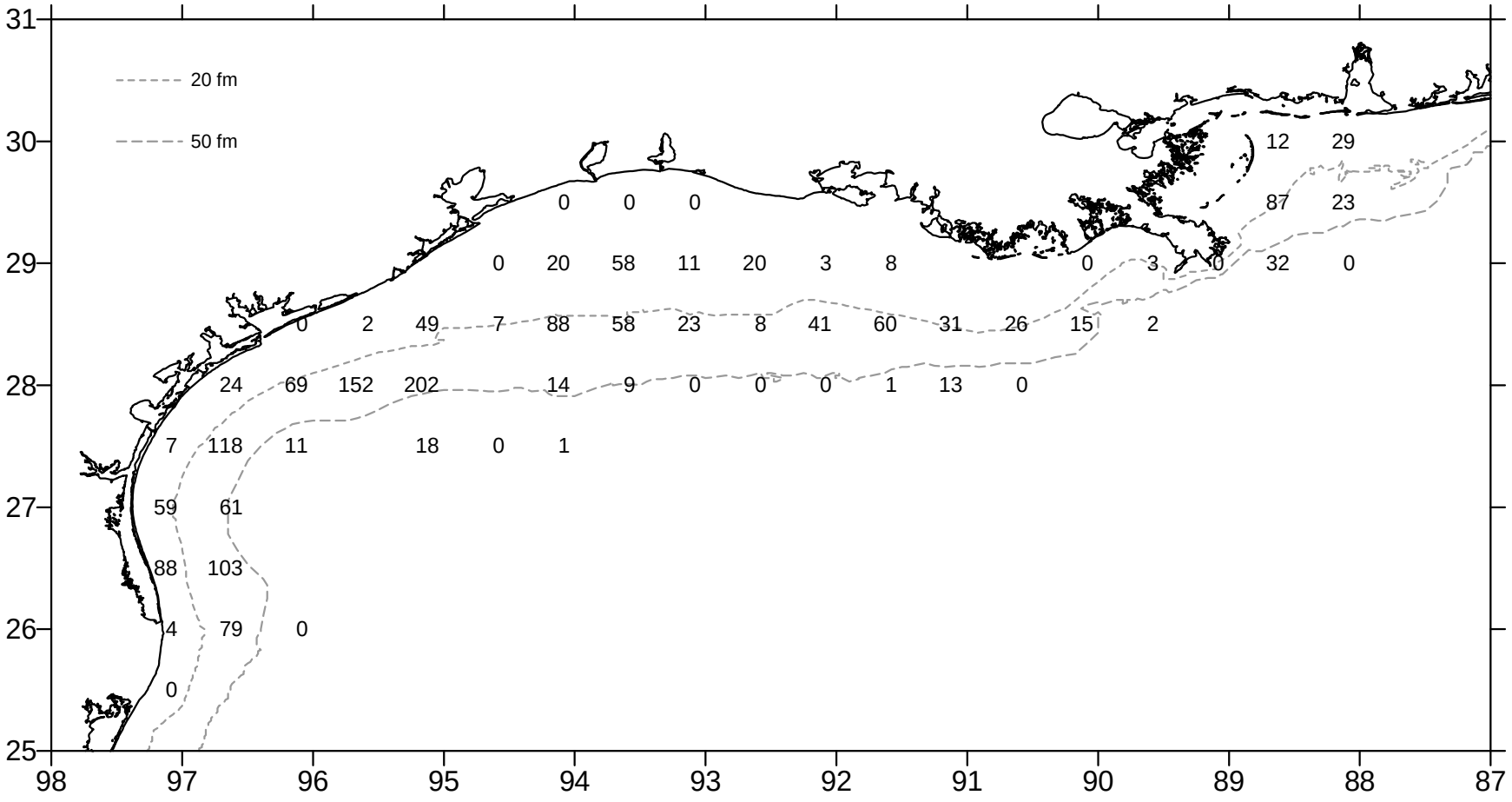

Figure 62. Dwarf sand perch, Diplectrum bivittatum, number/hour for October-December 2000.

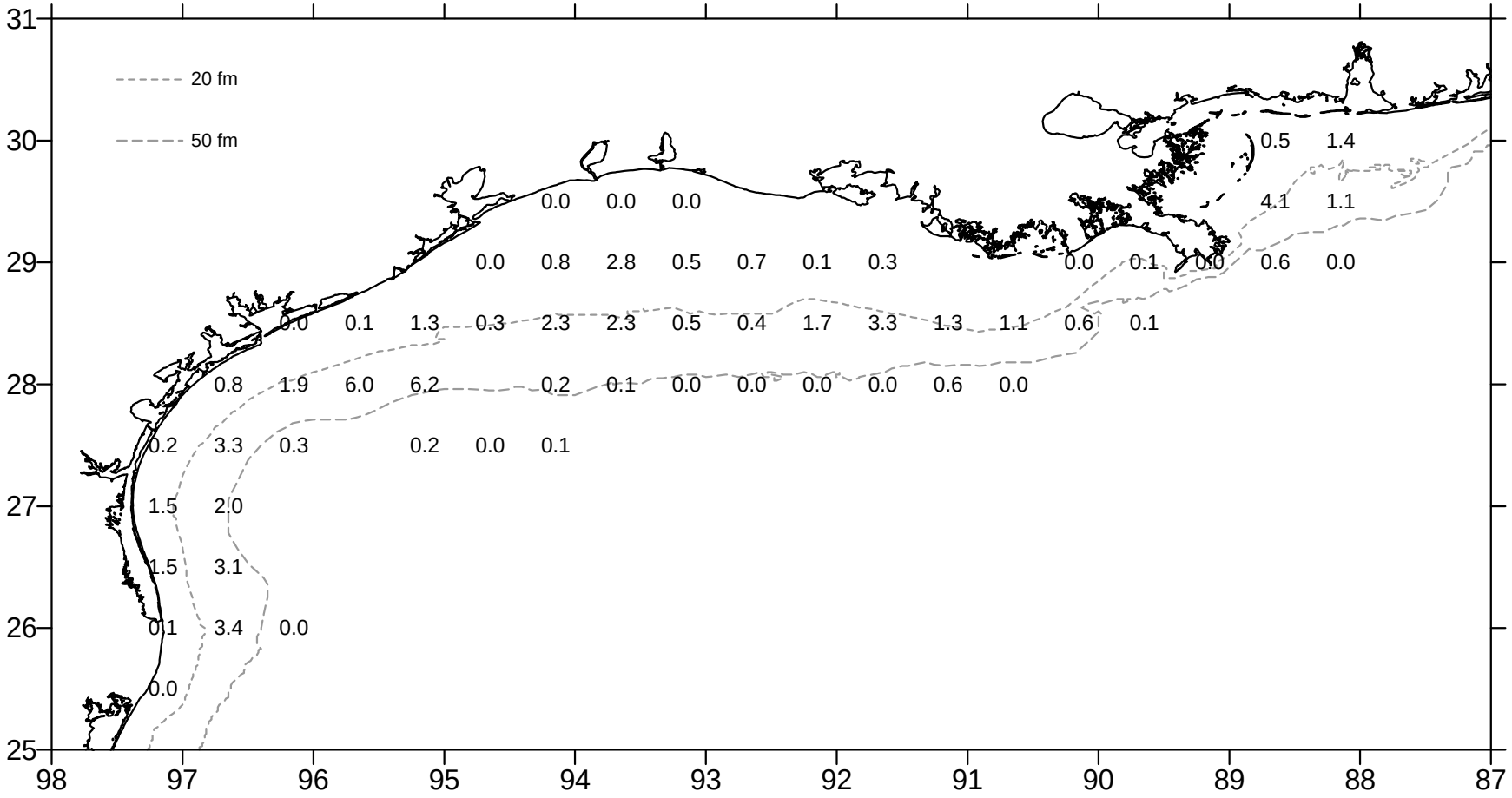

Figure 63. Dwarf sand perch, Diplectrum bivittatum, lb/hour for October-December 2000.

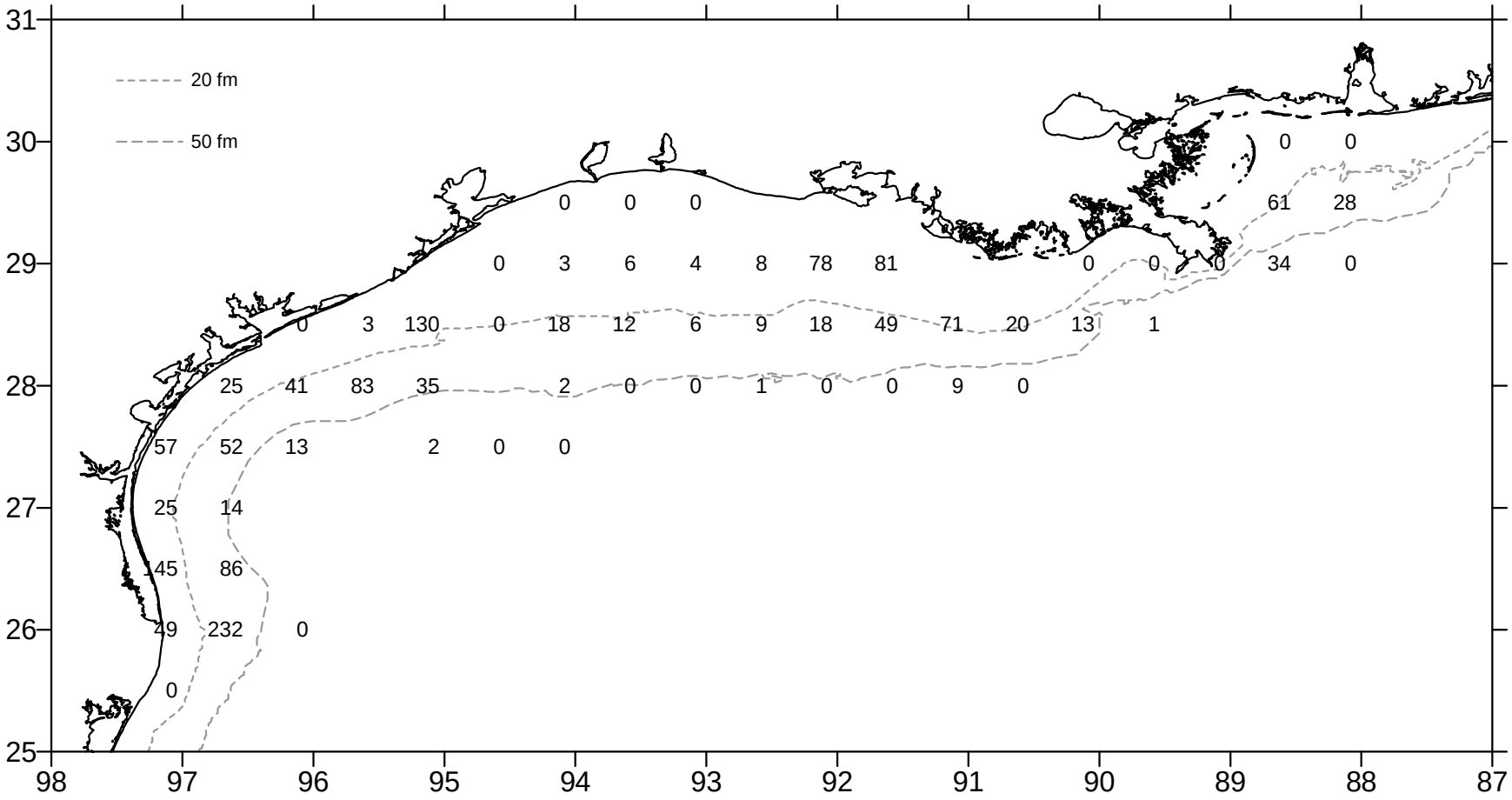

Figure 64. Shoal flounder, Syacium gunteri, number/hour for October-December 2000.

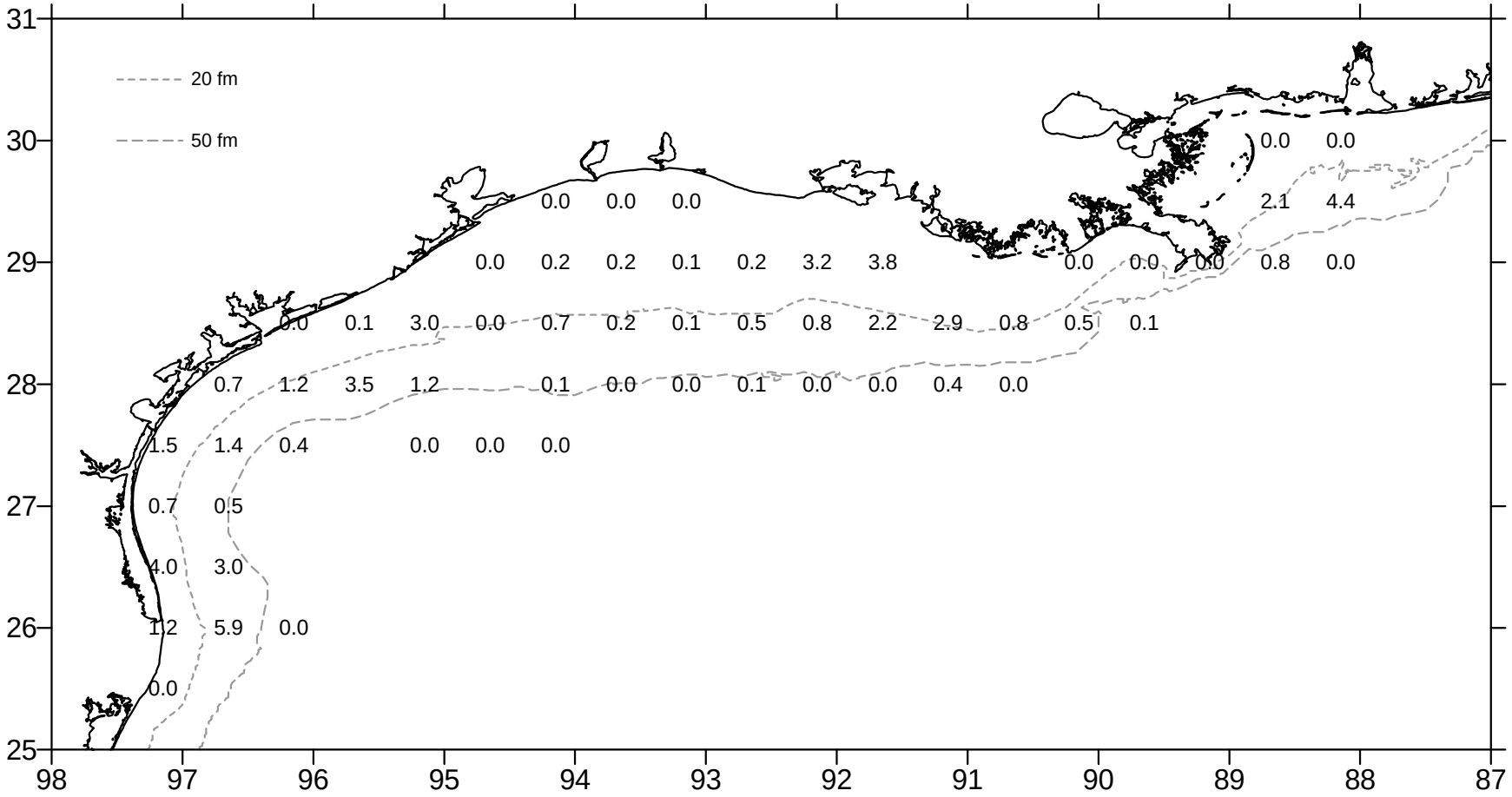

Figure 65. Shoal flounder, Syacium gunteri, lb/hour for October-December 2000.

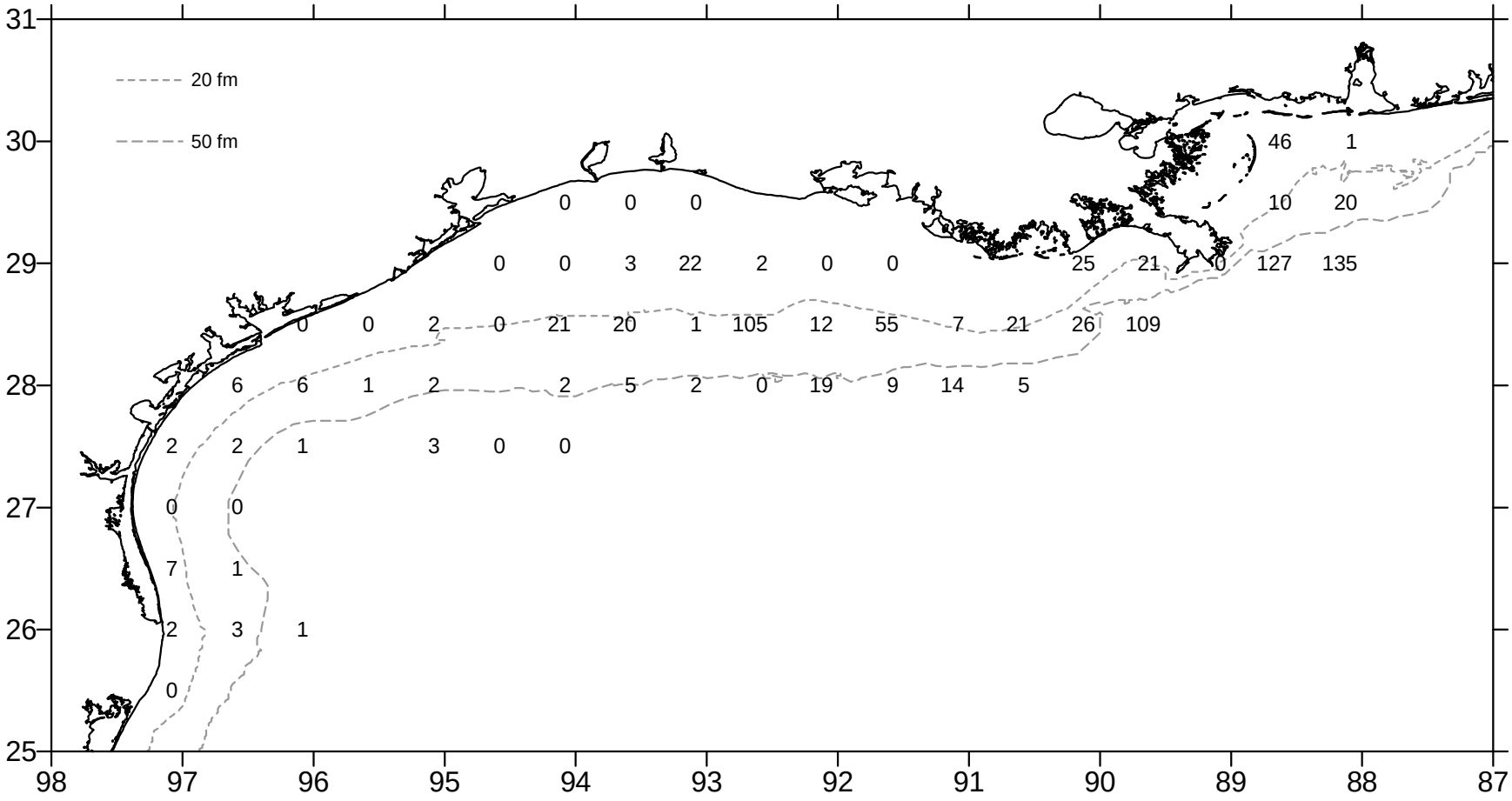

Figure 66. Spot, Leiostomus xanthurus, number/hour for October-December 2000.

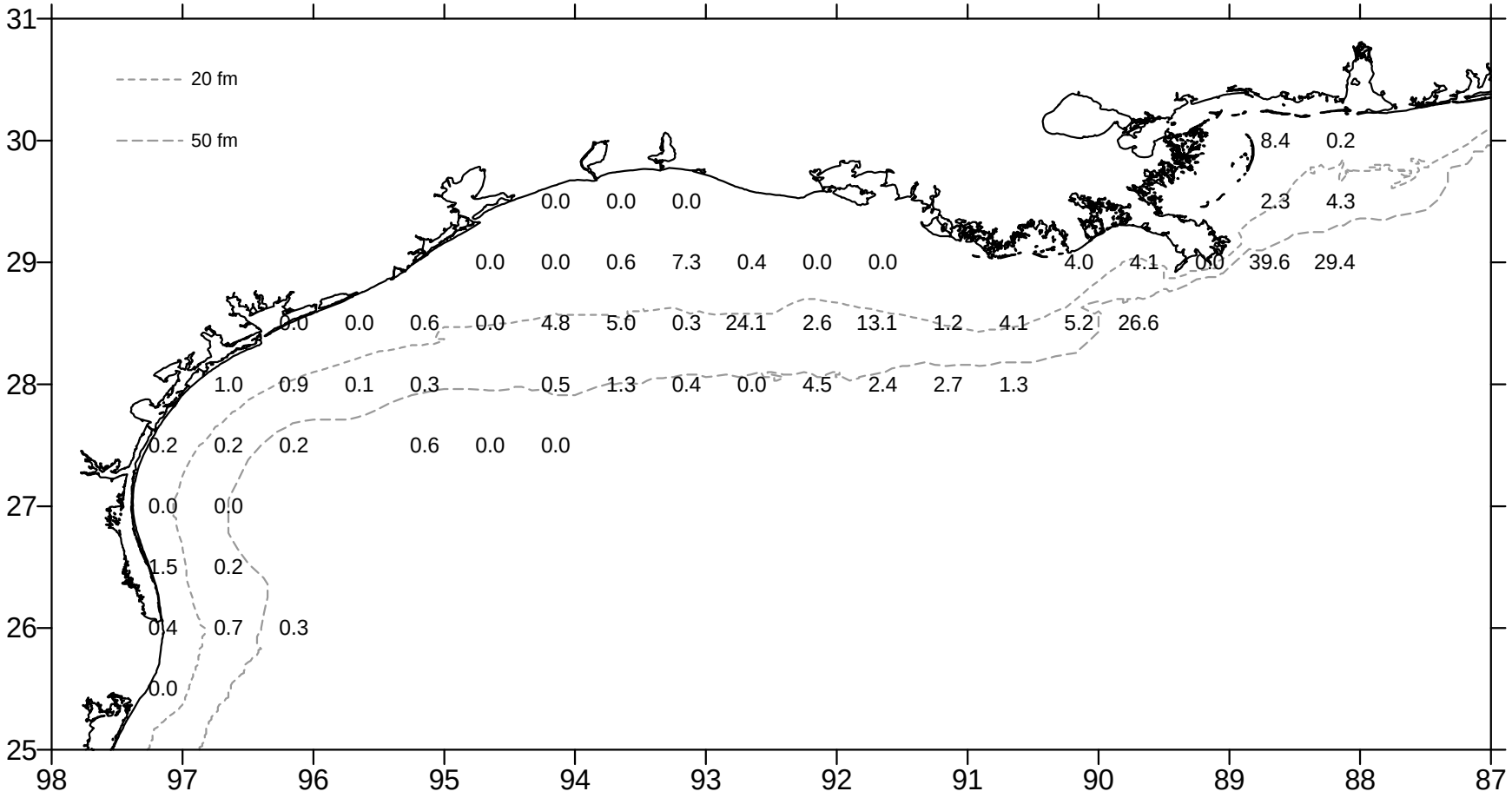

Figure 67. Spot, Leiostomus xanthurus, lb/hour for October-December 2000.

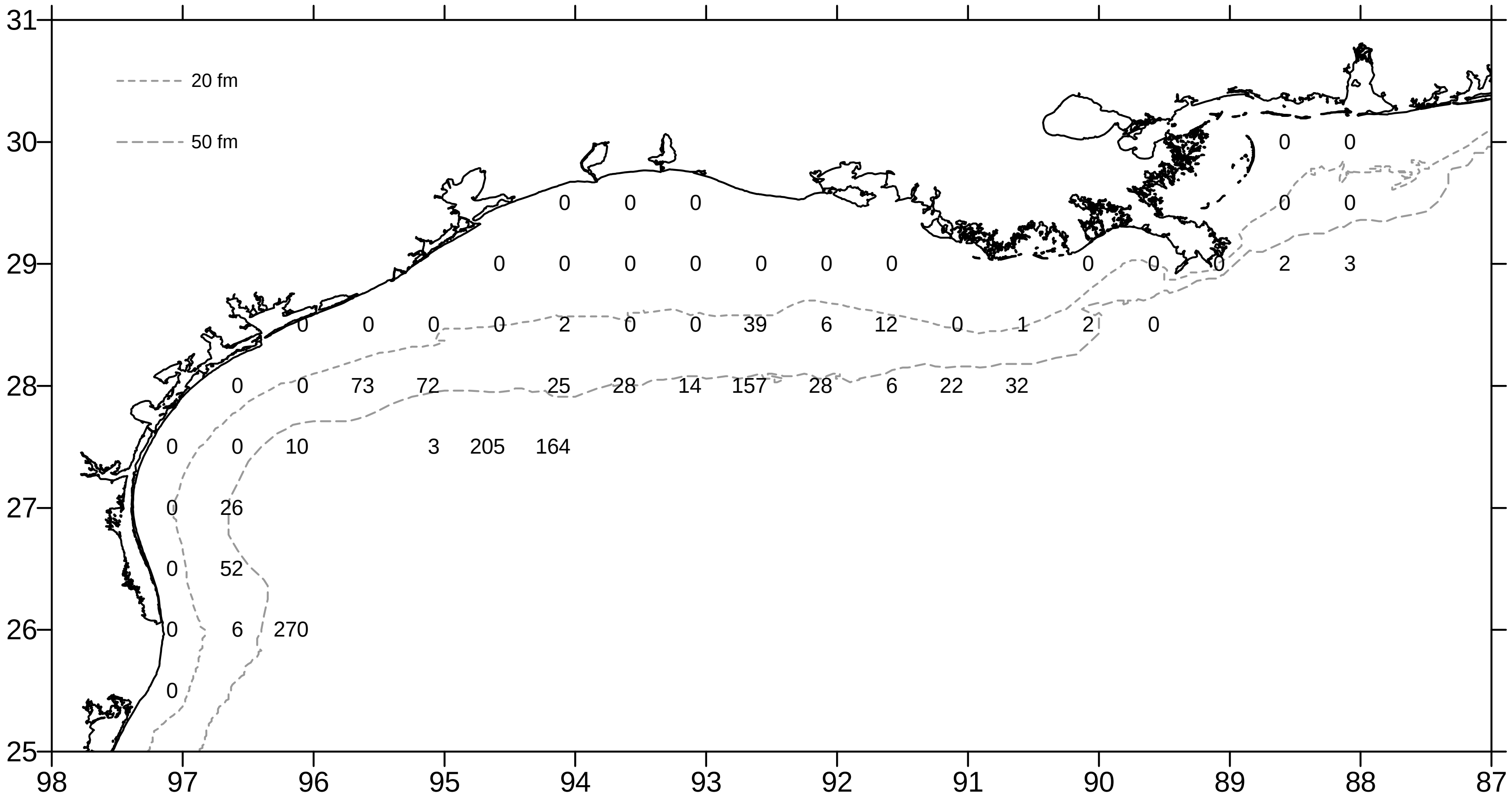

Figure 68. Dwarf goatfish, Upeneus parvus, number/hour October-December 2000.

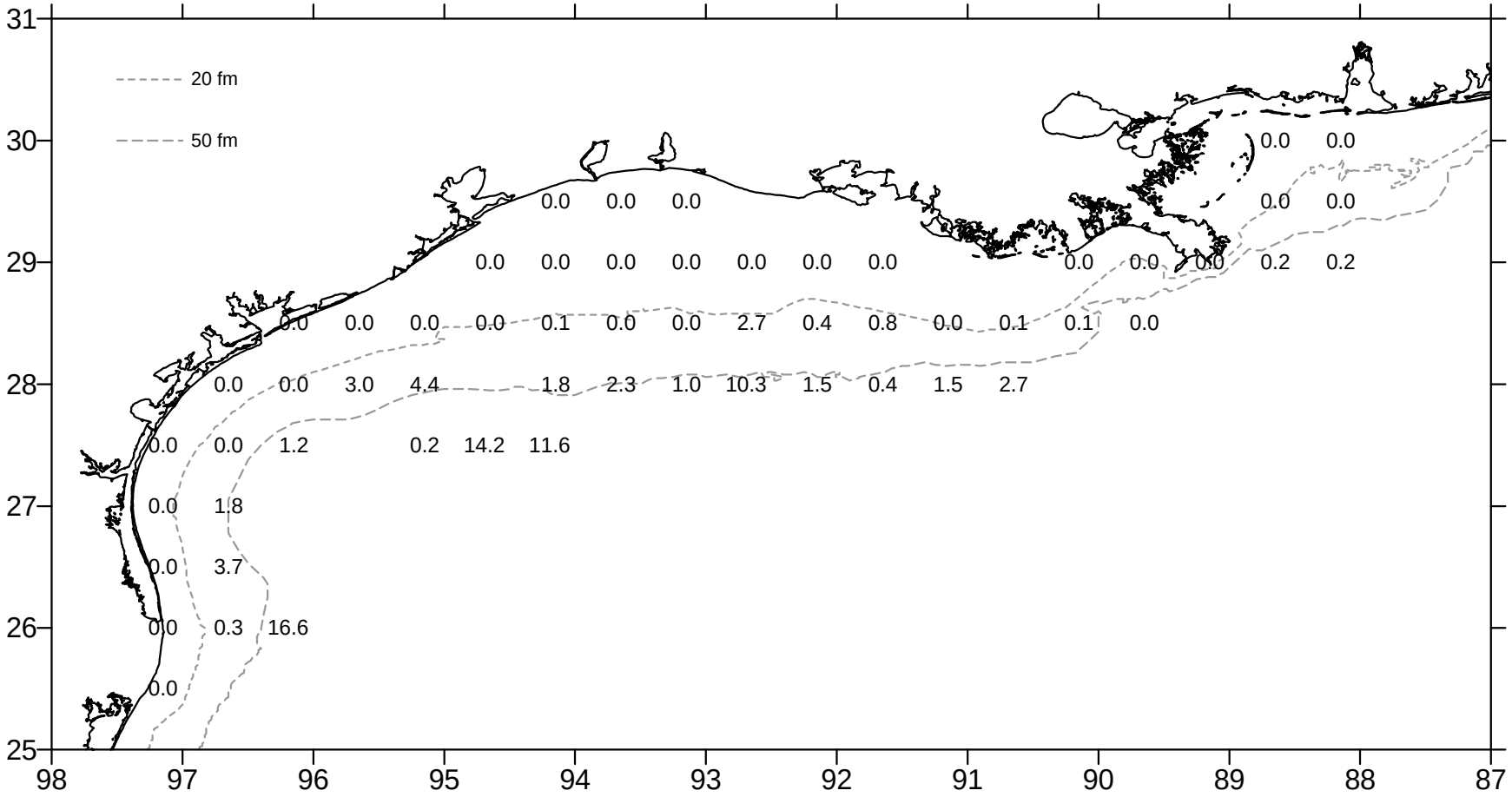

Figure 69. Dwarf goatfish, Upeneus parvus, lb/hour October-December 2000.

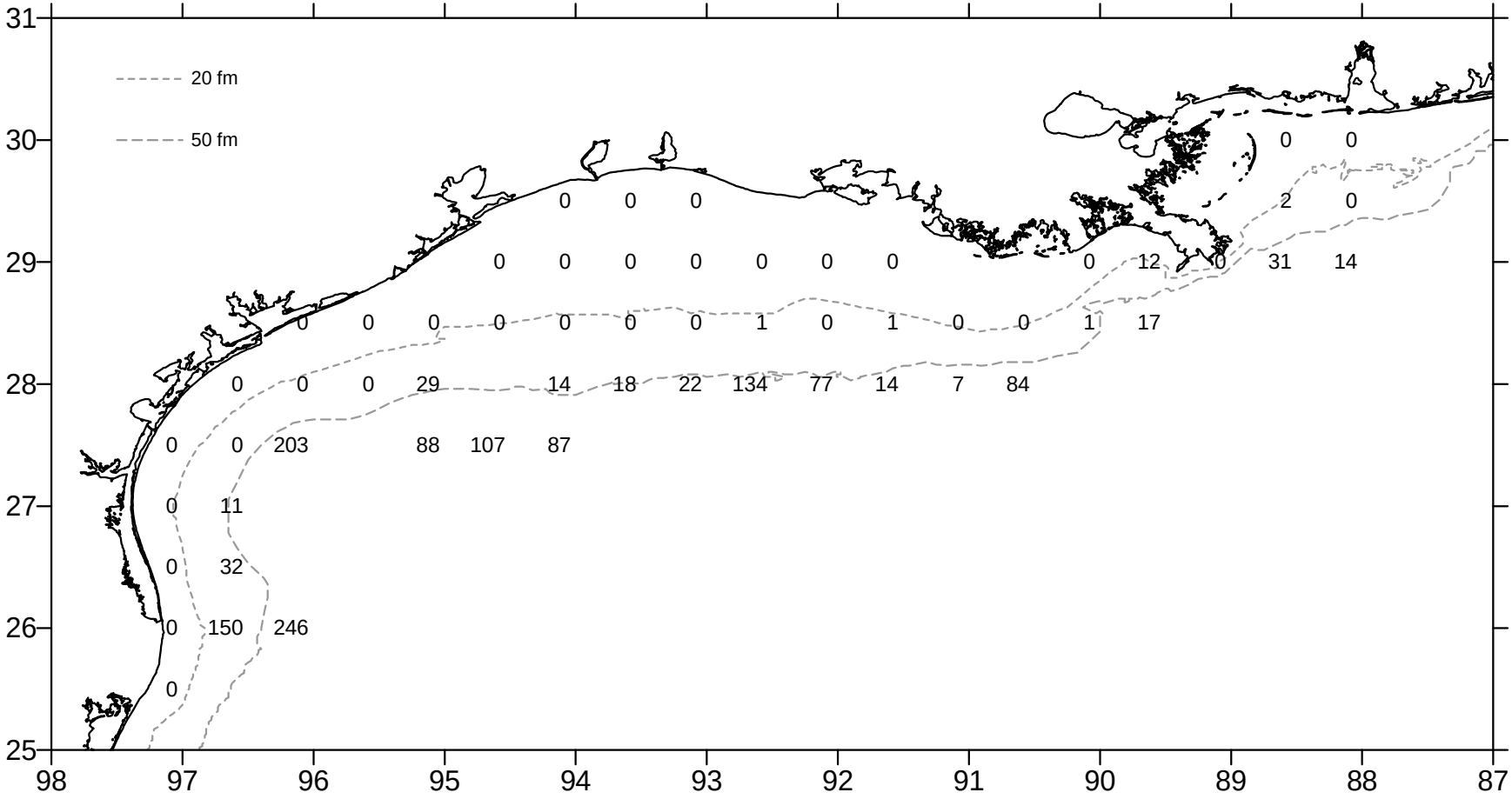

Figure 70. Wenchman, Pristipomoides aquilonaris, number/hour October-December 2000.

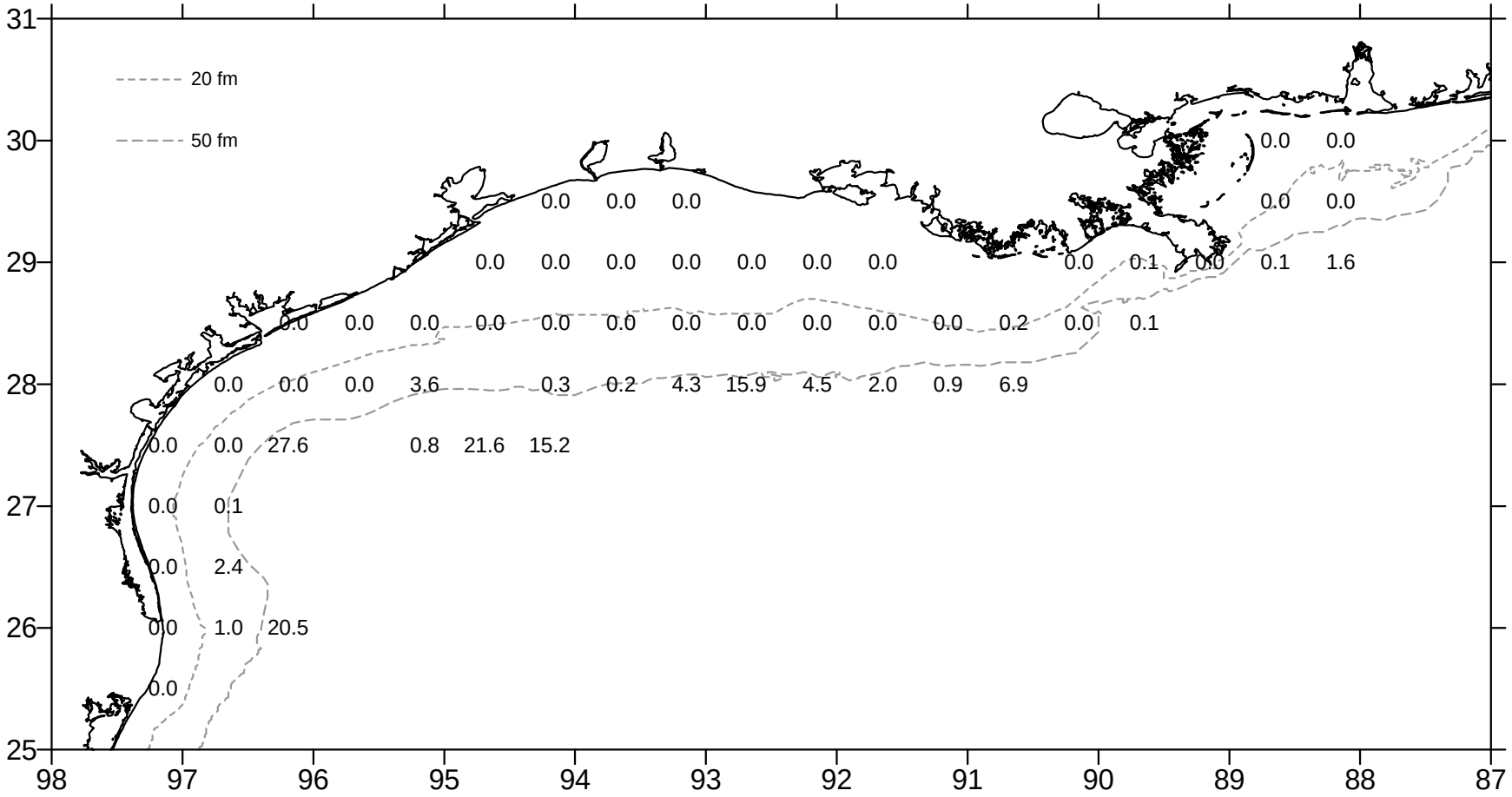

Figure 71. Wenchman, Pristipomoides aquilonaris, lb/hour October-December 2000.

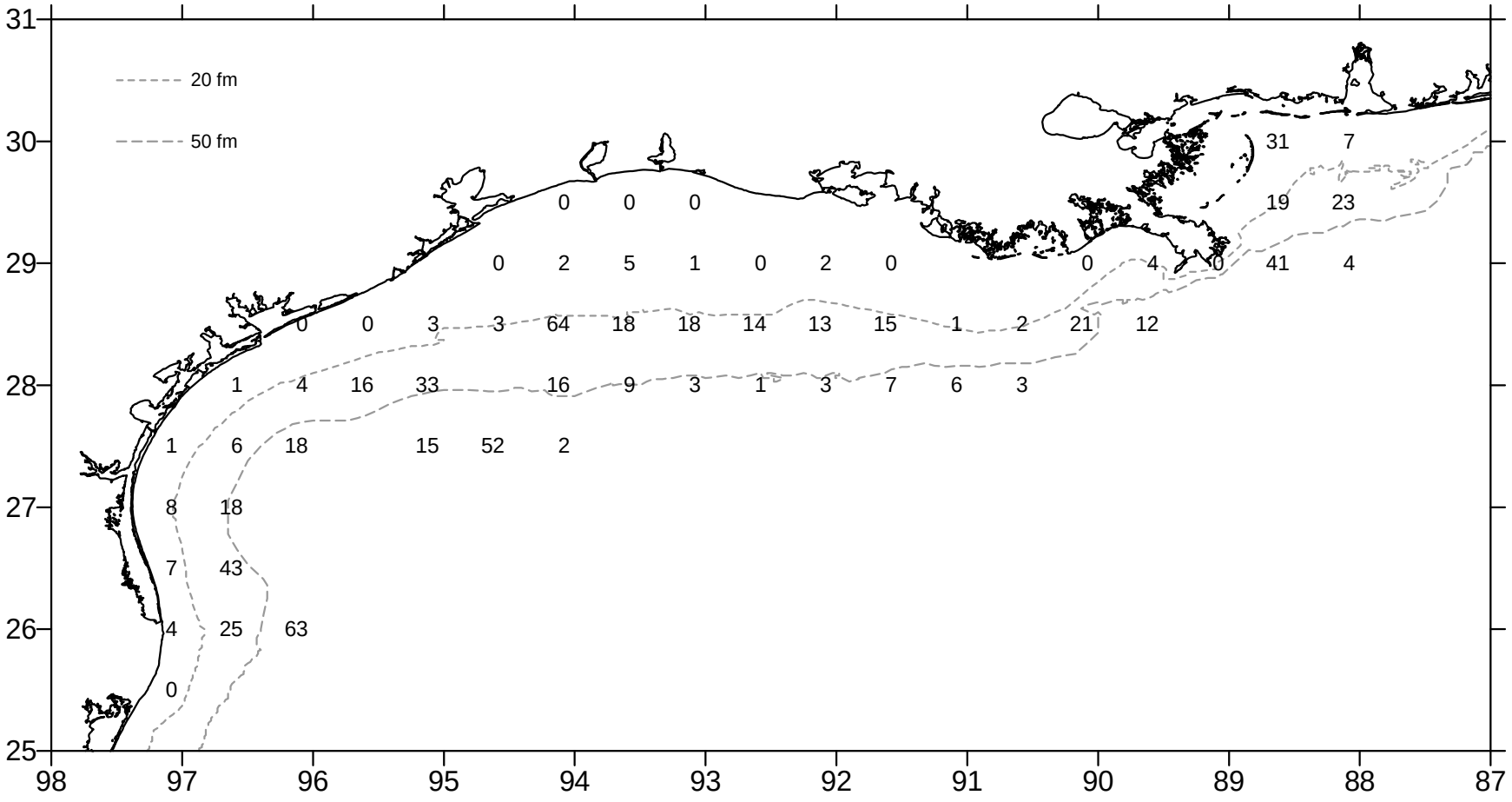

Figure 72. Red snapper, Lutjanus campechanus, number/hour for October-December 2000.

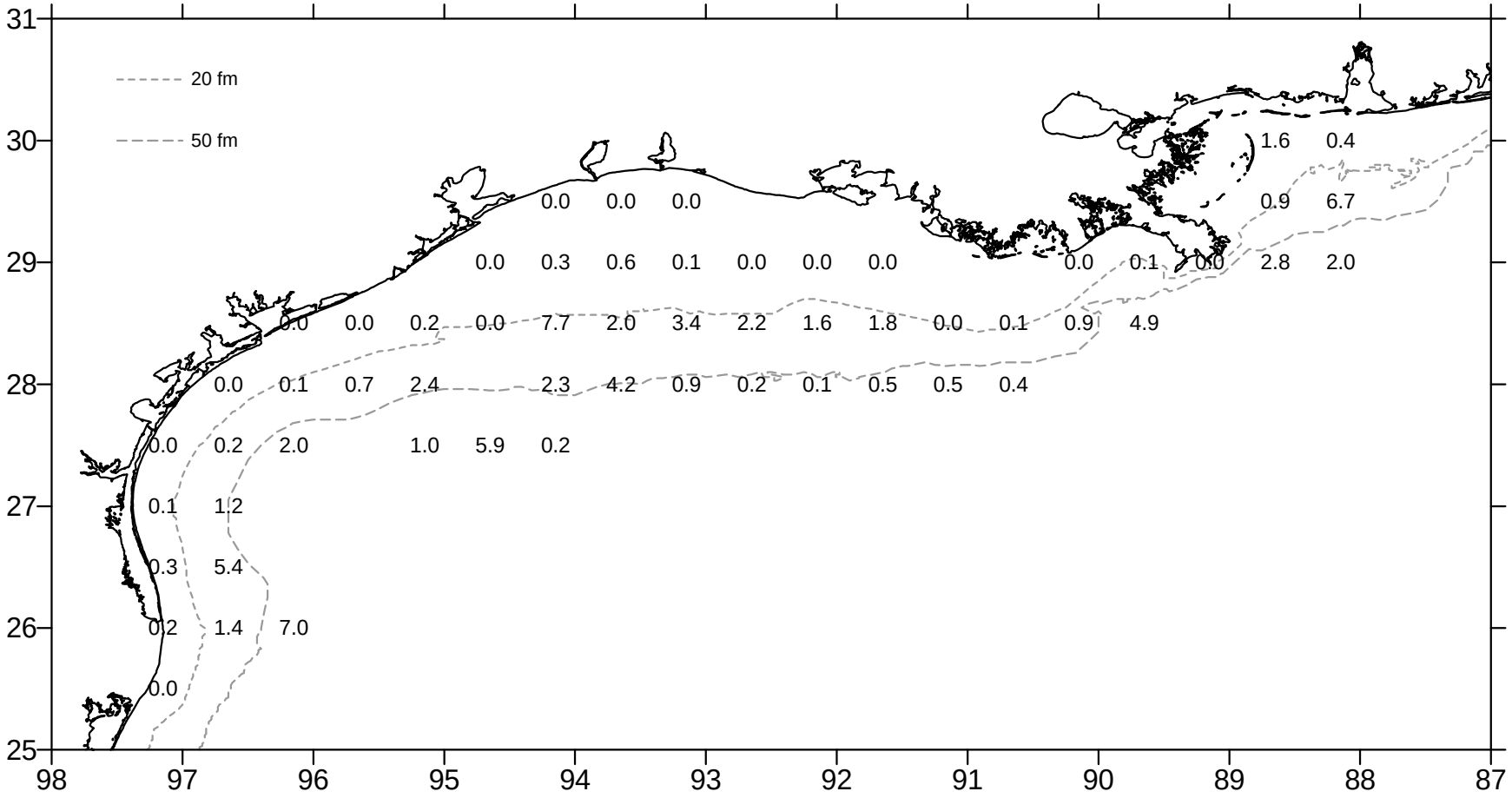

Figure 73. Red snapper, Lutjanus campechanus, lb/hour for October-December 2000.

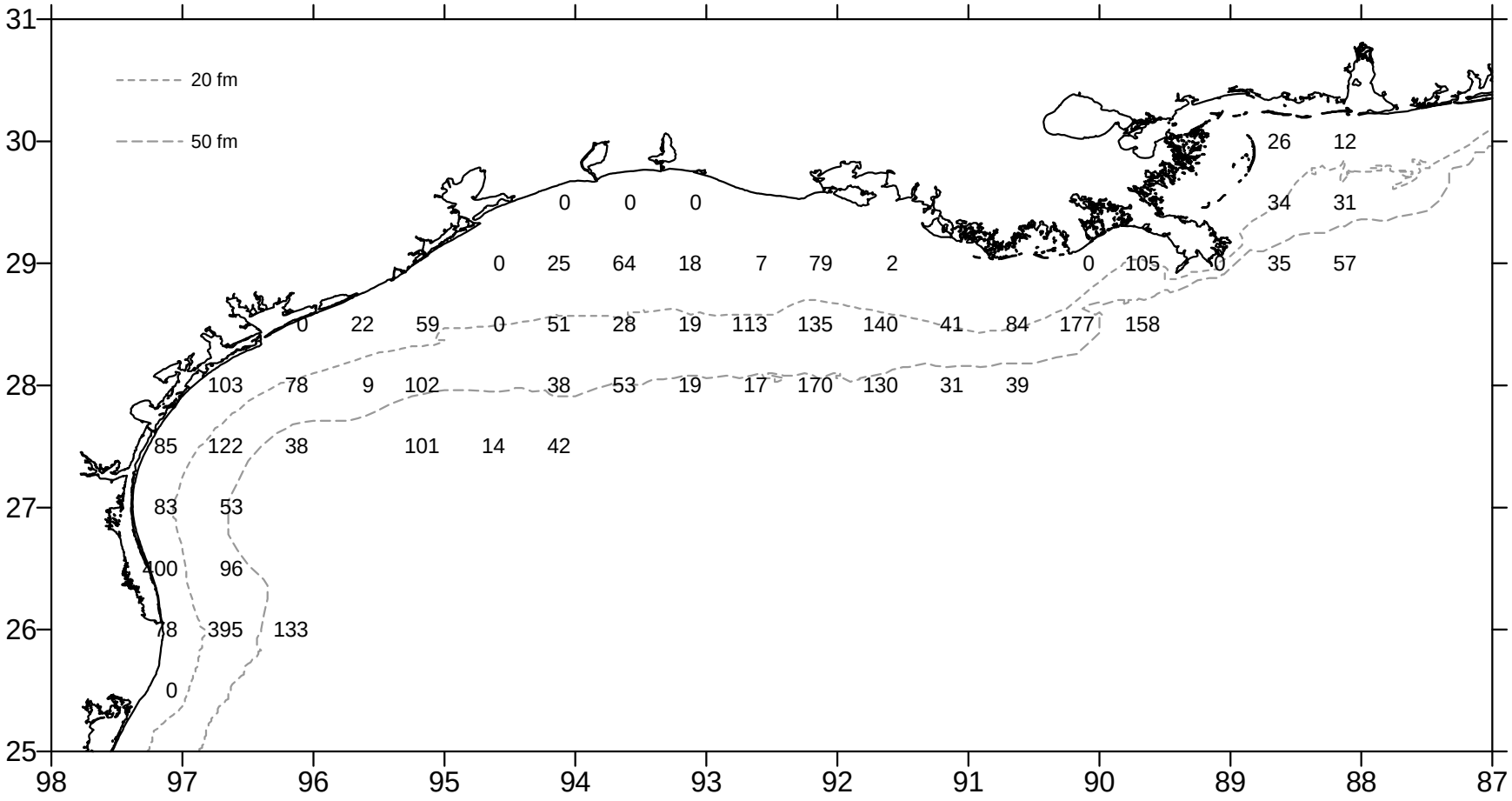

Figure 74. Brown shrimp, Penaeus aztecus, number/hour for October-December 2000.

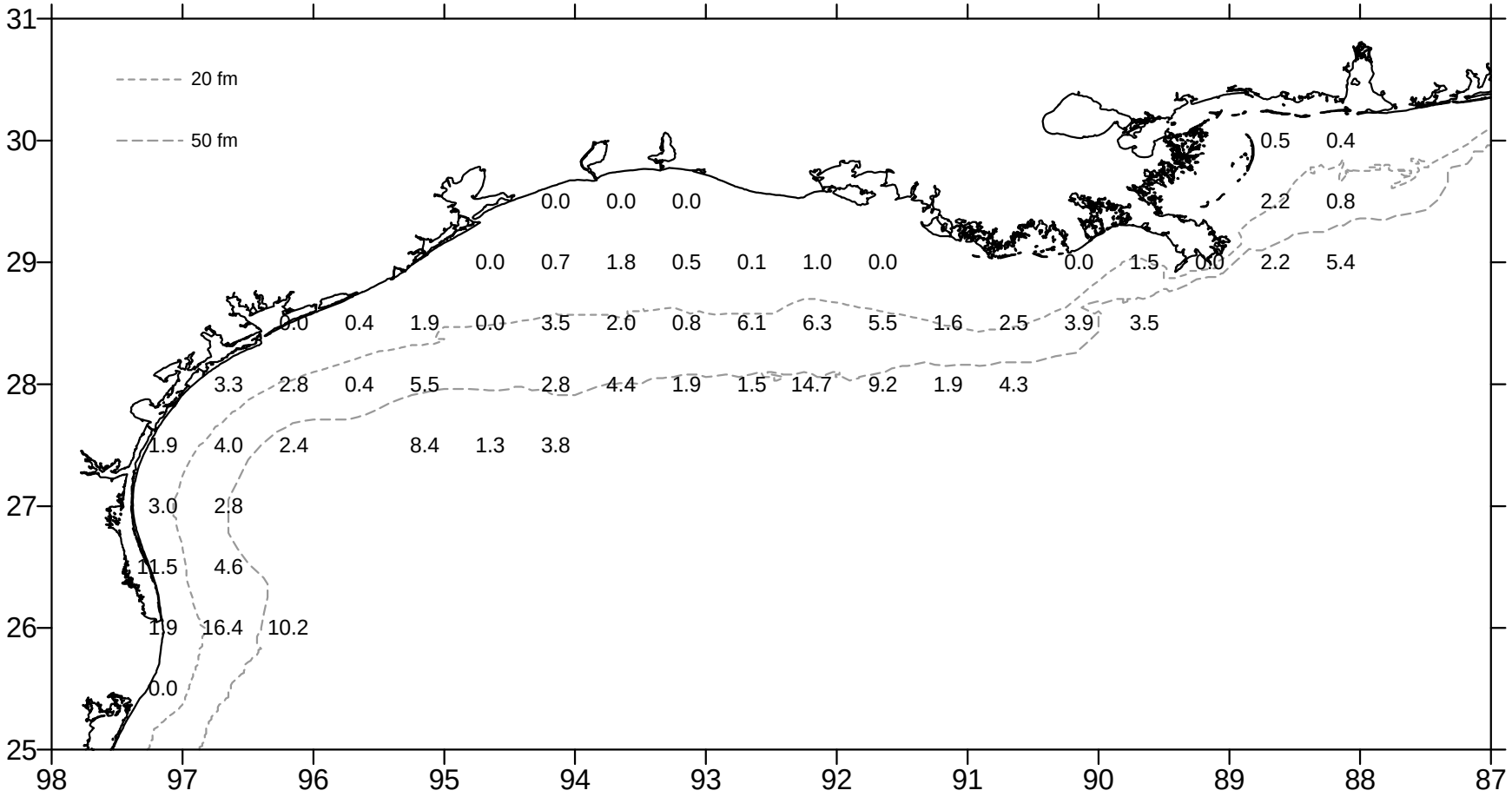

Figure 75. Brown shrimp, Penaeus aztecus, lb/hour for October-December 2000.

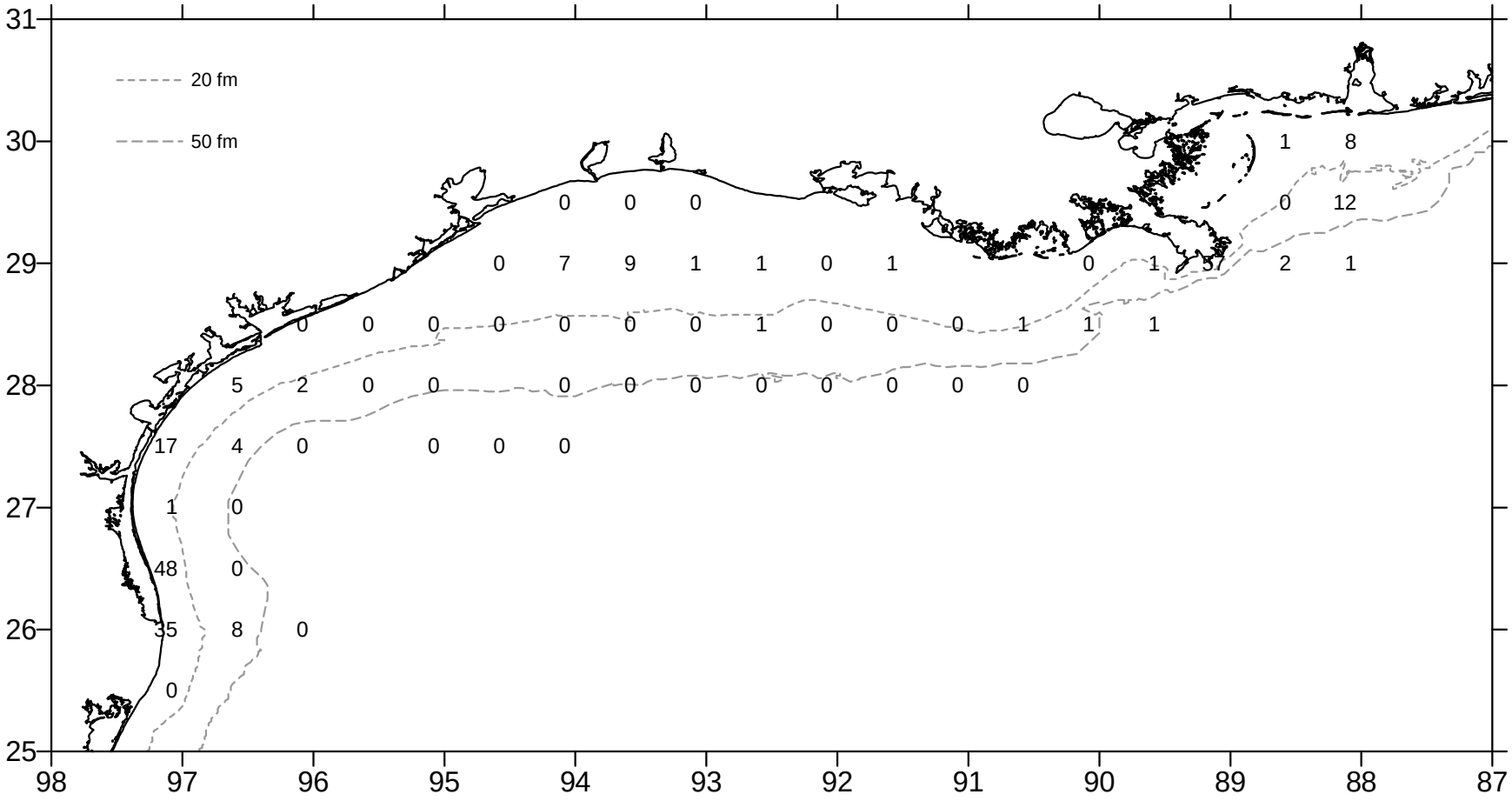

Figure 76. Pink shrimp, Penaeus duorarum, number/hour for October-December 2000.

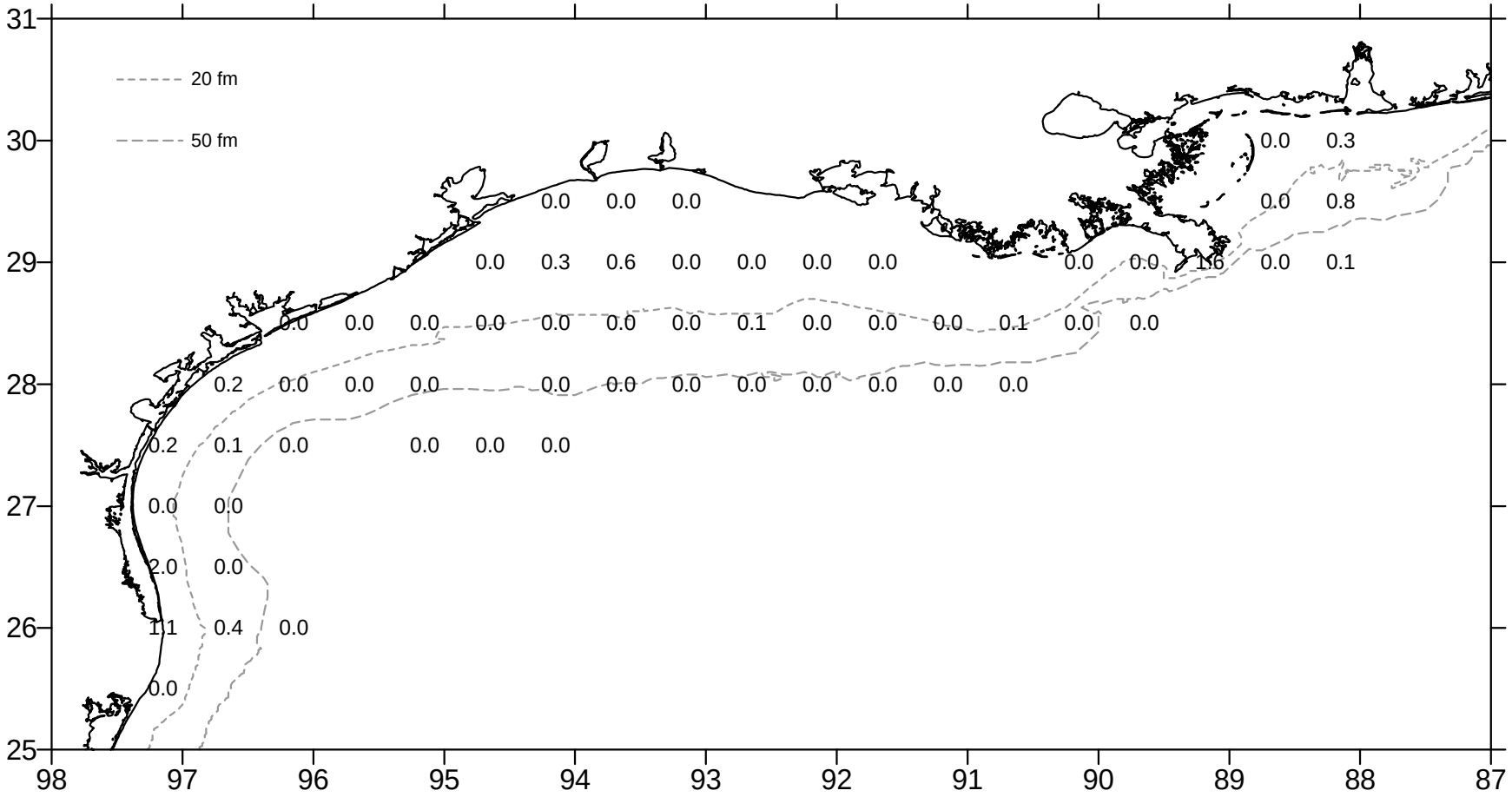

Figure 77. Pink shrimp, Penaeus duorarum, lb/hour for October-December 2000.

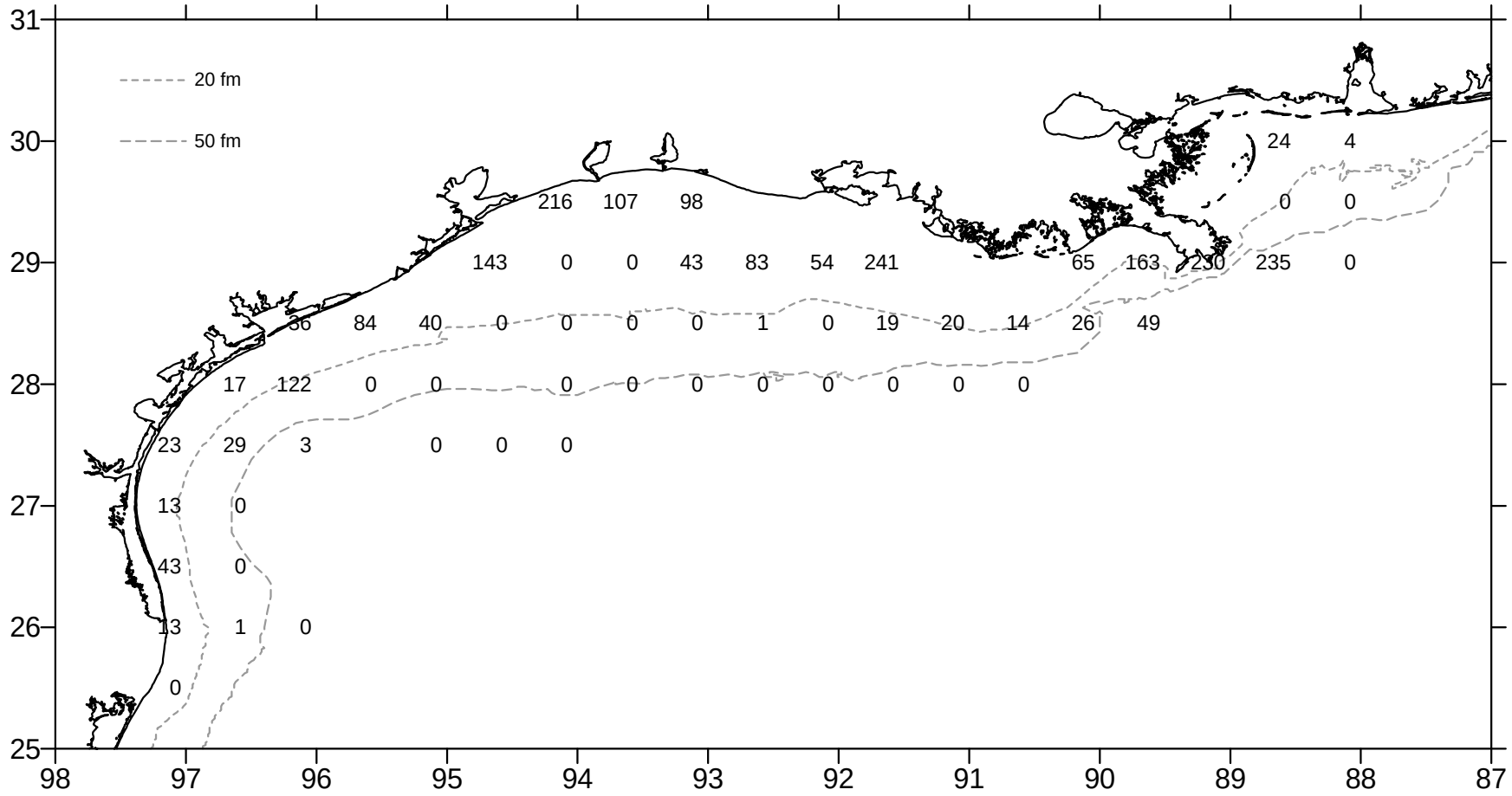

Figure 78. White shrimp, Penaeus setiferus, number/hour for October-December 2000.

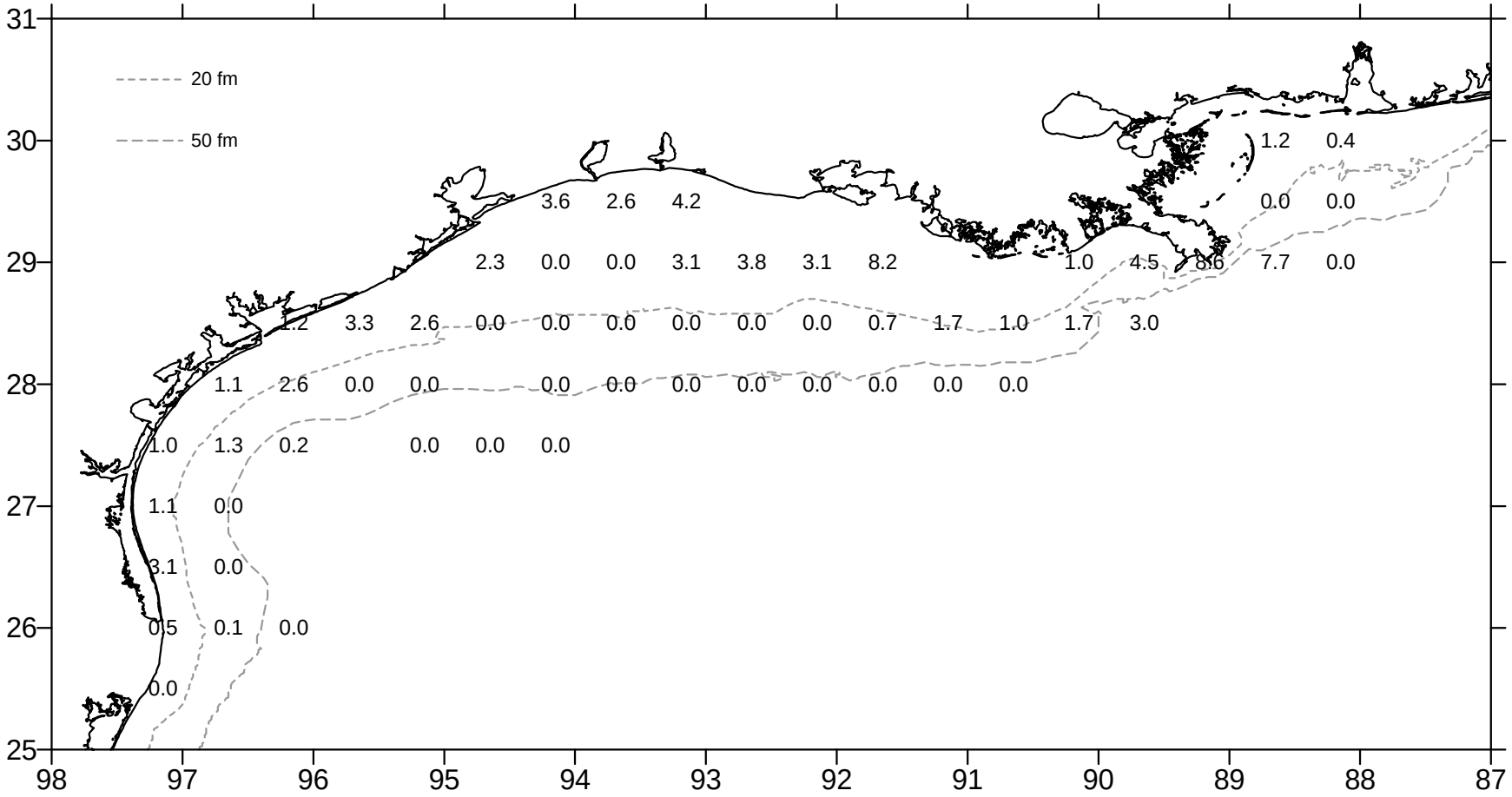

Figure 79. White shrimp, Penaeus setiferus, lb/hour for October-December 2000.

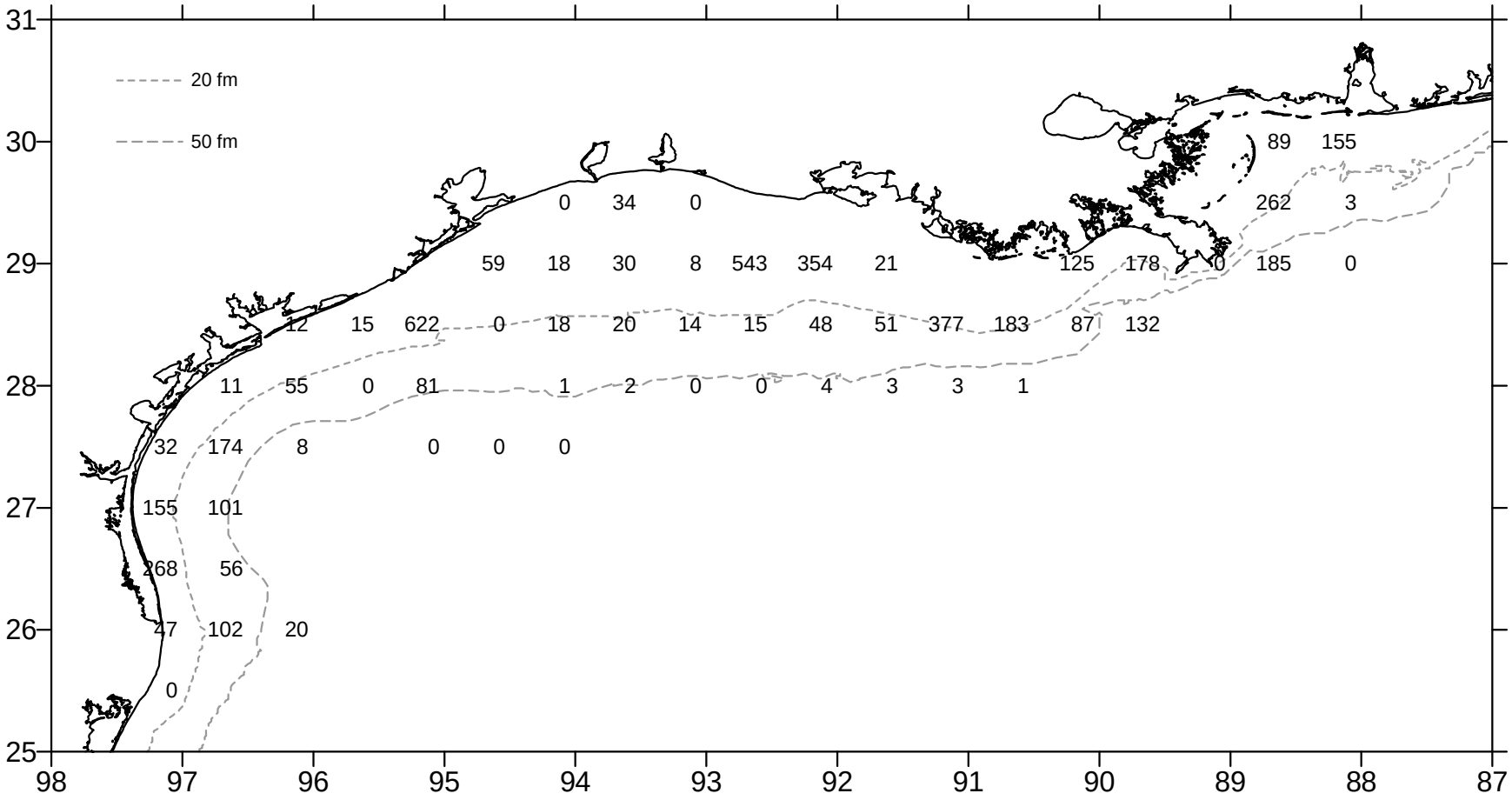

Figure 80. Roughback shrimp, Trachypenaeus similis, number/hour for October-December 2000.

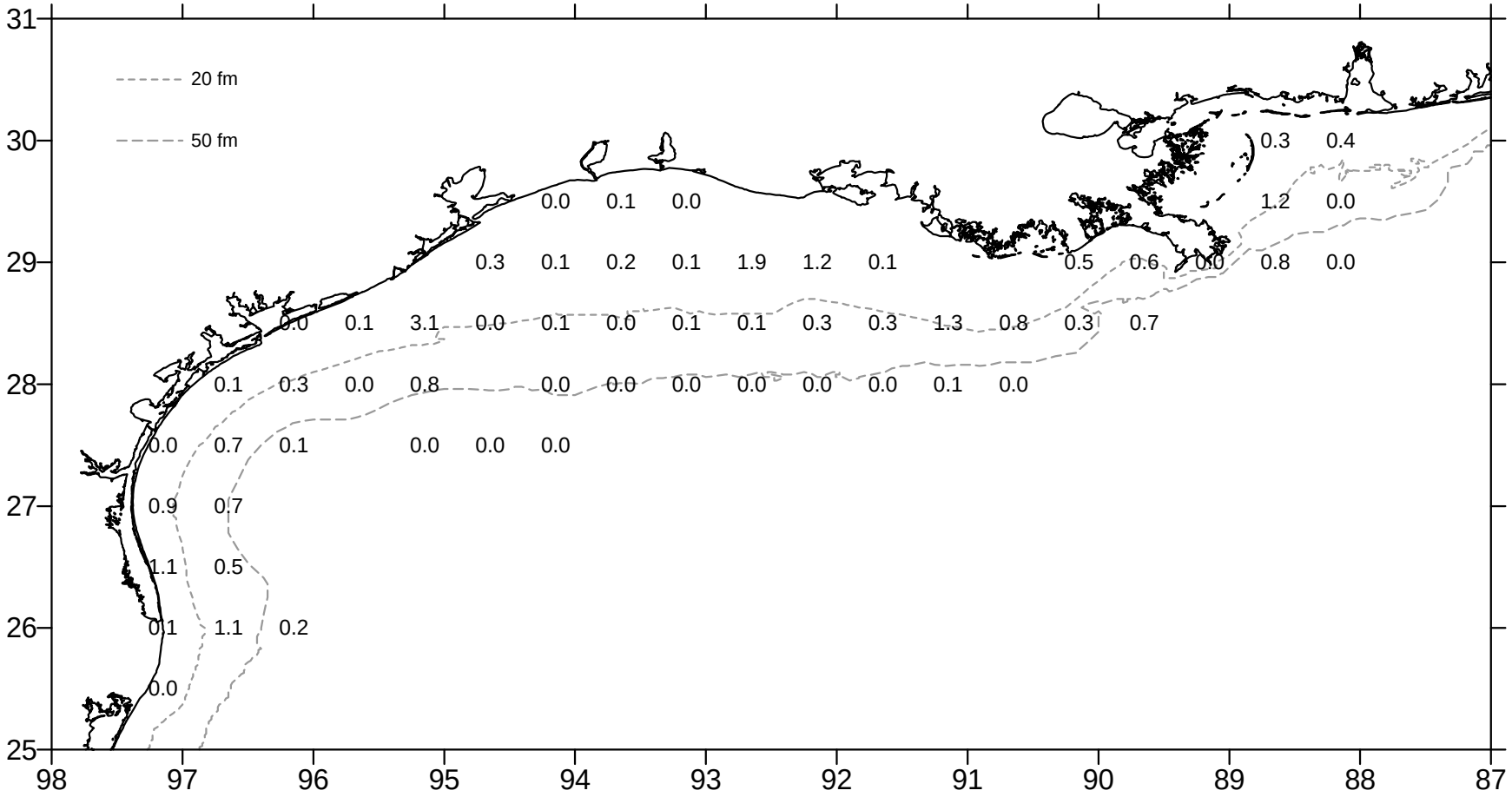

Figure 81. Roughback shrimp, Trachypenaeus similis, lb/hour for October-December 2000.

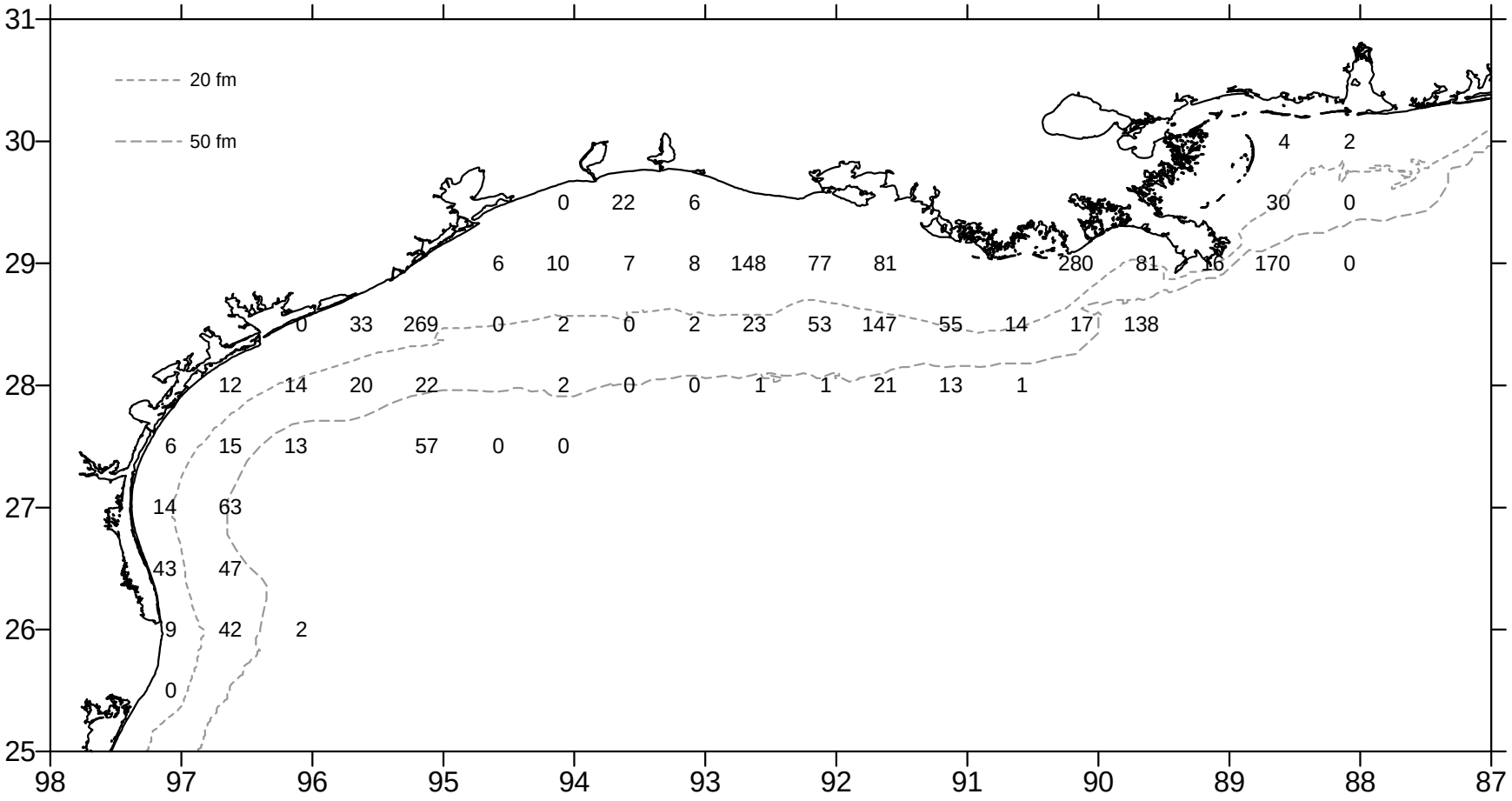

Figure 82. Lesser blue crab, Callinectes similis, number/hour for October-December 2000.

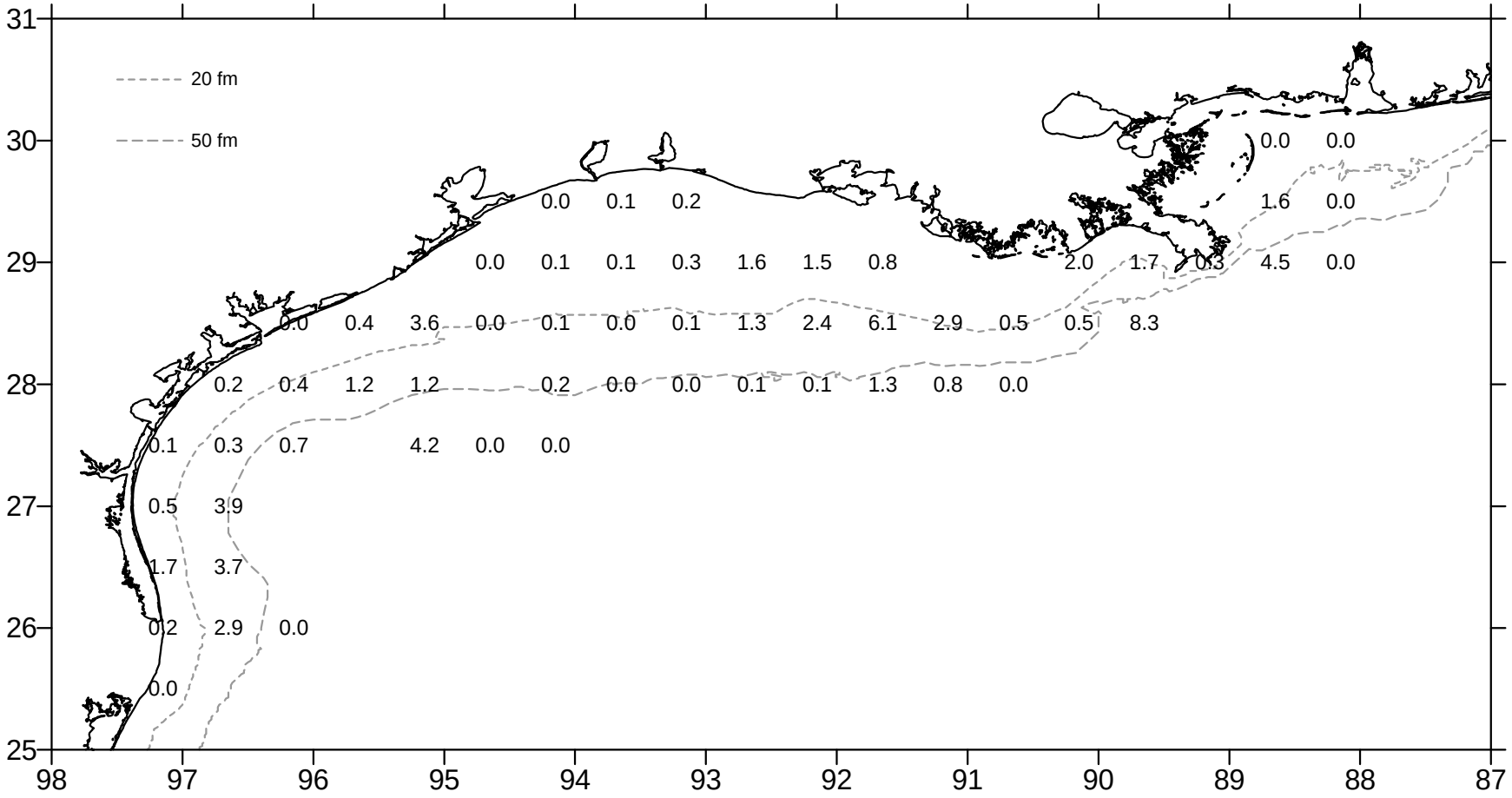

Figure 83. Lesser blue crab, Callinectes similis, lb/hour for October-December 2000.

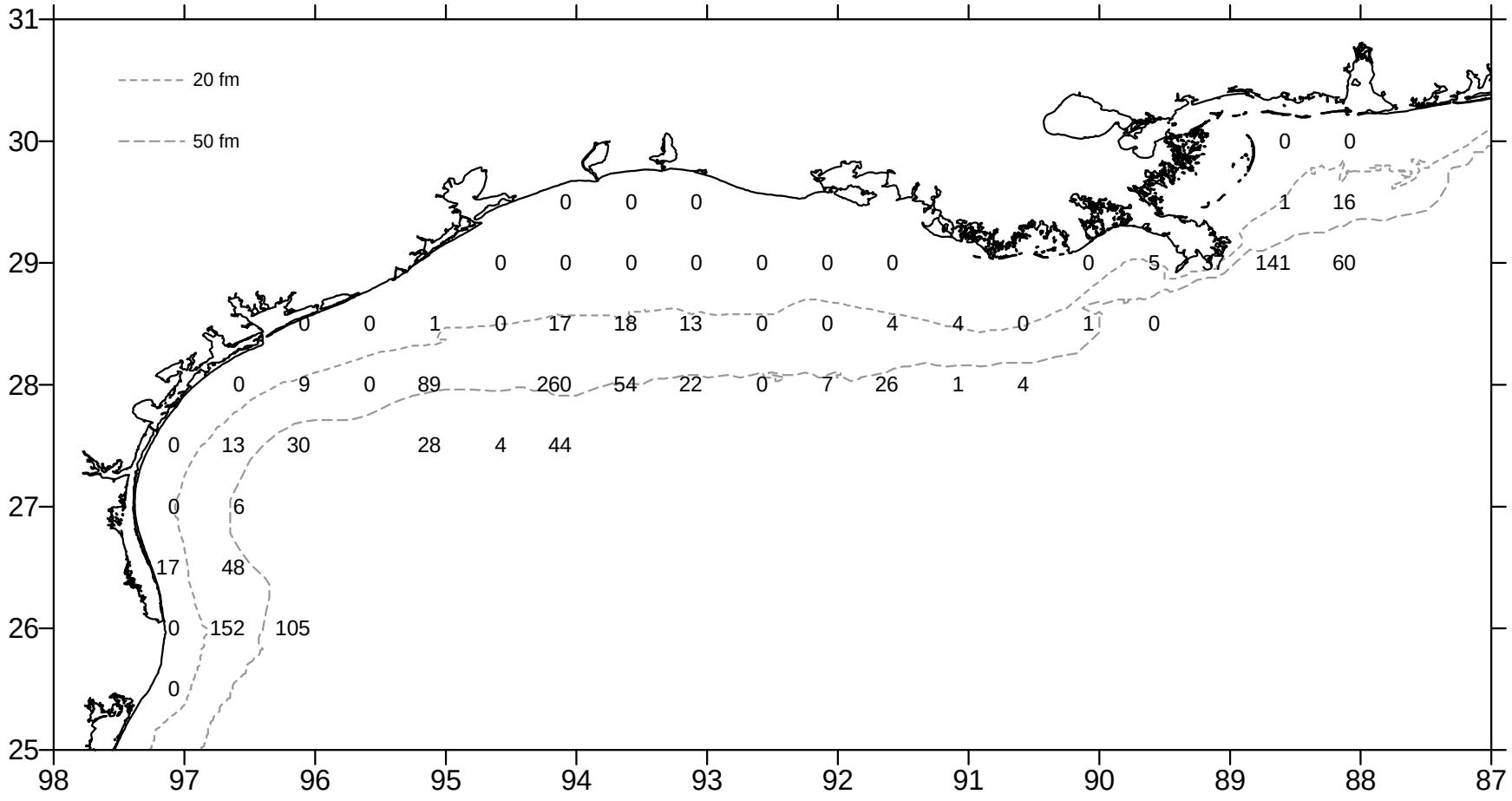

Figure 84. Longspine swimming crab, Portunus spinicarpus, number/hour for October-December 2000.

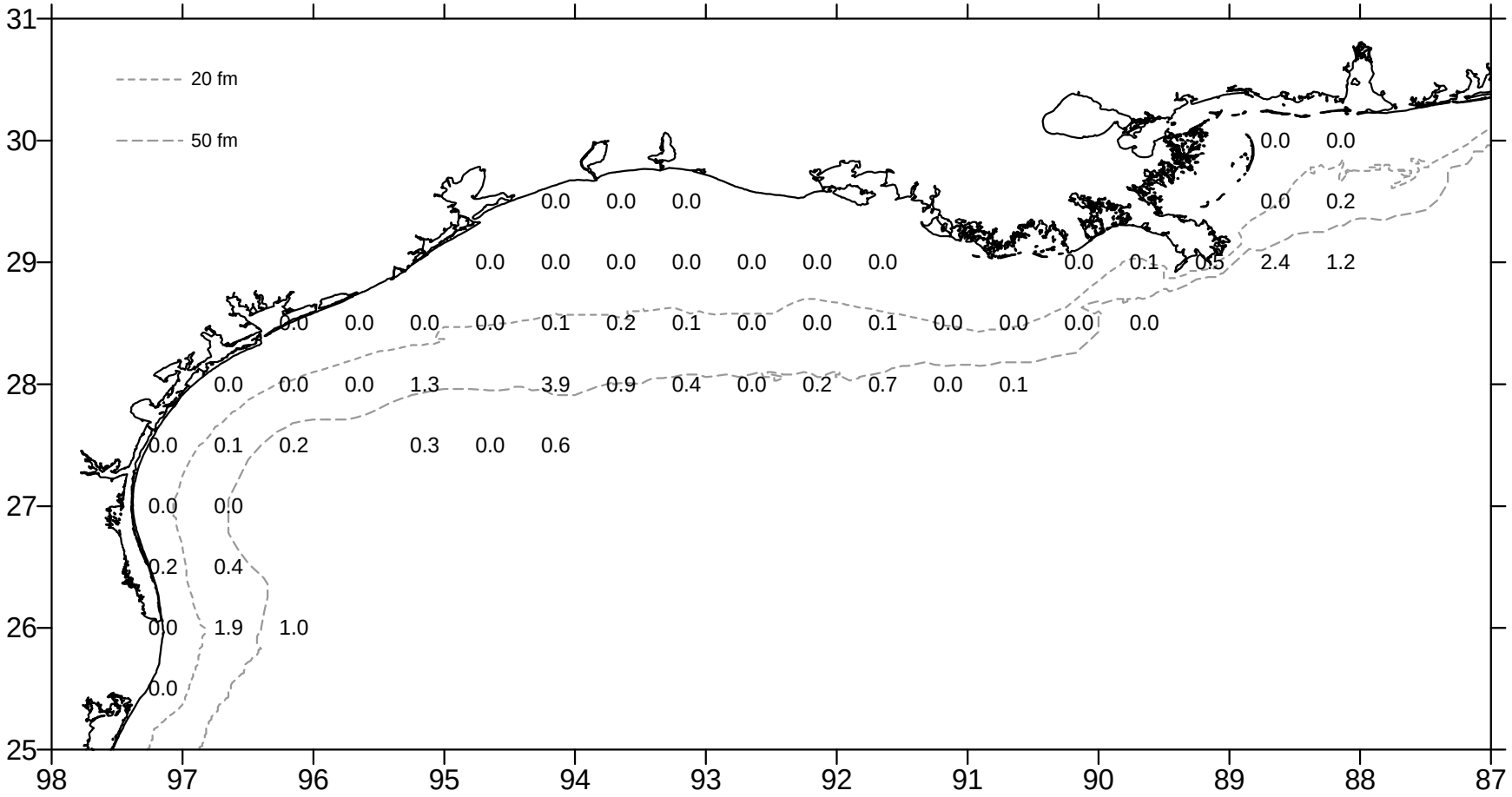

Figure 85. Longspine swimming crab, Portunus spinicarpus, lb/hour for October-December 2000.

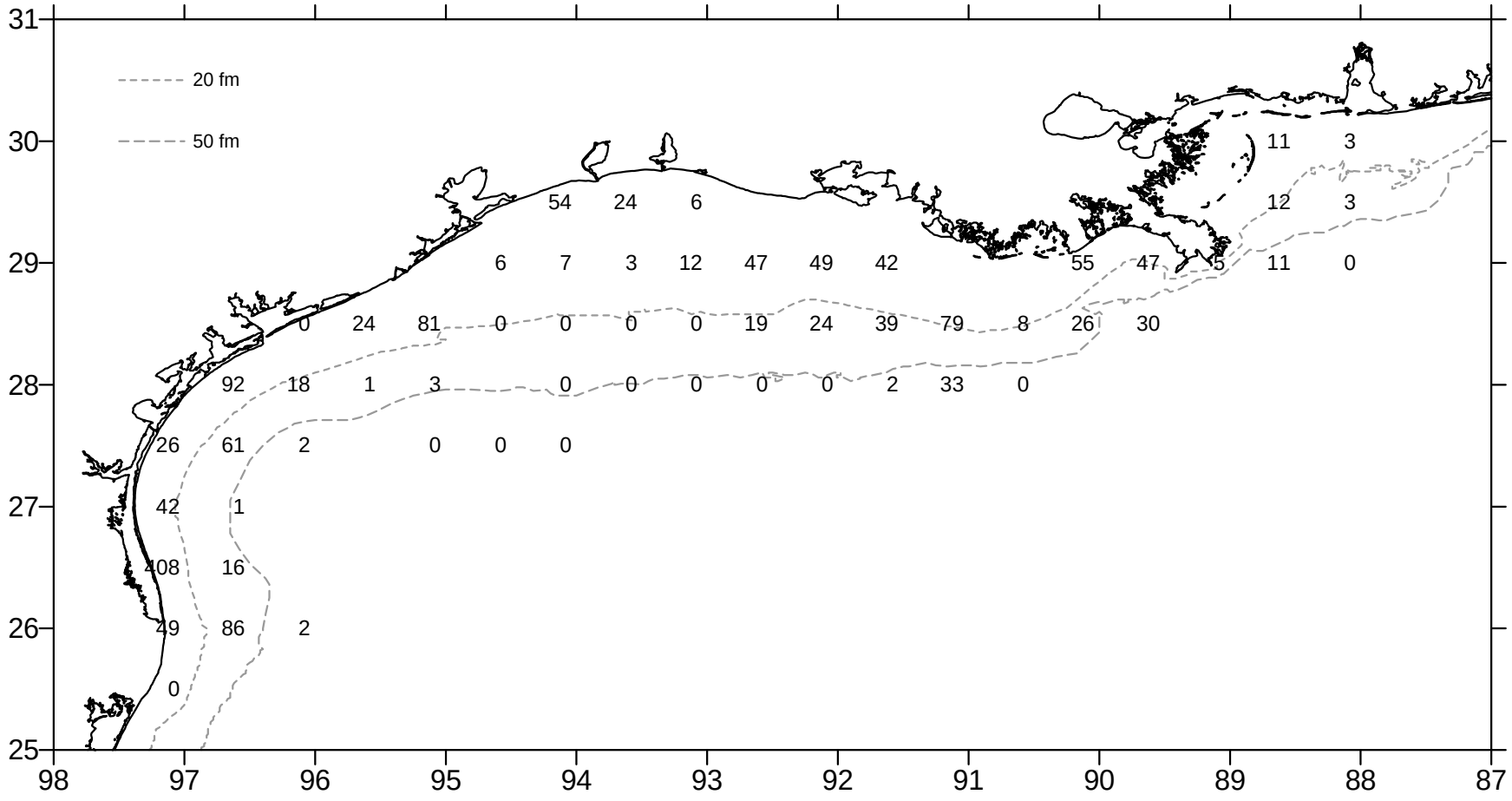

Figure 86. Irridescent swimming crab, Portunus gibbesii, number/hour for October-December 2000.

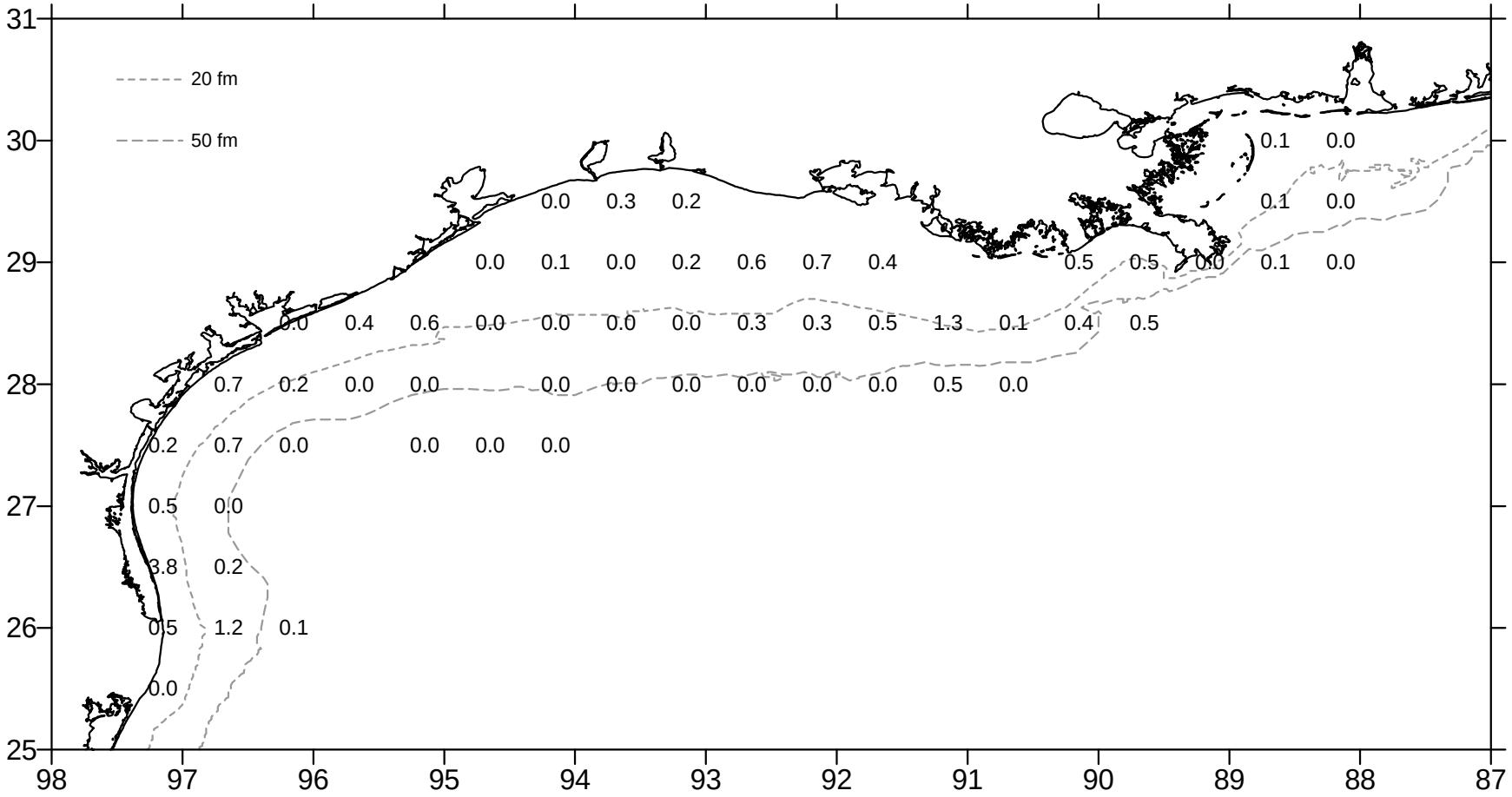

Figure 87. Irridescent swimming crab, Portunus gibbesii, lb/hour for October-December 2000.

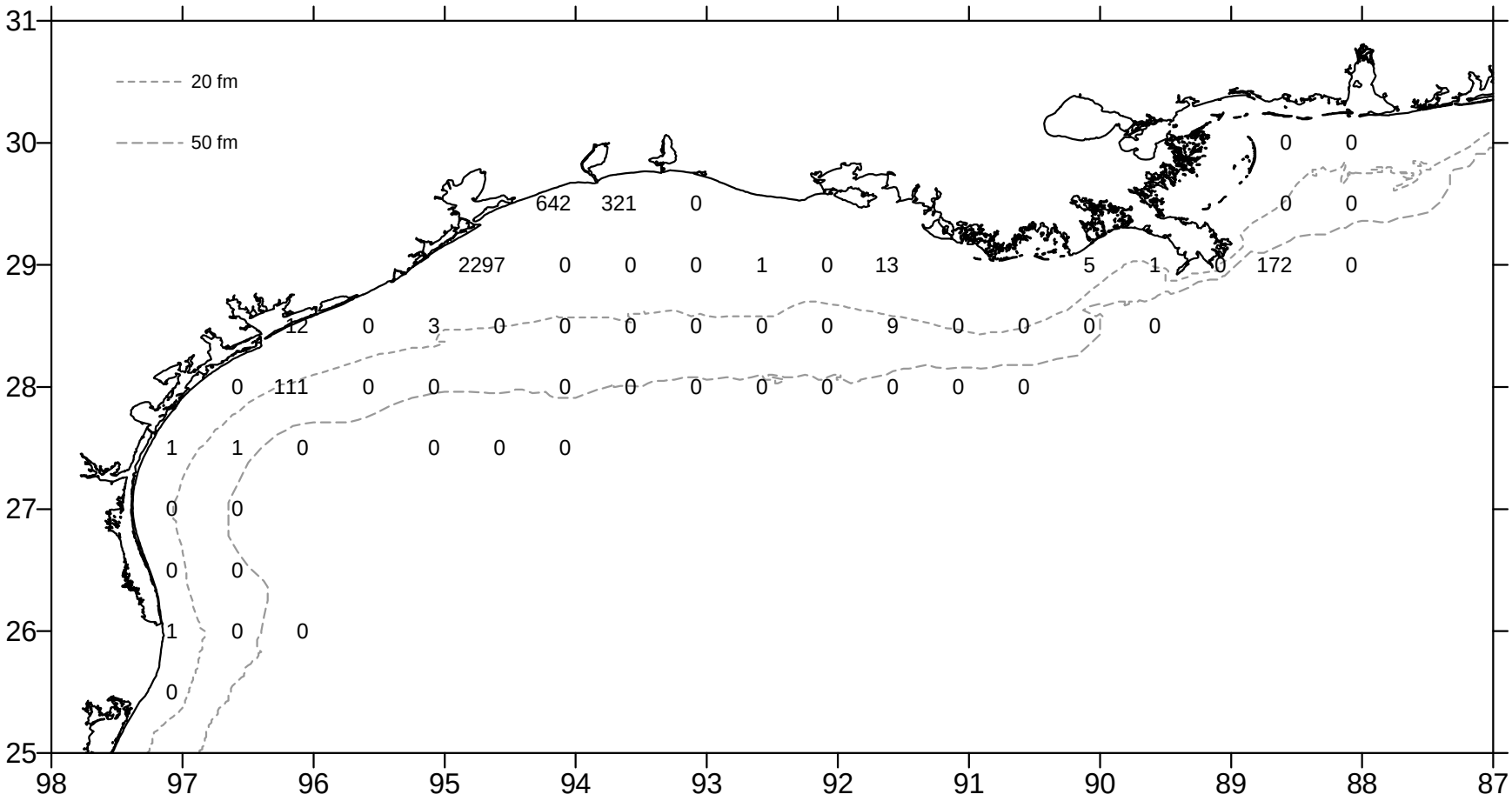

Figure 88. Seabob, Xiphopenaeus kroyeri, number/hour for October-December 2000.

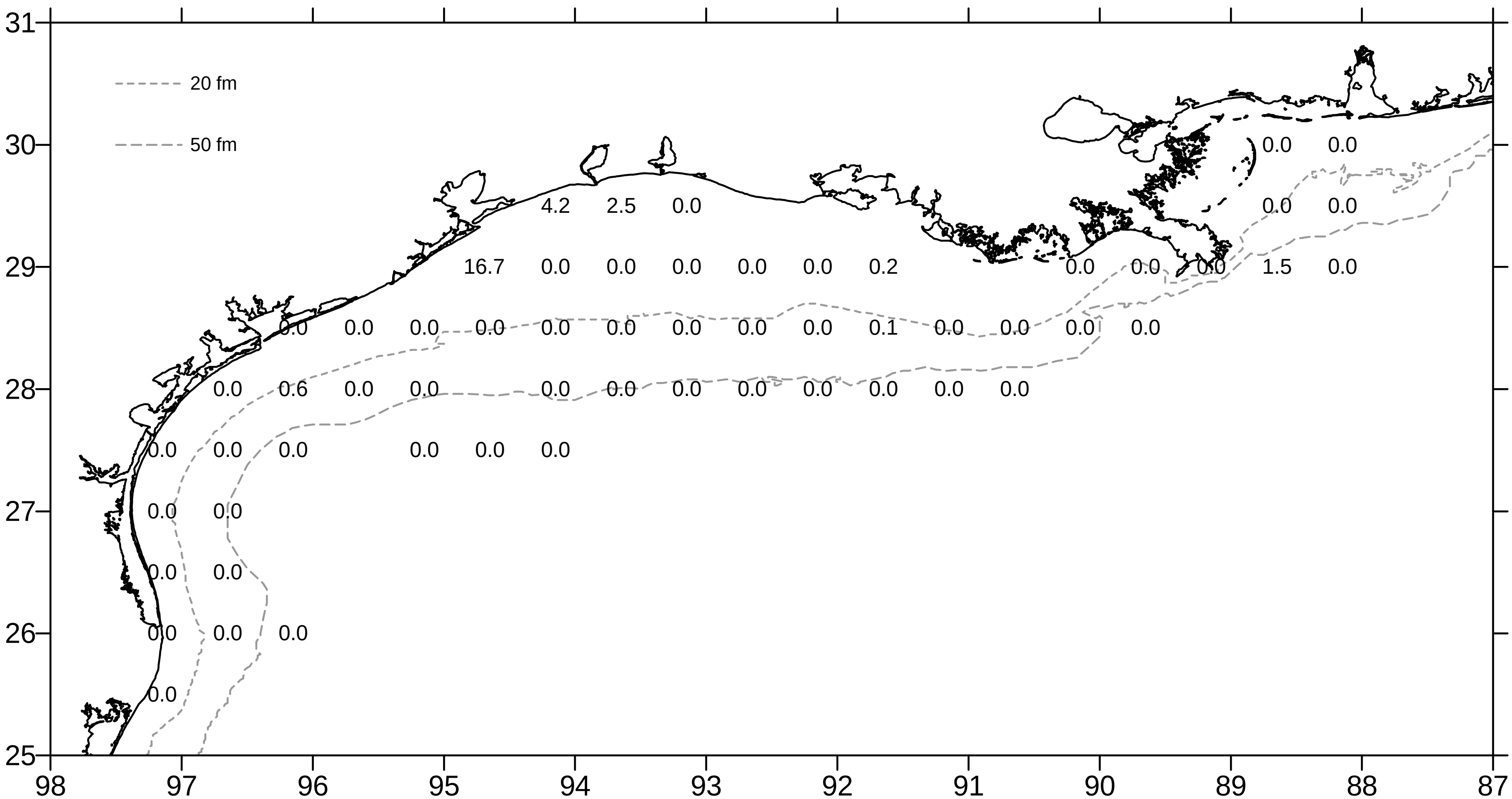

Figure 89. Seabob, Xiphopenaeus kroyeri, lb/hour for October-December 2000.

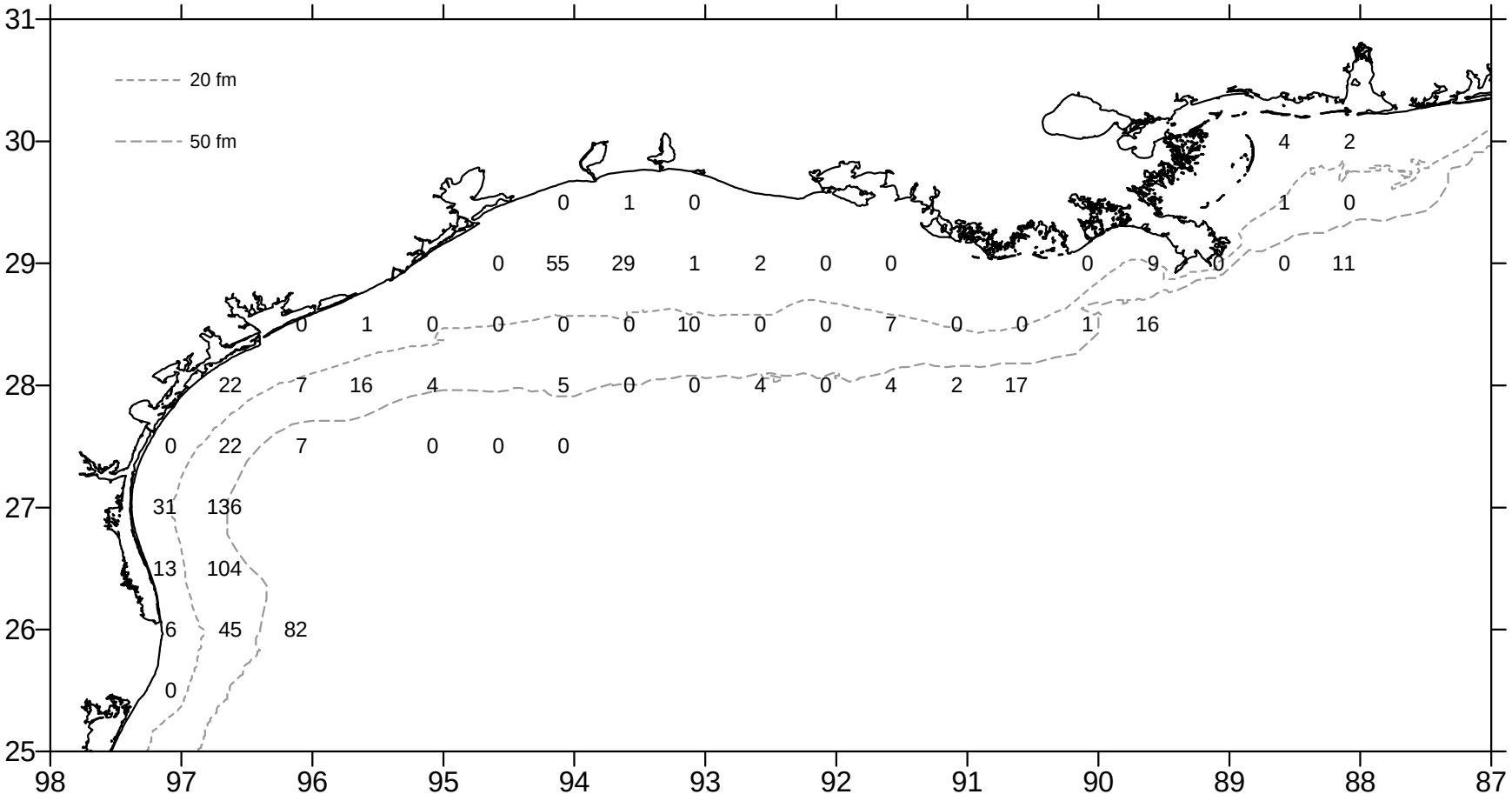

Figure 90. Arrow squid, Loligo pleii, number/hour for October-December 2000.

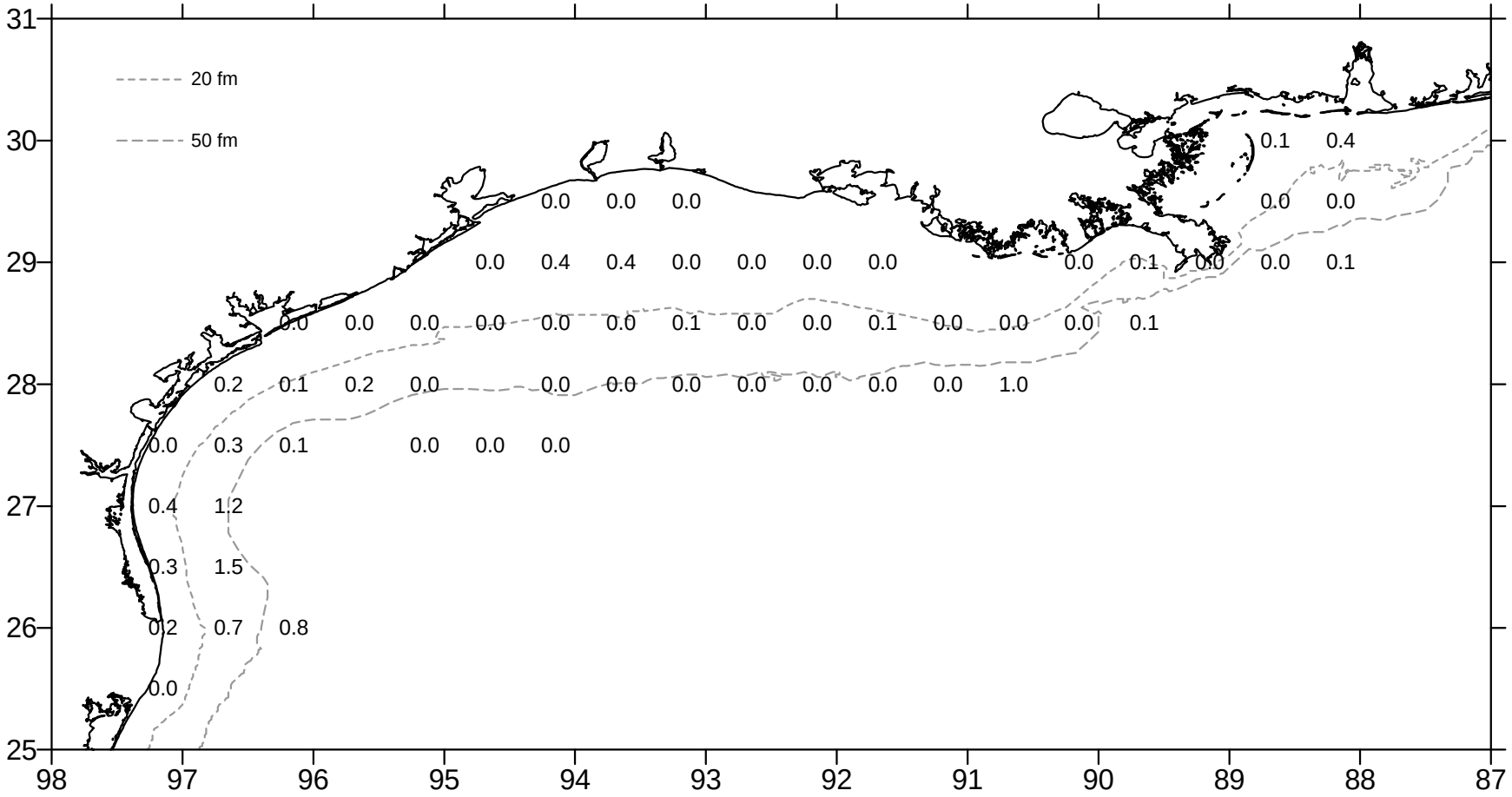

Figure 91. Arrow squid, Loligo pleii, lb/hour for October-December 2000.

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