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SEAMAP ENVIRONMENTAL AND BIOLOGICAL ATLAS OF THE GULF OF MEXICO, 2007

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The 2007 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, 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 database 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 (FWC); Alabama Department of Conservation and Natural Resources (ADCNR); Mississippi Department of Marine Resources (MDMR) represented by the University of Southern Mississippi, Gulf Coast Research Laboratory (USM/GCRL); Louisiana Department of Wildlife and Fisheries (LDWF); and Texas Parks and Wildlife Department (TPWD)], one from NMFS SEFSC 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 2007 (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); 1999 (Rester et al. 2001); 2000 (Rester et al. 2002); 2001 (Rester et al. 2004); 2002 (Rester et al. 2008); 2003 (Rester et al. 2009); 2004 (Rester 2009); 2005 (Rester 2010); and 2006 (Rester 2010). Environmental assessment activities occurred with each of the surveys found in Table 1.

In March 2007, 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 database, it was decided to continue the same types of survey activities conducted in 1982 through 2006. Overall survey objectives in 1982 to 2007 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 database 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).

A major purpose of SEAMAP is to provide resource survey data to State and Federal management agencies and universities participating in SEAMAP activities. This twenty-fifth in a series of SEAMAP environmental and biological atlases presents such data, in a summarized form, collected during the 2007 SEAMAP surveys. The area covered in the Gulf of Mexico for all SEAMAP survey activities during 2007 is shown in Figure 1.

MATERIALS AND METHODS

Methodology for the 2007 SEAMAP surveys is similar to that of the 1982 through 2006 surveys. Sampling was conducted within the U.S. Exclusive Economic Zone (EEZ) and state territorial waters. The NOAA Ship GORDON GUNTER and OREGON II collected plankton and environmental data during the Spring Plankton Survey from March 18 to May 29, while the USM/GCRL vessel TOMMY MUNRO collected data from June 5 to June 9.

Vessels that participated in the Summer Shrimp/Groundfish Survey and concurrently sampled plankton and environmental data included the USM/GCRL vessel TOMMY MUNRO (June 12 – July 8), the Louisiana vessel PELICAN (June 26-29), and the NOAA Ship OREGON II (June 7 – August 3). The A.E. VERRILL (June 4-27) and the TPWD vessels TRINITY BAY, SAN JACINTO, SABINE, MATAGORDA BAY, and NUECES (June 4-23) did not sample plankton in conjunction with the summer survey.

The NOAA Ship CARETTA participated in the Reef Fish Survey from February 6 – March 9. The NOAA Ship OREGON II participated in the Reef Fish Survey from April 22 – May 30.

Vessels that participated in collecting plankton and environmental data during the Fall Plankton Survey included the NOAA Ship GORDON GUNTER (August 29 – September 28), USM/GCRL vessel TOMMY MUNRO (September 28-29) and the Alabama vessel A.E. VERRILL (September 12).

Vessels that participated in the Fall Shrimp/Groundfish Survey and concurrently sampled plankton and environmental data included the NOAA Ships OREGON II (October 15 – November 11); the USM/GCRL vessel TOMMY MUNRO (October 10-13); and the Louisiana vessel PELICAN (December 4-7). The Alabama vessel A.E. VERRILL (October 9 – November 6) and TPWD vessels TRINITY BAY, SAN JACINTO, SABINE, MATAGORDA BAY, and NUECES (November 1–28) did not sample plankton in conjunction with the fall survey.

PLANKTON SURVEYS

Since 1982, SEAMAP resource surveys have been conducted by the National Marine Fisheries Service in cooperation with the states of Florida, Alabama, Mississippi, Louisiana, and Texas.

Plankton sampling is carried out during these surveys at predetermined SEAMAP stations arranged in a fixed, systematic grid pattern across the entire Gulf of Mexico. Most but not all SEAMAP stations (designated by a unique SEAMAP number) are located at ~56 km or ½-degree intervals along this grid. Some SEAMAP stations are located at < 56 km intervals especially along the continental shelf edge, while others have been moved to avoid obstructions, navigational hazards, or shallow water. Most SEAMAP plankton samples are taken during either dedicated plankton and shrimp/bottomfish (trawl) surveys, but over the years additional samples were taken using SEAMAP gear and collection methods at locations other than designated SEAMAP stations and/or outside established SEAMAP surveys, e.g. during Louisiana seasonal trawl surveys, SEAMAP Squid/Butterfish survey; and other serendipitous or special projects.

The sampling gear and methodology used to collect SEAMAP plankton samples are similar to those recommended by Kramer et al. (1972), Smith and Richardson (1977) and Posgay and Marak (1980). A 61 cm bongo net fitted with 0.333 (0.335)[1] mm mesh netting is fished in an oblique tow path from a maximum depth of 200 m or to 2-5 m off the bottom at depths less than 200 m. A mechanical flowmeter is mounted off-center in the mouth of each bongo net to record the volume of water filtered. Volume filtered ranges from ~20 to 600 m^3, but is typically 30 to 40 m^3 at the shallowest stations and 300 to 400 m^3 at the deepest stations. A single or double 2x1 m pipe frame neuston net fitted with 0.947 (0.950)[1] mm mesh netting is towed at the surface with the frame half-submerged for 10 minutes. Samples are taken upon arrival on station regardless of time of day. At each station either a bongo and/or neuston tow are made depending on the specific survey. Samples are routinely preserved in 5 to 10 % formalin and later transferred after 48 hours to 95 % ethanol for long-term storage. During some surveys, selected samples are preserved initially in 95 % ethanol and later transferred to fresh ethanol.

Initial processing of one bongo sample and one neuston sample (except those collected by Louisiana vessels) from each SEAMAP station was accomplished at the Sea Fisheries Institute, Plankton Sorting and Identification Center (ZSIOP), in Szczecin, Poland, under a Joint Studies Agreement with NMFS. Plankton samples collected by Louisiana vessels were retained by LDWF for sorting and identification at their facilities using the same protocols used at ZSIOP. Wet plankton volumes of bongo net samples were measured by displacement to estimate net-caught zooplankton biomass (Smith and Richardson 1977). Fish eggs and larvae were removed from bongo net samples, and fish larvae only from neuston net samples. Fish eggs were not identified further, but larvae were identified to the lowest possible taxon (to family in most cases). Body length (either notochord or standard length) was measured.

Sorted ichthyoplankton specimens from ZSIOP and LDWF were sent to the SEAMAP Archiving Center, managed in conjunction with the FWC, for long-term storage under museum conditions. Sorted ichthyoplankton samples from 1982 through 2007 are available for loan to researchers throughout the country. The alternate bongo and neuston samples from each station are retained at USM/GCRL as a backup for those samples transshipped to ZSIOP in case of loss or damage during transit. These backup unsorted plankton samples are curated and housed at the SEAMAP

[1] Mesh size change in database does not represent an actual change in gear but only a change in the accuracy at which plankton mesh aperture size can be measured by the manufacturer.

Invertebrate Plankton Archiving Center, managed in conjunction with USM/GCRL, and are available for use by researchers.

See the SEAMAP Operations Manual for a more detailed description of sampling methods and protocols. Refer to the NOAA vessel cruise reports for more specific information on the individual SEAMAP Plankton Surveys conducted during 2007.

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, and 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 $MgCO_3$ 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 database 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) have 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. 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 *Litopenaeus setiferus*, *Farfantepenaeus aztecus*, and *Farfantepenaeus duorarum* 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 22 (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" and 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 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

The SEAMAP Archiving Center received 17,424 identified ichthyoplankton lots in 2007. Most of these samples have been accessioned into the SEAMAP Archiving Center computer systems and the remaining samples are being prepared for accession.

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

ENVIRONMENTAL DATA

Environmental data were collected in conjunction with each plankton station for the Spring (Figure 3) Plankton Survey. Environmental data stations for the Summer Shrimp/Groundfish Survey are shown in Figure 7 and the Fall Shrimp/Groundfish Survey in Figure 8. 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, stations located outside the shrimp statistical zones are blank. 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 through August from off Fort Morgan, Alabama to Brownsville, Texas. Figure 9 shows station locations. 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-13a 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 through 22, by depth stratum. Tables 4b-13b 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:

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

where α = 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 invertebrates, and squid species, taken from Table 3 are displayed in plots of number/hour and lb/hour in Figures 12-51 computed within a 30 x 30 minute grid. The number in each grid square is the average number/hour or lb/hour from all stations (may be one or more stations) that were sampled within a particular grid. The number for the 30 x 30 minute grid is located in the lower right hand corner of the grid. 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.

Fall Shrimp/Groundfish Survey

Shrimp and groundfish sampling was conducted during October through December from off Fort Morgan, Alabama to Brownsville, Texas. Figure 10 shows the station locations. 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 14. The species lists for Table 14 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 invertebrates, and squid species, taken from Table 14 are displayed in plots of number/hour and lb/hour in Figures 52 to 91 computed within a 30 x 30 minute grid. The number in each grid square is the average number/hour or lb/hour from all stations (may be one or more stations) that were sampled within a particular grid. The number for the 30 x 30 minute grid is located in the lower right hand corner of the grid. 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.

Tables 15a-24a 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 <u>within</u> NMFS shrimp statistical zones 11 through 22, by depth stratum. Tables 15b-24b list the total catch and environmental data from the 40-ft and 20-ft nets <u>within</u> 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. Summarized data were distributed weekly to approximately 200 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.

REEF FISH SURVEY

Primary data collection and sampling for reef fish assessment were conducted during February through May by NMFS personnel. 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 25. The species list for Table 25 is ranked in order of abundance. Video tapes from all sources were analyzed using NMFS standardized protocols.

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, 1985-2006. 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 in 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 to the GMFMC in December 2006. This report contained the results and an overview of the effect of the 2006 Texas Closure. After review of these data and other information, the GMFMC voted to continue the Texas Closure for 2007.

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: 2006-2010 (ASMFC 2006).

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, 2404 Government Street, Ocean Springs, MS 39564; (228) 875-5912 or via e-mail at jrester@gsmfc.org.

Table 1. List of SEAMAP survey activities from 1982 to 2007.

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
2001	APRIL-MAY	JUNE-JULY	--	AUGUST-OCTOBER	OCTOBER-DECEMBER	--	MAY, JUNE, OCTOBER
2002	APRIL-MAY	JUNE-JULY	--	AUGUST-OCTOBER	OCTOBER-DECEMBER	--	FEBRUARY-MAY, OCTOBER
2003	MAY	JUNE-JULY	--	AUGUST-OCTOBER	OCTOBER-DECEMBER	--	OCTOBER-NOVEMBER
2004	APRIL-JUNE	JUNE-JULY	--	SEPTEMBER	OCTOBER-DECEMBER	JANUARY	FEBRUARY-MARCH
2005	APRIL-MAY	JUNE-AUGUST	--	--	OCTOBER-NOVEMBER	--	FEBRUARY-JULY, OCTOBER
2006	APRIL-MAY	JUNE-JULY	--	AUGUST-SEPTEMBER	OCTOBER-DECEMBER	--	FEBRUARY-AUGUST
2007	MARCH-JUNE	JUNE-AUGUST	--	AUGUST-SEPTEMBER	OCTOBER-DECEMBER	--	FEBRUARY-MAY

Table 2. Selected environmental parameters measured during 2007 SEAMAP surveys in the Gulf of Mexico, by individual vessel and survey.
(Gear codes: ST = TVawl; PN = bongo; NN = neuston net; BG = bathythermograph (CTD); TV = TVap/video; EV = environmental).

OREGON II, REEFFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	4/22/2007	1248	2652.6	9646.6	21														TV
2	4/22/2007	1356	2652.6	9646.5	21														TV
3	4/22/2007	1505	2652.7	9646.5	21														TV
4	4/22/2007	1616	2652.7	9646.6	21														TV
5	4/22/2007	1720	2652.7	9646.7	21		35	70	21.7	20.1	19.6	31.3	35.7	36.4	1.304	7.4	6.5	5.9	TV
6	4/22/2007	1819	2652.7	9646.7	21														TV
7	4/22/2007	1840	2652.6	9646.7	21		34	67	21.7	20.4	19.6	31.2	35.8	36.4	1.669	7.4	6.7	5.9	TV
8	4/22/2007	2007	2652.6	9646.6	21		32	63	21.5	20.4	19.7	31.0	35.7	36.3	1.567	7.3	6.6	6.4	
9	4/22/2007	2113	2652.6	9646.6	21		34	67	21.5	20.2	19.6	30.7	35.9	36.4	0.830	7.2	6.5	6.0	
10	4/22/2007	2220	2652.6	9646.5	21		32	64	21.6	20.5	19.7	30.4	35.9	36.3	0.862	7.2	6.6	6.4	
11	4/22/2007	2325	2652.8	9646.5	21		38	75	21.5	19.3	19.6	32.2	35.7	36.4	1.266	7.0	6.4	5.4	
12	4/23/2007	1308	2702.0	9642.2	20		37	74	21.9	20.9	19.3	31.4	35.9	36.4	0.732	7.0	6.8	5.9	
13	4/23/2007	1412	2702.2	9642.1	20		41	82	21.6	20.0	19.2	32.6	36.1	36.4	0.811	7.0	6.8	5.8	
14	4/23/2007	1517	2702.7	9642.4	20		34	67	21.7	21.6	19.2	31.9	35.8	36.4	0.748	6.9	6.9	6.0	
15	4/23/2007	1615	2702.6	9642.6	20		34	69	22.2	21.6	19.2	30.9	35.8	36.4	0.461	6.9	6.9	5.8	
16	4/23/2007	1718	2702.6	9642.6	20		34	67	22.1	21.6	19.2	31.5	35.8	36.4	0.506	7.0	6.9	5.8	
17	4/23/2007	1814	2702.6	9642.7	20		36	71	22.0	21.6	19.2	32.1	35.8	36.4	0.638	6.9	6.9	5.7	
18	4/23/2007	1859	2702.5	9642.8	20														TV
19	4/23/2007	1918	2702.7	9642.9	20		36	73	22.3	21.5	19.2	31.8	35.8	36.3	0.582	6.9	6.9	5.7	TV
20	4/23/2007	2049	2702.7	9643.0	20		36	71	22.4	21.4	19.2	31.8	35.8	36.3	0.601	6.9	6.9	5.7	
21	4/23/2007	2153	2702.6	9643.1	20		39	78	21.5	21.3	19.1	32.7	35.9	36.3	1.406	6.9	6.9	5.7	
22	4/23/2007	2257	2703.0	9642.7	20		40	81	22.5	20.5	19.1	31.8	36.1	36.3	0.902	6.9	6.9	5.7	
23	4/24/2007	1318	2726.5	9631.4	20		34	67	21.9	20.8	19.6	31.7	35.6	36.3	1.755	6.9	6.9	6.3	
24	4/24/2007	1427	2726.5	9631.3	20		33	66	21.3	20.8	19.7	33.8	35.6	36.3	1.171	7.0	6.9	6.3	
25	4/24/2007	1541	2726.6	9631.7	20		36	71	21.9	20.9	19.6	32.0	35.7	36.4	1.130	7.0	6.9	6.2	
26	4/24/2007	1639	2726.4	9631.5	20														TV
27	4/24/2007	1708	2726.8	9631.7	20		40	79	21.7	20.9	19.6	32.9	35.7	36.3	1.505	7.0	6.8	5.9	

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			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	MID	MAX	GEAR
28	4/24/2007	1815	2726.8	9631.5	20		38	75	21.6	20.9	19.6	33.1	35.7	36.3	1.453	7.0	6.9	6.2	
29	4/24/2007	1921	2726.7	9631.4	20		36	73	21.8	20.8	19.6	32.3	35.6	36.4	1.934	7.0	6.9	6.2	
30	4/24/2007	2022	2726.6	9631.2	20		35	70	21.1	20.8	19.6	33.7	35.6	36.3	2.072	7.1	6.9	6.2	
31	4/24/2007	2127	2726.7	9631.3	20		35	70	21.2	20.9	19.6	33.5	35.7	36.3	2.430	7.1	6.9	6.2	
32	4/24/2007	2225	2726.8	9631.5	20		38	77	22.1	20.8	19.6	31.9	35.8	36.3	2.556	7.0	6.5	6.2	
33	4/25/2007	1538	2744.5	9614.4	20		36	72	21.3	20.8	19.9	34.7	36.2	36.3	1.584	7.0	7.0	6.5	
34	4/26/2007	1253	2753.0	9350.1	0		46	91	22.7	21.0	19.1	36.3	36.4	36.5	0.325	6.7	7.0	5.7	
35	4/26/2007	1355	2753.3	9350.8	0		50	100	22.7	20.8	19.6	36.3	36.5	36.5	0.283	6.7	7.0	6.0	
36	4/26/2007	1451	2751.5	9352.1	0		54	109	22.8	20.5	19.5	36.3	36.5	36.5	0.206	6.7	6.8	5.9	
37	4/26/2007	1548	2751.0	9352.1	0		43	86	22.8	21.3	19.6	36.3	36.4	36.5	0.174	6.7	6.9	5.9	
38	4/26/2007	1655	2751.1	9351.7	0		32	65	22.9	21.9	19.8	36.3	36.4	36.6	0.091	6.6	6.8	6.0	
39	4/26/2007	1749	2751.1	9350.9	0		42	83	22.9	21.6	19.6	36.3	36.3	36.6	0.109	6.7	6.9	6.0	
40	4/26/2007	1842	2750.8	9350.9	0		42	85	23.1	21.6	19.5	36.3	36.3	36.5	0.115	6.7	6.9	5.9	
41	4/26/2007	1924	2751.1	9351.1	0														TV
42	4/26/2007	1941	2750.4	9350.4	0		44	87	23.2	21.4	19.5	36.3	36.4	36.5	0.144	6.7	6.9	5.9	
43	4/26/2007	2057	2750.1	9350.3	0		46	92	23.2	21.2	19.4	36.3	36.4	36.5	0.137	6.7	6.9	5.9	
44	4/26/2007	2155	2751.0	9350.1	0		40	79	23.2	21.4	19.7	36.3	36.4	36.6	0.217	6.6	6.9	6.0	
45	4/27/2007	1240	2751.8	9350.3	0		50	101	22.9	21.0	19.3	36.3	36.4	36.5	0.262	6.6	7.0	5.8	TV
46	4/27/2007	1343	2751.6	9350.5	0		44	89	22.9	21.6	19.5	36.3	36.3	36.5	0.173	6.7	6.9	5.9	TV
47	4/27/2007	1442	2751.2	9350.2	0		40	79	22.9	21.9	20.0	36.3	36.3	36.6	0.162	6.6	6.8	6.1	TV
48	4/27/2007	1547	2750.2	9349.9	0		49	98	22.9	20.8	19.1	36.3	36.4	36.5	0.121	6.6	7.0	5.7	TV
49	4/27/2007	1650	2751.1	9348.0	0		56	112	22.9	20.7	19.1	36.3	36.4	36.5	0.133	6.7	6.9	5.7	TV
50	4/27/2007	1736	2751.0	9348.0	0														TV
51	4/27/2007	1816	2751.9	9348.3	0		38	77	23.0	21.6	19.4	36.3	36.3	36.5	0.121	6.7	6.9	5.9	TV
52	4/27/2007	1930	2751.6	9349.2	0		37	74	23.0	21.7	19.8	36.3	36.3	36.5	0.245	6.7	6.9	6.1	TV
53	4/27/2007	2029	2751.9	9350.4	0		48	97	23.0	20.9	19.4	36.3	36.4	36.5	0.218	6.6	7.0	5.8	
54	4/27/2007	2150	2752.6	9349.6	0		42	83	0.0	21.6	19.6	0.0	36.4	36.5	0.000	0.0	7.0	6.0	

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
55	4/27/2007	2253	2753.1	9349.1	0		43	86	23.0	21.9	19.1	36.3	36.3	36.5	0.307	6.6	6.8	5.7	
56	4/28/2007	1254	2754.0	9346.9	0		54	107	22.8	20.9	19.2	36.3	36.4	36.5	0.337	6.7	6.9	5.8	
57	4/28/2007	1355	2753.8	9349.1	0		34	69	22.9	22.7	20.3	36.3	36.3	36.5	0.304	6.7	6.7	6.8	
58	4/28/2007	1502	2753.5	9349.1	0		50	101	22.9	21.3	19.3	36.3	36.4	36.5	0.263	6.6	6.9	5.9	
59	4/28/2007	1549	2753.5	9348.9	0														TV
60	4/28/2007	1608	2753.5	9349.3	0		49	98	22.9	21.4	19.3	36.3	36.4	36.5	0.173	6.6	6.9	5.9	
61	4/28/2007	1722	2753.0	9347.9	0		44	87	23.0	21.5	19.3	36.4	36.3	36.5	0.118	6.7	6.9	5.9	
62	4/28/2007	1848	2753.2	9339.9	0		53	106	23.3	21.0	19.1	36.3	36.4	36.5	0.128	6.7	7.0	5.6	
63	4/28/2007	1945	2753.3	9337.5	0		47	94	23.2	21.2	19.2	36.3	36.3	36.5	0.153	6.6	7.0	5.7	
64	4/28/2007	2044	2754.9	9338.3	0		48	97	23.4	21.1	19.3	36.3	36.4	36.5	0.158	6.6	7.0	5.8	
65	4/28/2007	2144	2755.6	9338.1	0		46	91	23.3	21.4	19.3	36.3	36.3	36.5	0.293	6.7	7.0	5.9	
66	4/28/2007	2245	2756.0	9338.0	0		44	89	23.2	21.4	19.3	36.3	36.3	36.5	0.615	6.7	7.0	5.9	
67	4/29/2007	1249	2758.2	9338.3	0		49	98	22.9	21.3	19.2	36.3	36.3	36.5	0.380	6.6	6.9	5.7	
68	4/29/2007	1343	2758.3	9337.4	0		48	95	22.9	21.3	19.4	36.3	36.3	36.5	0.305	6.7	7.0	5.9	
69	4/29/2007	1440	2758.5	9337.0	0		53	106	22.9	21.2	19.3	36.3	36.3	36.5	0.243	6.7	7.0	5.8	
70	4/29/2007	1543	2757.3	9336.6	0		42	83	23.0	21.3	19.9	36.3	36.3	36.5	0.201	6.7	6.9	6.4	
71	4/29/2007	1636	2756.2	9337.0	0		36	73	23.1	21.6	19.9	36.3	36.3	36.5	0.156	6.7	6.9	6.5	
72	4/29/2007	1732	2756.1	9337.1	0		38	75	23.6	21.6	19.8	36.3	36.3	36.5	0.125	6.6	6.9	6.4	
73	4/29/2007	1819	2755.9	9335.3	0		42	85	23.3	21.4	19.7	36.3	36.3	36.5	0.123	6.6	6.9	6.2	
74	4/29/2007	1913	2754.7	9335.3	0		25	50	23.4	22.6	21.3	36.3	36.3	36.3	0.161	6.6	6.7	6.9	
75	4/29/2007	2048	2756.2	9327.0	0		50	99	23.2	21.3	19.0	36.2	36.5	36.5	0.187	6.7	7.0	5.5	
76	4/29/2007	2132	2756.2	9326.7	0														TV
77	4/29/2007	2205	2754.8	9327.4	0		56	111	23.9	21.2	19.0	36.2	36.5	36.5	0.254	6.6	7.0	5.4	
78	4/30/2007	1250	2751.4	9326.4	0		54	108	23.1	20.6	19.0	36.2	36.5	36.5	0.321	6.6	6.9	5.4	
79	4/30/2007	1340	2752.1	9326.3	0		51	102	23.2	20.9	19.2	36.2	36.5	36.5	0.269	6.7	6.9	5.5	
80	4/30/2007	1441	2752.2	9326.1	0		55	110	23.1	20.9	18.9	36.2	36.5	36.5	0.165	6.7	6.9	5.3	
81	4/30/2007	1607	2754.7	9326.9	0		26	53	23.3	22.6	20.8	36.2	36.3	36.5	0.156	6.6	6.8	6.8	

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
82	4/30/2007	1650	2754.5	9326.8	0														TV
83	4/30/2007	1711	2754.7	9325.3	0		50	101	23.3	21.0	19.2	36.2	36.5	36.5	0.126	6.7	7.0	5.5	
84	4/30/2007	1820	2754.2	9326.3	0		52	104	23.4	20.9	19.1	36.2	36.5	36.5	0.123	6.7	7.0	5.5	
85	4/30/2007	1944	2752.8	9320.8	0		58	115	23.3	20.6	18.7	36.2	36.5	36.5	0.166	6.7	6.8	5.1	
86	4/30/2007	2100	2755.0	9321.5	0		50	101	23.6	21.2	18.9	36.2	36.5	36.5	0.180	6.7	7.0	5.2	
87	4/30/2007	2200	2755.4	9321.8	0		62	123	23.6	20.3	18.7	36.2	36.6	36.5	0.270	6.7	6.9	5.0	
88	5/1/2007	1248	2801.0	9329.8	0		41	82	23.3	21.6	19.9	36.3	36.4	36.6	0.338	6.6	6.9	6.1	
89	5/1/2007	1451	2807.8	9328.7	0		34	68	23.3	21.6	20.5	36.3	36.3	36.5	0.165	6.6	6.9	6.9	
90	5/1/2007	1553	2807.9	9329.0	0		31	62	23.3	22.3	20.5	36.3	36.3	36.5	0.179	6.6	6.9	6.9	
91	5/1/2007	1705	2807.8	9328.6	0		36	71	23.3	21.7	20.4	36.3	36.3	36.5	0.118	6.6	6.9	6.8	
92	5/1/2007	1804	2807.7	9328.9	0		33	66	23.4	22.3	20.5	36.3	36.3	36.5	0.109	6.6	6.8	6.8	
93	5/1/2007	1852	2807.9	9329.1	0														TV
94	5/1/2007	1915	2807.4	9329.5	0		36	73	23.3	22.0	20.4	36.3	36.3	36.5	0.153	6.6	6.9	6.8	
95	5/1/2007	2040	2808.1	9329.7	0		26	53	23.4	23.0	21.0	36.3	36.3	36.5	0.150	6.6	6.7	7.0	
96	5/1/2007	2143	2808.4	9330.0	0		32	63	23.5	21.8	20.3	36.3	36.4	36.5	0.237	6.6	6.6	6.9	
97	5/1/2007	2242	2808.6	9329.5	0		27	54	23.5	23.1	20.7	36.3	36.3	36.5	0.266	6.6	6.7	7.0	
98	5/5/2007	1303	2755.1	9318.1	0		53	106	23.9	21.3	19.2	36.3	36.5	36.5	0.279	6.5	6.7	5.5	
99	5/5/2007	1551	2755.0	9318.5	0		54	107	24.1	21.3	19.2	36.3	36.5	36.5	0.113	6.5	7.0	5.5	
100	5/5/2007	1655	2754.1	9317.7	0		23	46	24.0	23.4	21.5	36.3	36.4	36.4	0.101	6.5	6.6	6.9	
101	5/5/2007	1819	2753.9	9318.4	0		28	56	24.1	22.7	20.9	36.3	36.3	36.5	0.089	6.5	6.8	6.9	
102	5/5/2007	1907	2753.7	9318.3	0														TV
103	5/5/2007	1928	2753.5	9318.2	0		22	43	24.1	23.2	21.5	36.3	36.4	36.4	0.188	5.1	6.7	7.0	
104	5/5/2007	2056	2752.8	9318.2	0		25	50	24.1	22.8	21.0	36.3	36.3	36.5	0.169	5.3	6.8	5.9	
105	5/5/2007	2204	2752.0	9318.8	0		50	100	24.1	21.2	19.5	36.3	36.5	36.5	0.247	4.3	5.3	5.7	
106	5/5/2007	2247	2751.8	9318.6	0														TV
107	5/5/2007	2325	2752.3	9317.9	0		30	61	24.1	22.6	20.2	36.3	36.3	36.6	0.410	4.6	5.0	5.4	
108	5/6/2007	1244	2750.7	9303.6	0		40	79	23.7	22.2	19.8	36.5	36.4	36.6	0.241	6.6	6.2	5.3	

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
109	5/6/2007	1400	2751.5	9303.6	0		48	97	23.7	21.8	19.4	36.5	36.5	36.5	0.259	4.8	4.8	4.9	
110	5/6/2007	1504	2751.6	9303.8	0		44	88	24.1	22.0	19.9	36.4	36.3	36.6	0.178	5.8	5.2	5.4	
111	5/6/2007	1553	2751.4	9303.7	0														TV
112	5/6/2007	1621	2751.3	9304.1	0		28	55	24.0	23.2	21.2	36.3	36.3	36.5	0.234	4.9	6.7	5.1	
113	5/6/2007	1744	2751.5	9304.3	0		36	73	24.1	22.2	20.4	36.3	36.3	36.5	0.124	6.4	5.2	5.1	
114	5/6/2007	1843	2751.8	9304.6	0		66	132	24.1	20.7	17.9	36.3	36.5	36.4	0.357	5.0	6.7	3.7	
115	5/6/2007	1950	2751.0	9304.7	0		38	77	24.1	22.1	20.4	36.3	36.4	36.5	0.188	4.9	6.9	6.6	
116	5/6/2007	2035	2750.8	9304.6	0														TV
117	5/6/2007	2110	2750.6	9304.8	0		72	144	24.2	20.6	17.2	36.3	36.5	36.3	0.478	5.0	5.0	4.3	
118	5/6/2007	2245	2750.4	9304.5	0		40	81	24.2	22.1	20.2	36.3	36.4	36.5	0.367	4.9	6.8	5.6	
119	5/7/2007	1243	2758.2	9237.1	0		44	89	23.9	21.7	19.6	36.4	36.5	36.5	0.563	5.0	4.7	4.1	
120	5/7/2007	1345	2758.6	9237.0	0		59	118	23.9	21.0	18.8	36.4	36.6	36.5	0.619	5.2	5.4	4.4	
121	5/7/2007	1459	2758.3	9235.9	0		49	98	24.0	21.3	19.6	36.4	36.5	36.5	0.449	5.0	6.5	4.8	
122	5/7/2007	1608	2757.8	9236.1	0		24	47	24.1	23.7	21.7	36.5	36.4	36.5	0.110	6.3	5.0	6.8	
123	5/7/2007	1714	2757.9	9235.3	0		48	96	24.2	21.7	19.6	36.5	36.5	36.5	0.088	6.4	6.5	5.4	
124	5/7/2007	1759	2757.7	9235.2	0														TV
125	5/7/2007	1832	2757.7	9235.0	0		51	102	24.3	21.4	19.3	36.4	36.5	36.5	0.087	6.5	6.9	5.2	
126	5/7/2007	2001	2758.7	9235.7	0		44	89	24.3	21.6	19.6	36.4	36.4	36.5	0.122	6.5	7.0	5.5	
127	5/7/2007	2101	2758.2	9234.8	0														
128	5/7/2007	2159	2757.8	9233.4	0		60	121	24.6	20.4	19.1	36.4	36.6	36.5	0.331	4.5	5.9	5.1	
129	5/7/2007	2303	2757.7	9233.2	0		52	105	24.5	21.2	19.1	36.4	36.5	36.5	0.565	5.3	4.5	4.2	
130	5/23/2007	1547	2807.5	9100.8	15		44	89	25.2	22.1	19.7	35.5	36.4	36.5	0.633	4.3	4.1	5.1	TV
131	5/23/2007	1654	2805.6	9101.4	15		27	54	25.3	23.0	21.6	35.5	36.3	36.4	0.645	4.8	5.6	6.0	TV
132	5/23/2007	1814	2805.6	9101.5	15														TV
133	5/23/2007	1837	2806.2	9101.8	15		40	81	25.4	22.3	20.1	35.5	36.4	36.5	0.718	4.8	4.4	5.0	TV
134	5/23/2007	2004	2806.0	9102.3	15		50	99	25.4	21.7	19.9	35.6	36.4	36.5	0.580	4.8	4.9	4.9	TV
135	5/23/2007	2104	2805.7	9102.1	15		29	58	25.5	22.7	21.1	35.5	36.3	36.5	1.468	4.6	5.6	5.4	TV

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
136	5/23/2007	2211	2805.2	9101.5	15		30	59	25.5	22.4	21.0	35.5	36.3	36.5	0.621	4.6	4.7	5.1	TV
137	5/23/2007	2316	2805.6	9101.2	15		32	63	25.5	22.0	21.2	35.5	36.3	36.5	0.869	5.0	4.5	4.6	TV
138	5/24/2007	1218	2758.9	9140.1	0		65	130	25.7	21.8	18.8	36.2	36.6	36.4	0.472	4.8	5.7	4.5	TV
139	5/24/2007	1421	2751.4	9148.8	0		65	130	25.8	21.5	18.6	36.1	36.6	36.5	0.593	4.4	4.7	3.8	TV
140	5/24/2007	1521	2751.1	9149.0	0		52	103	25.9	22.5	19.6	36.1	36.5	36.5	0.526	4.3	4.7	5.1	TV
141	5/24/2007	1613	2751.1	9149.0	0														TV
142	5/24/2007	1623	2750.9	9148.6	0		52	103	25.9	22.5	19.6	36.1	36.5	36.5	0.165	4.3	4.9	4.0	TV
143	5/24/2007	1751	2750.2	9148.3	0		60	120	26.0	21.9	19.0	36.1	36.5	36.5	0.140	4.4	5.2	4.7	TV
144	5/24/2007	1902	2750.2	9148.6	0		58	115	26.1	22.0	19.1	36.1	36.5	36.5	0.097	6.1	6.6	5.1	TV
145	5/24/2007	1959	2750.2	9148.6	0														TV
146	5/24/2007	2022	2750.3	9149.1	0		54	107	26.1	22.4	19.4	36.1	36.5	36.5	0.301	6.1	6.6	5.2	TV
147	5/24/2007	2154	2750.2	9149.2	0		54	107	26.0	22.4	19.4	36.1	36.6	36.5	0.222	6.1	6.5	5.2	TV
148	5/24/2007	2305	2750.7	9149.8	0		49	98	26.0	22.8	19.8	36.1	36.5	36.6	0.232	6.1	6.6	5.3	
149	5/25/2007	1214	2757.0	9201.5	0		50	99	25.5	22.4	19.0	36.2	36.5	36.5	0.289	6.2	6.5	4.8	TV
150	5/25/2007	1315	2757.1	9200.5	0		58	115	25.7	21.2	18.7	36.3	36.6	36.4	0.204	6.2	6.5	4.7	TV
151	5/25/2007	1407	2757.1	9200.5	0														TV
152	5/25/2007	1425	2758.0	9200.2	0		48	97	25.6	22.4	19.4	36.3	36.5	36.5	0.163	6.2	6.6	5.3	TV
153	5/25/2007	1540	2756.2	9200.1	0		34	68	25.8	23.6	20.2	36.3	36.6	36.6	0.125	6.1	6.6	5.8	TV
154	5/25/2007	1639	2756.1	9200.5	0		34	68	25.9	23.9	21.5	36.3	36.5	36.6	0.105	6.1	6.5	6.2	TV
155	5/25/2007	1739	2756.1	9200.5	0														TV
156	5/25/2007	1803	2756.4	9201.3	0		30	61	25.9	24.4	21.6	36.3	36.5	36.6	0.099	6.1	6.5	6.4	TV
157	5/25/2007	1933	2756.0	9201.7	0		42	83	26.0	23.6	20.2	36.2	36.5	36.5	0.139	6.1	6.6	5.9	TV
158	5/25/2007	2033	2755.8	9202.8	0		49	98	26.0	22.6	19.9	36.2	36.6	36.5	0.131	6.1	6.4	5.5	ST
158	5/25/2007	2033	2755.8	9202.8	0														ST
159	5/25/2007	2139	2756.6	9202.8	0		44	88	26.0	23.0	20.1	36.3	36.6	36.5	0.189	6.1	6.6	5.8	TV
160	5/25/2007	2241	2757.7	9203.6	0		58	115	26.0	21.7	18.7	36.3	36.6	36.4	0.264	6.1	6.2	4.8	TV
161	5/26/2007	1214	2759.6	9223.1	0		67	134	25.6	21.1	18.4	36.3	36.5	36.4	0.268	6.1	6.3	4.4	TV

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
162	5/26/2007	1311	2758.5	9222.4	0		36	72	25.6	24.0	20.3	36.4	36.7	36.5	0.212	6.1	6.5	5.8	TV
163	5/26/2007	1402	2757.7	9222.2	0		31	62	25.6	25.2	20.1	36.4	36.4	36.5	0.188	6.1	6.3	5.6	TV
164	5/26/2007	1447	2757.7	9222.2	0														TV
165	5/26/2007	1502	2757.9	9221.7	0		60	121	25.6	21.3	18.9	36.4	36.5	36.4	0.133	6.3	6.4	4.7	TV
166	5/26/2007	1615	2756.9	9222.8	0		48	95	25.7	23.2	19.2	36.4	36.5	36.5	0.154	6.1	6.7	4.9	TV
167	5/26/2007	1719	2756.3	9222.7	0		44	87	25.9	23.1	19.7	36.4	36.5	36.5	0.405	4.5	4.9	5.8	
168	5/26/2007	1804	2756.1	9222.5	0														TV
169	5/26/2007	1823	2756.2	9222.9	0		48	95	25.9	22.9	19.3	36.4	36.5	36.5	0.100	4.9	4.6	5.2	TV
170	5/26/2007	1939	2755.7	9223.1	0		48	96	26.0	23.0	19.3	36.3	36.5	36.5	0.144	6.1	6.7	5.0	TV
171	5/26/2007	2051	2755.3	9223.1	0		42	84	26.0	23.5	19.8	36.3	36.6	36.5	0.163	6.1	6.7	5.4	TV
172	5/26/2007	2153	2755.2	9222.6	0		36	73	26.0	23.8	20.1	36.3	36.6	36.6	0.161	6.1	6.7	5.8	TV
173	5/27/2007	1219	2750.8	9251.9	0		76	153	25.8	20.6	17.8	36.5	36.5	36.3	0.222	6.1	6.4	4.7	TV
174	5/27/2007	1327	2750.6	9252.3	0		78	155	25.7	20.2	17.7	36.5	36.5	36.3	0.157	6.2	5.9	4.6	TV
175	5/27/2007	1448	2750.6	9253.1	0		68	137	25.7	21.1	18.3	36.5	36.6	36.4	0.141	6.1	6.4	4.7	TV
176	5/27/2007	1537	2750.6	9253.1	0														TV
177	5/27/2007	1553	2750.5	9252.6	0		60	119	25.7	21.6	18.6	36.4	36.6	36.4	0.103	6.1	6.6	4.8	TV
178	5/27/2007	1710	2750.2	9253.3	0		64	127	25.8	21.2	18.7	36.4	36.5	36.4	0.078	6.1	6.5	4.7	TV
179	5/27/2007	1808	2750.2	9253.5	0		65	130	25.9	21.5	18.6	36.4	36.6	36.4	0.106	6.1	6.5	4.7	TV
180	5/27/2007	1903	2750.2	9253.5	0														TV
181	5/27/2007	1923	2750.1	9253.7	0		60	119	25.9	22.3	18.7	36.4	36.6	36.4	0.105	6.1	6.6	4.7	TV
182	5/27/2007	2050	2750.9	9253.9	0		70	141	26.0	21.5	18.2	36.4	36.6	36.4	0.150	6.1	6.5	4.7	
183	5/27/2007	2139	2750.5	9254.2	0		68	136	26.0	21.5	18.5	36.4	36.5	36.4	0.176	6.1	6.5	4.7	TV
184	5/27/2007	2250	2751.1	9255.3	0		35	70	26.0	25.2	20.7	36.4	36.4	36.5	0.217	6.1	6.3	6.6	
185	5/28/2007	1219	2801.3	9227.8	16		52	105	25.8	22.5	19.7	36.2	36.5	36.5	0.229	6.1	6.7	4.9	TV
186	5/28/2007	1321	2801.4	9227.1	16		47	94	25.9	22.4	20.0	36.2	36.5	36.5	0.276	6.0	6.7	5.2	TV
187	5/28/2007	1408	2801.4	9227.1	16														TV
188	5/28/2007	1425	2800.8	9226.9	16		50	100	25.9	21.8	19.8	36.1	36.5	36.5	0.274	6.1	6.5	5.0	TV

Table 2. Selected environmental parameters (continued)

OREGON II, REEFFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
189	5/28/2007	1604	2803.1	9227.1	16		34	67	25.9	24.2	20.1	36.1	36.5	36.7	0.253	6.1	6.6	5.2	
190	5/28/2007	1703	2803.0	9226.2	16		41	82	25.9	23.3	20.1	36.1	36.6	36.5	0.130	6.1	6.7	5.1	
191	5/28/2007	1801	2803.6	9226.2	16		34	67	25.9	25.4	22.8	36.1	36.4	37.0	0.130	6.1	6.4	4.9	TV
192	5/28/2007	1854	2803.6	9226.2	16														TV
193	5/28/2007	1918	2803.5	9227.4	16														TV
194	5/28/2007	2059	2803.7	9226.3	16														TV
195	5/28/2007	2201	2804.0	9227.6	16														TV
196	5/29/2007	1226	2821.0	9228.0	16														TV
197	5/29/2007	1323	2820.5	9227.0	16														TV
198	5/29/2007	1407	2820.5	9227.0	16														TV
199	5/29/2007	1419	2820.6	9226.7	16														TV
200	5/29/2007	1518	2820.2	9226.9	16														TV
201	5/29/2007	1622	2820.2	9227.0	16		30	59	25.4	24.7	23.5	22.1	36.5	36.4	0.389	6.7	6.3	5.6	TV
202	5/29/2007	1722	2819.8	9227.2	16														TV
203	5/29/2007	1820	2819.7	9227.3	16														TV
204	5/29/2007	1912	2819.7	9227.3	16														TV
205	5/29/2007	1930	2819.5	9227.4	16														TV
206	5/29/2007	2045	2819.7	9227.9	16														TV
207	5/29/2007	2136	2819.8	9228.0	16														TV
208	5/30/2007	1144	2804.7	9160.0	0														TV
209	5/30/2007	1243	2804.3	9159.8	15														TV
210	5/30/2007	1336	2804.5	9159.6	15		44	87	25.8	22.4	20.4	36.1	36.4	36.5	0.169	6.3	6.3	4.7	TV
211	5/30/2007	1428	2805.0	9159.3	15														TV
212	5/30/2007	1518	2805.2	9159.4	15														TV

Table 2. Selected environmental parameters (continued)

CARETTA, REEFFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	2/6/2007	1453	2916.9	8543.6	8		32	63	19.3	19.3	17.6	36.5	36.5	36.3	0.000	6.9	6.9	7.1	
2	2/6/2007	1550	2916.5	8542.9	8		35	70	19.3	19.2	18.8	36.5	36.5	36.5	0.000	6.8	6.8	6.9	
3	2/6/2007	1648	2916.4	8542.7	8		35	70	19.4	19.3	18.9	36.5	36.5	36.5	0.000	6.8	6.8	6.9	
4	2/6/2007	1741	2916.2	8542.5	8		34	69	19.4	19.3	18.9	36.5	36.5	36.5	0.000	6.8	6.8	6.9	
5	2/6/2007	1837	2916.0	8542.3	8		34	69	19.5	19.4	19.0	36.5	36.5	36.5	0.000	6.8	6.8	6.9	
6	2/6/2007	1926	2915.7	8541.9	8		35	70	19.5	19.4	19.1	36.5	36.5	36.5	0.000	6.8	6.7	6.8	
7	2/6/2007	2011	2915.3	8541.4	8														TV
8	2/6/2007	2101	2915.0	8541.1	8														TV
9	2/6/2007	2156	2916.4	8542.7	8														TV
10	2/7/2007	1335	2913.1	8539.8	8														TV
11	2/7/2007	1429	2914.0	8540.4	8														TV
12	2/7/2007	1529	2915.7	8542.7	8														TV
13	2/8/2007	1318	2814.0	8444.5	6														TV
14	2/8/2007	1405	2813.8	8444.4	6														TV
15	2/8/2007	1452	2813.8	8443.9	6														TV
16	2/8/2007	1539	2813.8	8444.4	6														TV
17	2/8/2007	1626	2813.6	8444.4	6														TV
18	2/8/2007	1715	2813.5	8444.3	6														TV
19	2/8/2007	1801	2813.3	8443.7	6														TV
20	2/8/2007	1850	2812.4	8443.1	6														TV
21	2/8/2007	1936	2812.1	8442.6	6														TV
22	2/8/2007	2035	2811.2	8439.3	6														TV
23	2/8/2007	2123	2812.3	8438.0	6														TV
24	2/8/2007	2206	2812.0	8437.1	6														TV
25	2/9/2007	1312	2812.1	8448.1	6														TV
26	2/9/2007	1359	2811.2	8448.2	6														TV
27	2/9/2007	1444	2810.8	8447.7	6														TV

Table 2. Selected environmental parameters (continued)

CARETTA, REEFFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
28	2/9/2007	1535	2809.4	8446.9	6														TV
29	2/9/2007	1625	2809.3	8446.5	6														TV
30	2/9/2007	1714	2808.9	8446.3	6														TV
31	2/9/2007	1804	2808.1	8444.7	6														TV
32	2/9/2007	1855	2808.2	8443.0	6														TV
33	2/9/2007	1942	2808.1	8441.4	6														TV
34	2/9/2007	2035	2805.8	8440.7	6														TV
35	2/9/2007	2119	2805.4	8440.1	6														TV
36	2/9/2007	2203	2805.1	8439.1	6														TV
37	2/10/2007	1318	2813.6	8439.8	6														TV
38	2/10/2007	1404	2814.0	8438.5	6														TV
39	2/10/2007	1512	2810.6	8436.7	6														TV
40	2/10/2007	1621	2810.0	8441.2	6														TV
41	2/10/2007	1714	2809.5	8443.1	6														TV
42	2/10/2007	1806	2810.5	8442.2	6														TV
43	2/10/2007	1906	2812.0	8443.0	6														TV
44	2/10/2007	1949	2812.1	8442.8	6														TV
45	2/10/2007	2034	2812.2	8443.0	6														TV
46	2/10/2007	2124	2813.2	8442.2	6														TV
47	2/10/2007	2208	2813.3	8442.2	6														TV
48	2/11/2007	1313	2813.9	8444.5	6														TV
49	2/11/2007	1357	2813.8	8444.4	6														TV
50	2/11/2007	1441	2813.7	8444.4	6														TV
51	2/11/2007	1524	2813.5	8444.3	6														TV
52	2/11/2007	1607	2813.2	8444.2	6														TV
53	2/11/2007	1655	2812.9	8443.6	6														TV
54	2/11/2007	1807	2813.6	8447.8	6														TV

Table 2. Selected environmental parameters (continued)

CARETTA, REEFFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
55	2/21/2007	1826	2916.6	8538.8	8		28	56	19.3	18.4	14.5	36.4	36.5	35.9	0.000	9.4	9.8	5.3	
56	2/21/2007	1935	2915.7	8541.6	8		30	60	18.6	18.5	14.9	36.5	36.5	36.0	0.000	9.5	9.6	5.8	
57	2/21/2007	2017	2916.0	8541.9	8		30	59	18.8	18.4	14.9	36.5	36.5	36.0	0.000	9.3	9.6	5.5	
58	2/21/2007	2103	2916.0	8542.5	8		34	69	18.9	18.5	17.1	36.5	36.5	36.3	0.000	9.4	9.6	8.6	
59	2/21/2007	2204	2916.0	8543.8	8		38	76	18.6	18.4	15.7	36.5	36.5	36.1	0.000	9.7	9.7	6.8	
60	2/22/2007	1349	2916.7	8538.2	8		28	56	18.4	18.4	15.5	36.5	36.5	36.0	0.000	10.7	9.9	6.2	
61	2/22/2007	1448	2914.0	8538.0	8		34	67	18.5	18.4	16.0	36.5	36.5	36.1	0.000	9.5	9.5	6.3	
62	2/22/2007	1543	2913.3	8539.4	8		34	68	18.5	18.4	16.6	36.5	36.5	36.2	0.000	9.5	9.5	7.1	
63	2/22/2007	1644	2912.3	8541.3	8		40	81	18.6	18.4	16.6	36.5	36.5	36.2	0.000	9.5	9.6	6.7	
64	2/22/2007	1733	2912.0	8543.6	8		42	85	18.8	18.4	16.0	36.5	36.5	36.1	0.000	9.1	9.5	6.6	
65	2/22/2007	1837	2911.8	8546.0	8		49	98	19.0	18.5	14.9	36.5	36.5	36.0	0.000	9.6	9.5	5.7	
66	2/22/2007	1930	2913.1	8545.8	8		46	93	18.9	18.6	15.8	36.5	36.5	36.1	0.000	9.5	9.5	6.7	
67	2/22/2007	2020	2913.1	8545.9	8		47	94	18.9	18.5	15.6	36.4	36.5	36.1	0.000	9.6	9.4	6.3	
68	2/22/2007	2105	2913.3	8545.9	8		46	93	0.0	18.5	16.1	0.0	36.5	36.1	0.000	0.0	9.4	7.1	
69	2/22/2007	2149	2913.6	8545.8	8		46	92	19.0	18.4	16.0	36.5	36.5	36.1	0.000	9.7	9.4	6.9	
70	2/23/2007	1323	2911.7	8540.4	8		37	74	18.5	18.4	16.8	36.5	36.5	36.2	0.000	9.6	9.6	6.8	
71	2/23/2007	1411	2911.4	8540.9	8		40	80	18.5	18.5	16.3	36.5	36.5	36.2	0.000	9.7	9.7	6.5	
72	2/23/2007	1456	2911.3	8541.3	8		40	79	18.5	18.5	17.7	36.5	36.5	36.4	0.000	9.8	9.9	8.2	
73	2/23/2007	1542	2911.1	8540.9	8		38	75	18.5	18.5	17.5	36.5	36.5	36.3	0.000	9.7	10.0	7.6	
74	2/23/2007	1634	2910.2	8541.9	8		40	80	18.7	18.5	17.4	36.5	36.5	36.3	0.000	9.5	9.5	8.0	
75	2/23/2007	1720	2909.9	8542.4	8		44	87	18.7	18.5	17.2	36.5	36.4	36.3	0.000	9.5	9.4	7.8	
76	2/23/2007	1805	2910.0	8542.7	8		38	75	18.7	18.4	17.7	36.5	36.4	36.4	0.000	9.6	9.1	8.6	
77	2/23/2007	1854	2909.9	8543.6	8		41	82	18.8	18.4	17.6	36.5	36.5	36.4	0.000	9.0	9.8	8.3	
78	2/23/2007	1942	2909.9	8543.8	8		40	81	18.8	18.4	17.5	36.5	36.5	36.4	0.000	9.6	9.8	8.4	
79	2/27/2007	1339	2911.4	8540.4	8		40	81	18.7	16.8	16.8	36.5	36.3	36.3	0.000	8.7	9.1	9.2	
80	2/27/2007	1417	2911.3	8541.0	8		38	77	18.9	16.9	16.8	36.5	36.3	36.3	0.000	9.1	9.2	9.1	
81	2/27/2007	1504	2911.1	8540.8	8		40	80	19.1	16.7	16.7	36.5	36.3	36.3	0.000	9.6	8.3	9.1	

Table 2. Selected environmental parameters (continued)

CARETTA, REEFFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			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	MID	MAX	GEAR
82	2/27/2007	1549	2910.7	8541.2	8		42	85	19.2	16.9	16.6	36.5	36.3	36.3	0.000	9.4	9.0	9.0	
83	2/27/2007	1635	2910.1	8542.2	8		46	92	19.2	18.4	16.6	36.4	36.5	36.2	0.000	9.1	9.7	8.6	TV
84	2/27/2007	1727	2910.0	8542.6	8		48	95	19.4	18.5	16.7	36.4	36.4	36.3	0.000	7.4	9.3	8.6	TV
85	2/27/2007	1816	2909.8	8543.2	8		58	116	19.6	18.3	16.6	36.4	36.5	36.2	0.000	9.4	9.7	8.2	TV
86	2/27/2007	1905	2909.8	8543.8	8		45	90	19.5	18.5	16.8	36.5	36.4	36.3	0.000	9.8	9.4	8.6	TV
87	2/27/2007	1957	2909.7	8544.8	8		43	86	19.5	18.7	17.2	36.5	36.4	36.3	0.000	9.8	9.6	8.7	
88	2/27/2007	2045	2909.8	8544.9	8		42	83	19.7	18.7	17.2	36.5	36.4	36.3	0.000	9.9	9.6	8.6	
89	2/27/2007	2128	2909.8	8545.0	8		44	87	19.8	18.7	17.2	36.5	36.4	36.3	0.000	9.8	9.6	8.7	TV
90	2/27/2007	2218	2909.6	8545.8	8		50	100	19.9	18.6	16.5	36.4	36.4	36.2	0.000	4.3	9.3	8.0	TV
91	2/28/2007	1319	2916.7	8543.3	8		33	66	19.0	17.8	17.2	36.5	36.4	36.3	0.000	10.1	9.3	8.7	
92	2/28/2007	1404	2916.8	8543.1	8		30	60	19.0	17.7	17.2	36.5	36.4	36.3	0.000	10.2	9.1	8.7	
93	2/28/2007	1449	2916.6	8542.8	8		34	69	18.9	17.6	17.2	36.5	36.4	36.3	0.000	10.2	9.0	8.6	
94	2/28/2007	1534	2916.3	8542.6	8		34	67	19.0	17.5	17.2	36.5	36.4	36.3	0.000	10.1	8.9	8.7	
95	2/28/2007	1617	2916.1	8542.3	8		34	68	19.2	17.7	17.3	36.5	36.4	36.3	0.000	9.8	9.8	8.7	
96	2/28/2007	1707	2915.2	8541.4	8		32	65	19.1	18.0	17.2	36.5	36.4	36.3	0.000	9.8	9.2	8.7	
97	3/6/2007	1749	2913.8	8545.4	8		46	92	18.0	17.9	14.1	36.4	36.4	35.8	0.000	9.5	9.3	5.4	TV
98	3/6/2007	1839	2913.9	8545.4	8		44	88	18.1	17.9	14.1	36.4	36.4	35.9	0.000	7.9	9.7	5.5	
99	3/6/2007	1922	2912.5	8545.9	8		50	99	18.3	17.9	14.2	36.4	36.4	35.8	0.000	9.6	9.5	5.5	
100	3/6/2007	2006	2911.6	8545.4	8		50	99	18.5	17.9	14.9	36.4	36.4	35.9	0.000	9.5	9.6	5.8	
101	3/6/2007	2053	2911.5	8544.2	8		44	87	18.3	17.9	15.2	36.4	36.4	36.1	0.000	9.7	9.6	6.3	
102	3/6/2007	2150	2913.8	8543.0	8		42	84	18.3	18.0	14.4	36.6	36.4	35.9	0.000	9.8	9.6	5.6	
103	3/6/2007	2232	2915.3	8542.2	8		37	74	18.4	18.0	14.2	36.5	36.4	35.8	0.000	8.5	9.7	5.4	
104	3/7/2007	1300	2859.6	8522.8	8		35	70	18.3	18.3	16.9	36.4	36.4	36.3	0.000	10.1	9.8	8.0	TV
105	3/7/2007	1345	2859.2	8522.2	8		32	65	18.3	18.3	17.0	36.4	36.4	36.3	0.000	7.2	10.0	7.9	TV
106	3/7/2007	1427	2859.1	8522.1	8		34	69	18.3	18.3	17.0	36.4	36.4	36.3	0.000	9.2	9.9	8.0	TV
107	3/7/2007	1511	2859.2	8521.8	8		32	64	18.3	18.3	17.0	36.5	36.4	36.4	0.000	9.5	10.0	8.1	TV
108	3/7/2007	1552	2859.1	8522.0	8		36	71	18.4	18.3	17.0	36.5	36.4	36.4	0.000	8.7	10.1	8.1	TV

Table 2. Selected environmental parameters (continued)

CARETTA, REEFFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
109	3/7/2007	1638	2858.9	8522.0	8		36	71	18.5	18.3	17.0	36.4	36.4	36.3	0.000	10.0	10.0	8.2	
110	3/7/2007	1721	2858.8	8521.8	8		31	62	18.5	18.3	17.0	36.4	36.4	36.3	0.000	10.0	10.1	8.0	TV
111	3/7/2007	1803	2858.7	8521.6	8		32	65	18.6	18.3	17.2	36.4	36.4	36.5	0.000	9.8	10.0	8.6	TV
112	3/7/2007	1845	2858.6	8521.5	8		35	70	18.8	18.3	17.2	36.4	36.4	36.3	0.000	9.9	10.0	8.2	TV
113	3/7/2007	1929	2858.4	8521.4	8		34	69	18.7	18.3	17.1	36.5	36.4	36.3	0.000	10.2	10.2	8.2	TV
114	3/7/2007	1942	2858.6	8521.6	8														TV
115	3/7/2007	2010	2858.4	8521.4	8		35	70	18.9	18.3	17.0	36.5	36.4	36.3	0.000	10.1	10.1	8.1	TV
116	3/7/2007	2051	2858.5	8521.5	8		31	62	0.0	18.2	17.1	0.0	36.4	36.3	0.000	0.0	10.1	8.1	TV
117	3/7/2007	2135	2858.7	8521.7	8														
118	3/7/2007	2216	2859.1	8521.5	8														TV
119	3/8/2007	1258	2859.1	8521.6	8														TV
120	3/8/2007	1343	2858.8	8521.9	8														TV
121	3/8/2007	1423	2858.9	8522.0	8														TV
122	3/8/2007	1505	2859.1	8522.1	8														TV
123	3/8/2007	1547	2859.2	8522.2	8														TV
124	3/8/2007	1629	2859.5	8522.7	8														TV
125	3/8/2007	1921	2911.5	8541.4	8														TV
126	3/8/2007	2018	2913.8	8538.8	8														TV
127	3/8/2007	2112	2916.7	8538.4	8														TV
128	3/8/2007	2154	2916.9	8538.1	8														TV
129	3/9/2007	1332	2908.4	8546.4	8														TV
130	3/9/2007	1417	2908.4	8546.4	8														TV
131	3/9/2007	1507	2908.3	8546.9	8														TV
132	3/9/2007	1552	2908.3	8547.1	8														TV
133	3/9/2007	1638	2908.5	8547.3	8														TV
134	3/9/2007	1723	2908.4	8547.5	8														TV

Table 2. Selected environmental parameters (continued)

TOMMY MUNRO, 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	6/5/2007	710	2930.1	8800.1	11	44	22	44	25.0	25.0	24.6	36.3	36.3	36.3		5.3	4.3	4.0	PN
2	6/6/2007	716	2930.1	8729.6	10	68	35	68	25.1	24.9	24.1	36.3	36.3	35.9		4.6	4.6	3.2	PN
3	6/9/2007	1327	2930.0	8830.1	11	50	49	50	28.4	23.8	24.3	32.5	36.6	36.2		7.5	3.5	3.3	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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	3/18/2007	747	2930.1	8700.0	10	411	103	206	20.8	18.3	13.9	36.4	36.4	35.8		7.0	6.9	4.1	PN
2	3/18/2007	1132	2929.9	8630.7		216	101	201	19.2	17.9	15.3	36.0	36.3	36.0		7.3	6.8	4.3	PN
3	3/18/2007	1754	2911.8	8559.7	8	198	96	190	19.0	18.0	14.4	36.0	36.4	35.9		7.2	6.9	3.8	PN
4	3/18/2007	2246	2900.7	8530.5	8	74	34	68	19.1	19.0	18.0	36.5	36.5	36.4		7.3	7.2	6.4	PN
5	3/19/2007	214	2900.9	8459.9	7	40	18	33	18.4	18.3	18.3	36.4	36.4	36.4		7.5	7.4	7.4	PN
6	3/19/2007	531	2900.0	8430.0	7	35	15	29	18.8	18.9	18.9	36.6	36.6	36.6		7.4	7.4	7.4	PN
7	3/19/2007	1009	2832.1	8400.9	6	36	15	29	18.2	18.2	18.2	36.7	36.7	36.7		7.5	7.5	7.5	PN
8	3/19/2007	1322	2830.2	8430.3	6	50	23	44	19.1	19.1	19.0	36.6	36.6	36.6		7.3	7.3	7.2	PN
9	3/19/2007	1808	2830.2	8500.5	8	104	51	100	20.3	19.0	18.6	36.5	36.5	36.6		7.0	6.7	7.0	PN
10	3/20/2007	18	2840.8	8530.6		181	88	173	21.4	18.1	15.0	36.5	36.4	36.0		7.0	5.1	4.4	PN
11	3/20/2007	435	2830.4	8601.2		348	101	202	19.9	18.7	15.5	36.5	36.4	36.1		7.2	6.7	4.5	PN
12	3/20/2007	947	2800.6	8530.6		594	103	204	21.7	19.2	15.1	36.5	36.5	36.0		6.9	6.3	4.6	PN
13	3/20/2007	1453	2800.3	8500.6		263	7	13	22.0	22.0	22.0	36.5	36.5	36.5		6.9	6.9	0.0	PN
14	3/20/2007	1957	2800.2	8430.1	6	80	38	75	19.8	19.6	18.8	36.6	36.6	36.6		7.3	7.2	6.6	PN
15	3/21/2007	0	2800.2	8400.4	6	48	21	42	20.0	19.8	18.2	36.6	36.6	36.5		7.3	7.3	7.5	PN
16	3/21/2007	340	2729.6	8400.8	5	62	28	55	20.5	20.2	19.6	36.6	36.7	36.7		7.2	7.2	7.2	PN
17	3/21/2007	718	2729.8	8430.4		134	63	125	21.5	19.4	16.9	36.5	36.5	36.3		7.0	6.6	4.5	PN
18	3/21/2007	1109	2730.6	8460.0	5	399	106	209	22.2	20.2	15.6	36.5	36.5	36.1		6.8	6.6	4.7	PN
19	3/21/2007	2028	2659.8	8459.8		458	101	201	22.1	20.2	16.1	36.6	36.6	36.2		6.9	5.4	4.5	PN
20	3/22/2007	222	2659.4	8430.6		180	88	173	22.1	19.5	16.4	36.6	36.5	36.2		6.9	5.3	4.6	PN
21	3/22/2007	732	2700.1	8400.6	5	85	42	83	21.0	19.9	18.9	36.6	36.6	36.6		7.1	6.9	6.3	PN
22	3/22/2007	1122	2700.2	8331.0	5	54	24	47	21.0	21.0	20.1	36.7	36.7	36.8		5.1	5.0	4.5	PN
23	3/22/2007	1517	2629.8	8330.9	4	60	28	55	21.5	21.5	21.0	36.6	36.6	36.7		7.0	7.0	7.0	PN
24	3/22/2007	2031	2630.1	8360.0	4	125	60	119	21.4	19.4	16.1	36.5	36.6	36.2		7.0	6.9	4.6	PN
25	3/23/2007	149	2629.5	8430.7		204	101	202	22.8	19.8	16.3	36.5	36.6	36.2		6.8	6.5	4.5	PN
26	3/23/2007	752	2629.9	8500.6		1619	102	203	22.1	18.9	14.4	36.3	37.1	36.3		5.2	5.0	3.4	PN
27	3/23/2007	1205	2600.4	8500.7		3330	102	201	21.5	18.1	13.5	36.4	36.4	35.7		7.0	4.6	4.1	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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
28	3/23/2007	1733	2600.3	8431.0		224	101	201	23.8	18.5	14.1	36.1	36.5	35.8		6.8	5.0	4.1	PN
29	3/24/2007	5	2559.7	8400.6		140	67	132	22.4	20.4	17.0	36.5	36.6	36.3		6.9	6.6	5.0	PN
30	3/24/2007	345	2559.9	8331.0	3	66	30	59	22.1	22.0	21.3	36.6	36.6	36.6		6.9	7.0	6.8	PN
31	3/24/2007	756	2530.0	8330.1	3	72	33	66	22.5	22.4	19.7	36.5	36.5	36.6		7.0	6.9	6.4	PN
32	3/24/2007	1148	2530.0	8400.8		140	68	134	23.3	20.3	16.9	36.4	36.6	36.3		6.7	6.6	4.5	PN
33	3/24/2007	1857	2529.9	8430.5		415	102	201	22.8	19.0	14.2	36.4	36.5	35.9		6.9	6.4	4.2	PN
34	3/25/2007	106	2529.9	8501.0		3800	102	201	25.0	19.4	15.0	36.2	36.5	36.0		6.6	6.0	4.3	PN
35	3/25/2007	657	2459.7	8500.4		3348	101	200	25.4	25.4	19.4	36.2	36.5	36.7		6.5	5.7	5.0	PN
36	3/25/2007	1132	2460.0	8431.0		2040	105	208	25.7	21.5	18.7	36.2	36.8	36.5		6.4	4.8	5.6	PN
37	3/25/2007	1836	2460.0	8400.1		129	62	123	23.7	20.2	17.5	36.3	36.6	36.4		6.8	6.7	4.7	PN
38	3/25/2007	2236	2459.8	8331.7		74	34	67	23.2	23.0	21.4	36.5	36.5	36.5		6.8	6.9	6.3	PN
39	3/26/2007	1104	2630.7	8500.7		203	102	203	23.4	19.4	14.5	36.2	36.5	35.9		6.8	6.5	4.3	BG
40	3/26/2007	2006	2730.2	8500.2		415	101	202	22.2	19.8	15.3	36.6	36.6	36.0		6.9	5.8	4.3	BG
41	3/26/2007	2311	2730.2	8430.9	5	140	67	134	22.3	19.7	17.3	36.6	36.5	36.3		6.9	6.2	5.2	BG
42	3/27/2007	711	2830.0	8459.9	6	104	49	98	21.3	19.0	18.5	36.6	36.5	36.5		7.1	6.9	5.9	BG
43	3/27/2007	2218	2930.4	8630.6	9	215	103	204	22.4	16.7	14.7	36.4	36.2	35.9		6.9	4.7	3.7	BG
44	3/28/2007	354	2929.9	8659.4		421	102	202	21.8	18.1	13.6	36.1	36.4	35.8		7.1	6.0	3.9	BG
45	3/28/2007	748	2948.1	8700.0	10	195	95	190	21.1	19.0	16.0	36.3	36.5	36.2		7.1	6.5	4.7	PN
46	3/28/2007	1223	2931.6	8729.1	10	74	35	68	19.7	19.8	17.4	34.6	36.3	36.3		7.5	7.2	6.3	PN
47	3/28/2007	1633	2900.3	8730.9		1692	102	202	24.5	18.7	15.1	36.4	36.5	36.0		6.7	4.6	4.4	PN
48	3/28/2007	2240	2915.5	8800.8	11	260	101	202	23.1	17.6	16.6	36.3	36.3	36.2		6.9	5.9	5.6	PN
1	4/17/2007	908	2959.7	8659.4	9	78	37	72	19.2	19.1	17.4	35.8	35.9	36.3		7.1	7.1	5.2	PN
2	4/17/2007	1343	2929.3	8630.5		219	102	201	22.4	19.3	15.5	36.5	36.5	36.1		6.6	6.6	4.0	PN
3	4/17/2007	1742	2912.2	8559.8	8	194	95	188	24.2	19.4	15.7	36.4	36.5	36.1		6.4	6.0	4.2	PN
4	4/17/2007	2304	2839.8	8529.8	8	182	89	176	25.1	21.9	16.4	36.4	36.6	36.2		6.3	5.6	4.5	PN
5	4/18/2007	420	2800.1	8459.2	6	258	102	201	22.5	19.9	16.5	36.5	36.6	36.2		6.6	5.7	4.2	PN
6	4/18/2007	835	2730.0	8459.8		418	103	202	21.9	19.6	16.7	36.5	36.5	36.2		6.7	6.1	4.5	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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
7	4/18/2007	1230	2659.3	8459.7		500	102	202	23.5	19.1	14.6	36.4	36.5	35.9		6.5	5.1	4.1	PN
8	4/18/2007	1649	2630.1	8459.1		1619	101	200	23.0	17.2	12.0	36.5	36.3	35.5		6.6	4.4	3.9	PN
9	4/18/2007	2108	2560.0	8459.3		3312	102	201	26.9	22.3	16.7	36.2	36.7	36.2		6.1	4.9	4.2	PN
10	4/19/2007	30	2559.7	8429.8		222	103	202	26.8	25.3	19.0	36.2	36.6	36.6		6.1	5.2	4.7	PN
11	4/19/2007	420	2559.6	8359.9	3	141	69	134	26.6	25.0	18.6	36.2	36.6	36.5		6.1	5.3	5.4	PN
12	4/19/2007	828	2529.5	8400.0		141	68	134	26.6	26.6	19.2	36.2	36.2	36.5		6.1	6.1	5.7	PN
13	4/19/2007	1158	2459.3	8359.6		129	62	121	26.8	26.7	20.5	36.2	36.2	36.5		6.1	6.1	5.9	PN
14	4/19/2007	1717	2429.1	8400.2		2013	102	202	26.9	26.0	19.5	36.2	36.4	36.4		6.2	5.7	5.8	PN
15	4/19/2007	2105	2429.7	8330.7		309	103	202	24.5	17.7	11.4	36.4	36.3	35.4		6.5	5.0	3.8	PN
16	4/20/2007	59	2400.2	8330.4		1151	100	199	26.8	23.1	16.4	36.2	36.6	36.0		6.1	5.6	5.0	PN
17	4/20/2007	633	2359.9	8400.7		1647	103	203	26.8	26.1	21.2	36.1	36.2	36.7		6.1	6.2	4.6	PN
18	4/20/2007	1339	2430.0	8430.7		3422	102	201	25.8	25.2	23.5	36.2	36.2	36.8		6.2	6.2	4.7	PN
19	4/20/2007	2024	2459.7	8430.3		2040	104	205	26.0	25.4	23.2	36.2	36.2	36.8		6.5	6.5	4.9	PN
20	4/21/2007	134	2459.8	8500.5		3349	106	209	26.1	25.3	22.4	36.2	36.2	36.9		6.4	6.4	4.8	PN
21	4/21/2007	537	2429.9	8500.3		3395	102	203	26.7	26.6	24.5	36.1	36.1	36.7		6.3	6.2	5.1	PN
22	4/21/2007	1000	2440.1	8530.8		3376	103	202	26.3	25.2	22.5	36.2	36.2	36.8		6.3	6.4	4.8	PN
23	4/21/2007	1307	2460.0	8530.5		3303	102	201	26.2	25.3	21.4	36.2	36.2	36.8		6.3	6.3	4.7	PN
24	4/21/2007	1709	2459.6	8600.4		3294	102	202	26.7	25.2	19.0	36.2	36.4	36.6		6.3	5.7	5.0	PN
25	4/21/2007	2105	2529.8	8600.3		3303	102	203	27.1	23.4	17.4	36.2	36.8	36.4		6.3	4.9	4.9	PN
26	4/22/2007	120	2530.0	8627.7		3257	103	204	26.3	17.6	14.7	36.3	36.4	35.9		6.4	4.7	4.5	PN
27	4/22/2007	556	2559.5	8600.5		3230	104	204	25.3	17.8	14.5	36.3	36.4	35.9		6.5	4.7	4.4	PN
28	4/22/2007	1028	2629.8	8559.9		3203	103	202	23.1	18.9	14.2	36.4	36.5	35.9		6.7	5.4	4.1	PN
29	5/13/2007	149	2959.7	8659.3	9	76	36	69	24.5	23.3	19.0	36.4	36.5	36.4		6.3	6.3	4.9	PN
30	5/13/2007	622	2929.2	8629.7		219	102	203	24.1	19.0	15.3	36.1	36.5	36.0		6.4	5.1	4.0	PN
31	5/13/2007	1015	2911.7	8559.5	8	200	98	194	24.7	19.0	15.8	36.6	36.5	36.1		6.3	4.5	4.0	PN
32	5/13/2007	1533	2839.8	8529.3	8	180	88	173	25.6	20.7	16.7	36.4	36.6	36.3		6.2	5.5	4.2	PN
33	5/13/2007	2055	2759.4	8458.7	5	248	102	201	26.9	19.5	16.9	36.4	36.6	36.3		6.2	4.7	4.2	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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
34	5/14/2007	125	2729.8	8459.7		410	101	200	25.5	20.1	15.3	36.5	36.6	36.0		6.3	5.8	4.2	PN
35	5/14/2007	506	2659.4	8459.9		201	102	201	25.9	20.2	15.5	36.4	36.6	36.1		6.3	5.9	4.2	PN
36	5/14/2007	855	2630.3	8500.1		1620	102	201	27.1	20.6	16.3	36.3	36.6	36.2		6.1	6.3	4.4	PN
37	5/14/2007	1240	2600.3	8500.5		3331	101	200	26.0	18.5	14.4	36.5	36.5	35.9		6.3	4.3	3.7	PN
38	5/14/2007	1700	2559.8	8430.8		225	102	201	27.3	20.9	16.1	36.3	36.6	36.1		6.1	5.8	4.3	PN
39	5/14/2007	2042	2559.7	8400.6		140	66	131	27.0	24.0	19.1	36.3	36.5	36.5		6.2	6.5	4.5	PN
40	5/15/2007	102	2529.8	8400.3		141	67	130	27.2	23.5	19.7	36.3	36.6	36.5		6.2	6.7	5.3	PN
41	5/15/2007	435	2500.4	8401.1		129	63	123	27.5	23.9	20.1	36.3	36.7	36.6		6.2	5.6	4.9	PN
42	5/15/2007	827	2430.3	8400.2		2432	102	201	27.7	22.6	17.2	36.3	36.5	36.3		6.1	6.3	4.1	PN
43	5/15/2007	1242	2429.6	8330.3		316	103	202	26.9	21.7	15.4	36.4	36.6	36.0		6.2	6.0	4.3	PN
44	5/15/2007	2011	2400.5	8330.6		1124	100	199	27.1	22.0	14.3	36.4	36.6	35.9		6.2	5.9	4.2	PN
45	5/16/2007	30	2400.3	8400.5		2196	100	199	27.8	26.6	19.5	36.2	36.3	36.6		6.1	6.0	4.7	PN
46	5/16/2007	717	2430.6	8430.2		3435	103	202	27.8	25.9	19.6	36.3	36.4	36.5		6.1	5.8	6.0	PN
47	5/16/2007	1219	2500.4	8430.6		1858	102	201	27.0	21.0	15.9	36.4	36.6	36.1		6.2	5.9	4.4	PN
48	5/16/2007	1654	2500.3	8500.5		3349	102	202	28.0	25.5	19.1	36.3	36.6	36.6		6.2	5.5	4.8	PN
49	5/16/2007	2227	2430.3	8500.4		3389	100	199	27.5	26.5	22.2	36.1	36.2	36.8		6.2	6.3	4.7	PN
50	5/17/2007	230	2440.2	8530.4		3376	102	201	27.2	26.1	22.5	36.1	36.2	36.8		6.2	6.3	4.8	PN
51	5/17/2007	544	2500.4	8530.4		3303	102	202	28.0	25.9	20.1	36.3	36.4	36.7		6.1	5.9	4.6	PN
52	5/17/2007	954	2500.6	8600.3		3294	102	201	27.6	25.4	20.3	36.1	36.3	36.7		6.2	6.2	4.7	PN
53	5/17/2007	1417	2530.0	8600.3		3203													PN
54	5/17/2007	1817	2529.9	8627.9		3257	102	203	28.1	24.6	18.2	36.3	36.7	36.5		6.2	5.3	4.8	PN
55	5/17/2007	2250	2559.5	8600.8		3230	101	200	26.0	17.7	12.9	36.5	36.3	35.7		6.5	4.5	4.0	PN
56	5/18/2007	334	2629.7	8600.4		3202	102	201	26.3	20.7	16.6	36.2	36.6	36.2		6.4	5.9	4.3	PN
57	5/18/2007	754	2659.7	8600.6		3202	102	201	26.2	22.3	18.0	36.3	36.4	36.4		6.4	6.7	4.6	PN
58	5/18/2007	1252	2730.0	8600.3		3223	102	201	26.1	20.6	16.2	36.4	36.6	36.2		6.3	6.1	4.4	PN
59	5/18/2007	1747	2759.9	8600.9		942	102	202	24.9	17.3	11.5	36.6	36.3	35.4		6.6	4.4	3.8	BG
60	5/18/2007	2203	2829.9	8600.3		346	103	204	25.1	18.7	14.2	36.6	36.5	35.9		6.5	4.4	4.0	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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
61	5/19/2007	238	2859.9	8629.9		390	107	211	24.5	17.6	14.6	36.6	36.4	35.9		6.6	4.6	4.1	PN
62	5/19/2007	603	2859.7	8700.5		705	104	205	24.1	16.3	12.3	36.6	36.2	35.5		6.7	4.3	3.9	PN
63	5/19/2007	946	2829.5	8700.2		864	102	201	24.5	18.0	13.9	36.6	36.4	35.8		6.6	4.2	3.9	PN
64	5/19/2007	1304	2759.8	8700.9		2851	101	200	27.2	22.6	17.3	36.4	36.6	36.3		6.2	5.8	4.3	PN
65	5/19/2007	1705	2730.2	8700.7		3038	103	203	25.9	25.3	20.9	36.3	36.2	36.8		6.4	6.2	4.7	PN
66	5/19/2007	2016	2700.6	8700.7		2946	103	202	26.0	25.3	21.6	36.3	36.2	36.8		6.4	6.2	4.7	PN
67	5/20/2007	8	2630.0	8700.7		2983	103	201	26.1	25.3	20.9	36.3	36.2	36.8		6.4	6.3	4.7	PN
68	5/20/2007	158	2617.9	8700.3		3093	103	203	26.0	25.3	20.3	36.3	36.3	36.6		6.4	6.3	5.4	PN
69	5/20/2007	552	2600.7	8729.8		3148	107	210	27.7	23.2	18.2	36.3	36.5	36.4		6.2	5.9	4.1	PN
70	5/20/2007	908	2600.6	8759.9		2988	103	202	27.8	22.5	17.0	36.3	36.8	36.3		6.2	4.7	4.2	PN
71	5/20/2007	1313	2630.2	8800.4		2749													PN
72	5/20/2007	1634	2700.4	8800.3		2754	102	203	25.9	25.2	21.8	36.3	36.2	36.8		6.4	6.3	4.8	PN
73	5/20/2007	1957	2700.3	8830.1		2516	103	203	26.0	25.2	20.4	36.3	36.4	36.7		6.4	6.2	4.8	PN
74	5/20/2007	2301	2700.7	8900.0		2333	101	200	27.6	21.8	16.5	36.3	36.5	36.2		6.2	6.7	4.4	PN
75	5/21/2007	405	2630.0	8859.8		2854	105	206	25.9	19.1	14.5	36.6	36.5	35.9		6.4	4.7	4.2	PN
76	5/21/2007	804	2600.4	8900.3		3175	103	203	26.8	19.4	15.2	36.4	36.5	36.0		6.3	5.6	4.3	PN
77	5/21/2007	1157	2600.1	8930.5		3248	105	206	25.6	19.2	15.0	36.5	36.5	36.0		6.4	5.5	4.1	PN
78	5/21/2007	1518	2600.0	9000.8		204	103	202	25.9	20.1	15.4	36.4	36.6	36.0		6.4	5.7	4.2	PN
79	5/21/2007	1923	2630.3	9000.5		2745	103	202	25.8	19.1	15.2	36.6	36.5	36.0		6.5	5.4	4.2	PN
80	5/21/2007	2313	2700.7	9000.5		2452	101	200	26.4	19.2	15.1	36.5	36.5	36.0		6.4	5.4	4.3	PN
81	5/22/2007	300	2700.1	9030.4		1667	101	199	25.7	19.2	15.4	36.2	36.5	36.0		6.5	5.1	4.1	PN
82	5/22/2007	610	2658.2	9058.3		1665	108	210	25.8	19.0	15.2	36.2	36.5	36.0		6.4	4.9	4.1	PN
83	5/22/2007	957	2630.4	9100.2		2104	102	199	26.0	19.5	15.0	35.8	36.5	36.0		6.4	5.7	3.8	PN
84	5/22/2007	1348	2600.1	9100.3		2708	101	200	26.4	20.3	14.8	36.1	36.5	35.9		6.3	5.9	3.9	PN
85	5/22/2007	1739	2600.3	9130.1		2050	103	204	26.5	19.0	13.9	35.7	36.5	35.8		6.4	4.4	3.7	PN
86	5/22/2007	2110	2600.6	9200.3		2068	103	202	26.6	18.3	13.7	34.8	36.4	35.8		6.4	4.1	3.7	PN
87	5/23/2007	110	2630.4	9200.3		1885	102	201	26.2	18.4	13.1	35.5	36.4	35.7		6.4	4.4	3.9	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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
88	5/23/2007	446	2700.8	9200.5		1669	101	199	25.9	19.3	13.9	35.7	36.5	35.8		6.4	5.1	3.9	PN
89	5/23/2007	816	2700.1	9230.2		1446	101	199	25.9	18.5	14.3	35.9	36.4	35.9		6.4	4.7	4.0	PN
90	5/23/2007	1151	2700.6	9300.7		1299	101	200	25.7	17.6	15.6	35.8	36.3	36.1		6.5	5.3	4.2	PN
91	5/23/2007	1601	2630.6	9300.5		1627	103	201	26.1	18.2	15.2	35.5	36.4	36.0		6.4	5.0	4.2	PN
92	5/23/2007	1757	2618.0	9300.3		1890	100	199	26.5	19.0	14.0	34.3	36.5	35.8		6.4	4.3	4.1	PN
93	5/23/2007	2159	2601.4	9330.3		2288	103	203	26.5	18.2	13.5	34.9	36.4	35.7		6.4	4.3	3.7	PN
94	5/24/2007	127	2601.6	9400.6															PN
95	5/24/2007	458	2629.9	9360.0															PN
96	5/24/2007	814	2700.6	9400.2															PN
97	5/24/2007	1143	2659.9	9430.1															PN
98	5/24/2007	1455	2700.1	9500.8															PN
99	5/24/2007	1845	2630.7	9500.2															PN
100	5/24/2007	2209	2601.5	9500.4															PN
101	5/25/2007	139	2600.7	9530.2															PN
102	5/25/2007	436	2601.5	9600.7															PN
103	5/25/2007	837	2630.4	9600.4															PN
104	5/25/2007	1207	2700.8	9600.2															PN
105	5/25/2007	1536	2730.5	9600.5	20														PN
106	5/25/2007	1903	2800.3	9600.6	19														PN
107	5/25/2007	2247	2800.2	9530.3	19														PN
108	5/26/2007	226	2800.6	9500.5	19														
109	5/26/2007	603	2800.7	9430.4	18														PN
110	5/26/2007	946	2800.7	9400.7	18														PN
111	5/26/2007	1335	2800.6	9329.9	17														PN
112	5/26/2007	1648	2801.8	9300.8	17														PN
113	5/26/2007	2008	2801.6	9231.7	16														PN
114	5/26/2007	2342	2800.6	9200.6	16														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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
115	5/27/2007	320	2800.8	9130.5	15														PN
116	5/27/2007	712	2800.7	9100.5	15														PN
117	5/27/2007	1101	2805.7	9030.5	14														PN
118	5/27/2007	1515	2800.7	8960.0															PN
119	5/27/2007	1856	2800.7	8930.5															PN
120	5/27/2007	2231	2759.9	8900.5															PN
121	5/28/2007	203	2800.1	8829.9															PN
122	5/28/2007	514	2759.9	8759.9															PN
123	5/28/2007	811	2800.4	8730.1															PN
124	5/28/2007	1232	2830.5	8730.6															PN
125	5/28/2007	1625	2830.5	8800.5															PN
126	5/28/2007	2302	2900.6	8800.6	11														PN
127	5/29/2007	406	2930.7	8802.1	11														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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	6/7/2007	139	2959.5	8817.8	11	29	14	27	26.6	24.7	24.0	29.8	36.1	36.4		6.8	6.4	6.0	ST
2	6/7/2007	432	2959.6	8801.6	11	26	14	25	26.5	24.8	24.5	31.8	36.1	36.3		6.4	6.2	6.2	PN
3	6/7/2007	858	2946.8	8813.3	11	36	18	35	26.9	23.9	23.1	33.4	36.2	36.3		7.2	5.4	5.7	ST
4	6/7/2007	1025	2944.6	8813.5	11														ST
5	6/7/2007	1339	2929.9	8800.0	11	45	23	44	27.2	26.2	24.2	35.0	36.4	36.4		6.2	5.5	5.9	PN
6	6/7/2007	1629	2915.3	8759.3	11														PN
7	6/11/2007	2246	2925.1	8832.5	11	56	28	55	30.0	22.6	21.0	30.3	36.6	36.6		11.2	4.9	4.5	ST
8	6/12/2007	12	2922.8	8833.7	11														ST
9	6/12/2007	205	2925.0	8832.6	11	54	28	53	28.7	22.8	21.8	32.5	36.6	36.6		9.7	5.0	4.7	ST
10	6/12/2007	336	2922.6	8833.7	11														ST
11	6/12/2007	500	2920.5	8834.8	11														ST
12	6/12/2007	704	2917.8	8831.1	11	64	31	62	27.4	23.0	21.1	36.6	36.5	36.5		2.9	5.0	4.7	ST
13	6/12/2007	757	2918.2	8829.2	11														ST
14	6/12/2007	926	2915.7	8829.2	11														ST
15	6/12/2007	1015	2915.6	8829.2	11	101	51	100	28.2	23.6	20.1	36.3	36.7	36.5		6.8	5.1	4.6	PN
16	6/12/2007	1418	2914.7	8848.3	11	64	31	61	29.1	21.7	19.7	29.9	36.5	36.5		9.7	4.7	4.5	ST
17	6/12/2007	1547	2912.2	8848.7	11														ST
18	6/12/2007	1710	2909.9	8848.5	11														ST
19	6/12/2007	1843	2907.5	8847.4	11	84	42	83	29.2	23.4	19.4	30.4	36.8	36.8		8.1	5.1	3.2	ST
20	6/12/2007	2006	2907.0	8847.1	11	98	48	95	28.4	23.6	19.1	35.8	37.1	36.6		3.8	4.9	4.4	ST
21	6/12/2007	2250	2900.4	8856.5	13	129	65	129	29.9	21.5	18.2	30.4	36.6	36.4		8.2	4.9	4.2	ST
22	6/13/2007	248	2907.1	8848.3	11	80	39	78	28.8	23.8	19.7	35.0	36.4	36.6		7.8	6.2	4.3	ST
23	6/13/2007	510	2905.9	8848.7	11	127	63	126	28.8	21.7	18.7	34.1	36.5	36.5		6.4	6.0	4.2	ST
24	6/14/2007	2042	2602.3	9629.8	21	62	32	62	29.5	23.2	21.5	31.7	35.9	36.3		5.5	5.8	5.5	PN
25	6/15/2007	12	2600.9	9658.2	21	27	14	26	27.4	23.1	22.1	34.3	35.5	35.9		6.1	7.0	4.0	ST
26	6/15/2007	358	2603.8	9634.5	21	56	27	54	28.7	24.0	21.5	33.5	35.6	36.3		5.6	5.9	5.5	ST
27	6/15/2007	522	2604.2	9637.3	21														ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GROUNDFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT				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	FL SUR	SUR	MID	MAX	GEAR
28	6/15/2007	638	2604.5	9640.1	21														ST
29	6/15/2007	916	2607.9	9702.1	21	24	12	22	27.4	23.6	22.4	34.6	35.6	36.1		5.7	4.9	5.1	ST
30	6/15/2007	1044	2614.1	9701.4	21	29	14	27	27.1	22.9	22.6	34.3	35.9	36.1		5.8	6.2	4.3	ST
31	6/15/2007	1217	2618.2	9657.0	21	35	18	33	27.2	23.0	22.1	34.1	35.9	36.1		5.8	5.4	4.5	ST
32	6/15/2007	1342	2623.4	9651.5	21	40	20	38	27.3	22.3	21.7	34.0	35.8	36.3		5.9	5.5	4.8	ST
33	6/15/2007	1505	2623.5	9648.8	21														ST
34	6/15/2007	1631	2623.7	9646.1	21														ST
35	6/15/2007	1759	2623.8	9643.5	21														ST
36	6/15/2007	1954	2630.7	9633.5	21	86	43	85	28.5	23.4	19.6	32.4	36.4	36.5		6.0	6.6	5.2	PN
37	6/15/2007	2350	2639.1	9652.1	21	51	26	49	28.9	24.3	21.3	33.7	36.1	36.3		5.7	5.9	5.1	ST
38	6/16/2007	313	2637.9	9636.0	21	84	41	82	28.3	23.1	20.4	34.1	36.4	36.5		5.7	6.4	5.7	ST
39	6/16/2007	707	2630.0	9700.2	21	35	17	33	27.8	25.0	22.8	34.0	36.3	36.2		5.7	6.2	5.5	PN
40	6/16/2007	921	2624.9	9711.1	21	17	9	16	25.4	24.8	23.2	35.2	35.5	36.0		6.1	5.8	5.8	ST
41	6/16/2007	1041	2630.8	9711.1	21	20	10	19	25.4	23.4	23.2	35.3	35.1	36.0		5.7	6.3	5.7	ST
42	6/16/2007	1306	2630.4	9707.5	21	22	11	20	26.6	23.6	23.2	34.8	35.5	36.1		5.7	5.5	5.6	ST
43	6/16/2007	1442	2635.4	9715.0	21	16	8	15	25.0	24.5	23.7	35.9	35.9	36.1		5.5	5.4	5.3	ST
44	6/16/2007	1640	2640.9	9707.3	21	30	15	28	26.6	23.4	22.4	34.9	35.6	36.2		5.6	5.8	4.2	ST
45	6/16/2007	1907	2658.3	9717.0	20	23	11	22	26.2	25.3	23.3	35.2	35.6	36.2		5.5	5.6	5.2	ST
46	6/16/2007	2121	2711.2	9715.2	20	22	11	21	26.9	26.2	24.6	35.3	35.6	36.3		5.6	5.7	5.6	ST
47	6/16/2007	2303	2707.3	9706.8	20	34	17	32	28.2	25.2	23.5	33.7	35.6	36.3		5.7	5.8	5.3	ST
48	6/17/2007	139	2700.3	9700.3	20	41	21	40	28.1	25.1	22.9	33.6	36.2	36.3		5.7	6.1	5.9	PN
49	6/17/2007	310	2703.6	9705.3	20	32	16	31	27.6	25.3	23.4	34.0	36.0	36.3		5.7	6.0	5.5	ST
50	6/17/2007	552	2655.3	9721.5	20	15	7	13	25.4	25.4	24.2	35.7	35.7	36.3		5.5	5.5	5.1	ST
51	6/17/2007	745	2646.6	9714.7	21	23	12	21	26.4	24.4	23.1	34.9	36.0	36.3		5.6	5.8	5.6	ST
52	6/17/2007	954	2643.4	9703.0	21	35	16	33	27.5	24.9	22.6	34.3	36.2	36.1		5.5	5.9	4.7	ST
53	6/17/2007	1302	2702.1	9649.0	20	65	33	63	28.2	24.8	21.5	32.9	36.3	36.4		5.6	6.0	4.9	ST
54	6/17/2007	1431	2702.6	9646.4	20														ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
55	6/17/2007	1652	2657.6	9638.4	20														ST
56	6/17/2007	1829	2658.2	9635.6	20														ST
57	6/17/2007	2248	2708.2	9639.5	20														ST
58	6/18/2007	29	2707.1	9636.8	20														ST
59	6/18/2007	350	2659.1	9641.7	20														ST
60	6/18/2007	555	2655.3	9648.8	20														ST
61	6/18/2007	726	2654.1	9651.1	20														ST
62	6/18/2007	1143	2713.9	9718.9	20														ST
63	6/18/2007	1325	2724.0	9717.4	20														ST
64	6/18/2007	1451	2731.1	9714.4	20														ST
65	6/18/2007	1656	2729.9	9700.1	20														PN
66	6/18/2007	1852	2723.5	9706.7	20														ST
67	6/18/2007	2149	2721.8	9646.2	20														ST
68	6/18/2007	2313	2721.0	9643.5	20														ST
69	6/19/2007	121	2729.8	9630.0	20														PN
70	6/19/2007	336	2725.6	9626.6	20														ST
71	6/19/2007	520	2724.6	9624.1	20														ST
72	6/19/2007	844	2719.7	9638.2	20														ST
73	6/19/2007	1014	2720.8	9641.1	20														ST
74	6/19/2007	1336	2743.9	9702.4	20														ST
75	6/19/2007	1643	2755.2	9641.5	19														ST
76	6/19/2007	1825	2800.2	9640.9	19														ST
77	6/19/2007	2012	2800.1	9630.0	19														PN
78	6/20/2007	146	2731.1	9714.0	20														ST
79	6/20/2007	238	2732.2	9712.5	20														ST
80	6/20/2007	338	2734.0	9708.9	20														ST
81	6/20/2007	521	2726.2	9700.6	20														ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT				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	FL SUR	SUR	MID	MAX	GEAR
82	6/20/2007	638	2729.5	9656.9	20														ST
83	6/20/2007	833	2739.0	9658.6	20														ST
84	6/20/2007	1034	2737.3	9646.6	20														ST
85	6/20/2007	1321	2749.5	9635.0	20														ST
86	6/20/2007	1426	2751.8	9630.9	19														ST
87	6/20/2007	1827	2759.9	9559.9	19														PN
88	6/20/2007	1938	2801.0	9554.4	19														ST
89	6/20/2007	2117	2803.2	9555.7	19														ST
90	6/21/2007	201	2820.4	9619.6	19														ST
91	6/21/2007	343	2814.8	9628.8	19	16	9	16	29.3	29.2	29.3	32.9	32.9	33.5		5.5	5.5	4.7	ST
92	6/21/2007	626	2758.8	9630.6	19	31	15	29	28.6	28.8	25.7	32.7	34.0	35.8		5.5	5.1	2.8	ST
93	6/21/2007	937	2759.8	9611.0	19	41	21	40	28.9	26.2	25.3	32.3	35.8	36.2		5.4	5.2	4.5	ST
94	6/21/2007	1305	2755.1	9551.0	19	54	27	52	29.1	25.5	22.8	31.8	36.3	36.4		5.4	5.6	5.7	ST
95	6/21/2007	1431	2753.2	9549.6	19														ST
96	6/21/2007	1555	2751.2	9547.9	19														ST
97	6/21/2007	1826	2742.4	9548.1	19	119	60	119	29.0	22.2	18.3	33.8	36.4	36.4		5.5	6.6	4.3	ST
98	6/21/2007	2238	2753.5	9525.6	19	88	45	88	29.2	22.8	19.8	33.7	36.4	36.5		5.5	6.6	5.1	ST
99	6/22/2007	140	2759.6	9529.8	19	55	27	54	29.5	26.0	23.1	31.4	36.4	36.4		5.5	5.9	6.1	PN
100	6/22/2007	552	2829.9	9500.1	19	34	17	32	29.1	25.9	25.8	31.9	36.4	36.4		5.6	5.7	5.4	PN
101	6/25/2007	230	2900.1	9430.5	18	19	10	18	28.9	28.9	26.4	31.3	31.4	35.6		5.6	5.3	1.0	PN
102	6/25/2007	436	2857.6	9418.8	18	20	10	19	28.9	27.2	26.3	31.3	34.1	35.8		5.9	1.3	2.5	ST
103	6/25/2007	744	2908.4	9359.3	18														ST
104	6/25/2007	913	2906.0	9359.3	18	20	10	19	28.5	28.5	26.7	34.2	34.3	35.6		5.4	5.4	2.7	ST
105	6/25/2007	1336	2844.0	9405.5	18	28	15	28	28.0	28.1	26.1	35.3	36.1	36.0		5.1	5.3	3.5	ST
106	6/25/2007	1704	2839.6	9345.7	17	29	14	27	28.2	27.9	26.6	35.5	36.3	36.2		5.3	5.3	4.5	ST
107	6/25/2007	1910	2835.4	9351.1	18	35	18	35	27.8	27.6	26.3	35.9	36.1	36.3		5.5	5.5	5.3	ST
108	6/25/2007	2043	2830.9	9351.9	18	41	21	41	27.9	27.8	25.7	36.3	36.4	36.0		5.2	5.3	4.8	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT				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	FL SUR	SUR	MID	MAX	GEAR
109	6/25/2007	2211	2828.3	9352.1	18														ST
110	6/25/2007	2342	2829.8	9400.1	18	41	21	41	27.8	27.8	25.9	36.3	36.3	36.4		5.3	5.3	5.7	PN
111	6/26/2007	148	2827.7	9347.4	17	46	23	44	28.0	27.2	23.7	36.3	36.4	36.4		5.5	5.6	5.6	ST
112	6/26/2007	310	2825.3	9346.8	17														ST
113	6/26/2007	654	2839.9	9356.1	18	30	15	28	27.8	27.8	27.1	36.1	36.1	36.2		5.2	5.2	5.1	ST
114	6/26/2007	1053	2841.1	9426.8	18	30	15	30	28.4	28.4	27.1	35.0	35.0	36.0		5.1	5.1	4.7	ST
115	6/26/2007	1308	2830.0	9429.9	18	37	19	35	28.4	27.6	26.1	34.5	36.3	36.4		5.1	5.3	4.6	PN
116	6/26/2007	1624	2848.0	9444.1	18	22	12	21	28.3	28.2	26.5	33.4	33.4	35.7		5.3	5.3	2.9	ST
117	6/26/2007	1841	2836.6	9442.9	18	31	16	31	28.7	28.2	26.2	32.8	34.7	36.2		6.1	6.0	4.2	ST
118	6/26/2007	2226	2821.0	9502.9	19	36	18	35	28.9	28.1	25.6	31.5	35.7	36.4		6.1	6.0	5.4	ST
119	6/27/2007	32	2821.5	9513.9	19	36	18	35	29.0	25.9	25.7	31.5	36.3	36.4		6.1	5.5	5.1	ST
120	6/27/2007	312	2821.2	9502.9	19	37	18	35	28.9	28.2	25.6	31.7	35.7	36.4		6.1	6.0	5.4	ST
121	6/27/2007	423	2819.6	9502.2	19														ST
122	6/27/2007	544	2817.3	9501.5	19	46	23	46	29.0	27.3	25.8	31.6	36.3	36.4		6.1	6.2	6.0	ST
123	6/27/2007	846	2832.2	9504.2	19	31	17	31	28.8	27.7	26.0	31.9	35.2	36.3		6.1	6.0	4.3	ST
124	6/27/2007	1049	2842.2	9506.6	19	26	13	26	28.7	28.7	26.3	31.9	32.3	35.3		6.0	6.0	0.7	ST
125	6/27/2007	1922	2912.1	9452.4	19	13	7	13	29.2	28.6	28.7	29.0	30.3	28.7		6.3	5.7	5.1	ST
126	6/27/2007	2136	2900.2	9500.2	19	19	10	19	29.1	28.7	27.4	31.0	31.2	33.3		6.4	6.0	0.9	PN
127	6/28/2007	128	2846.4	9527.7	19	13	7	12	28.9	28.9	28.6	31.2	31.2	31.5		5.4	5.3	5.3	ST
128	6/28/2007	436	2831.1	9546.9	19	19	10	17	28.8	28.8	27.7	32.3	32.3	33.1		6.0	6.0	1.8	ST
129	6/28/2007	713	2829.8	9530.1	19	26	14	26	28.9	28.4	25.9	32.0	33.7	35.8		6.1	5.8	1.0	PN
130	6/28/2007	858	2837.1	9524.6	19	23	11	22	28.8	28.8	26.4	32.1	32.1	34.8		6.0	6.0	0.6	ST
131	6/28/2007	1134	2838.8	9518.5	19	24	11	22	28.7	28.7	26.4	32.0	32.0	35.2		6.0	6.0	1.0	ST
132	6/28/2007	1402	2848.2	9527.6	19	11	6	10	28.9	28.9	28.9	31.1	31.2	31.2		5.5	5.4	5.3	ST
133	6/28/2007	1623	2843.4	9530.0	19	14	6	13	28.8	28.7	28.6	31.3	31.3	31.8		5.8	5.6	5.0	ST
134	6/28/2007	1854	2836.4	9545.5	19	15	8	14	28.9	28.7	28.8	31.5	31.5	31.4		6.2	6.0	4.7	ST
135	6/28/2007	2031	2831.7	9545.9	19	18	9	17	29.2	28.8	27.3	31.8	31.8	34.0		6.3	6.2	1.7	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
136	6/28/2007	2221	2827.3	9537.4	19	25	13	24	29.1	28.7	25.9	32.0	32.3	35.8		6.1	5.8	1.1	ST
137	6/29/2007	122	2826.8	9558.8	19	18	9	17	29.6	28.7	27.9	31.6	32.2	33.0		6.5	5.9	2.2	PN
138	6/29/2007	420	2815.0	9557.7	19	26	13	26	28.9	28.4	25.6	33.1	33.3	36.0		5.9	5.4	2.6	ST
139	6/29/2007	617	2815.4	9548.6	19	29	15	28	28.6	27.9	25.8	32.8	33.8	36.0		5.9	5.1	2.2	ST
140	6/29/2007	736	2812.7	9547.8	19	33	18	33	28.6	27.0	25.7	32.7	34.8	36.2		5.9	4.5	4.2	ST
141	6/29/2007	1024	2817.2	9531.0	19	34	17	34	28.6	26.0	25.9	32.7	36.3	36.3		5.9	4.6	3.9	ST
142	6/29/2007	1151	2819.0	9529.3	19	33	17	32	28.6	26.2	25.8	33.0	36.2	36.2		5.9	4.6	3.6	ST
143	6/29/2007	1349	2818.2	9539.4	19	29	16	29	28.6	28.5	25.8	33.0	33.1	36.1		5.9	5.8	2.0	ST
144	6/29/2007	1616	2810.5	9523.9	19	46	23	45	28.7	25.9	25.5	32.7	36.4	36.4		6.0	5.8	5.0	ST
145	6/29/2007	1734	2808.4	9522.6	19														ST
146	6/29/2007	1855	2806.3	9521.6	19														ST
147	6/29/2007	2014	2803.9	9520.4	19														ST
148	6/30/2007	130	2810.1	9523.6	19	45	23	45	29.1	26.2	25.5	32.9	36.4	36.4		5.9	6.0	5.1	ST
149	6/30/2007	252	2807.9	9522.4	19														ST
150	6/30/2007	416	2805.8	9521.2	19														ST
151	6/30/2007	540	2803.3	9519.6	19														ST
152	6/30/2007	701	2801.0	9518.7	19	67	33	66	29.2	25.3	21.3	32.5	36.4	36.5		5.9	6.5	5.6	ST
153	6/30/2007	1050	2746.8	9541.0	19	89	44	87	28.6	23.1	19.7	33.9	36.4	36.5		5.9	6.6	5.2	ST
154	6/30/2007	1317	2749.0	9544.5	19	63	32	63	28.7	25.1	21.9	33.6	36.3	36.5		5.9	6.5	5.8	ST
155	6/30/2007	1443	2747.0	9543.0	19														ST
156	6/30/2007	1816	2747.5	9533.8	19	78	39	78	28.6	25.2	20.1	33.8	36.4	36.5		5.9	6.1	5.2	ST
157	7/1/2007	129	2744.4	9558.7	19	80	41	80	28.9	23.2	20.6	33.3	36.4	36.5		5.9	6.1	5.8	ST
158	7/1/2007	246	2742.6	9557.9	19	123	62	122	28.5	21.3	18.1	34.0	36.5	36.4		6.0	6.4	4.2	ST
159	7/1/2007	639	2749.0	9544.5	19	63	31	61	28.7	25.8	21.9	33.7	36.3	36.5		5.9	6.4	6.0	ST
160	7/1/2007	805	2746.9	9543.0	19														ST
161	7/1/2007	1235	2759.9	9500.1	19	83	42	83	29.0	23.1	20.5	33.5	36.5	36.5		5.9	6.9	5.0	PN
162	7/1/2007	1606	2759.8	9429.7	18	72	35	69	29.0	24.5	21.3	34.7	36.4	36.5		5.9	6.8	5.9	PN

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
163	7/1/2007	1908	2759.7	9400.2	18	82	42	81	29.2	23.2	20.3	36.0	36.5	36.5		5.9	6.9	5.4	PN
164	7/1/2007	2040	2801.4	9352.0	18	73	37	72	29.2	25.0	21.1	35.8	36.4	36.5		5.9	6.7	5.6	ST
165	7/1/2007	2143	2760.0	9351.7	18	97	49	96	29.3	23.2	19.5	35.8	36.5	36.5		5.9	6.9	4.9	ST
166	7/2/2007	115	2801.4	9351.9	18	71	35	70	29.0	25.8	21.2	35.8	36.4	36.5		5.9	6.6	6.1	ST
167	7/2/2007	423	2809.1	9337.3	17	64	32	63	29.1	25.8	22.0	36.1	36.4	36.5		5.8	6.6	6.5	ST
168	7/2/2007	547	2806.7	9336.7	17														ST
169	7/2/2007	709	2804.3	9336.0	17														ST
170	7/2/2007	905	2802.0	9324.2	17	106	53	106	29.2	22.4	18.7	35.6	36.5	36.4		5.9	6.8	4.6	ST
171	7/2/2007	1145	2800.1	9328.7	17	95	47	93	29.0	23.1	19.7	35.7	36.4	36.5		5.9	6.8	4.8	PN
172	7/2/2007	1355	2810.5	9323.4	17	64	31	62	28.8	26.4	22.2	36.0	36.2	36.5		5.9	6.5	6.5	ST
173	7/2/2007	1518	2808.3	9324.9	17														ST
174	7/2/2007	1811	2800.2	9301.1	17	103	51	102	29.4	23.1	19.2	35.3	36.5	36.5		5.8	6.8	4.9	PN
175	7/2/2007	2114	2820.9	9250.2	17														ST
176	7/2/2007	2238	2823.3	9250.2	17														ST
177	7/3/2007	2	2826.3	9250.4	17	48	24	47	29.2	27.0	23.6	36.2	36.4	36.3		5.9	6.4	4.4	ST
178	7/3/2007	257	2830.6	9301.8	17	44	23	44	28.9	27.7	24.8	36.2	36.3	36.3		6.0	6.2	5.6	PN
179	7/3/2007	533	2830.4	9329.9	17	42	21	41	28.7	28.0	24.9	36.3	36.3	36.3		5.9	6.0	5.7	PN
180	7/7/2007	1843	2900.8	9353.2	18	20	10	19	28.9	28.6	27.7	29.1	32.0	35.3		7.0	5.0	4.6	ST
181	7/7/2007	2138	2900.5	9330.4	17	23	10	21	29.5	28.5	28.0	30.9	34.2	36.0		6.9	6.1	4.9	PN
182	7/8/2007	49	2928.9	9337.0	17	14	7	12	29.1	28.6	28.7	22.7	28.4	32.4		7.0	5.5	3.7	ST
183	7/8/2007	459	2935.5	9402.1	18	12	5	9	28.5	28.4	28.5	26.3	26.7	28.2		5.7	5.6	3.2	ST
184	7/8/2007	1102	2940.1	9307.4	17														ST
185	7/8/2007	1254	2927.6	9301.7	17														PN
186	7/8/2007	1342	2927.4	9301.2	17														ST
187	7/27/2007	56	3011.1	8827.1	11	12	6	11	29.4	29.0	28.4	32.9	33.2	33.7		5.9	5.8	5.2	ST
188	7/27/2007	219	3012.7	8835.5	11	12	6	11	29.8	29.5	28.5	31.4	32.0	33.5		5.9	5.9	4.5	ST
189	7/28/2007	652	2836.7	9306.4	17														ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
190	7/28/2007	1055	2830.5	9335.0	17	47	24	47	28.5	28.1	23.2	32.7	35.6	36.5		5.5	5.3	3.8	ST
191	7/28/2007	1434	2847.1	9328.3	17	27	14	27	28.6	28.5	27.7	31.2	32.4	35.8		6.1	4.4	0.9	ST
192	7/28/2007	1750	2848.9	9306.6	17	27	13	26	28.9	29.0	27.9	31.0	32.2	36.0		6.0	5.6	2.6	ST
193	7/28/2007	2012	2836.6	9306.4	17	36	18	36	29.3	28.4	26.1	30.7	36.0	36.4		6.4	5.3	3.6	ST
194	7/29/2007	20	2842.3	9237.9	16	35	18	35	28.8	28.8	26.3	28.8	36.0	36.3		5.9	5.2	1.9	ST
195	7/29/2007	234	2842.6	9243.6	16	33	17	32	28.9	28.2	27.1	30.5	35.3	36.2		5.4	2.4	2.4	ST
196	7/29/2007	613	2843.8	9309.0	17	29	14	27	28.6	29.2	27.5	30.7	34.6	36.2		5.8	5.2	2.6	ST
197	7/29/2007	842	2852.1	9303.0	17	25	13	24	28.7	29.0	28.1	31.5	32.0	35.6		5.8	5.7	2.2	ST
198	7/29/2007	1034	2900.1	9301.6	17	25	13	24	28.9	28.9	27.8	30.9	32.0	35.7		5.4	5.8	0.9	PN
199	7/29/2007	1204	2907.6	9302.6	17	20	10	19	28.7	28.7	28.1	31.0	31.0	34.6		5.9	5.8	0.7	ST
200	7/29/2007	1341	2914.1	9257.8	17	19	9	17	28.9	29.0	28.3	30.4	30.6	33.6		5.4	5.5	2.8	ST
201	7/29/2007	1456	2911.8	9258.0	17														ST
202	7/29/2007	1738	2907.8	9241.3	16	22	11	20	29.0	28.8	27.7	29.6	29.7	35.4		6.1	5.2	0.0	ST
203	7/29/2007	2106	2859.3	9232.2	16	26	13	25	29.7	29.1	27.7	29.2	32.0	36.1		5.9	3.0	1.8	ST
204	7/29/2007	2242	2850.2	9229.2	16	32	15	30	29.9	29.2	27.7	29.5	34.6	36.2		6.0	4.5	3.3	ST
205	7/30/2007	208	2905.8	9213.3	16	14	7	13	30.3	29.0	28.2	27.5	28.3	35.2		7.1	5.2	0.0	ST
206	7/30/2007	442	2911.6	9229.1	16	17	9	16	29.6	29.1	28.1	28.9	29.3	35.4		6.0	5.2	0.0	ST
207	7/30/2007	737	2904.5	9247.9	16	24	13	24	29.1	29.0	27.3	29.5	29.7	35.4		6.7	4.0	0.0	ST
208	7/30/2007	858	2907.1	9248.1	16														ST
209	7/30/2007	1219	2931.6	9234.9	16	11	5	10	29.0	29.0	28.6	22.6	25.9	30.7		5.2	5.1	0.0	ST
210	7/30/2007	1520	2914.0	9226.3	16	13	8	13	29.7	29.2	28.5	28.3	28.9	33.4		6.2	4.7	0.2	ST
211	7/30/2007	1859	2904.2	9155.7	16	15	7	14	29.7	29.2	28.5	27.6	30.9	35.2		7.3	5.3	0.9	ST
212	7/30/2007	2045	2900.4	9159.6	16	20	9	18	30.1	29.6	28.3	28.7	32.9	35.9		6.8	5.5	2.2	PN
213	7/31/2007	104	2908.7	9200.9	16														ST
214	7/31/2007	227	2907.7	9204.8	16	15	7	14	29.7	28.9	28.2	23.6	29.7	35.7		7.5	4.1	0.3	ST
215	7/31/2007	424	2900.9	9206.0	16	20	11	20	30.4	30.2	29.5	28.1	31.3	35.1		5.7	4.3	2.6	ST
216	7/31/2007	642	2852.6	9200.8	16	26	13	25	30.5	29.0	28.2	29.0	35.5	36.0		7.0	5.0	3.7	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	POSITION LAT	LONG	STAT ZONE	DEPTH (M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	MID	MAX	GEAR
217	7/31/2007	850	2846.4	9208.2	16	33	16	31	30.0	29.4	24.8	28.4	34.6	36.3		5.8	5.5	2.8	ST
218	7/31/2007	1042	2845.7	9215.0	16	35	17	34	29.3	28.8	24.8	28.3	36.1	36.3		5.6	5.6	1.9	ST
219	7/31/2007	1344	2829.1	9159.4	16	50	25	49	29.9	28.8	23.4	31.2	35.9	36.4		5.6	5.6	5.3	PN
220	7/31/2007	1648	2826.7	9219.9	16	55	27	53	29.3	27.3	22.5	29.1	36.3	36.5		5.8	6.0	5.5	ST
221	7/31/2007	1809	2824.1	9219.7	16														ST
222	7/31/2007	1929	2821.5	9219.8	16														ST
223	7/31/2007	2048	2818.9	9220.3	16														ST
224	7/31/2007	2310	2805.3	9222.3	16	120	60	119	30.4	22.4	18.0	31.1	36.5	36.4		5.6	6.4	4.2	ST
225	8/1/2007	349	2826.3	9219.9	16	55	27	54	29.7	28.1	22.5	28.7	36.2	36.5		5.7	5.2	5.5	ST
226	8/1/2007	508	2823.8	9219.7	16														ST
227	8/1/2007	627	2821.3	9219.9	16														ST
228	8/1/2007	749	2818.8	9220.0	16														ST
229	8/1/2007	1045	2807.4	9208.7	16	90	46	89	29.4	24.2	19.0	34.0	36.4	36.5		5.5	6.4	4.3	ST
230	8/1/2007	1320	2800.4	9159.6	16	118	59	116	29.2	22.2	18.5	34.8	36.5	36.4		5.5	6.3	4.3	PN
231	8/1/2007	1528	2809.0	9152.1	16	82	41	81	29.4	25.9	19.4	34.7	36.4	36.5		5.6	6.1	4.1	ST
232	8/1/2007	1652	2811.4	9152.4	16														ST
233	8/1/2007	2008	2808.3	9134.1	15	94	47	93	29.4	24.6	18.9	34.9	36.5	36.5		5.5	6.0	4.3	ST
234	8/1/2007	2140	2810.9	9133.9	15														ST
235	8/2/2007	19	2831.1	9134.9	15	41	21	40	29.5	28.8	24.1	27.7	35.9	36.4		5.8	5.4	4.2	PN
236	8/2/2007	401	2846.5	9129.1	15	22	11	21	29.7	29.3	27.8	27.4	34.0	36.1		5.1	5.1	1.8	ST
237	8/2/2007	605	2857.1	9131.7	15	17	9	16	29.1	29.5	28.2	27.5	33.2	35.8		4.0	5.0	0.7	ST
238	8/2/2007	743	2858.4	9131.5	15	14	7	12	28.9	28.8	28.1	24.4	33.5	35.6		5.9	2.0	0.6	PN
239	8/2/2007	936	2850.3	9136.9	15	24	12	23	28.7	29.7	26.6	23.7	33.7	36.2		5.6	5.2	2.0	ST
240	8/2/2007	1132	2850.3	9137.0	15	22	11	20	28.8	29.7	27.4	23.9	34.2	36.1		5.5	5.0	1.6	ST
241	8/2/2007	1323	2842.6	9139.6	15	30	15	28	29.2	29.4	25.4	25.5	34.2	36.3		5.7	4.8	3.1	ST
242	8/2/2007	1459	2838.7	9142.9	15	35	17	34	29.3	28.8	24.8	23.6	36.0	36.4		5.7	5.2	3.8	ST
243	8/2/2007	1652	2837.9	9133.6	15	33	16	31	29.3	29.4	28.8	25.6	34.5	33.8		4.8	3.8	2.5	ST

Table 2. Selected environmental parameters (continued)

OREGON II, SUMMER SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
244	8/2/2007	1818	2840.5	9127.1	15	25	13	24	29.3	29.2	26.9	23.0	34.1	36.2		6.0	5.3	2.4	ST
245	8/2/2007	2037	2838.2	9113.5	15	27	13	26	29.5	29.0	25.9	18.7	34.4	36.3		6.7	4.5	3.6	ST
246	8/2/2007	2246	2830.2	9100.7	15	36	19	36	29.6	29.1	22.5	30.8	35.8	36.4		5.9	5.4	1.8	ST
247	8/3/2007	119	2831.8	9109.0	15	34	17	33	29.6	28.8	23.2	23.6	35.8	36.4		6.3	5.3	2.7	ST
248	8/3/2007	431	2825.3	9050.2	15	40	21	40	29.3	29.0	21.7	30.9	35.6	36.4		6.0	5.5	2.7	ST
249	8/3/2007	617	2830.0	9049.4	14	33	17	32	29.3	29.0	23.3	30.5	35.7	36.4		5.8	5.4	0.8	ST
250	8/3/2007	756	2833.2	9041.0	14	26	12	23	29.3	29.2	28.1	31.7	34.4	35.8		5.4	5.3	4.0	ST
251	8/3/2007	925	2833.4	9034.8	14	32	16	31	29.3	29.2	25.9	32.0	35.1	36.4		5.6	5.5	0.8	ST
252	8/3/2007	1037	2837.1	9042.6	14	18	9	17	29.1	29.0	27.7	31.5	34.5	35.9		5.7	4.7	1.7	ST
253	8/3/2007	1315	2842.4	9056.5	15	16	8	15	29.2	29.4	28.6	31.1	33.3	35.3		5.7	5.4	1.2	ST
254	8/3/2007	1427	2839.9	9056.9	15														ST

Table 2. Selected environmental parameters (continued)

TOMMY MUNRO, SUMMER SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	6/12/2007	737	2916.4	8853.4	11	47	23	46	29.5	23.0	23.0	36.0	23.5	37.0		0.0	0.0	0.0	ST
2	6/12/2007	1259	2919.2	8855.0	11	26	13	25	31.0	24.5	23.0	25.0	38.0	38.0		0.0	0.0	0.0	ST
3	6/12/2007	1419	2921.5	8849.1	11	36	18	35	29.0	25.0	26.0	36.0	38.0	38.0		0.0	0.0	0.0	ST
4	6/12/2007	1524	2921.0	8849.1	11	40	20	39	29.5	24.0	23.0	35.0	38.0	38.0		0.0	0.0	0.0	ST
5	6/12/2007	1652	2921.7	8850.3	11	32	16	31	30.0	25.0	23.0	32.0	36.0	36.0		0.0	0.0	0.0	ST
6	6/13/2007	211	2922.7	8844.3	11	46	23	45	28.0	23.0	22.0	33.0	35.0	37.0		0.0	0.0	0.0	ST
7	6/13/2007	1422	2928.1	8840.7	11	31	15	30	28.8	25.2	23.7	32.1	36.2	36.2		5.8	6.2	4.9	ST
8	6/13/2007	1543	2926.9	8841.6	11	35	15	34	29.0	24.5	23.7	32.1	36.3	36.4		5.6	5.4	4.8	ST
9	6/13/2007	2021	2922.3	8853.6	11	21	10	21	29.1	24.7	23.3	26.5	35.6	36.4		8.5	5.4	5.0	ST
10	6/13/2007	2215	2921.9	8851.7	11	26	13	25	28.6	25.6	23.5	28.7	36.0	36.2		7.0	5.6	5.9	ST
11	6/14/2007	27	2930.8	8845.1	11	16	8	15	28.1	26.7	24.0	32.6	35.3	36.5		5.4	5.3	5.6	ST
12	6/14/2007	947	2947.2	8846.1	11	13	6	12	28.3	27.8	24.9	30.8	32.1	36.0		5.5	5.5	4.8	ST
13	6/14/2007	1117	2947.3	8837.1	11	22	10	21	28.7	26.0	23.2	30.6	35.4	36.3		5.5	5.3	4.9	ST
14	6/14/2007	1303	2953.2	8841.1	11	19	9	18	28.9	26.4	23.6	32.0	36.0	36.0		5.6	5.4	4.4	ST
15	6/14/2007	1425	2956.6	8838.8	11	20	10	19	29.2	26.8	23.6	30.6	35.9	36.1		5.6	5.4	4.6	ST
16	6/14/2007	2029	2928.7	8839.6	11	33	16	32	28.1	26.2	24.5	35.2	35.5	36.5		5.7	5.8	5.1	ST
17	6/14/2007	2226	2930.8	8837.9	11	32	16	31	27.9	26.8	24.7	35.7	36.4	36.6		4.3	5.1	5.3	ST
18	6/14/2007	2341	2933.7	8838.0	11	23	12	22	28.0	26.9	25.3	35.5	36.2	36.4		5.0	5.3	5.5	ST
19	6/15/2007	113	2938.3	8834.0	11	28	14	27	27.7	25.2	22.6	35.0	32.7	36.3		5.3	5.4	5.1	ST
20	6/27/2007	1222	2959.4	8847.6	11	10	5	9	28.9	28.6	27.1	27.9	31.1	34.5		5.8	5.1	3.6	ST
21	6/27/2007	1350	2957.3	8846.5	11	11	5	10	29.5	26.8	26.7	31.0	35.1	34.9		5.3	4.2	4.2	ST
22	6/27/2007	1555	2960.0	8830.0	11	26	13	25	29.7	26.0	24.6	30.7	35.8	36.2		5.3	5.3	4.3	PN
25	7/7/2007	108	2857.9	9051.9	14	10	5	10	30.6	28.3	30.1	28.3	28.3	30.3		6.3	5.7	5.1	ST
26	7/7/2007	253	2900.8	9056.5	14	7	4	7	30.3	30.5	30.2	27.6	27.5	28.4		5.7	5.4	5.2	ST
27	7/7/2007	1000	2921.2	9152.3	15	5	3	5	28.9	28.9	29.2	16.7	16.3	19.3		4.9	0.0	4.9	ST
28	7/7/2007	1610	2933.9	9235.1	16	6	1	6	29.0	29.0	29.5	19.8	19.8	22.3		4.1	0.0	4.1	ST
29	7/7/2007	1746	2928.7	9227.1	16	9	5	9	29.2	29.2	31.4	24.1	22.8	31.4		3.9	0.0	3.9	ST

Table 2. Selected environmental parameters (continued)

TOMMY MUNRO, SUMMER SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
30	7/7/2007	2251	2908.4	9152.6	15	9	5	9	30.2	30.2	32.4	30.8	30.8	32.4		4.6	0.0	4.6	ST
31	7/8/2007	202	2924.7	9203.1	16	5	1	5	29.6	29.6	29.7	19.3	19.3	19.3		5.4	0.0	5.4	ST
32	7/8/2007	424	2910.9	9211.9	16	8	1	8	29.2	29.2	29.5	25.2	25.2	19.3		5.7	0.0	5.7	ST
33	7/8/2007	545	2910.7	9219.0	16	10	5	10	29.2	29.2	29.3	26.7	32.1	33.2		4.7	0.0	4.7	ST
34	7/8/2007	2059	2917.3	8948.3	13	8	4	8	31.4	31.4	33.2	22.6	29.5	33.2		2.6	0.0	2.6	ST
35	7/8/2007	2215	2916.6	8940.3	13	6	1	6	30.9	30.9	30.2	17.3	17.3	21.6		4.3	0.0	4.3	ST

Table 2. Selected environmental parameters (continued)

PELICAN, SUMMER SHRIMP/GOUNDFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			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	MID	MAX	GEAR
35001	6/26/2007	910	2900.2	9030.1	14	8	4	8	29.0	29.0	28.9	28.8	28.8	32.3	1.842	6.3	6.3	5.3	PN
35002	6/26/2007	1243	2860.0	9060.0	14	5	1	5	29.2	29.2	29.1	29.8	29.8	29.8	5.611	5.5	5.5	5.1	PN
35003	6/26/2007	1601	2860.0	9130.0	15	9	4	9	29.8	29.7	29.2	32.0	32.0	32.4	2.490	7.2	7.2	5.3	PN
35004	6/26/2007	1851	2844.5	9127.3	15	21	12	21	28.8	28.3	27.4	34.3	36.1	36.3	0.225	6.0	6.2	5.7	ST
35005	6/26/2007	2122	2844.6	9128.5	15	21	12	21	28.8	28.3	27.4	34.3	36.1	36.3	0.225	6.0	6.2	5.7	ST
35006	6/26/2007	2326	2841.4	9126.4	15	23	16	23	28.2	27.9	27.3	35.3	36.2	36.3	0.419	5.7	6.1	5.5	ST
35007	6/27/2007	156	2845.9	9115.3	15	12	7	12	28.9	28.4	26.8	32.5	35.5	35.9	2.916	6.4	6.2	4.5	ST
35008	6/27/2007	411	2840.9	9106.6	15	13	8	13	28.2	28.1	28.1	36.1	36.1	36.1	0.303	6.1	6.1	6.0	ST
35009	6/27/2007	715	2841.4	9126.3	15	25	12	25	28.1	28.2	27.6	35.7	36.1	36.3	0.249	5.8	6.0	5.5	ST
35010	6/27/2007	928	2845.7	9115.4	15	13	6	13	28.5	28.4	27.4	33.7	35.7	35.8	0.627	6.4	6.1	5.3	ST
35011	6/27/2007	1126	2840.5	9106.7	15	14	7	14	28.1	28.2	28.1	35.8	36.1	36.2	0.208	6.0	6.0	6.1	ST
35012	6/27/2007	1317	2830.0	9100.0	15	32	16	32	28.4	28.1	25.9	36.0	36.3	36.4	0.116	6.1	6.1	3.8	PN
35013	6/27/2007	1651	2830.1	9030.0	14	37	18	37	28.6	27.6	24.6	36.1	36.3	36.4	0.105	6.1	6.2	4.4	PN
35014	6/27/2007	2105	2854.5	9018.9	14	17	10	17	29.2	28.9	25.9	33.5	34.8	35.7	0.240	6.1	6.0	1.0	ST
35015	6/27/2007	2250	2855.5	9013.0	14	19	10	19	29.0	28.6	25.9	34.1	35.2	36.0	0.148	6.1	6.0	1.7	ST
35016	6/28/2007	145	2857.6	8953.6	13	33	17	33	29.4	26.3	23.9	27.7	35.5	36.6	1.351	6.7	1.3	0.7	ST
35017	6/28/2007	314	2901.0	8952.3	13	29	15	29	29.1	26.3	24.3	28.9	36.0	36.5	1.145	6.4	4.0	0.2	ST
35018	6/28/2007	717	2855.5	9018.8	14	18	9	18	28.6	28.0	25.9	34.0	35.6	35.7	0.283	6.0	5.2	1.0	ST
35019	6/28/2007	903	2855.5	9013.1	14	20	7	20	28.5	28.6	25.8	34.6	35.3	36.0	0.090	6.0	6.0	1.3	ST
35020	6/28/2007	1156	2857.3	8953.7	13	33	17	33	29.2	27.0	23.9	27.7	34.9	36.6	1.244	6.7	2.2	0.7	ST
35021	6/28/2007	1329	2900.9	8952.3	13	29	14	29	29.8	28.9	24.2	27.9	33.5	36.5	1.300	6.9	5.4	0.2	ST
35022	6/28/2007	1613	2860.0	8930.0	13	13	7	13	29.9	29.1	25.8	20.8	31.0	36.1	23.170	11.1	5.7	1.7	PN
35023	6/28/2007	1822	2905.1	8945.0	13	25	13	25	30.1	26.5	24.6	28.0	35.9	36.4	1.976	6.5	3.5	2.1	ST
35024	6/28/2007	1919	2906.3	8947.3	13	21	12	21	29.8	27.0	24.9	27.4	35.1	36.3	2.220	6.6	4.1	1.2	ST
35025	6/28/2007	2027	2906.4	8947.1	13	21	12	21	29.8	27.0	24.9	27.4	35.1	36.3	2.220	6.6	4.1	1.2	ST
35026	6/28/2007	2210	2905.0	8945.1	13	28	16	28	29.6	25.8	24.4	29.2	36.0	36.4	0.883	6.4	3.4	3.2	ST
35027	6/29/2007	1	2910.3	8948.1	13	13	7	13	29.9	28.9	25.6	25.7	32.7	35.6	7.623	7.2	5.0	0.0	ST

Table 2. Selected environmental parameters (continued)

PELICAN, SUMMER SHRIMP/GOUNDFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			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	MID	MAX	GEAR
35028	6/29/2007	149	2911.4	8955.7	13	9	6	9	30.7	29.4	28.6	18.5	28.9	31.0	12.856	9.5	4.8	2.9	ST
35029	6/29/2007	649	2911.3	8955.7	13	10	5	10	30.0	29.3	28.1	21.4	29.5	32.3	15.796	8.4	4.8	2.2	ST
35030	6/29/2007	829	2910.5	8947.1	13	14	8	14	29.5	28.4	25.5	24.2	33.3	35.7	6.312	6.6	4.7	0.1	ST
35031	6/29/2007	1035	2900.0	8960.0	13	22	9	22	29.3	28.9	25.8	29.5	32.7	36.0	1.566	6.8	5.9	0.2	PN

Table 2. Selected environmental parameters (continued)

A.E. VERRILL, SUMMER SHRIMP/GOUNDFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT				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	FL SUR	SUR	MID	MAX	GEAR
1	6/4/2007	1042	3000.6	8811.4	11	26	13	26	25.8	24.9	24.6	34.6	35.7	36.1		6.1	6.1	5.9	ST
2	6/4/2007	1309	2952.1	8822.4	11	34	17	34	25.7	24.7	24.2	35.5	36.2	36.3		6.1	6.2	5.9	ST
3	6/4/2007	1523	3001.0	8819.3	11	26	13	26	33.5	24.8	24.8	25.9	36.2	36.1		6.1	6.1	6.1	ST
4	6/11/2007	2030	3004.4	8809.0	11	21	11	21	29.5	25.1	23.7	28.6	35.9	36.4		7.6	6.0	5.5	ST
5	6/11/2007	2224	3010.5	8804.5	11	10	5	10	29.1	25.8	25.3	30.2	35.3	35.7		6.6	6.6	5.3	ST
6	6/27/2007	1744	3004.1	8826.0	11	19	10	19	29.1	28.2	25.0	31.2	32.1	36.2		5.9	5.9	4.6	ST
7	6/27/2007	1821	3004.9	8825.4	11	19	9	17	29.0	28.7	25.2	31.1	31.5	36.2		6.0	5.9	4.2	ST
8	6/27/2007	2031	3007.5	8823.1	11	15	8	15	29.0	28.8	25.4	30.4	30.6	36.1		6.1	6.1	4.1	ST
9	6/27/2007	2211	3012.1	8815.4	11	13	7	13	29.0	29.7	25.6	30.8	30.9	36.0		5.8	5.8	4.4	ST

Table 2. Selected environmental parameters (continued)

MATAGORDA BAY, SUMMER SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
32001	6/4/2007	947	2825.6	9617.5	19	5	5	5	28.0	26.0	26.0	22.0	27.0	32.0		7.0	5.0	3.0	ST
32002	6/4/2007	1048	2821.4	9616.5	19	8	8	8	27.0	26.0	26.0	25.0	32.0	33.0		8.0	5.0	4.0	ST
32003	6/4/2007	1159	2822.5	9608.4	19	10	9	10	28.0	26.0	26.0	24.0	32.0	33.0		8.0	6.0	6.0	ST
32004	6/4/2007	1253	2825.5	9610.4	19	8	7	8	28.0	26.0	26.0	24.0	31.0	33.0		8.0	6.0	6.0	ST
32005	6/4/2007	1345	2828.5	9609.4	19	6	6	6	28.0	26.0	26.0	25.0	31.0	32.0		7.0	5.0	3.0	ST
32006	6/4/2007	1425	2829.5	9610.5	19	5	4	5	28.0	26.0	26.0	26.0	31.0	31.0		6.0	4.0	4.0	ST
32007	6/4/2007	1539	2828.5	9606.4	19	7	6	7	29.0	26.0	26.0	25.0	31.0	32.0		8.0	5.0	5.0	ST
32008	6/4/2007	1648	2824.5	9603.5	19	10	9	10	28.0	26.0	26.0	25.0	33.0	33.0		8.0	6.0	5.0	ST
32009	6/20/2007	942	2822.5	9620.6	19	5	4	5	29.0	29.0	29.0	31.0	31.0	31.0		6.0	6.0	6.0	ST
32010	6/20/2007	1012	2822.6	9619.5	19	5	5	5	29.0	29.0	29.0	30.0	31.0	31.0		6.0	6.0	6.0	ST
32011	6/20/2007	1121	2815.5	9616.6	19	12	11	12	29.0	28.0	26.0	31.0	32.0	33.0		6.0	6.0	4.0	ST
32012	6/20/2007	1234	2814.5	9624.5	19	10	9	10	29.0	29.0	28.0	31.0	31.0	32.0		6.0	6.0	6.0	ST
32013	6/20/2007	1321	2813.5	9628.6	19	8	7	8	29.0	29.0	29.0	31.0	31.0	32.0		6.0	6.0	5.0	ST
32014	6/20/2007	1403	2812.6	9626.6	19	6	6	6	29.0	29.0	28.0	31.0	32.0	32.0		6.0	6.0	6.0	ST
32015	6/20/2007	1451	2810.4	9624.6	19	12	11	12	29.0	28.0	26.0	32.0	32.0	33.0		6.0	6.0	4.0	ST
32016	6/20/2007	1519	2810.5	9623.5	19	12	11	12	29.0	28.0	26.0	32.0	32.0	34.0		6.0	6.0	2.0	ST

Table 2. Selected environmental parameters (continued)

R.J. KEMP, SUMMER SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
31001	6/5/2007	807	2602.9	9708.5	21	4	4	4	25.0	25.0	25.0	34.0	34.0	34.0		5.0	5.0	4.0	ST
31002	6/5/2007	837	2601.3	9708.5	21	4	4	4	25.0	25.0	24.0	34.0	35.0	34.0		5.0	4.0	4.0	ST
31003	6/5/2007	911	2602.9	9706.5	21	9	8	9	25.0	25.0	24.0	34.0	34.0	35.0		6.0	6.0	5.0	ST
31004	6/5/2007	1004	2600.5	9701.5	21	13	12	13	26.0	26.0	25.0	34.0	34.0	35.0		6.0	6.0	6.0	ST
31005	6/5/2007	1059	2607.9	9700.5	21	14	13	14	27.0	26.0	26.0	33.0	33.0	35.0		6.0	6.0	5.0	ST
31006	6/5/2007	1150	2607.4	9706.6	21	10	9	10	26.0	24.0	25.0	34.0	36.0	35.0		6.0	6.0	5.0	ST
31007	6/5/2007	1223	2606.7	9707.5	21	9	8	9	27.0	25.0	24.0	34.0	35.0	35.0		6.0	5.0	4.0	ST
31008	6/5/2007	1254	2605.3	9709.5	21	8	8	8	27.0	25.0	25.0	34.0	34.0	35.0		5.0	5.0	4.0	ST
31009	6/16/2007	836	2608.5	9705.5	21	10	18	10	25.0	24.0	23.0	34.0	34.0	35.0		6.0	7.0	6.0	ST
31010	6/16/2007	921	2610.8	9706.5	21	10	9	10	24.0	24.0	22.0	34.0	34.0	35.0		6.0	6.0	7.0	ST
31011	6/16/2007	1004	2616.5	9705.5	21	10	9	10	26.0	25.0	23.0	34.0	34.0	35.0		6.0	6.0	6.0	ST
31012	6/16/2007	1043	2616.8	9702.5	21	12	11	12	27.0	26.0	23.0	34.0	34.0	35.0		7.0	7.0	7.0	ST
31013	6/16/2007	1123	2618.5	9702.5	21	12	11	12	26.0	26.0	23.0	34.0	34.0	34.0		7.0	7.0	7.0	ST
31014	6/16/2007	1207	2621.8	9704.5	21	11	10	11	26.0	26.0	23.0	34.0	34.0	35.0		6.0	7.0	6.0	ST
31015	6/16/2007	1320	2620.4	9710.5	21	8	7	8	25.0	23.0	23.0	35.0	35.0	35.0		6.0	6.0	7.0	ST
31016	6/23/2007	1025	2618.0	9707.5	21	10	9	10	26.0	26.0	25.0	35.0	35.0	35.0		7.0	6.0	6.0	ST

Table 2. Selected environmental parameters (continued)

SAN JACINTO, SUMMER SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
69001	6/5/2007	950	2916.7	9443.2	18	4	4	4	27.0	26.0	26.0	29.0	32.0	33.0		5.0	4.0	4.0	ST
69002	6/5/2007	1022	2916.4	9444.7	18	4	4	4	27.0	26.0	26.0	29.0	32.0	33.0		5.0	4.0	4.0	ST
69003	6/5/2007	1055	2916.7	9446.3	18	3	3	3	26.0	26.0	26.0	30.0	32.0	32.0		5.0	3.0	3.0	ST
69004	6/5/2007	1135	2911.2	9447.8	18	7	6	7	27.0	26.0	26.0	29.0	30.0	32.0		6.0	5.0	4.0	ST
69005	6/5/2007	1207	2911.7	9446.1	18	7	6	7	27.0	26.0	26.0	29.0	30.0	32.0		6.0	5.0	4.0	ST
69006	6/5/2007	1237	2910.3	9445.6	18	8	7	8	27.0	26.0	26.0	29.0	30.0	32.0		7.0	5.0	4.0	ST
69007	6/5/2007	1316	2908.9	9443.1	18	9	8	9	27.0	26.0	26.0	29.0	29.0	33.0		7.0	6.0	4.0	ST
69008	6/5/2007	1412	2907.5	9450.6	18	8	7	8	27.0	26.0	26.0	29.0	30.0	32.0		6.0	6.0	5.0	ST
69009	6/21/2007	1110	2916.9	9442.4	18	4	4	4	29.0	29.0	29.0	20.0	26.0	27.0		7.0	6.0	5.0	ST
69010	6/21/2007	1147	2914.3	9441.8	18	7	6	7	29.0	29.0	29.0	25.0	28.0	28.0		6.0	6.0	6.0	ST
69011	6/21/2007	1236	2918.9	9437.4	18	6	6	6	30.0	29.0	29.0	23.0	27.0	28.0		7.0	6.0	5.0	ST
69012	6/21/2007	1312	2917.1	9436.0	18	7	7	7	30.0	29.0	29.0	25.0	28.0	28.0		7.0	6.0	6.0	ST
69013	6/21/2007	1411	2923.9	9429.3	18	6	6	6	30.0	29.0	29.0	26.0	28.0	28.0		7.0	6.0	4.0	ST
69014	6/21/2007	1449	2925.4	9433.9	18	4	4	4	30.0	29.0	29.0	27.0	27.0	27.0		8.0	6.0	6.0	ST
69015	6/21/2007	1519	2926.8	9432.4	18	4	4	4	30.0	29.0	29.0	26.0	26.0	27.0		8.0	6.0	3.0	ST
69016	6/21/2007	1553	2927.3	9436.7	18	2	2	2	31.0	30.0	30.0	25.0	26.0	26.0		8.0	7.0	7.0	ST

Table 2. Selected environmental parameters (continued)

SABINE, SUMMER SHRIMP/GOUNDFISH SURVEY																			
			POSITION		STAT	DEPTH	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	LAT	LONG	ZONE	(M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	MID	MAX	GEAR
40001	6/5/2007	733	2940.3	9352.2	17	1	1	1	27.0	28.0	27.0	22.0	25.0	28.0		6.0	6.0	2.0	ST
40002	6/5/2007	814	2940.4	9355.8	17	2	1	2	27.0	27.0	26.0	27.0	29.0	29.0		6.0	4.0	3.0	ST
40003	6/5/2007	910	2938.6	9400.3	17	6	3	6	27.0	26.0	26.0	28.0	30.0	31.0		7.0	4.0	4.0	ST
40004	6/5/2007	1010	2936.4	9357.8	17	4	4	4	27.0	27.0	26.0	28.0	30.0	31.0		7.0	6.0	5.0	ST
40005	6/5/2007	1101	2935.5	9357.2	17	4	4	4	27.0	27.0	26.0	28.0	30.0	31.0		7.0	6.0	5.0	ST
40006	6/5/2007	1209	2933.6	9352.9	17	6	6	6	28.0	27.0	27.0	23.0	28.0	29.0		8.0	7.0	6.0	ST
40007	6/5/2007	1409	2932.6	9351.3	17	7	6	7	29.0	27.0	26.0	23.0	28.0	32.0		9.0	7.0	6.0	ST
40008	6/5/2007	1515	2932.5	9348.7	17	7	6	7	29.0	27.0	26.0	24.0	28.0	32.0		9.0	6.0	5.0	ST
40009	6/21/2007	736	2934.4	9348.9	17	6	6	6	28.0	29.0	29.0	24.0	27.0	28.0		6.0	6.0	6.0	ST
40010	6/21/2007	853	2940.5	9345.3	17	4	4	4	29.0	29.0	29.0	27.0	27.0	27.0		6.0	6.0	6.0	ST
40011	6/21/2007	1044	2944.4	9337.8	17	2	2	2	29.0	29.0	29.0	24.0	24.0	24.0		7.0	6.0	6.0	ST
40012	6/21/2007	1132	2941.6	9337.3	17	4	4	4	29.0	28.0	29.0	24.0	25.0	26.0		7.0	6.0	6.0	ST
40013	6/21/2007	1213	2939.7	9340.8	17	5	4	5	29.0	29.0	28.0	27.0	28.0	28.0		7.0	6.0	6.0	ST
40014	6/21/2007	1255	2937.6	9339.3	17	6	5	6	30.0	29.0	29.0	28.0	28.0	28.0		6.0	6.0	6.0	ST
40015	6/21/2007	1338	2937.5	9336.8	17	6	5	6	30.0	29.0	28.0	28.0	28.0	28.0		7.0	6.0	5.0	ST
40016	6/21/2007	1433	2936.5	9334.2	17	6	5	6	30.0	29.0	28.0	28.0	28.0	28.0		8.0	6.0	5.0	ST

Table 2. Selected environmental parameters (continued)

NUECES, SUMMER SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
67001	6/4/2007	800	2746.8	9701.3	20	8	7	8	27.0	27.0	27.0	26.0	26.0	27.0		8.0	8.0	6.0	ST
67002	6/4/2007	942	2744.9	9705.3	20	6	5	6	28.0	28.0	28.0	27.0	27.0	27.0		8.0	8.0	8.0	ST
67003	6/4/2007	918	2745.2	9705.5	20	6	5	6	28.0	28.0	28.0	27.0	27.0	27.0		8.0	8.0	8.0	ST
67004	6/4/2007	1003	2741.0	9708.5	20	5	4	5	28.0	28.0	28.0	28.0	28.0	28.0		7.0	7.0	7.0	ST
67005	6/4/2007	1156	2739.9	9700.6	20	12	11	12	28.0	26.0	26.0	26.0	35.0	35.0		8.0	7.0	7.0	ST
67006	6/4/2007	1408	2744.2	9659.4	20	11	9	11	28.0	27.0	26.0	25.0	33.0	35.0		9.0	7.0	6.0	ST
67007	6/4/2007	1435	2744.7	9658.5	20	11	10	11	28.0	27.0	26.0	25.0	32.0	35.0		9.0	7.0	7.0	ST
67008	6/4/2007	1507	2746.1	9656.9	20	11	10	11	29.0	27.0	26.0	25.0	32.0	35.0		9.0	7.0	7.0	ST
67009	6/21/2007	821	2759.1	9655.3	20	4	4	4	29.0	29.0	29.0	34.0	34.0	34.0		7.0	7.0	7.0	ST
67010	6/21/2007	904	2760.0	9652.5	20	6	6	6	28.0	28.0	28.0	33.0	33.0	33.0		7.0	7.0	7.0	ST
67011	6/21/2007	954	2755.0	9653.4	20	8	8	8	28.0	28.0	28.0	33.0	33.0	34.0		7.0	7.0	6.0	ST
67012	6/21/2007	1042	2753.8	9650.6	20	10	9	10	28.0	28.0	28.0	34.0	34.0	34.0		7.0	7.0	6.0	ST
67013	6/21/2007	1121	2752.2	9649.4	20	11	10	11	28.0	28.0	27.0	34.0	34.0	34.0		7.0	7.0	6.0	ST
67014	6/21/2007	1201	2750.8	9651.5	20	11	10	11	28.0	28.0	26.0	34.0	40.0	35.0		7.0	7.0	5.0	ST
67015	6/21/2007	1237	2749.1	9652.7	20	11	10	11	28.0	28.0	27.0	34.0	34.0	35.0		7.0	7.0	5.0	ST
67016	6/21/2007	1314	2747.8	9654.2	20	12	10	12	28.0	28.0	27.0	34.0	34.0	35.0		7.0	7.0	5.0	ST

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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	9/28/2007	841	2859.8	8830.1		350	100	350	28.4	20.2	16.9	35.2	36.4	35.6		5.0	5.3	5.5	PN
2	9/28/2007	1245	2900.0	8760.0		720	100	720	29.2	20.4	16.9	35.9	36.3	35.5		5.4	5.6	5.6	PN
3	9/28/2007	1704	2930.0	8800.0	11	44	23	44	29.2	28.2	28.1	35.4	35.3	35.9		4.3	4.1	4.0	PN
4	9/29/2007	817	2930.0	8831.0	11	50	25	50	28.3	28.1	26.6	35.5	35.8	36.2		5.8	4.8	4.8	PN
5	9/29/2007	1400	2959.5	8800.2	11	26	13	26	28.2	28.5	28.4	35.2	35.4	35.3		5.6	5.7	5.9	PN
6	9/29/2007	1722	3000.0	8830.0	11	26	13	26	28.2	28.3	28.4	34.6	34.3	35.8		6.3	6.2	5.4	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	8/29/2007	1929	2729.9	9030.1															PN
2	8/30/2007	247	2729.7	9127.8															PN
3	8/30/2007	1020	2729.4	9230.2															PN
4	8/31/2007	752	2600.9	9559.8															PN
5	8/31/2007	1143	2602.3	9629.9															PN
6	8/31/2007	1531	2600.8	9700.1	21														PN
7	8/31/2007	1925	2629.9	9659.8	21														PN
8	8/31/2007	2243	2629.9	9630.8	21														PN
9	9/1/2007	329	2659.7	9600.3															PN
10	9/1/2007	809	2659.5	9640.0	21														PN
11	9/1/2007	1213	2700.1	9712.0	20														PN
12	9/1/2007	1615	2729.8	9700.4	20														PN
13	9/1/2007	1940	2729.6	9630.3	20														PN
14	9/1/2007	2322	2800.0	9629.9	19														PN
15	9/2/2007	231	2820.1	9620.4	19														PN
16	9/2/2007	620	2828.7	9600.3	19														PN
17	9/2/2007	951	2800.1	9600.2	19														PN
18	9/2/2007	1401	2732.8	9559.7	20														PN
19	9/2/2007	1733	2730.0	9529.9															PN
20	9/2/2007	1947	2744.2	9529.9															PN
21	9/3/2007	38	2800.2	9500.5	19														PN
22	9/3/2007	358	2800.0	9530.6	19														PN
23	9/3/2007	834	2830.4	9530.2	19														PN
24	9/3/2007	1144	2829.9	9459.9	18														PN
25	9/3/2007	1526	2900.3	9500.4	19														PN
26	9/3/2007	2008	2924.9	9430.3	18														PN
27	9/3/2007	2352	2900.4	9430.1	18														PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
28	9/4/2007	346	2830.0	9430.4	18														PN
29	9/4/2007	810	2800.4	9430.5	18														PN
30	9/4/2007	1255	2730.5	9429.9															PN
31	9/4/2007	1740	2759.9	9360.0															PN
32	9/4/2007	2122	2830.1	9359.9	17														PN
33	9/5/2007	138	2900.5	9400.1	18														PN
34	9/5/2007	524	2929.8	9359.8	17														PN
35	9/5/2007	828	2932.2	9332.5	17														PN
36	9/5/2007	1221	2901.2	9330.1	17														PN
37	9/5/2007	1610	2830.4	9330.1	17														PN
38	9/5/2007	1949	2800.6	9330.1	17														PN
39	9/5/2007	2334	2729.9	9330.0															PN
40	9/6/2007	442	2800.4	9301.6	17														PN
41	9/6/2007	859	2830.4	9259.6	16														PN
42	9/6/2007	1318	2900.1	9300.6	17														PN
43	9/6/2007	1712	2929.8	9259.8	16														PN
44	9/6/2007	2047	2924.8	9227.8	16														PN
45	9/6/2007	2358	2900.9	9232.6	16														PN
46	9/7/2007	417	2830.5	9231.3	16														PN
47	9/7/2007	851	2800.6	9230.8	16														PN
48	9/7/2007	1217	2760.0	9159.7															PN
49	9/7/2007	1605	2830.2	9200.1	16														PN
50	9/7/2007	2003	2900.6	9200.1	16														PN
51	9/7/2007	2335	2859.8	9130.4	15														PN
52	9/8/2007	337	2829.7	9130.6	15														PN
53	9/8/2007	854	2800.9	9130.1	15														PN
54	9/8/2007	1239	2760.0	9100.0															PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
55	9/8/2007	1702	2830.3	9100.2	15														PN
56	9/8/2007	1950	2847.3	9053.5	14														PN
57	9/8/2007	2237	2853.5	9032.9	14														PN
58	9/9/2007	143	2830.0	9030.4	14														PN
59	9/9/2007	500	2805.4	9030.4	14														PN
60	9/9/2007	944	2760.0	9000.7															PN
61	9/9/2007	1357	2829.9	9000.5	14														PN
62	9/9/2007	1839	2858.2	8933.6	13														PN
63	9/9/2007	2339	2830.2	8930.0	13														PN
64	9/10/2007	305	2829.9	8900.8															PN
65	9/10/2007	824	2900.1	8900.5	13														PN
66	9/10/2007	1150	2900.1	8830.2	11														PN
67	9/10/2007	1407	2913.4	8830.5	11														PN
68	9/10/2007	1634	2930.1	8830.7	11														PN
69	9/10/2007	1943	2930.4	8802.9	11														PN
70	9/10/2007	2145	2915.2	8800.3	11														PN
71	9/11/2007	200	2930.8	8729.7	10														PN
72	9/11/2007	536	2959.1	8729.5	10														PN
73	9/11/2007	904	2947.9	8700.1	10														PN
74	9/11/2007	1201	2958.9	8700.2	10														PN
75	9/11/2007	1502	3020.2	8659.5	9														PN
76	9/11/2007	1845	3014.0	8729.3	10														PN
77	9/11/2007	2313	2959.5	8757.0	10														PN
78	9/12/2007	411	2959.7	8827.8	11														PN
79	9/16/2007	654	3019.1	8628.9	9														PN
80	9/16/2007	928	2959.5	8630.4	9														PN
81	9/16/2007	1429	2929.9	8630.2															PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL PLANKTON SURVEY																			
			POSITION		STAT	DEPTH	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	LAT	LONG	ZONE	(M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	MID	MAX	GEAR
82	9/16/2007	1804	2911.8	8600.4															PN
83	9/16/2007	2039	2929.5	8600.1															PN
84	9/17/2007	4	2958.5	8601.3	9														PN
85	9/17/2007	352	2947.7	8530.3	8														PN
86	9/17/2007	620	2929.6	8531.4	8														PN
87	9/17/2007	1100	2929.7	8456.0	7														PN
88	9/17/2007	1410	2930.0	8430.7	7														PN
89	9/17/2007	1803	2944.6	8400.6	7														PN
90	9/17/2007	2006	2929.8	8400.6	7														PN
91	9/17/2007	2326	2929.4	8337.6	7														PN
92	9/18/2007	324	2859.9	8330.6	6														PN
93	9/18/2007	949	2900.0	8359.7	7														PN
94	9/18/2007	1248	2859.8	8430.4	6														PN
95	9/18/2007	1628	2859.9	8459.6	6														PN
96	9/18/2007	1952	2859.8	8530.7															PN
97	9/19/2007	2339	2500.1	8429.9		54													PN
98	9/20/2007	352	2459.6	8400.1															PN
99	9/20/2007	741	2459.5	8329.9															PN
100	9/20/2007	1422	2500.2	8229.7	3														PN
101	9/20/2007	1817	2500.2	8159.3	3	22	10	19	30.6	30.6	30.6	37.2	37.2	37.2		6.1	6.1	6.1	PN
102	9/20/2007	2124	2459.9	8133.7															PN
103	9/21/2007	346	2530.1	8159.8	3														PN
104	9/21/2007	747	2530.3	8229.9	3														PN
105	9/21/2007	1124	2529.9	8259.9	3														PN
106	9/21/2007	1541	2530.1	8329.8	3														PN
107	9/21/2007	1941	2530.6	8359.8	3	137	68	135	29.6	21.2	16.3	36.0	36.6	36.2		6.3	5.6	4.0	PN
108	9/21/2007	2349	2529.9	8429.8		415	101	199	29.4	18.9	14.4	36.1	36.5	35.9		6.3	4.7	4.5	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
109	9/22/2007	421	2600.1	8429.9		220	101	202	29.5	18.7	13.9	35.6	36.5	35.8		6.2	4.7	4.1	PN
110	9/22/2007	850	2559.8	8400.2		140	70	139	29.4	21.2	16.1	35.8	36.6	36.1		6.2	5.4	4.0	PN
111	9/22/2007	1408	2600.5	8332.2	4	67	32	62	29.4	28.3	21.5	36.0	36.4	36.5		6.3	7.2	5.0	PN
112	9/22/2007	1836	2600.7	8300.1	4	44	22	43	29.5	29.5	27.7	36.5	36.6	36.5		6.3	6.3	5.9	PN
113	9/22/2007	2222	2559.8	8230.2	3	29	14	27	30.1	30.1	30.1	36.8	36.8	36.8		6.0	6.0	6.0	PN
114	9/23/2007	153	2600.0	8200.1	4	14	7	12	29.7	29.7	29.7	36.9	36.9	36.9		6.1	6.1	6.1	PN
115	9/23/2007	748	2630.0	8230.6	4	21	10	18	29.9	29.9	29.9	36.9	36.9	36.9		5.9	5.9	5.9	PN
116	9/23/2007	1126	2630.4	8300.6	4	40	20	38	29.5	29.5	29.5	36.6	36.6	36.6		6.1	6.0	6.1	PN
117	9/23/2007	1515	2630.3	8330.4	4	58	29	56	29.2	29.0	22.4	36.1	36.2	36.5		6.3	6.5	5.3	PN
118	9/23/2007	1904	2630.1	8400.8		123	61	122	29.2	21.0	17.1	35.8	36.6	36.3		6.3	5.7	4.1	PN
119	9/23/2007	2323	2629.9	8429.7		201	102	201	29.2	18.6	13.5	36.0	36.5	35.7		6.3	4.6	3.9	PN
120	9/24/2007	409	2700.1	8430.7		176	88	175	28.9	19.7	14.7	35.8	36.6	35.9		6.3	4.9	4.0	PN
121	9/24/2007	840	2660.0	8400.7		85	43	85	29.2	24.5	19.1	35.9	36.5	36.5		5.0	6.5	4.3	PN
122	9/24/2007	1307	2700.0	8330.8	5	52	27	52	29.2	29.2	24.0	36.5	36.5	36.5		6.3	6.3	5.4	PN
123	9/24/2007	1709	2700.0	8300.7	5	34	16	31	30.0	29.9	29.9	36.8	36.8	36.8		5.9	5.9	5.9	PN
124	9/24/2007	2102	2659.9	8233.0	4	13	6	12	29.4	29.4	29.3	36.7	36.7	36.8		6.1	6.1	5.2	PN
125	9/25/2007	210	2730.1	8259.9	5	19	9	16	29.2	29.2	29.2	36.6	36.6	36.6		6.2	6.2	6.2	PN
126	9/25/2007	555	2730.0	8330.6	5	41	20	39	29.3	29.3	29.3	36.6	36.6	36.6		6.1	6.1	6.1	PN
127	9/25/2007	927	2729.9	8400.5	5	62	31	60	28.8	27.3	22.1	36.0	36.3	36.5		6.3	6.7	5.4	PN
128	9/25/2007	1310	2730.0	8430.4	5	133	67	132	28.6	20.2	16.0	36.1	36.6	36.1		6.3	5.0	4.1	PN
129	9/25/2007	1807	2800.2	8500.8		245	102	201	28.7	19.1	14.1	36.0	36.5	35.8		6.3	4.7	4.2	PN
130	9/25/2007	2226	2800.0	8431.0	6	78	39	78	28.8	25.4	20.1	36.1	36.5	36.5		6.3	6.8	4.4	PN
131	9/26/2007	227	2800.2	8400.0	6	47	24	45	29.0	29.1	27.0	36.2	36.4	36.6		6.3	6.3	5.2	PN
132	9/26/2007	622	2800.3	8330.4	6	31	15	29	29.3	29.3	29.3	36.5	36.5	36.5		6.1	6.2	6.1	PN
133	9/26/2007	957	2759.9	8301.1	5	13	6	11	28.4	28.4	28.4	36.5	36.5	36.5		6.0	6.0	6.0	PN
134	9/26/2007	1525	2830.0	8303.8	6	13	5	10	28.3	28.2	28.2	36.5	36.5	36.5		6.2	6.2	6.2	PN
135	9/26/2007	1937	2853.7	8315.1	6	12	6	10	28.5	28.3	28.3	36.3	36.3	36.3		6.3	6.4	6.5	PN

Table 2. Selected environmental parameters (continued)

GORDON GUNTER, FALL PLANKTON SURVEY																			
			POSITION		STAT	DEPTH	SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			FL	DISSOLVED OXYGEN, PPM			
STA#	DATE MM/DD/YY	TIME	LAT	LONG	ZONE	(M)	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	SUR	SUR	MID	MAX	GEAR
136	9/27/2007	11	2859.7	8400.4	6	28	14	27	29.1	29.0	29.0	36.6	36.6	36.6		6.2	6.1	6.0	PN
137	9/27/2007	518	2830.1	8330.7	6	23	11	21	29.1	29.1	29.1	36.6	36.6	36.6		6.1	6.1	6.1	PN
138	9/27/2007	849	2832.3	8400.6	6	34	16	33	29.1	29.1	29.1	36.6	36.6	36.6		6.1	6.1	6.1	PN
139	9/27/2007	1242	2829.9	8430.0	6	47	23	46	28.9	28.9	25.8	36.3	36.3	36.5		6.3	6.3	4.8	PN
140	9/28/2007	144	2830.1	8459.5	6	97	48	95	28.8	22.7	19.0	36.1	36.5	36.5		6.3	5.1	4.4	PN
141	9/28/2007	549	2839.9	8529.9	8	175	86	172	28.7	19.7	15.1	36.0	36.6	36.0		6.2	4.7	3.8	PN
142	9/28/2007	944	2900.6	8530.6		71	35	69	28.5	26.3	22.1	36.2	36.5	36.6		6.2	5.2	4.6	BG
143	9/28/2007	1340	2913.1	8559.6		181	90	179	28.7	20.0	15.0	36.1	36.6	36.0		6.2	5.0	3.9	BG
144	9/28/2007	1834	2930.2	8630.6		210	102	201	28.8	18.6	13.6	35.8	36.5	35.7		6.3	4.5	4.0	BG

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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	9/12/2007	831	3012.8	8802.4	11														NN
2	9/12/2007	938	3013.4	8808.4	11														NN
3	9/12/2007	1029	3008.5	8807.2	11														NN
4	9/12/2007	1107	3008.3	8803.8	11														NN
5	9/12/2007	1145	3008.1	8800.3	11														NN
6	9/12/2007	1224	3011.0	8800.0	11														NN
7	9/12/2007	1354	3016.5	8800.0	11														NN
8	9/12/2007	1436	3016.4	8802.2	11														NN
9	9/12/2007	1519	3016.6	8804.3	11														NN

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	10/15/2007	1848	2913.2	9441.6	18	17	8	15	26.9	27.2	27.2	29.1	32.2	32.4		6.6	5.6	5.6	ST
2	10/15/2007	2146	2900.3	9459.4	18	17	9	16	27.7	27.7	27.5	32.5	32.5	32.6		5.8	5.7	5.4	NN
3	10/16/2007	123	2833.4	9500.8	19	32	16	29	28.1	28.1	28.0	34.7	34.7	34.8		5.5	5.5	5.5	ST
4	10/16/2007	231	2831.0	9500.9	19	36	18	35	27.9	28.0	28.3	35.2	35.2	35.8		5.4	5.5	5.3	ST
5	10/16/2007	705	2816.0	9529.8	19														ST
6	10/16/2007	825	2814.5	9527.3	19	41	21	40	28.2	28.2	28.3	35.0	35.0	36.1		5.4	5.4	5.3	ST
7	10/16/2007	1125	2829.9	9530.0	19	27	14	26	27.9	27.9	28.0	34.3	34.3	34.5		0.0	0.0	0.0	NN
8	10/16/2007	1343	2827.4	9514.3	19	33	18	33	28.1	28.1	28.1	34.8	34.8	34.9		5.4	5.4	5.2	ST
9	10/16/2007	1455	2830.5	9514.6	19	29	16	29	28.0	28.0	28.0	34.5	34.5	34.5		5.4	5.4	5.4	ST
10	10/16/2007	1801	2847.3	9524.1	19	13	7	12	26.9	26.9	27.3	29.3	29.4	31.2		5.5	5.5	4.9	ST
11	10/16/2007	1957	2837.2	9534.3	19	16	8	15	27.9	27.8	27.8	33.2	33.2	33.3		5.2	5.2	5.2	ST
12	10/16/2007	2242	2831.1	9559.6	19	16	8	13	27.4	27.4	27.4	30.4	30.5	30.6		6.0	5.9	5.8	NN
13	10/17/2007	17	2835.7	9553.9	19	11	5	10	27.1	27.1	27.1	29.1	29.1	29.1		5.3	5.4	5.4	ST
14	10/17/2007	204	2826.2	9555.6	19	20	10	19	27.8	27.8	27.8	33.9	33.9	33.9		5.4	5.4	5.4	ST
15	10/17/2007	320	2827.5	9559.2	19	16	8	15	27.4	27.4	27.6	30.9	31.2	31.8		5.5	5.2	5.3	ST
16	10/17/2007	609	2821.9	9619.4	19	16	8	15	27.4	27.4	27.4	30.5	30.5	30.5		5.3	5.4	5.4	ST
17	10/17/2007	750	2816.3	9615.8	19	23	12	22	27.9	28.0	27.9	33.6	33.7	33.7		5.5	5.6	5.6	ST
18	10/17/2007	957	2809.2	9610.8	19	27	14	27	28.2	28.2	28.2	34.9	34.9	34.9		5.4	5.4	5.4	ST
19	10/17/2007	1055	2807.6	9610.8	19	32	17	32	28.2	28.3	28.3	34.9	34.9	34.9		5.4	5.4	5.4	ST
20	10/17/2007	1337	2815.5	9618.6	19	22	12	21	27.6	27.8	27.9	32.0	33.3	33.5		5.0	5.1	5.2	ST
21	10/17/2007	1508	2819.9	9616.7	19	18	10	17	27.5	27.5	27.6	31.7	31.8	32.1		5.5	5.4	5.2	ST
22	10/17/2007	1710	2827.8	9613.0	19	14	7	12	27.3	27.2	27.2	29.7	29.7	29.8		5.5	5.4	5.2	ST
23	10/17/2007	2131	2807.5	9553.6	19	37	18	34	28.3	28.3	28.3	34.9	35.0	35.1		5.5	5.4	5.4	ST
24	10/17/2007	2355	2805.2	9550.8	19	40	20	39	28.3	28.3	28.3	35.2	35.2	35.2		5.5	5.5	5.5	ST
25	10/18/2007	114	2803.0	9549.9	19														ST
26	10/18/2007	210	2801.8	9551.0	19														ST
27	10/18/2007	338	2759.4	9550.5	20														ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
28	10/18/2007	526	2757.0	9549.9	20	58	30	57	28.3	28.3	24.7	35.2	35.9	36.4		5.3	5.3	4.1	ST
29	10/18/2007	847	2744.3	9558.6	20	83	42	81	28.3	28.4	22.3	35.1	36.1	36.5		5.3	5.4	5.3	ST
30	10/18/2007	1228	2757.1	9537.1	20	55	28	54	28.2	28.3	26.3	36.0	36.1	36.3		5.4	5.5	4.4	ST
31	10/18/2007	1352	2754.7	9536.6	20														ST
32	10/18/2007	1657	2801.5	9551.0	19	46	24	45	28.3	28.2	28.2	35.1	35.1	36.1		5.5	5.5	5.4	ST
33	10/18/2007	1826	2759.1	9550.5	20														ST
34	10/18/2007	1955	2756.4	9550.4	20														ST
35	10/18/2007	2203	2746.7	9554.5	20	64	31	62	28.6	28.3	23.8	35.1	35.8	36.4		5.5	5.4	4.6	ST
36	10/18/2007	2306	2743.8	9556.5	20	100	50	99	28.5	26.3	21.1	35.1	36.3	36.5		5.5	4.1	5.3	ST
37	10/19/2007	139	2742.3	9603.7	20	91	45	90	28.5	28.5	21.5	35.4	36.3	36.5		5.5	5.4	5.0	ST
38	10/19/2007	442	2759.9	9600.1	20	46	23	42	28.4	28.3	28.2	35.0	35.2	35.3		5.6	5.6	5.5	NN
39	10/19/2007	827	2810.9	9629.5	19	18	9	17	27.8	27.5	27.9	29.3	31.7	33.4		6.3	5.3	4.5	ST
40	10/19/2007	1141	2754.9	9631.9	20	31	16	31	27.9	28.3	28.4	31.1	34.8	35.2		6.6	5.4	5.0	ST
41	10/19/2007	1352	2750.1	9642.9	20	27	13	26	27.6	28.3	28.5	31.0	33.9	34.9		6.1	5.7	4.9	ST
42	10/19/2007	1649	2741.6	9700.5	20	20	11	19	28.4	28.4	28.6	30.7	31.2	34.0		5.9	5.1	3.8	ST
43	10/19/2007	1933	2730.3	9706.3	20	22	11	20	28.7	28.8	28.9	32.2	32.9	34.5		5.8	5.8	4.1	ST
44	10/19/2007	2254	2715.2	9706.4	20	29	16	29	28.5	28.8	28.9	30.7	33.8	35.1		5.9	5.5	4.0	ST
45	10/20/2007	22	2709.5	9703.5	20	37	18	35	28.4	28.8	28.9	30.9	34.6	35.4		5.7	5.3	4.3	ST
46	10/20/2007	208	2714.1	9700.2	20	42	20	39	28.5	29.0	28.9	31.5	34.9	35.4		5.9	5.5	4.8	ST
47	10/20/2007	559	2735.0	9711.3	20	13	6	11	28.4	28.4	28.4	32.2	32.2	32.2		5.9	6.0	6.0	ST
48	10/20/2007	731	2738.7	9706.1	20	16	9	14	28.1	28.1	28.3	30.8	30.8	31.1		5.8	5.8	5.7	ST
49	10/20/2007	934	2740.4	9655.7	20	25	13	24	27.7	28.0	28.6	31.5	33.0	34.3		6.0	5.8	4.2	ST
50	10/20/2007	1250	2729.6	9630.5	20	72	37	72	27.8	28.3	23.6	33.7	35.6	36.5		5.6	5.5	5.4	NN
51	10/20/2007	1450	2721.4	9633.0	20	83	42	82	27.8	28.4	22.0	31.3	36.2	36.5		5.8	5.2	5.1	ST
52	10/20/2007	1744	2715.9	9644.3	20	63	31	61	27.8	28.8	25.0	30.3	35.5	36.4		5.9	5.3	5.0	ST
53	10/20/2007	1909	2715.0	9641.5	20														ST
54	10/20/2007	2124	2712.7	9655.0	20	45	24	45	28.3	28.9	29.0	31.2	35.3	35.4		5.9	5.0	4.7	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
55	10/20/2007	2242	2710.6	9651.2	20	61	30	59	28.1	28.8	26.3	30.8	35.4	36.2		5.9	5.1	4.3	ST
56	10/21/2007	208	2657.2	9706.2	21	35	17	32	28.1	29.0	28.9	30.5	34.5	35.3		5.9	5.3	4.5	ST
57	10/21/2007	425	2648.9	9700.0	21	40	20	38	28.3	29.1	28.9	32.6	34.8	35.5		5.8	5.3	4.4	ST
58	10/21/2007	710	2638.4	9652.4	21	46	23	44	28.2	29.0	28.9	32.1	35.5	35.6		5.7	5.4	4.7	ST
59	10/21/2007	829	2638.1	9649.3	21														ST
60	10/21/2007	1036	2636.7	9632.8	21														ST
61	10/21/2007	1500	2644.7	9637.5	21	88	46	88	28.2	28.5	21.5	34.4	35.9	36.5		5.5	5.1	5.8	ST
62	10/21/2007	1808	2650.3	9644.5	21	74	36	71	28.1	28.7	23.3	32.3	35.6	36.5		5.8	5.5	5.1	ST
63	10/21/2007	2134	2641.6	9700.8	21	36	18	35	28.6	28.6	29.0	34.0	34.3	35.4		5.7	5.5	4.5	ST
64	10/22/2007	127	2627.2	9637.4	21	53	26	51	28.1	28.3	27.4	33.9	36.2	36.4		5.7	5.7	6.0	ST
65	10/22/2007	255	2626.8	9634.6	21														ST
66	10/22/2007	347	2627.0	9633.5	21	74	35	70	27.9	28.2	23.1	35.7	36.2	36.5		5.7	5.7	6.6	ST
67	10/22/2007	529	2627.3	9630.0	21														ST
68	10/22/2007	654	2626.9	9627.2	21	86	41	82	27.9	28.2	21.3	35.7	36.3	36.5		5.7	5.7	5.4	ST
69	10/22/2007	1118	2627.5	9705.1	21	20	10	19	28.5	28.5	28.5	35.2	35.3	35.2		5.5	5.5	5.5	ST
70	10/22/2007	1153	2627.5	9702.7	21	32	17	30	28.6	28.6	28.7	34.9	34.9	35.1		5.5	5.6	5.0	ST
71	10/22/2007	1318	2627.5	9659.3	21	35	19	34	28.6	28.6	28.9	34.9	34.9	35.6		5.6	5.6	4.4	ST
72	10/23/2007	1558	2619.6	9708.6	21	16	9	16	26.9	26.9	26.9	34.9	34.9	34.9		5.7	5.7	5.7	ST
73	10/23/2007	1713	2622.7	9711.5	21	17	8	14	26.8	26.8	26.8	34.8	34.8	34.8		5.8	5.8	5.7	ST
74	10/23/2007	1836	2628.1	9713.8	21	17	8	13	26.8	26.8	26.8	34.7	34.7	34.7		5.8	5.8	5.8	ST
75	10/23/2007	2002	2631.6	9711.2	21	18	9	16	26.9	26.9	26.9	34.6	34.6	34.6		5.9	5.9	5.9	ST
76	10/23/2007	2151	2630.8	9703.1	21	31	17	30	27.5	27.5	27.6	33.7	33.7	33.8		5.7	5.7	5.6	ST
77	10/23/2007	2358	2623.2	9712.5	21	15	8	13	26.5	26.5	26.5	34.8	34.8	34.8		5.7	5.8	5.8	ST
78	10/24/2007	103	2623.2	9707.7	21	18	10	17	27.0	27.0	27.0	34.7	34.7	34.7		5.7	5.6	5.7	ST
79	10/24/2007	323	2634.4	9705.3	21	28	13	26	27.5	27.5	27.5	33.6	33.6	34.1		5.5	5.5	5.3	ST
80	10/24/2007	434	2638.2	9707.7	21	26	13	24	27.4	27.4	27.4	33.4	33.4	33.4		5.4	5.6	5.6	ST
81	10/24/2007	527	2638.4	9710.3	21	19	9	18	27.2	27.1	27.2	33.9	33.9	34.2		5.7	5.7	5.7	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH SURVEY																				
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT				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	FL SUR	SUR	MID	MAX	GEAR
82	10/24/2007	702	2640.5	9715.3	21	17	10	17	26.9	26.9	26.9	34.2	34.2	34.2		5.7	5.7	5.7	ST
83	10/24/2007	811	2642.1	9718.5	21	16	8	15	26.5	26.5	26.3	34.3	34.3	34.4		5.8	5.8	5.7	ST
84	10/24/2007	1238	2647.9	9720.1	21	12	6	11	26.1	26.1	24.4	34.1	34.1	34.5		5.8	5.8	5.9	ST
85	10/24/2007	1331	2650.7	9719.9	21	17	9	17	26.2	26.2	25.7	33.9	33.9	34.5		5.8	5.8	5.2	ST
86	10/24/2007	1436	2653.2	9713.4	21	28	14	27	27.1	27.1	27.6	33.4	33.4	33.7		5.5	5.4	5.3	ST
87	10/24/2007	1637	2700.5	9715.3	20	24	13	24	26.7	26.7	26.8	33.6	33.6	34.0		5.8	5.8	5.7	ST
88	10/24/2007	1821	2658.0	9704.7	21	36	18	33	27.5	27.5	27.5	34.0	34.0	34.0		5.5	5.5	5.4	ST
89	10/24/2007	1932	2657.2	9700.8	21	41	20	38	27.4	27.4	27.8	34.1	34.1	34.4		5.6	5.6	5.3	ST
90	10/28/2007	28	2927.9	9430.8	18	12	5	10	22.7	22.7	22.7	30.3	30.3	30.3		6.1	6.2	6.2	ST
91	10/28/2007	249	2921.2	9423.5	18	15	8	15	22.7	22.7	23.6	31.0	31.0	31.8		6.7	6.8	5.7	ST
92	10/28/2007	404	2919.1	9422.6	18														ST
93	10/28/2007	1030	2914.4	9357.6	17	16	9	15	23.0	23.0	23.0	32.7	32.7	32.7		6.3	6.3	6.3	ST
94	10/28/2007	1406	2928.2	9428.4	18	12	7	10	22.2	22.2	22.2	30.3	30.3	30.3		6.6	6.7	6.7	ST
95	10/28/2007	1942	2852.1	9422.7	18	24	13	22	24.3	24.3	24.2	34.5	34.5	34.5		6.1	6.1	6.1	ST
96	10/28/2007	2145	2853.5	9413.4	18	24	12	23	24.4	24.5	24.5	34.3	34.3	34.4		6.0	6.0	6.0	ST
97	10/28/2007	2341	2849.5	9413.6	18	26	13	26	24.5	24.5	24.6	34.6	34.6	34.8		6.1	6.1	6.0	ST
98	10/29/2007	100	2847.0	9414.1	18														ST
99	10/29/2007	253	2849.1	9406.9	18	25	13	24	24.8	24.8	24.8	34.9	34.9	34.9		5.9	5.9	5.9	ST
100	10/29/2007	418	2851.2	9406.5	18														ST
101	10/29/2007	537	2853.0	9404.7	18														ST
102	10/29/2007	910	2854.7	9352.2	17	24	12	23	24.0	24.0	24.0	34.1	34.1	34.1		6.0	5.9	6.0	ST
103	10/29/2007	1026	2856.8	9350.7	17														ST
104	10/29/2007	1312	2845.0	9357.1	17	26	13	24	24.3	24.3	24.3	34.6	34.6	34.6		5.9	5.9	5.9	ST
105	10/29/2007	1604	2843.9	9414.5	18	28	14	25	24.8	24.8	24.8	35.3	35.3	35.3		5.9	5.9	5.9	ST
106	10/29/2007	1852	2827.9	9416.8	18	40	29	38	26.1	26.1	26.1	36.1	36.1	36.1		5.7	5.7	5.7	ST
107	10/29/2007	2009	2825.1	9415.5	18														ST
108	10/29/2007	2240	2829.7	9400.6	18	41	20	39	25.9	25.9	25.9	36.1	36.1	36.1		5.8	5.8	5.7	NN

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
109	10/30/2007	118	2838.6	9345.6	17	33	24	32	24.8	24.8	24.8	35.6	35.6	35.6		5.9	5.9	5.9	ST
110	10/30/2007	210	2839.7	9345.8	17	29	18	29	24.7	24.7	24.7	35.6	35.6	35.6		5.9	5.9	6.0	ST
111	10/30/2007	341	2844.2	9350.5	17	26	14	25	24.5	24.5	24.4	35.4	35.4	35.4		6.0	6.0	6.0	ST
112	10/30/2007	750	2834.2	9426.6	18	36	18	35	25.4	25.5	25.5	35.9	35.9	35.9		5.8	5.8	5.8	ST
113	10/30/2007	1230	2844.5	9435.8	18	25	13	24	24.1	24.1	24.2	34.7	34.7	34.8		6.0	6.1	6.0	ST
114	10/30/2007	1459	2833.2	9446.4	18	33	16	30	25.0	25.0	25.0	35.3	35.3	35.4		5.9	5.9	5.9	ST
115	10/30/2007	1647	2830.9	9442.7	18	35	17	34	25.1	25.1	25.1	35.5	35.5	35.5		5.9	5.9	5.9	ST
116	10/30/2007	2106	2758.8	9434.0	18	76	39	76	26.1	26.2	21.4	36.3	36.3	36.7		5.8	5.8	4.7	ST
117	10/30/2007	2231	2757.1	9431.1	18	113	56	111	26.3	26.3	19.2	36.5	36.5	36.5		5.7	5.7	4.0	ST
118	10/31/2007	204	2757.6	9449.1	18	90	47	90	26.0	26.2	19.5	36.4	36.4	36.5		5.7	5.7	4.0	ST
119	10/31/2007	502	2759.6	9457.4	18	82	41	81	26.0	26.3	22.0	36.3	36.5	36.5		5.7	5.8	4.8	ST
120	10/31/2007	812	2804.2	9451.2	18	63	31	60	25.6	25.7	25.3	36.2	36.2	36.3		5.8	5.6	4.7	ST
121	10/31/2007	1016	2803.5	9443.0	18	64	32	63	25.9	26.0	24.6	36.2	36.2	36.4		5.7	5.8	4.9	ST
122	10/31/2007	1702	2758.5	9354.9	17	84	42	83	26.3	26.0	20.8	36.4	36.3	36.6		5.8	5.7	4.4	ST
123	10/31/2007	2019	2810.1	9333.1	17	74	38	74	26.3	25.9	22.6	36.4	36.4	36.5		5.8	5.8	4.3	ST
124	10/31/2007	2140	2808.0	9332.0	17														ST
125	10/31/2007	2355	2802.0	9324.1	17	92	47	92	26.6	26.5	20.8	36.4	36.4	36.5		5.8	5.8	4.4	ST
126	11/1/2007	127	2759.9	9322.9	17														ST
127	11/1/2007	541	2759.7	9352.4	17	79	39	78	26.4	26.0	22.8	36.3	36.3	36.5		5.7	5.7	4.5	ST
128	11/1/2007	808	2803.9	9337.9	17	87	43	84	26.5	26.1	20.8	36.4	36.4	36.5		5.7	5.7	4.4	ST
129	11/1/2007	1041	2810.4	9324.4	17	64	32	63	25.9	25.9	25.9	36.4	36.4	36.4		5.7	5.8	5.8	ST
130	11/1/2007	1225	2807.5	9323.5	17	74	37	74	26.3	25.8	25.4	36.4	36.3	36.4		5.7	5.7	5.6	ST
131	11/1/2007	1543	2803.8	9308.4	17	92	46	89	25.9	25.9	19.9	36.4	36.4	36.5		5.8	5.8	4.1	ST
132	11/1/2007	1711	2801.6	9307.7	17														ST
133	11/1/2007	1845	2759.3	9305.5	17														ST
134	11/1/2007	2250	2827.5	9325.6	17	43	22	43	25.7		25.7	36.1		35.9		5.8		6.3	ST
135	11/2/2007	314	2842.0	9309.8	17	31	17	30	25.0	25.0	25.0	36.0	36.0	36.0		6.0	5.9	5.8	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
136	11/2/2007	619	2839.2	9327.6	17														ST
137	11/2/2007	815	2830.3	9336.3	17														ST
138	11/2/2007	1003	2820.9	9335.1	17														ST
139	11/2/2007	1126	2818.2	9335.6	17														ST
140	11/2/2007	1407	2821.1	9322.5	17														ST
141	11/2/2007	1525	2823.6	9322.5	17														ST
142	11/2/2007	1644	2826.0	9322.8	17														ST
143	11/2/2007	2241	2833.8	9306.5	17	38	19	37	25.8	25.2	25.2	36.2	36.1	36.1		6.0	5.9	5.9	ST
144	11/3/2007	53	2830.5	9300.1	17	46	33	46	25.7	25.6	25.4	36.2	36.2	36.2		5.8	5.8	5.5	NN
145	11/3/2007	401	2853.7	9253.3	16	26	15	25	24.5	24.4	24.5	35.4	35.4	35.5		6.1	5.9	5.6	ST
146	11/3/2007	548	2900.6	9259.1	16	25	14	25	24.2	23.9	24.2	35.1	35.0	35.2		6.3	5.9	5.6	NN
147	11/3/2007	707	2906.4	9301.7	17	22	12	21	24.1	23.9	23.8	35.0	34.9	34.9		6.4	6.0	5.7	ST
148	11/3/2007	958	2909.2	9325.0	17	20	10	19	23.7	23.7	23.7	34.7	34.7	34.7		6.2	6.3	6.2	ST
149	11/3/2007	1153	2859.9	9326.9	17	25	13	25	24.0	24.0	24.0	35.1	35.1	35.1		5.9	5.9	5.9	NN
150	11/3/2007	1348	2849.6	9328.0	17	24	13	24	24.4	24.4	24.4	35.1	35.1	35.1		5.9	5.9	5.8	ST
151	11/3/2007	1757	2921.5	9322.3	17	16	9	16	23.1	22.9	22.9	33.9	33.9	33.9		6.2	6.2	6.1	ST
152	11/3/2007	2130	2937.9	9300.8	17	11	5	10	21.9	21.6	21.5	30.7	30.9	31.2		7.8	7.3	5.3	ST
153	11/3/2007	2209	2936.8	9300.8	17	13	7	12	22.9	22.2	22.2	32.4	32.4	32.5		7.6	7.4	7.1	ST
154	11/4/2007	54	2940.2	9304.9	17	11	5	10	22.6	22.1	21.9	31.7	31.6	31.6		7.2	6.8	6.5	ST
155	11/4/2007	459	2932.7	9328.4	17	13	7	12	22.8	22.8	22.7	33.4	33.4	33.5		6.9	6.9	6.6	NN
156	11/4/2007	916	2931.9	9251.4	16	13	6	11	21.6	21.6	22.1	31.6	31.7	32.1		8.1	8.1	6.5	ST
157	11/4/2007	1131	2920.9	9244.3	16	18	9	17	23.0	23.0	23.0	33.6	33.6	33.6		6.8	6.7	6.7	ST
158	11/4/2007	1420	2907.4	9254.1	16	22	11	21	23.6	23.6	23.5	34.6	34.6	34.6		6.2	6.3	5.3	ST
159	11/4/2007	1533	2909.2	9252.2	16														ST
160	11/4/2007	1816	2906.7	9234.0	16	24	12	23	23.7	23.8	23.9	34.4	34.6	34.7		6.7	6.2	6.1	ST
161	11/4/2007	2146	2852.2	9237.6	16	29	16	29	24.8	24.5	24.5	35.4	35.4	35.5		6.2	6.1	5.9	ST
162	11/5/2007	102	2829.5	9228.3	16	51	26	51	25.7	25.6	25.6	36.1	36.1	36.1		5.9	5.8	5.8	NN

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT				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	FL SUR	SUR	MID	MAX	GEAR
163	11/5/2007	409	2827.4	9207.3	16	55	27	54	25.6	25.7	25.7	36.1	36.2	36.2		5.9	5.9	5.7	ST
164	11/5/2007	535	2830.1	9207.2	16														ST
165	11/5/2007	711	2833.1	9203.4	16	45	23	44	25.5	25.6	25.7	36.1	36.2	36.2		5.9	5.9	5.8	NN
166	11/5/2007	855	2827.0	9155.4	15	55	28	55	25.2	25.3	25.6	35.8	35.8	36.1		6.0	5.9	5.6	ST
167	11/5/2007	1017	2824.4	9155.6	15														ST
168	11/5/2007	1134	2821.8	9156.0	15														ST
169	11/5/2007	1412	2817.9	9209.3	16	64	32	63	25.5	25.5	25.3	36.2	36.2	36.3		5.8	5.9	5.4	ST
170	11/5/2007	1532	2820.6	9209.4	16														ST
171	11/5/2007	1653	2823.2	9210.4	16														ST
172	11/5/2007	2037	2843.8	9223.6	16	36	19	36	25.5	25.1	25.1	35.9	35.9	35.9		6.0	5.9	5.9	ST
173	11/5/2007	2223	2850.7	9220.8	16	31	16	31	24.9	24.7	25.1	35.1	35.4	35.8		6.1	5.8	5.7	ST
174	11/6/2007	9	2846.5	9223.0	16	35	17	33	24.8	24.7	25.0	35.4	35.5	35.9		6.3	5.7	5.8	ST
175	11/6/2007	340	2838.4	9201.3	16	40	20	39	25.1	25.1	25.4	35.6	35.7	35.9		6.1	5.9	5.8	ST
176	11/6/2007	455	2840.9	9200.6	16														ST
177	11/6/2007	704	2857.1	9156.9	15	20	10	19	22.4	22.7	23.1	32.8	33.1	33.4		6.9	6.6	5.2	ST
178	11/6/2007	1012	2909.4	9204.7	16	11	6	10	22.0	22.0	22.1	31.7	31.8	31.8		7.0	7.0	6.9	ST
179	11/6/2007	1233	2910.0	9221.2	16	12	6	11	22.2	22.2	23.1	31.6	31.6	33.3		7.8	7.8	4.7	ST
180	11/6/2007	1428	2906.2	9214.9	16	17	9	16	22.5	22.5	23.2	32.8	32.8	33.6		6.5	6.5	5.2	ST
181	11/6/2007	1505	2905.1	9214.9	16	21	11	20	23.0	23.2	23.8	33.4	33.7	34.5		6.6	6.1	4.8	ST
182	11/6/2007	1824	2852.5	9207.2	16	28	17	27	23.5	23.8	25.1	34.0	34.6	35.6		6.4	6.0	5.5	ST
183	11/6/2007	1946	2846.5	9208.1	16	33	17	32	24.8	24.8	25.4	35.4	35.4	35.8		6.1	6.0	5.4	ST
184	11/6/2007	2236	2845.4	9148.8	15	28	14	27	22.3	23.2	24.2	31.7	34.0	35.0		7.4	6.5	5.4	ST
185	11/7/2007	158	2843.4	9126.4	15	24	12	22	23.9	24.0	24.6	34.8	34.8	35.5		6.4	6.4	5.8	ST
186	11/7/2007	343	2837.5	9121.7	15	29	16	29	24.4	24.4	24.8	35.4	35.4	35.7		6.1	6.1	5.6	ST
187	11/7/2007	544	2829.9	9128.4	15	46	25	46	24.8	24.7	25.5	35.5	35.4	36.2		5.8	5.9	5.5	NN
188	11/7/2007	807	2839.3	9141.4	15	33	17	32	24.1	24.1	25.3	35.0	35.0	35.7		5.8	5.8	5.4	ST
189	11/7/2007	1017	2832.0	9143.0	15	42	21	42	24.8	25.0	25.5	35.7	35.9	36.2		6.0	6.0	5.7	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			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	MID	MAX	GEAR
190	11/7/2007	1131	2834.5	9142.7	15														ST
191	11/7/2007	1327	2832.2	9155.4	15	46	23	43	25.1	25.2	25.6	35.9	35.9	36.1		5.8	5.8	5.8	ST
192	11/7/2007	1444	2834.7	9155.1	15														ST
193	11/7/2007	1740	2840.1	9142.8	15	33	17	32	24.5	24.5	24.5	35.4	35.4	35.4		5.7	5.7	5.7	ST
194	11/7/2007	2054	2841.9	9119.4	15	22	11	20	23.9	23.9	23.9	34.9	34.9	34.9		5.7	5.8	5.8	ST
195	11/7/2007	2237	2839.3	9110.1	15	17	10	17	23.6	23.6	23.6	34.5	34.5	34.5		6.2	6.2	6.1	ST
196	11/8/2007	48	2847.1	9116.1	15	15	7	14	22.9	22.9	22.9	33.9	33.9	33.9		7.0	7.0	7.0	ST
197	11/8/2007	345	2839.9	9057.6	14	17	9	17	23.4	23.4	23.7	34.3	34.3	34.7		6.4	6.4	6.3	ST
198	11/8/2007	623	2853.3	9045.8	14														ST
199	11/8/2007	734	2852.7	9042.9	14														ST
200	11/8/2007	1220	2828.9	9039.1	14														ST
201	11/8/2007	1450	2840.7	9051.4	14	16													ST
202	11/8/2007	1659	2841.7	9101.1	15														ST
203	11/8/2007	1828	2844.1	9105.8	15	13	9	12	23.0	23.0	23.0	33.7	33.7	33.7		6.8	6.6	6.6	ST
204	11/8/2007	2102	2832.3	9056.6	14	30	15	28	24.4	24.4	24.4	35.7	35.8	35.9		6.1	6.0	6.0	ST
205	11/8/2007	2145	2830.6	9056.7	14	32	17	32	24.6	24.6	24.6	36.0	36.0	36.0		6.0	6.0	6.0	NN
206	11/8/2007	2328	2834.1	9055.7	14	25	14	25	23.7	24.5	24.5	34.5	35.7	35.8		6.8	6.0	6.0	ST
207	11/9/2007	4	2832.4	9056.1	14	32	17	32	24.6	24.6	24.7	36.1	36.1	36.2		6.0	6.0	5.9	ST
208	11/9/2007	303	2818.7	9109.6	15	64	33	64	25.2	25.2	25.3	36.1	36.2	36.3		5.9	5.9	5.9	ST
209	11/9/2007	521	2810.0	9109.6	15	92	47	92	25.4	25.5	20.3	36.3	36.4	36.5		5.9	5.9	4.3	ST
210	11/9/2007	645	2807.2	9109.7	15														ST
211	11/9/2007	1223	2810.5	9101.9	15	94	47	94	25.5	25.5	20.0	36.4	36.4	36.5		5.9	5.9	4.1	ST
212	11/9/2007	1436	2814.1	9050.6	14	74	37	72	25.2	25.2	24.6	36.2	36.2	36.4		5.8	5.8	5.2	ST
213	11/9/2007	1658	2808.1	9042.1	14														ST
214	11/9/2007	1827	2810.4	9040.9	14														ST
215	11/9/2007	2018	2816.3	9029.9	14	66	34	65	25.3	25.2	25.2	36.3	36.3	36.3		5.9	5.8	5.7	ST
216	11/9/2007	2223	2817.8	9022.3	14	77	38	75	25.3	25.1	21.6	36.4	36.4	36.6		5.9	5.9	4.9	ST

Table 2. Selected environmental parameters (continued)

OREGON II, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
217	11/10/2007	47	2819.7	9012.0	14	72	35	70	26.3	25.8	21.5	36.5	36.4	36.7		5.8	5.9	4.7	ST
218	11/10/2007	409	2810.7	9030.3	14	90	45	90	25.8	25.4	19.6	36.4	36.3	36.5		5.9	5.9	4.2	ST
219	11/10/2007	950	2846.5	9017.7	14	23	11	22	23.2	24.3	24.4	33.8	35.3	36.0		7.2	6.3	6.0	ST
220	11/10/2007	1200	2849.5	9004.6	14	36	18	35	24.9	24.9	24.9	36.0	36.0	36.0		5.7	5.9	5.9	ST
221	11/10/2007	1253	2848.3	9004.4	14	41	21	40	24.9	24.9	25.1	35.9	35.9	36.0		5.9	5.9	5.6	ST
222	11/10/2007	1544	2849.7	9015.0	14	20	10	19	23.5	24.6	24.4	34.2	35.3	35.7		7.5	5.8	5.7	ST
223	11/10/2007	1723	2841.5	9020.9	14	24	13	24	24.5	24.4	24.3	36.0	36.0	36.0		6.0	6.0	6.0	ST
224	11/10/2007	1853	2834.0	9029.3	14	36	18	35	25.2	25.0	25.0	36.1	36.2	36.2		5.8	6.1	6.0	ST
225	11/10/2007	2215	2852.8	9033.1	14	18	9	17	22.9	22.7	23.4	32.4	32.7	33.5		7.8	7.2	5.5	NN
226	11/11/2007	210	2855.6	9000.6	14	32	15	29	23.4	25.1	25.4	30.6	35.7	36.0		7.6	5.6	4.6	NN
227	11/11/2007	534	2903.3	8943.9	13	33	17	33	22.1	23.0	25.9	30.3	32.8	35.9		11.2	6.3	4.1	ST
228	11/11/2007	704	2903.8	8937.1	13	20	9	18	22.1	22.3	25.4	31.0	32.0	35.5		9.6	6.8	3.5	ST
229	11/11/2007	825	2859.2	8935.3	13	40	20	39	21.6	25.5	25.4	30.8	35.5	36.2		10.0	4.6	3.0	ST
230	11/11/2007	913	2857.1	8932.1	13	57	29	57	21.8	25.3	23.4	31.7	35.9	36.4		8.4	5.6	3.8	ST
231	11/11/2007	1127	2905.9	8929.8	13	13	8	13	21.2	22.5	24.4	29.3	33.0	34.2		8.2	4.6	2.2	ST
232	11/11/2007	1254	2904.9	8927.8	13	11	5	9	21.0	21.7	23.7	25.7	30.5	33.8		8.7	6.6	2.9	ST
233	11/11/2007	1352	2906.6	8930.8	13	14	7	12	20.9	21.3	22.8	23.5	32.3	33.4		8.1	5.5	3.6	ST
234	11/11/2007	1649	2905.1	8950.4	13	25	13	24	21.9	22.1	25.4	30.4	31.8	35.2		11.1	6.8	4.2	ST
235	11/11/2007	1827	2858.1	8944.8	13	46	23	45	22.2	24.9	24.9	31.2	35.6	35.9		9.4	6.2	5.8	ST
236	11/11/2007	1943	2855.3	8944.9	13														ST
237	11/11/2007	2201	2857.8	8933.5	13														NN

Table 2. Selected environmental parameters (continued)

TOMMY MUNRO, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	10/10/2007	1134	2922.2	8847.7	11		20	40	27.4	27.5	27.6	36.1	35.3	36.0		5.5	5.5	5.2	ST
2	10/10/2007	1534	2923.1	8854.9	11		9	17	27.5	27.7	27.6	35.5	35.4	35.5		5.6	5.6	5.6	ST
3	10/10/2007	1808	2927.5	8849.4	11		8	14	27.7	27.8	27.9	36.0	35.7	35.8		5.7	5.8	5.4	ST
4	10/10/2007	2047	2933.0	8838.6	11		11	21	27.6	28.0	27.9	36.1	36.1	36.1		5.7	5.8	5.8	ST
5	10/10/2007	2209	2932.1	8830.8	11		23	45	27.8	27.8	27.8	36.3	36.2	36.3		5.8	5.8	5.6	ST
6	10/11/2007	131	2919.5	8851.7	11		18	36	27.6	27.7	27.7	36.1	35.9	36.0		5.6	5.5	5.5	ST
7	10/11/2007	433	2922.5	8848.8	11		15	30	27.4	27.6	27.5	36.0	35.9	36.0		5.6	5.6	5.6	ST
8	10/11/2007	619	2926.9	8845.2	11		11	22	27.2	27.4	27.6	35.9	35.8	36.1		5.8	5.8	5.7	ST
9	10/11/2007	757	2927.2	8841.7	11		16	32	27.2	27.5	27.5	36.2	36.1	36.2		5.7	5.7	5.8	ST
10	10/11/2007	918	2926.5	8840.8	11		19	37	27.0	27.5	27.5	36.3	35.5	36.2		5.8	5.7	5.6	ST
11	10/11/2007	721	2930.0	8830.1	11		25	49	27.5	27.7	27.5	36.4	36.3	36.5		5.5	5.6	5.5	PN
12	10/11/2007	1535	2943.6	8827.2	11		17	34	27.4	27.5	27.5	36.2	36.2	36.3		5.8	5.6	5.6	ST
13	10/11/2007	1811	2952.2	8824.0	11		15	29	27.4	27.6	27.8	36.2	36.2	35.2		5.7	5.7	5.7	ST
14	10/11/2007	2017	2958.2	8832.4	11		13	25	27.3	27.5	27.5	36.0	35.8	35.8		5.8	5.7	5.7	ST
15	10/11/2007	1703	2959.8	8830.0	11		12	24	27.3	27.5	27.5	36.1	36.0	36.0		6.1	5.8	5.8	PN
16	10/11/2007	2350	3004.6	8829.5	11		9	18	27.1	27.2	27.2	36.0	36.0	36.4		5.9	5.9	5.6	ST
17	10/12/2007	245	2947.4	8824.1	11		17	34	27.3	27.4	27.4	36.4	36.1	36.4		5.6	5.7	5.5	ST
18	10/12/2007	459	2944.8	8830.4	11		16	32	27.2	27.4	27.2	36.2	36.1	36.2		5.8	5.7	5.8	ST
19	10/12/2007	659	2938.1	8835.2	11		10	20	26.4	27.0	27.1	36.1	35.9	36.2		5.8	5.7	5.8	ST
20	10/12/2007	859	2934.4	8835.3	11		13	26	27.0	27.1	27.0	36.3	36.2	36.2		5.7	5.7	5.8	ST
21	10/12/2007	1305	2947.1	8850.7	11		3	5	25.5	25.6	25.6	32.5	32.5	32.5		6.2	6.0	6.1	ST
22	10/13/2007	11	2942.2	8847.0	11		6	12	26.5	26.6	26.7	35.0	35.0	35.1		6.0	6.0	5.8	ST
23	10/13/2007	215	2939.6	8850.8	11		5	10	26.5	26.6	26.5	35.0	34.8	34.9		6.0	5.9	5.8	ST
24	10/13/2007	516	2957.8	8838.6	11		10	19	26.7	26.9	26.8	35.7	35.7	35.8		5.6	5.8	5.8	ST
25	10/13/2007	701	2958.7	8832.9	11		13	25	26.6	27.2	26.8	36.1	35.6	35.8		5.9	5.8	6.0	ST
26	10/13/2007	944	3003.3	8849.6	11		4	8	25.6	26.1	25.9	35.1	34.9	35.0		6.1	6.0	6.1	ST
27	10/13/2007	1146	3008.2	8841.3	11		7	14	25.7	26.1	26.0	35.4	35.2	35.3		5.8	5.7	5.8	ST

Table 2. Selected environmental parameters (continued)

TOMMY MUNRO, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
35028	10/10/2007	2141	2845.2	9119.3	15	15	8	15	28.1	28.1	28.0	33.7	33.7	33.8	0.605	6.1	6.0	6.5	ST
35029	10/11/2007	817	2845.3	9119.3	15	14	7	14	27.9	27.9	27.9	33.5	33.5	33.5	0.809	5.6	5.6	6.0	ST
35030	10/11/2007	1130	2900.0	9100.1	15	7	3	7	27.6	27.6	27.6	29.7	29.7	29.8	1.523	6.2	6.0	6.0	PN

Table 2. Selected environmental parameters (continued)

A.E. VERRILL, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
1	10/9/2007	1007	3005.5	8811.0	11														ST
2	10/9/2007	1308	3008.8	8828.3	11														ST
3	10/9/2007	1423	3010.7	8823.1	11														ST
4	10/9/2007	1618	3014.0	8810.0	11														ST
5	10/9/2007	1833	3014.4	8813.0	11														ST
6	10/9/2007	1927	3009.6	8812.5	11														ST
7	10/9/2007	2023	3009.2	8810.2	11														ST
8	11/6/2007	1112	3000.2	8817.5	11														ST
9	11/6/2007	1223	2959.5	8821.3	11														ST
10	11/6/2007	1501	2950.0	8812.5	11														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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
35001	10/8/2007	850	2900.0	9030.3	14	10	5	10	27.9	27.9	27.9	30.7	30.7	30.7	1.364	8.4	6.2	4.0	PN
35002	10/8/2007	1249	2900.0	8960.0	13	23	11	23	28.2	28.1	28.2	32.7	33.3	34.0	2.176	5.6	4.8	5.9	PN
35003	10/8/2007	1523	2906.2	9008.0	14	9	5	9	28.4	28.3	28.1	30.4	30.4	33.1	3.157	6.4	5.7	5.6	ST
35004	10/8/2007	1703	2907.3	9003.9	14	11	6	11	28.4	28.1	28.4	31.5	31.7	32.5	2.607	6.4	6.4	6.5	ST
35005	10/8/2007	1934	2906.2	9007.7	14	7	3	7	28.2	28.2	27.9	28.3	28.3	29.6	1.399	5.0	5.5	5.2	ST
35006	10/8/2007	2116	2907.3	9003.7	14	9	5	9	28.1	28.2	28.2	30.2	30.7	31.6	1.155	6.5	6.4	6.5	ST
35007	10/8/2007	2314	2903.8	8953.0	13	23	13	23	27.9	28.1	28.1	32.2	34.4	35.4	1.368	6.2	6.1	4.9	ST
35008	10/9/2007	113	2905.2	8941.6	13	24	13	24	27.9	28.0	28.2	30.4	31.7	35.2	2.242	6.3	6.0	4.0	ST
35009	10/9/2007	230	2901.7	8937.7	13	25	11	25	27.8	27.9	28.2	28.5	31.1	35.1	1.760	6.1	5.2	4.1	ST
35010	10/9/2007	655	2860.0	8930.0	13	15	10	15	27.6	27.9	28.1	24.9	30.3	34.8	2.177	5.2	4.1	2.8	PN
35011	10/9/2007	845	2901.9	8938.4	13	27	16	27	27.7	28.1	28.2	28.5	31.9	35.2	2.153	5.0	4.7	2.9	ST
35012	10/9/2007	1000	2904.9	8941.5	13	22	11	22	27.7	27.9	28.2	30.0	31.4	35.1	2.365	1.6	5.4	3.5	ST
35013	10/9/2007	1145	2903.7	8952.9	13	25	11	25	27.9	28.0	28.1	34.5	35.0	35.7	1.046	5.8	2.1	0.7	ST
35014	10/9/2007	1658	2830.0	9030.1	14	38	19	38				34.9	35.9	36.2	0.735	4.9	4.8	5.3	PN
35015	10/9/2007	1940	2835.4	9048.7	14	18	10	18	28.2	28.2	28.3	31.6	33.4	35.7	0.444	5.9	5.9	5.2	ST
35016	10/9/2007	2157	2838.6	9102.3	15	16	9	16	28.3	28.2	28.2	33.5	33.8	33.9	0.591	6.3	6.0	6.0	ST
35017	10/9/2007	2356	2840.6	9059.9	14	13	5	13	28.2	28.2	28.3	33.2	33.2	34.0	0.352	6.0	5.9	6.0	ST
35018	10/10/2007	231	2830.1	9109.1	15	34	18	34	28.2	28.3	28.2	34.3	34.6	35.4	0.133	5.7	6.0	5.6	ST
35019	10/10/2007	451	2831.2	9057.1	14	28	15	28	28.0	28.2	28.3	33.0	34.8	36.0	0.222	5.8	4.6	5.9	ST
35020	10/10/2007	659	2830.0	9100.1	15	34	17	34	28.0	28.3	28.2	33.4	34.7	36.1	0.393	4.7	4.9	1.8	PN
35021	10/10/2007	822	2831.0	9057.3	14	30	15	30	28.0	28.3	28.3	33.3	35.1	36.0	0.408	3.2	1.2	0.7	ST
35022	10/10/2007	1016	2834.8	9049.4	14	19	10	19	28.0	28.1	28.3	32.0	33.1	35.8	0.724	5.0	4.6	4.8	ST
35023	10/10/2007	1154	2840.5	9100.2	15	14	7	14	28.0	27.9	28.3	32.4	32.4	33.9	0.636	5.6	5.2	4.9	ST
35024	10/10/2007	1249	2838.7	9102.3	15	15	6	15	28.0	28.0	28.2	32.4	32.6	33.9	0.556	6.2	6.0	5.6	ST
35025	10/10/2007	1443	2830.3	9109.4	15	35	17	35	28.3	28.2	28.2	33.8	34.7	35.4	0.552	5.7	5.2	5.2	ST
35026	10/10/2007	1657	2836.7	9126.5	15	32	14	32	28.4	28.2	28.0	34.5	34.8	36.1	0.634	5.8	6.0	5.4	ST
35027	10/10/2007	1950	2836.8	9126.3	15	30	14	30	28.0	28.2	28.3	34.5	34.7	36.1	0.763	6.3	6.2	5.8	ST

Table 2. Selected environmental parameters (continued)

PELICAN, FALL SHRIMP/GOUNDFISH SURVEY																			
							SAMPLE DEPTHS (M)		TEMPERATURE, C			SALINITY, PPT			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	MID	MAX	GEAR
35028	10/10/2007	2141	2845.2	9119.3	15	15	8	15	28.1	28.1	28.0	33.7	33.7	33.8	0.605	6.1	6.0	6.5	ST
35029	10/11/2007	817	2845.3	9119.3	15	14	7	14	27.9	27.9	27.9	33.5	33.5	33.5	0.809	5.6	5.6	6.0	ST
35030	10/11/2007	1130	2900.0	9100.1	15	7	3	7	27.6	27.6	27.6	29.7	29.7	29.8	1.523	6.2	6.0	6.0	PN
35001	12/4/2007	715	2860.0	9030.1	14	9	5	9	20.4	20.5	20.5	33.4	33.4	33.4	1.445	7.1	7.1	7.1	PN
35002	12/4/2007	1040	2860.0	9100.4	15	5	3	5	18.5	18.4	18.4	32.0	32.0	32.0	3.774	7.6	7.6	7.5	PN
35003	12/4/2007	1410	2900.4	9130.0	15	9	5	9	17.8	17.8	18.0	32.4	32.5	32.7	3.125	8.2	7.7	7.3	PN
35004	12/4/2007	1605	2852.4	9122.5	15	11	6	11	19.6	19.2	19.1	33.5	33.5	33.5	2.855	8.3	7.6	7.5	ST
35005	12/4/2007	1818	2852.4	9122.4	15	11	6	11	19.3	19.2	19.1	33.5	33.5	33.5	1.904	8.1	7.6	7.4	ST
35006	12/4/2007	2001	2847.4	9118.7	15	14	7	14	20.7	20.7	20.6	33.9	33.9	33.9	1.878	7.4	7.3	7.0	ST
35007	12/4/2007	2135	2842.8	9115.4	15	15	7	15	20.6	20.6	21.2	33.7	33.7	34.2	2.332	7.2	7.2	6.7	ST
35008	12/4/2007	2347	2833.2	9116.1	15	33	17	33	21.4	21.8	22.0	35.1	35.4	35.6	0.567	7.1	7.1	6.6	ST
35009	12/5/2007	147	2832.8	9108.9	15	32	15	32	21.9	21.9	22.2	35.6	35.6	35.8	0.663	6.8	6.9	6.8	ST
35010	12/5/2007	750	2846.6	9118.6	15	14	7	14	20.4	20.4	20.4	33.9	33.9	33.9	1.579	7.1	7.2	7.2	ST
35011	12/5/2007	903	2842.9	9115.5	15	16	8	16	20.7	20.7	21.1	33.9	33.9	34.2	1.446	7.2	7.1	6.6	ST
35012	12/5/2007	1052	2832.8	9115.9	15	33	17	33	21.3	21.7	21.8	35.1	35.5	35.6	0.874	7.1	7.0	6.8	ST
35013	12/5/2007	1224	2831.4	9109.6	15	32	18	32	21.5	21.8	22.5	35.3	35.6	36.1	1.625	7.5	6.9	6.6	ST
35014	12/5/2007	1348	2830.0	9100.0	15	32	17	32	22.9	22.7	22.6	36.2	36.2	36.2	0.630	6.9	6.8	6.8	PN
35015	12/5/2007	1559	2834.3	9046.3	14	21	11	21	22.9	22.9	22.8	35.9	35.9	35.9	1.031	7.4	7.3	7.2	ST
35016	12/5/2007	1815	2834.4	9046.3	14	19	1	19	22.8	22.8	22.8	35.9	35.9	35.9	0.772	7.4	7.4	7.2	ST
35017	12/5/2007	1955	2833.6	9037.3	14	26	14	26	23.2	23.2	23.3	35.9	35.9	36.1	1.411	7.0	7.0	6.5	ST
35018	12/5/2007	2109	2831.1	9032.4	14	33	17	33	22.9	23.2	23.1	35.7	36.3	36.3	0.999	6.9	6.8	6.7	ST
35019	12/5/2007	2245	2836.3	9030.8	14	23	11	23	22.7	22.8	23.4	35.5	35.5	35.9	1.597	7.4	7.3	6.4	ST
35020	12/6/2007	632	2830.0	9030.1	14	37	20	37	23.0	23.3	23.1	36.2	36.3	36.3	1.363	6.9	6.7	6.6	PN
35021	12/6/2007	805	2830.9	9032.8	14	33	17	33	22.8	22.9	23.2	35.7	35.8	36.3	1.821	6.8	6.8	6.5	ST
35022	12/6/2007	951	2833.3	9037.7	14	25	12	25	22.7	22.7	23.1	35.6	35.6	35.9	0.838	7.0	6.9	6.4	ST
35023	12/6/2007	1134	2836.5	9031.1	14	23	13	23	22.5	22.5	22.9	35.3	35.3	35.6	2.349	7.1	7.0	6.4	ST
35024	12/6/2007	1614	2859.9	9000.2	14	24	12	24	21.2	21.4	23.4	32.9	33.2	35.1	2.871	7.7	7.1	5.7	PN

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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
35025	12/6/2007	1853	2904.4	8945.0	13	27	14	27	20.9	21.0	24.4	32.9	32.9	36.2	0.956	7.3	7.3	4.7	ST
35026	12/6/2007	2033	2902.1	8936.9	13	23	11	23	22.6	24.0	24.4	30.5	30.2	27.7	3.353	3.4	3.7	3.5	ST
35027	12/6/2007	2143	2900.1	8932.3	13	16	9	16	21.4	20.9	23.6	30.6	32.1	35.4	1.932	7.0	7.3	4.8	ST
35028	12/7/2007	635	2860.0	8929.9	13	13	7	13	20.7	20.8	23.5	28.6	31.3	35.5	1.905	7.3	7.2	4.6	PN
35029	12/7/2007	745	2900.3	8932.5	13	16	8	16	20.9	20.7	23.8	30.2	31.8	35.8	2.179	7.2	7.3	4.8	ST
35030	12/7/2007	859	2902.3	8937.4	13	21	11	21	20.7	21.7	24.2	32.6	33.9	36.4	1.799	7.4	6.0	5.1	ST
35031	12/7/2007	1015	2904.4	8944.8	13	27	15	27	21.1	20.9	24.3	32.9	32.9	36.3	0.907	7.3	7.2	4.6	ST

Table 2. Selected environmental parameters (continued)

MATAGORDA BAY, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
32001	11/1/2007	957	2824.4	9615.7	19	12	6	12	23.0	23.0	23.0	28.0	28.0	28.0		6.0	5.0	6.0	ST
32002	11/1/2007	1028	2824.6	9614.4	19	13	7	13	23.0	23.0	23.0	29.0	29.0	29.0		6.0	5.0	5.0	ST
32003	11/1/2007	1112	2827.0	9616.4	19	6	5	6	23.0	23.0	22.0	28.0	28.0	28.0		5.0	5.0	5.0	ST
32004	11/1/2007	1201	2826.6	9610.4	19	13	7	13	23.0	23.0	23.0	29.0	29.0	29.0		5.0	5.0	5.0	ST
32005	11/1/2007	1247	2829.5	9610.6	19	8	4	8	22.0	22.0	22.0	28.0	28.0	28.0		6.0	5.0	5.0	ST
32006	11/1/2007	1326	2830.6	9607.4	19	9	5	9	22.0	22.0	22.0	28.0	28.0	28.0		6.0	6.0	5.0	ST
32007	11/1/2007	1423	2824.4	9603.7	19	18	9	18	23.0	23.0	23.0	30.0	30.0	30.0		5.0	5.0	5.0	ST
32008	11/1/2007	1518	2822.5	9606.4	19	18	9	18	24.0	24.0	24.0	31.0	31.0	31.0		5.0	5.0	5.0	ST
32009	11/19/2007	930	2823.4	9614.6	19	11	6	11	22.0	22.0	22.0	30.0	30.0	31.0		6.0	7.0	7.0	ST
32010	11/19/2007	1018	2821.6	9618.4	19	13	7	13	22.0	22.0	22.0	30.0	30.0	31.0		6.0	6.0	6.0	ST
32011	11/19/2007	1055	2819.4	9620.6	19	14	7	14	23.0	22.0	23.0	31.0	31.0	32.0		7.0	6.0	6.0	ST
32012	11/19/2007	1128	2819.7	9622.5	19	11	6	11	22.0	22.0	22.0	30.0	30.0	30.0		7.0	6.0	6.0	ST
32013	11/19/2007	1228	2813.6	9628.7	19	14	7	14	23.0	23.0	23.0	31.0	31.0	31.0		6.0	6.0	6.0	ST
32014	11/19/2007	1150	2813.7	9625.6	19	18	9	18	23.0	23.0	23.0	31.0	31.0	32.0		6.0	7.0	5.0	ST
32015	11/19/2007	1426	2815.4	9616.6	19	21	11	21	23.0	23.0	23.0	31.0	31.0	31.0		6.0	6.0	6.0	ST
32016	11/19/2007	1508	2817.6	9614.5	19	20	10	20	23.0	23.0	23.0	31.0	31.0	32.0		6.0	6.0	6.0	ST

Table 2. Selected environmental parameters (continued)

SABINE, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
40001	11/1/2007	843	2936.3	9351.3	17	7	4	7	21.0	21.0	22.0	28.0	28.0	28.0		7.0	7.0	6.0	ST
40002	11/1/2007	919	2936.5	9352.9	17	6	3	6	21.0	21.0	21.0	28.0	28.0	28.0		7.0	6.0	6.0	ST
40003	11/1/2007	1025	2938.4	9402.1	17	6	3	6	21.0	21.0	21.0	28.0	28.0	28.0		7.0	7.0	7.0	ST
40004	11/1/2007	1109	2934.4	9400.8	17	9	4	9	22.0	22.0	22.0	29.0	29.0	29.0		7.0	6.0	5.0	ST
40005	11/1/2007	1140	2935.5	9359.1	17	8	4	8	22.0	22.0	22.0	28.0	28.0	28.0		6.0	6.0	5.0	ST
40006	11/1/2007	1219	2934.6	9357.8	17	9	4	9	22.0	22.0	22.0	28.0	28.0	30.0		6.0	6.0	5.0	ST
40007	11/1/2007	1244	2933.5	9356.2	17	10	5	10	22.0	21.0	22.0	28.0	28.0	31.0		7.0	6.0	6.0	ST
40008	11/1/2007	1350	2932.5	9356.8	17	11	6	11	22.0	21.0	22.0	28.0	28.0	31.0		7.0	6.0	6.0	ST
40009	11/28/2007	834	2940.6	9346.9	17	6	3	6	16.0	16.0	16.0	30.0	30.0	30.0		7.0	7.0	7.0	ST
40010	11/28/2007	934	2936.7	9339.2	17	10	5	10	17.0	17.0	17.0	35.0	32.0	32.0		6.0	6.0	6.0	ST
40011	11/28/2007	1023	2935.6	9345.8	17	10	5	10	17.0	17.0	17.0	31.0	31.0	31.0		6.0	6.0	6.0	ST
40012	11/28/2007	1058	2936.5	9347.2	17	9	5	9	17.0	17.0	17.0	31.0	31.0	31.0		6.0	6.0	6.0	ST
40013	11/28/2007	1130	2937.1	9349.7	17	7	3	7	16.0	16.0	16.0	30.0	30.0	30.0		6.0	7.0	6.0	ST
40014	11/28/2007	1213	2935.5	9350.3	17	8	4	8	17.0	17.0	17.0	28.0	28.0	29.0		7.0	7.0	7.0	ST
40015	11/28/2007	1246	2934.5	9351.9	17	9	5	9	17.0	17.0	17.0	31.0	31.0	31.0		6.0	6.0	6.0	ST
40016	11/28/2007	1420	2931.4	9350.3	17	12	6	12	18.0	18.0	18.0	32.0	32.0	32.0		6.0	6.0	6.0	ST

Table 2. Selected environmental parameters (continued)

SAN JACINTO, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
69001	11/8/2007	1134	2920.9	9438.3	18	9	5	9	21.0	21.0	21.0	27.0	27.0	28.0		7.0	6.0	6.0	ST
69002	11/8/2007	1221	2921.3	9432.8	18	11	6	11	21.0	21.0	22.0	29.0	29.0	29.0		7.0	7.0	6.0	ST
69003	11/8/2007	1300	2922.9	9429.3	18	11	6	11	22.0	22.0	22.0	29.0	29.0	29.0		7.0	7.0	7.0	ST
69004	11/8/2007	1339	2925.4	9431.9	18	10	5	10	21.0	21.0	21.0	28.0	28.0	28.0		7.0	7.0	6.0	ST
69005	11/8/2007	1409	2928.2	9431.9	18	7	3	7	21.0	21.0	21.0	28.0	28.0	28.0		7.0	7.0	6.0	ST
69006	11/8/2007	1434	2927.9	9432.3	18	7	3	7	21.0	21.0	21.0	28.0	28.0	28.0		7.0	7.0	6.0	ST
69007	11/8/2007	1503	2926.9	9435.5	18	6	3	6	21.0	21.0	21.0	28.0	28.0	28.0		6.0	6.0	6.0	ST
69008	11/8/2007	1538	2925.3	9439.9	18	4	2	4	22.0	21.0	21.0	28.0	28.0	28.0		6.0	6.0	6.0	ST
69009	11/27/2007	1205	2918.8	9436.4	18	11	5	11	16.0	16.0	16.0	27.0	27.0	28.0		8.0	8.0	8.0	ST
69010	11/27/2007	1241	2917.1	9436.9	18	12	6	12	17.0	17.0	17.0	28.0	28.0	29.0		8.0	8.0	7.0	ST
69011	11/27/2007	1323	2916.6	9442.5	18	8	3	8	17.0	17.0	17.0	27.0	27.0	29.0		8.0	7.0	7.0	ST
69012	11/27/2007	1355	2915.2	9445.0	18	8	4	8	17.0	17.0	17.0	28.0	28.0	28.0		8.0	8.0	8.0	ST
69013	11/27/2007	1437	2911.7	9446.2	18	12	6	12	17.0	17.0	18.0	29.0	29.0	29.0		8.0	8.0	7.0	ST
69014	11/27/2007	1516	2908.1	9448.0	18	15	7	15	17.0	17.0	17.0	28.0	28.0	28.0		8.0	8.0	8.0	ST
69015	11/27/2007	1635	2912.1	9449.8	18	10	5	10	17.0	17.0	17.0	28.0	29.0	29.0		8.0	8.0	7.0	ST
69016	11/27/2007	1713	2912.2	9454.0	18	8	4	8	17.0	17.0	17.0	29.0	29.0	29.0		7.0	7.0	7.0	ST

Table 2. Selected environmental parameters (continued)

NUECES, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
67001	11/1/2007	910	2746.7	9702.3	20	12	6	12	23.0	23.0	23.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
67002	11/1/2007	953	2742.0	9703.5	20	15	8	15	23.0	23.0	24.0	31.0	32.0	32.0		7.0	7.0	7.0	ST
67003	11/1/2007	1026	2738.8	9703.6	20	18	9	18	24.0	24.0	24.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
67004	11/1/2007	1227	2739.2	9701.4	20	66	33	66	24.0	24.0	24.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
67005	11/1/2007	1258	2740.9	9701.1	20	19	10	19	24.0	24.0	24.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
67006	11/1/2007	1331	2740.3	9659.3	20	21	10	21	24.0	24.0	24.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
67007	11/1/2007	1405	2742.9	9657.3	20	21	10	21	24.0	24.0	24.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
67008	11/1/2007	1592	2748.4	9655.4	20	19	9	19	24.0	24.0	24.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
67009	11/19/2007	806	2749.3	9658.4	20	15	7	15	23.0	23.0	23.0	31.0	32.0	32.0		6.0	6.0	5.0	ST
67010	11/19/2007	848	2753.7	9659.4	20	9	5	9	23.0	23.0	23.0	33.0	33.0	33.0		8.0	7.0	7.0	ST
67011	11/19/2007	920	2753.2	9657.5	20	12	6	12	23.0	23.0	23.0	33.0	33.0	33.0		7.0	7.0	7.0	ST
67012	11/19/2007	957	2756.8	9657.3	20	7	4	7	23.0	23.0	23.0	33.0	34.0	33.0		8.0	8.0	8.0	ST
67013	11/19/2007	1028	2758.2	9656.4	20	4	2	4	23.0	23.0	23.0	33.0	33.0	33.0		8.0	8.0	8.0	ST
67014	11/19/2007	1106	2757.8	9651.4	20	13	7	13	23.0	23.0	23.0	33.0	33.0	33.0		8.0	8.0	9.0	ST
67015	11/19/2007	1222	2752.4	9649.6	20	20	10	20	24.0	23.0	23.0	33.0	33.0	33.0		8.0	8.0	8.0	ST
67016	11/19/2007	1556	2750.8	9651.7	20	20	10	20	24.0	23.0	23.0	34.0	34.0	34.0		8.0	8.0	8.0	ST

Table 2. Selected environmental parameters (continued)

R.J. KEMP, FALL SHRIMP/GOUNDFISH 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	FL SUR	DISSOLVED OXYGEN, PPM SUR	DISSOLVED OXYGEN, PPM MID	DISSOLVED OXYGEN, PPM MAX	GEAR
31001	11/2/2007	855	2610.3	9700.5	21	27	13	27	25.0	25.0	25.0	33.0	33.0	33.0		6.0	6.0	6.0	ST
31002	11/2/2007	949	2614.7	9703.5	21	19	10	19	25.0	25.0	25.0	33.0	33.0	33.0		6.0	7.0	7.0	ST
31003	11/2/2007	1040	2618.3	9706.6	21	18	9	18	24.0	24.0	24.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
31004	11/2/2007	1121	2619.7	9709.5	21	16	8	16	24.0	24.0	24.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
31005	11/2/2007	1152	2620.3	9710.6	21	14	7	14	24.0	24.0	24.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
31006	11/2/2007	1242	2616.7	9707.4	21	17	9	17	25.0	25.0	25.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
31007	11/2/2007	1340	2613.2	9707.5	21	17	8	17	25.0	25.0	25.0	32.0	32.0	32.0		7.0	7.0	7.0	ST
31008	11/2/2007	1400	2613.9	9710.5	21	6	3	6	25.0	25.0	25.0	33.0	33.0	33.0		7.0	7.0	7.0	ST
31009	11/19/2007	856	2600.3	9706.4	21	16	8	16	25.0	25.0	24.0	35.0	35.0	35.0		6.0	6.0	6.0	ST
31010	11/19/2007	927	2600.7	9705.4	21	19	9	19	35.0	25.0	25.0	35.0	35.0	36.0		6.0	6.0	6.0	ST
31011	11/19/2007	1014	2558.3	9700.4	21	26	13	26	25.0	25.0	25.0	35.0	35.0	35.0		6.0	6.0	6.0	ST
31012	11/19/2007	1098	2601.8	9700.5	21	26	13	26	25.0	25.0	25.0	35.0	35.0	35.0		6.0	6.0	6.0	ST
31013	11/19/2007	1194	2608.3	9700.4	21	26	13	26	25.0	25.0	25.0	35.0	35.0	35.0		6.0	6.0	6.0	ST
31014	11/19/2007	1247	2605.7	9705.5	21	18	9	18	25.0	25.0	25.0	35.0	35.0	35.0		6.0	6.0	6.0	ST
31015	11/19/2007	1328	2603.4	9703.5	21	22	11	22	25.0	25.0	25.0	36.0	36.0	36.0		6.0	6.0	6.0	ST
31016	11/19/2007	1400	2603.8	9705.5	21	18	9	18	25.0	25.0	24.0	35.0	35.0	35.0		6.0	6.0	6.0	ST

Table 3. 2007 Summer Shrimp/Groundfish Survey species composition list, 278 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	177000	5265.0	167	60.1
Peprilus burti	gulf butterfish	57756	1610.0	170	61.2
Stenotomus caprinus	longspine porgy	46905	1421.0	207	74.5
Trachurus lathami	rough scad	31947	488.8	147	52.9
Prionotus longispinosus	bigeye searobin	12726	113.7	121	43.5
Chloroscombrus chrysurus	Atlantic bumper	12213	452.2	94	33.8
Trichiurus lepturus	Atlantic cutlassfish	9189	373.6	129	46.4
Cynoscion nothus	silver seatrout	8461	334.2	108	38.8
Upeneus parvus	dwarf goatfish	5303	116.4	115	41.4
Synodus foetens	inshore lizardfish	5059	543.5	190	68.3
Leiostomus xanthurus	spot	5047	382.0	105	37.8
Stellifer lanceolatus	star drum	4854	70.7	25	9.0
Anchoa hepsetus	striped anchovy	4302	75.1	74	26.6
Serranus atrobranchus	blackear bass	3691	43.7	91	32.7
Saurida brasiliensis	largescale lizardfish	3455	22.2	112	40.3
Larimus fasciatus	banded drum	3330	109.5	51	18.3
Cynoscion arenarius	sand seatrout	3209	158.4	99	35.6
Centropristis philadelphica	rock sea bass	2271	92.1	129	46.4
Prionotus stearnsi	shortwing searobin	1894	16.9	69	24.8
Syacium gunteri	shoal flounder	1647	35.2	105	37.8
Prionotus paralatus	Mexican searobin	1608	25.4	61	21.9
Pristipomoides aquilonaris	wenchman	1598	115.8	66	23.7
Polydactylus octonemus	Atlantic threadfin	1589	57.0	38	13.7
Lagodon rhomboides	pinfish	1530	89.2	113	40.6
Anchoa mitchilli	bay anchovy	1005	1.3	18	6.5
Harengula jaguana	scaled sardine	1005	42.7	58	20.9
Lutjanus campechanus	red snapper	780	83.6	119	42.8

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Brevoortia patronus	gulf menhaden	750	48.6	18	6.5
Halieutichthys aculeatus	pancake batfish	741	5.3	59	21.2
Trichopsetta ventralis	sash flounder	733	16.6	43	15.5
Prionotus tribulus	bighead searobin	686	11.8	30	10.8
Diplectrum bivittatum	dwarf sand perch	680	16.8	56	20.1
Selene setapinnis	Atlantic moonfish	651	49.4	35	12.6
Prionotus roseus	bluespotted searobin	650	48.3	25	9.0
Lepophidium brevibarbe	blackedge cusk-eel	605	20.9	62	22.3
Steindachneria argentea	luminous hake	581	4.2	7	2.5
Selene vomer	lookdown	562	43.1	50	18.0
Porichthys plectrodon	Atlantic midshipman	546	9.5	60	21.6
Syacium micrurum	channel flounder	546	11.2	30	10.8
Eucinostomus gula	silver jenny	521	28.0	48	17.3
Etropus crossotus	fringed flounder	508	7.5	48	17.3
Etrumeus teres	round herring	508	3.7	15	5.4
Lutjanus synagris	lane snapper	487	45.5	62	22.3
Sphoeroides parvus	least puffer	469	3.6	41	14.7
Urophycis floridana	southern hake	450	24.7	44	15.8
Citharichthys spilopterus	bay whiff	405	6.0	31	11.2
Peprilus triacanthus	butterfish	400	10.0	10	3.6
Arius felis	hardhead catfish	395	38.6	17	6.1
Synodus poeyi	offshore lizardfish	395	2.6	50	18.0
Mullus auratus	red goatfish	374	27.8	22	7.9
Cyclopsetta chittendeni	Mexican flounder	364	42.9	72	25.9
Scorpaena calcarata	smoothhead scorpionfish	321	4.1	20	7.2
Menticirrhus americanus	southern kingfish	317	61.9	38	13.7
Opisthonema oglinum	Atlantic thread herring	317	19.1	29	10.4
Lagocephalus laevigatus	smooth puffer	310	11.3	57	20.5
Prionotus rubio	blackwing searobin	299	11.7	33	11.9
Scomberomorus maculatus	Spanish mackerel	250	11.2	23	8.3

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Monacanthus hispidus	planehead filefish	244	4.1	35	12.6
Sphyraena guachancho	guaguanche	232	32.2	35	12.6
Scomberomorus cavalla	king mackerel	229	11.4	21	7.6
Urophycis cirrata	gulf hake	227	3.4	24	8.6
Cynoscion spp.	seatrouts	210	0.3	6	2.2
Ogcocephalus declivirostris	slantbrow batfish	205	5.3	32	11.5
Symphurus plagiusa	blackcheek tonguefish	166	3.3	30	10.8
Sardinella aurita	Spanish sardine	165	6.8	23	8.3
Engyophrys senta	spiny flounder	161	2.0	21	7.6
Peprilus alepidotus	harvestfish	148	4.5	19	6.8
Bollmannia communis	ragged goby	133	0.6	25	9.0
Syacium papillosum	dusky flounder	114	8.5	6	2.2
Peristedion gracile	slender searobin	110	2.6	8	2.9
Anchoa lyolepis	dusky anchovy	107	0.9	4	1.4
Microgobius gulosus	clown goby	103	0.3	5	1.8
Hoplunnis macrurus	freckled pike-conger	101	1.3	21	7.6
Bairdiella chrysoura	silver perch	92	4.9	8	2.9
Oligoplites saurus	leatherjack	90	1.4	2	0.7
Raja texana	roundel skate	89	35.6	38	13.7
Gymnachirus texae	fringed sole	87	1.7	23	8.3
Ancylopsetta dilecta	three-eye flounder	77	2.1	21	7.6
Diplectrum formosum	sand perch	73	7.0	7	2.5
Bellator militaris	horned searobin	71	0.6	11	4.0
Haemulon aurolineatum	tomtate	71	3.7	9	3.2
Kathetostoma albigutta	lancer stargazer	70	2.0	18	6.5
Antennarius radiosus	singlespot frogfish	68	0.6	20	7.2
Hildebrandia flava	yellow conger	68	3.9	15	5.4
Balistes capriscus	gray triggerfish	64	13.0	26	9.4
Ancylopsetta quadrocellata	ocellated flounder	61	6.6	19	6.8
Decapterus punctatus	round scad	61	2.0	8	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
Caulolatilus intermedius	anchor tilefish	55	2.0	13	4.7
Caranx crysos	blue runner	54	7.3	16	5.8
Orthopristis chrysoptera	pigfish	49	3.7	10	3.6
Brotula barbata	bearded brotula	46	10.4	16	5.8
Symphurus diomedianus	spottedfin tonguefish	43	1.1	12	4.3
Paraconger caudilimbatus	margintail conger	40	2.2	6	2.2
Citharichthys macrops	spotted whiff	39	1.1	9	3.2
Prionotus ophryas	bandtail searobin	39	0.2	4	1.4
Chaetodipterus faber	Atlantic spadefish	38	1.2	9	3.2
Ophidion welshi	crested cusk-eel	37	2.5	8	2.9
Lepophidium jeannae	mottled cusk-eel	36	1.6	7	2.5
Rhomboplites aurorubens	vermilion snapper	36	2.9	9	3.2
Paralichthys lethostigma	southern flounder	34	12.7	11	4.0
Symphurus civitatus	offshore tonguefish	34	0.6	2	0.7
Gymnothorax nigromarginatus	blackedge moray	31	3.1	16	5.8
Sphoeroides spengleri	bandtail puffer	31	0.5	6	2.2
Equetus umbrosus	cubbyu	29	2.9	6	2.2
Rhizoprionodon terraenovae	Atlantic sharpnose shark	29	18.1	16	5.8
Ophidion holbrooki	bank cusk-eel	28	2.6	2	0.7
Equetus wamotoi	blackbar drum	26	1.8	8	2.9
Prionotus scitulus	leopard searobin	26	0.4	4	1.4
Paralichthys squamilentus	broad flounder	23	4.0	14	5.0
Ogcocephalus pantostictus	spotted batfish	22	8.5	5	1.8
Seriola dumerili	greater amberjack	22	3.2	14	5.0
Squatina dumeril	Atlantic angel shark	22	23.2	9	3.2
Scomber japonicus	chub mackerel	20	0.6	6	2.2
Bagre marinus	gafftopsail catfish	19	1.0	3	1.1
Caulolatilus chrysops	goldface tilefish	19	0.3	4	1.4
Gymnachirus melas	naked sole	19	0.2	3	1.1
Mustelus sinusmexicanus	gulf smoothhound	19	31.7	14	5.0

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Etropus cyclosquamus	shelf flounder	18	0.2	1	0.4
Trinectes maculatus	hogchoker	18	0.3	4	1.4
Chilomycterus schoepfi	striped burrfish	17	2.9	3	1.1
Neobythites gillii	cusk-eel	17	0.1	4	1.4
Neomerinthe hemingwayi	spinycheek scorpionfish	16	10.1	7	2.5
Hemicaranx amblyrhynchus	bluntnose jack	14	1.8	3	1.1
Bregmaceros atlanticus	antenna codlet	12	0.0	5	1.8
Pontinus longispinis	longspine scorpionfish	12	0.1	3	1.1
Trachinocephalus myops	snakefish	11	0.5	3	1.1
Synagrops bellus	blackmouth bass	10	0.1	3	1.1
Selar crumenophthalmus	bigeye scad	9	0.8	5	1.8
Lutjanus	snappers	8	0.0	5	1.8
Menticirrhus littoralis	gulf kingfish	8	1.5	2	0.7
Pagrus pagrus	red porgy	8	3.0	3	1.1
Paralichthys albigutta	gulf flounder	8	0.6	1	0.4
Rypticus maculatus	whitespotted soapfish	8	0.2	4	1.4
Ophidion grayi	blotched cusk-eel	7	0.4	3	1.1
Pomatomus saltatrix	bluefish	7	1.3	3	1.1
Serranus subligarius	belted sandfish	7	0.1	1	0.4
Sphoeroides nephelus	southern puffer	7	0.1	1	0.4
Bathyanthias mexicanus	yellowtail bass	6	0.1	2	0.7
Myliobatis freminvillii	bullnose ray	6	18.2	2	0.7
Priacanthus arenatus	bigeye	6	1.6	5	1.8
Syngnathus louisianae	chain pipefish	6	0.0	2	0.7
Aluterus schoepfi	orange filefish	5	0.2	1	0.4
Dorosoma petenense	threadfin shad	5	0.5	1	0.4
Epinephelus flavolimbatus	yellowedge grouper	5	0.6	3	1.1
Gymnothorax saxicola	honeycomb moray	5	0.5	3	1.1
Ophichthus gomesi	shrimp eel	5	0.6	4	1.4
Opsanus pardus	leopard toadfish	5	0.3	1	0.4

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Sphyrna tiburo	bonnethead	5	9.4	5	1.8
Hippocampus erectus	lined seahorse	4	0.0	1	0.4
Narcine brasiliensis	lesser electric ray	4	2.1	3	1.1
Serranus phoebe	tattler	4	0.1	2	0.7
Carcharhinus limbatus	blacktip shark	3	0.6	1	0.4
Caulolatilus cyanops	blackline tilefish	3	0.0	2	0.7
Gobioides broussoneti	violet goby	3	0.6	1	0.4
Gobionellus hastatus	darter gobies	3	0.0	2	0.7
Heteropriacanthus cruentatus	glasseye snapper	3	0.6	1	0.4
Lonchopisthus micrognathus	swordtail jawfish	3	0.0	1	0.4
Mustelus canis	smooth dogfish	3	1.8	2	0.7
Ophidion selenops	mooneye cusk-eel	3	0.0	1	0.4
Opistognathus spp.	jawfishes	3	0.1	1	0.4
Prionotus martis	barred searobin	3	0.0	1	0.4
Seriola zonata	banded rudderfish	3	0.2	1	0.4
Symphurus pusillus	northern tounguefish	3	0.1	1	0.4
Trachinotus carolinus	Florida pompano	3	0.1	1	0.4
Bothus robinsi	twospot flounder	2	0.0	2	0.7
Gobionellus oceanicus	highfin goby	2	0.0	1	0.4
Gymnothorax kolpos	blacktail moray	2	0.4	2	0.7
Hemanthias aureorubens	streamer bass	2	0.0	1	0.4
Hirundichthys rondeleti	blackwing flyingfish	2	0.0	1	0.4
Lactophrys quadricornis	scrawled cowfish	2	0.3	2	0.7
Monacanthus ciliatus	fringed filefish	2	0.0	1	0.4
Mustelus norrisi	Florida smoothhound	2	2.2	2	0.7
Physiculus fulvus	metallic codling	2	0.0	1	0.4
Prionotus punctatus	bluewing searobin	2	0.1	1	0.4
Rachycentron canadum	cobia	2	0.2	2	0.7
Rhinoptera bonasus	cownose ray	2	9.9	2	0.7
Scorpaena dispar	hunchback scorpionfish	2	0.1	1	0.4

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Sphoeroides dorsalis	marbled puffer	2	0.0	1	0.4
Aluterus	filefishes	1	0.0	1	0.4
Aluterus heudeloti	dotterel filefish	1	0.0	1	0.4
Carcharhinus acronotus	blacknose shark	1	0.6	1	0.4
Carcharhinus obscurus	dusky shark	1	1.9	1	0.4
Charcharhinus plumbeus	sandbar shark	1	1.5	1	0.4
Citharichthys cornutus	horned whiff	1	0.0	1	0.4
Dasyatis americana	southern stingray	1	1.8	1	0.4
Decodon puellaris	red hogfish	1	0.0	1	0.4
Echeneis naucrates	sharksucker	1	0.4	1	0.4
Epinephelus niveatus	snowy grouper	1	0.6	1	0.4
Equetus acuminatus	high-hat	1	0.0	1	0.4
Hemanthias leptus	longtail bass	1	0.3	1	0.4
Lophius gastrophysus	blackfin goosefish	1	0.0	1	0.4
Opistognathus aurifrons	yellowhead jawfish	1	0.0	1	0.4
Raja eglanteria	clearnose skate	1	1.0	1	0.4
Rhinoptera brasiliensis	Brazilian cow-nosed ray	1	9.1	1	0.4
Crustaceans					
Farfantepenaeus aztecus	brown shrimp	38828	672.8	231	83.1
Callinectes similis	lesser blue crab	21935	237.1	182	65.5
Squilla empusa	mantis shrimp	12269	113.0	127	45.7
Trachypenaeus similis	roughback shrimp	12041	60.5	93	33.5
Portunus spinicarpus	longspine swimming crab	9169	44.1	69	24.8
Solenocera vioscai	humpback shrimp	2661	15.0	44	15.8
Portunus gibbesii	irridescent swimming crab	2464	11.3	101	36.3
Litopenaeus setiferus	white shrimp	2429	100.9	83	29.9
Sicyonia brevirostris	brown rock shrimp	2112	24.5	56	20.1
Squilla chydaea	mantis shrimp	1937	13.0	73	26.3

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Farfantepenaeus duorarum	pink shrimp	1818	33.1	45	16.2
Xiphopenaeus kroyeri	seabob	1636	6.7	10	3.6
Sicyonia dorsalis	lesser rock shrimp	1459	3.9	43	15.5
Parapenaeus politus	deepwater rose shrimp	984	1.5	27	9.7
Trachypenaeus constrictus	roughneck shrimp	742	3.7	11	4.0
Callinectes sapidus	blue crab	352	58.2	68	24.5
Calappa sulcata	yellow box crab	290	51.0	67	24.1
Anasimus latus	stilt spider crab	260	1.6	27	9.7
Raninoides louisianensis	gulf frog crab	254	2.3	16	5.8
Portunus spinimanus	blotched swimming crab	242	7.7	44	15.8
Squilla spp.	mantis shrimps	142	1.2	2	0.7
Ovalipes floridanus	Florida lady crab	103	1.2	21	7.6
Speocarcinus lobatus	gulf squareback crab	96	0.1	7	2.5
Hepatus epheliticus	calico crab	81	2.8	14	5.0
Leiolambrus nitidus	white elbow crab	81	0.2	14	5.0
Leiolambrus nitidus	white elbow crab	81	0.2	14	5.0
Portunus sayi	sargassum swimming crab	59	0.4	6	2.2
Pseudorhombila quadridentata	flecked squareback crab	56	0.8	9	3.2
Sicyonia burkenroadi	spiny rock shrimp	54	0.1	12	4.3
Podochela sidneyi	shortfinger neck crab	50	0.2	11	4.0
Persephona mediterranea	mottled purse crab	44	0.3	6	2.2
Porcellana sayana	spotted porcelain crab	26	0.0	2	0.7
Stenorhynchus seticornis	yellowline arrow crab	26	0.1	9	3.2
Arenaeus cribrarius	speckled swimming crab	25	0.7	5	1.8
Libinia emarginata	portly spider crab	23	0.5	10	3.6
Dardanus insignis	red brocade hermit	16	0.1	3	1.1
Myropsis quinquespinosa	fivespine purse crab	15	0.1	3	1.1
Danielum ixbauchac	red sea crab	13	0.1	2	0.7
Calappa ocellata	ocellate box crab	11	0.3	2	0.7
Libinia dubia	longnose spider crab	9	0.3	2	0.7

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Paguristes sericeus	blue-eyed hermit	9	0.0	2	0.7
Paguristes triangulatus	hermit crab	9	0.5	2	0.7
Stenocionops furcata	furcate crab	9	0.4	5	1.8
Ethusa microphthalma	broadback sumo crab	7	0.0	2	0.7
Menippe adina	gulf stone crab	7	0.1	1	0.4
Plesionika longicauda	pandalid shrimp	7	0.0	2	0.7
Scyllarus chacei	chace slipper lobster	7	0.0	1	0.4
Sicyonia typica	kinglet rock shrimp	7	0.0	1	0.4
Pagurus bullisi	hermit crab	4	0.0	2	0.7
Stenocionops spinimanus	prickly spider crab	4	0.6	1	0.4
Alpheus floridanus	sand snapping shrimp	3	0.0	2	0.7
Euphrosynoplax clausa	craggy bathyal crab	3	0.0	1	0.4
Libinia	spider crabs	3	0.0	1	0.4
Parthenope granulata	bladetooth elbow crab	3	0.0	3	1.1
Unidentified crustacean	Unidentified crustacean	3	0.0	1	0.4
Metoporhaphis calcarata	false arrow crab	2	0.0	1	0.4
Persephona crinita	pink purse crab	2	0.0	1	0.4
Stenocionops coelata	spider crab	2	0.0	1	0.4
Stenopus scutellatus	golden coral shrimp	2	0.0	1	0.4
Acanthocarpus alexandri	gladiator box crab	1	0.0	1	0.4
Calappa flammea	flame box crab	1	0.2	1	0.4
Petrochirus diogenes	giant hermit crab	1	0.0	1	0.4
Xanthidae	mud crabs	1	0.0	1	0.4
Others					
Loligo pleii	arrow squid	5699	77.6	110	39.6
Amusium papyraceum	paper scallop	4464	48.1	71	25.5
Lolliguncula brevis	Atlantic brief squid	3235	39.1	115	41.4
Renilla mulleri	short-stemmed sea pansy	2974	15.5	50	18.0

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Loligo pealeii	longfin squid	2546	39.6	42	15.1
Astropecten duplicatus	spiny beaded sea star	2505	3.1	35	12.6
Chrysaora quinquecirrha	sea nettle	621	13.9	27	9.7
Luidia clathrata	sea star	334	4.3	29	10.4
Astropecten cingulatus	starfish	216	2.3	25	9.0
Pitar cordatus	Schwengel's pitar	145	3.0	14	5.0
Loligo spp.	squids	137	0.9	4	1.4
Aurelia aurita	moon jellyfish	65	2.6	11	4.0
Polystira albida	white giant turris	60	0.5	3	1.1
Anadara baughmani	Baughman's ark	51	0.8	8	2.9
Aplysia	opistobranchs	43	0.3	2	0.7
Styela plicata	tunicate	33	0.7	3	1.1
Calliactris tricolor	common sea anemone	20	0.3	4	1.4
Hexaplex fulvescens	giant eastern murex	16	1.3	2	0.7
Conus austini	cone shell	12	0.2	2	0.7
Mopalia	chitons	12	0.3	3	1.1
Chione clenchi	clench venus	11	0.2	4	1.4
Luidia alternata	banded luidia	10	0.6	3	1.1
Tamoya haplonema	sea wasp	10	0.8	3	1.1
Clypeaster ravenelii	cake urchin	9	0.7	5	1.8
Distorsio clathrata	Atlantic distorsio	9	0.1	4	1.4
Octopus joubini	Atlantic pygmy octopus	9	0.0	1	0.4
Neverita duplicata	shark eye	8	0.1	3	1.1
Macoma brevifrons	short macoma	7	0.1	2	0.7
Ophiolepis elegans	brittle star	7	0.0	3	1.1
Sconsia striata	royal bonnet	7	0.2	3	1.1
Unidentified invertebrates	Unidentified invertebrate	7	0.3	2	0.7
Spongiidae	sponges	6	3.9	4	1.4
Clypeaster prostratus	sea biscuit	5	0.0	2	0.7
Semirossia	mollusks	5	0.0	2	0.7

Table 3. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Semirossia equalis	greater shining bobtail	5	0.0	2	0.7
Aplysia brasiliana	mottled seahare	4	0.0	2	0.7
Sinum perspectivum	white baby-ear	4	0.0	2	0.7
Tethyaster grandis	starfish	4	0.2	2	0.7
Tunicata	sea squirts	4	0.0	2	0.7
Molpadia	sea cucumber	3	0.1	1	0.4
Aequipecten muscosus	rough scallop	3	0.0	1	0.4
Agriopuma texasianum	Texas venus	3	0.0	1	0.4
Atrina spp.	penshells	3	0.5	1	0.4
Busycon perversum	whelk	3	1.2	1	0.4
Comactinia meridionalis	feather star, sea lillie	3	0.0	1	0.4
Encope aberrans	sand dollar	3	0.3	1	0.4
Paranthus rapiformis	onion anemone	3	0.0	2	0.7
Ventricolaria rigida	rigid venus	3	0.1	1	0.4
Argopecten gibbus	calico scallop	2	0.0	1	0.4
Echinaster sentus	spiny sea star	2	0.0	1	0.4
Echinodermata	echinoderms	2	0.0	1	0.4
Molpadia spp.	sea cucumber	2	0.1	1	0.4
Polystira tellea	delicate giant turret	2	0.0	1	0.4
Tonna galea	giant tun	2	0.8	1	0.4
Allothyone mexicana		1	0.0	1	0.4
Chicoreus pomum	apple murex	1	0.0	1	0.4
Mopaliidae	chitons	1	0.0	1	0.4
Porifera	sponges	1	11.4	1	0.4
Renilla	sea anemones	1	0.0	1	0.4
Rhynchocephalia	tuataras	1	10.7	1	0.4

Table 4a

Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2007 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
Farfantepenaeus aztecus	110.7	93.25	2.2	2.00	3	91.5	45.66	1.5	0.72	9	166.2	72.58	2.2	0.93	18
Squilla spp	13.3	13.33	0.1	0.09	3	11.1	5.15	0.1	0.06	9	24.6	11.08	0.4	0.21	18
Trachypenaeus similis	0.0	0.00	0.0	0.00	3	10.6	10.59	0.0	0.04	9	99.5	46.20	0.3	0.14	18
Solenocera vioscai	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	9	8.3	5.58	0.0	0.01	18
Callinectes similis	4.2	2.32	0.0	0.04	3	6.8	5.02	0.1	0.12	9	12.9	11.61	0.1	0.06	18
Farfantepenaeus duorarum	0.0	0.00	0.0	0.00	3	66.2	40.87	1.4	0.88	9	17.8	9.24	0.4	0.20	18
Micropogonias undulatus	25.3	17.94	0.7	0.46	3	105.4	104.95	3.3	3.29	9	359.5	196.91	19.4	10.07	18
Stenotomus caprinus	1.5	1.54	0.0	0.01	3	256.2	106.42	3.7	1.56	9	127.6	32.55	2.6	0.74	18
Leiostomus xanthurus	22.7	12.72	1.2	0.88	3	51.3	48.49	4.0	3.74	9	102.9	58.79	9.7	5.18	18
Synodus foetens	7.1	3.63	0.1	0.12	3	8.7	3.74	0.5	0.21	9	43.6	11.58	6.2	1.80	18
Centropristis philadelphica	4.0	4.00	0.0	0.04	3	7.4	3.91	0.1	0.04	9	44.3	21.07	0.8	0.26	18
Steindachneria argentea	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	18
Prionotus roseus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	18
Trichiurus lepturus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	9	14.1	12.76	0.2	0.10	18
Squid spp	313.8	179.27	2.7	1.18	3	130.2	69.42	1.7	0.84	9	49.6	23.10	0.2	0.08	18

Table 4a (continued)

Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2007 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
Farfantepenaeus aztecus	594.2	266.62	13.6	5.25	6	113.1	46.78	3.6	0.92	9	48.8	0.42	1.9	0.18	3
Squilla spp	114.0	29.00	1.3	0.50	6	83.9	38.15	0.6	0.28	9	4.4	2.20	0.0	0.04	3
Trachypenaeus similis	58.5	22.14	1.1	0.86	6	9.9	5.78	0.0	0.02	9	2.1	2.11	0.0	0.01	3
Solenocera vioscai	34.3	18.93	0.1	0.08	6	56.2	24.66	0.4	0.20	9	8.2	8.24	0.1	0.08	3
Callinectes similis	63.5	23.96	1.3	0.63	6	34.5	10.75	0.6	0.21	9	0.0	0.00	0.0	0.00	3
Farfantepenaeus duorarum	0.8	0.80	0.0	0.02	6	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	3
Micropogonias undulatus	1258.8	916.08	63.2	38.44	6	484.8	161.67	42.9	13.94	9	14.0	3.84	2.0	0.72	3
Stenotomus caprinus	283.5	98.10	12.9	4.54	6	724.0	262.56	40.8	15.09	9	582.8	201.81	35.4	13.46	3
Leiostomus xanthurus	68.4	68.40	5.7	5.70	6	8.1	3.81	1.1	0.54	9	0.0	0.00	0.0	0.00	3
Synodus foetens	74.5	9.91	12.9	2.39	6	45.0	11.68	9.6	2.49	9	42.0	15.94	6.1	2.16	3
Centropristis philadelphica	48.1	13.80	2.2	0.40	6	28.7	12.27	2.2	0.75	9	53.5	27.64	6.8	2.63	3
Steindachneria argentea	19.7	17.74	0.9	0.87	6	65.6	38.72	0.2	0.12	9	0.0	0.00	0.0	0.00	3
Prionotus roseus	36.1	25.49	2.6	1.73	6	28.7	6.77	2.4	0.52	9	106.1	48.08	7.9	3.59	3
Trichiurus lepturus	78.8	76.65	1.3	0.83	6	20.7	9.46	1.1	0.56	9	8.0	8.00	0.0	0.02	3
Squid spp	35.4	21.77	0.1	0.09	6	10.8	4.63	0.0	0.02	9	24.0	24.00	0.1	0.08	3

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 2007 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	29.2	17.39	3	37.1	13.36	9	63.0	17.16	18	0.0	0	0	128.0	26.26	9	84.2	10.18	3
Total finfish	6.6	4.72	3	28.7	12.24	9	55.2	16.53	18	0.0	0	0	121.0	26.51	9	77.7	11.69	3
Total crustacean	7.2	2.7	3	5.2	2.2	9	4.3	1.33	18	0.0	0	0	6.3	1.21	9	5.8	1.96	3
Total other	15.6	10.74	3	3.1	0.91	9	3.5	3.01	18	0.0	0	0	0.3	0.1	9	0.8	0.32	3
Surface temperature	29.2	0.27	3	29.0	0.16	10	28.5	0.41	20	0.0	0	0	28.3	0.49	3	28.8	0.16	4
Midwater temperature	28.0	1.11	3	27.8	0.4	10	25.3	0.19	20	0.0	0	0	22.7	0.58	3	23.1	0.47	4
Bottom temperature	27.0	0.92	3	25.3	0.43	10	23.9	0.19	20	0.0	0	0	20.3	0.41	3	19.2	0.21	4
Surface salinity	29.8	1.02	3	31.3	0.27	10	31.7	0.77	20	0.0	0	0	34.3	2.18	3	33.8	1.18	4
Midwater salinity	32.8	1.27	3	33.2	0.67	10	36.0	0.23	20	0.0	0	0	36.6	0.05	3	36.7	0.14	4
Bottom salinity	34.6	0.63	3	35.8	0.27	10	36.5	0.12	20	0.0	0	0	36.5	0.01	3	36.6	0.07	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	6.1	0.25	3	5.7	0.09	10	5.2	0.55	20	0.0	0	0	6.5	1.97	3	6.5	0.98	4
Midwater oxygen	5.9	0.43	3	5.5	0.17	10	4.9	0.48	20	0.0	0	0	4.9	0.12	3	5.6	0.32	4
Bottom oxygen	4.5	0.49	3	4.6	0.15	10	4.6	0.46	20	0.0	0	0	4.6	0.06	3	4.0	0.28	4

Table 5a

Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2007 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 21-40 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	0.0	0.00	0.0	0.00	2	10.5	9.22	0.1	0.14	4	1292.6	488.49	4.8	1.98	8
Squilla spp	0.0	0.00	0.0	0.00	2	4.0	4.00	0.0	0.01	4	714.2	259.45	4.5	1.99	8
Callinectes similis	0.0	0.00	0.0	0.00	2	10.1	4.66	0.0	0.01	4	127.6	50.95	1.0	0.43	8
Farfantepenaeus aztecus	327.5	327.50	3.0	3.04	2	1.5	0.96	0.0	0.01	4	4.9	3.89	0.1	0.06	8
Raninoides louisianensis	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8
Speocarcinus lobatus	0.0	0.00	0.0	0.00	2	7.9	5.10	0.0	0.01	4	20.1	16.42	0.0	0.02	8
Prionotus longispinosus	0.0	0.00	0.0	0.00	2	15.0	12.33	0.1	0.09	4	1689.2	624.99	11.3	6.20	8
Micropogonias undulatus	167.5	167.50	3.8	3.75	2	4.5	4.50	0.1	0.13	4	176.7	112.02	4.5	2.90	8
Cynoscion arenarius	12.5	12.50	0.2	0.19	2	0.0	0.00	0.0	0.00	4	37.2	17.29	2.5	1.63	8
Centropristis philadelphica	0.0	0.00	0.0	0.00	2	0.5	0.50	0.0	0.00	4	23.8	14.00	0.1	0.08	8
Serranus atrobranchus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8
Microgobius gulosus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4	30.2	25.93	0.1	0.08	8
Trichopsetta ventralis	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	8
Squid spp	42.5	42.50	0.3	0.32	2	16.8	11.57	0.1	0.08	4	28.2	22.71	0.2	0.13	8

Table 5a (continued)

Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2007 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 21-40 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	0	0.0	0.00	0.0	0.00	1
Squilla spp	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	10.0	0.00	0.2	0.00	1
Callinectes similis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	17.5	0.00	0.2	0.00	1
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	447.5	0.00	13.8	0.00	1
Raninoides louisianensis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	237.5	0.00	2.2	0.00	1
Speocarcinus lobatus	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	1
Prionotus longispinosus	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	1
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	15.0	0.00	2.0	0.00	1
Cynoscion arenarius	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	1
Centropristis philadelphica	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	82.5	0.00	13.3	0.00	1
Serranus atrobranchus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	265.0	0.00	6.0	0.00	1
Microgobius gulosus	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	1
Trichopsetta ventralis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	190.0	0.00	4.5	0.00	1
Squid spp	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0	5.0	0.00	0.2	0.00	1

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 2007 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 21-40 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	15.6	13.43	2	1.4	0.67	4	34.4	15.16	8	0.0	0	0	0.0	0	0	88.3	0	1
Total finfish	10.9	10.07	2	1.2	0.64	3	22.4	11.84	8	0.0	0	0	0.0	0	0	70.5	0	1
Total crustacean	4.1	2.86	2	0.5	0.33	3	11.8	4.17	8	0.0	0	0	0.0	0	0	17.3	0	1
Total other	0.3	0.25	2	0.4	0	1	1.0	0	1	0.0	0	0	0.0	0	0	0.3	0	1
Surface temperature	31.2	0.25	2	30.0	0.19	5	29.6	0.11	9	0.0	0	0	0.0	0	0	29.9	0	1
Midwater temperature	31.2	0.25	2	29.0	0.18	5	27.1	0.37	9	0.0	0	0	0.0	0	0	21.5	0	1
Bottom temperature	31.7	1.5	2	26.7	0.68	5	24.5	0.2	9	0.0	0	0	0.0	0	0	18.2	0	1
Surface salinity	20.0	2.65	2	22.1	1.27	5	28.2	0.26	9	0.0	0	0	0.0	0	0	30.4	0	1
Midwater salinity	23.4	6.1	2	31.1	0.86	5	35.0	0.39	9	0.0	0	0	0.0	0	0	36.6	0	1
Bottom salinity	27.4	5.8	2	34.1	1.04	5	36.4	0.06	9	0.0	0	0	0.0	0	0	36.4	0	1
Surface chlorophyll	0.0	0	0	13.2	3.04	5	1.5	0.16	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	3.5	0.85	2	8.6	0.81	5	6.6	0.06	9	0.0	0	0	0.0	0	0	8.2	0	1
Midwater oxygen	0.0	0	2	5.0	0.18	5	3.8	0.47	9	0.0	0	0	0.0	0	0	4.9	0	1
Bottom oxygen	3.5	0.85	2	1.4	0.58	5	1.1	0.34	9	0.0	0	0	0.0	0	0	4.2	0	1

Table 6a

Statistical Zone 14

Summary of dominant organisms taken in statistical zone 14 during the 2007 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 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
Trachypenaeus similis	33.2	29.08	0.0	0.03	2	121.3	116.37	0.2	0.21	3	321.7	302.69	0.6	0.54	5
Squilla spp	100.3	98.20	0.7	0.68	2	87.3	85.34	0.3	0.28	3	210.3	160.23	1.1	0.66	5
Farfantepenaeus aztecus	575.8	575.77	3.6	3.61	2	6.0	5.03	0.0	0.03	3	144.1	74.77	1.6	0.91	5
Portunus gibbesii	421.7	411.37	0.9	0.89	2	86.4	85.78	0.3	0.25	3	113.6	40.27	0.5	0.19	5
Callinectes similis	307.7	301.51	1.3	1.21	2	10.0	9.02	0.2	0.17	3	34.6	15.43	0.4	0.21	5
Litopenaeus setiferus	105.0	105.00	3.5	3.48	2	0.0	0.00	0.0	0.00	3	16.9	7.83	0.8	0.38	5
Micropogonias undulatus	1203.5	1203.50	21.9	21.86	2	890.4	888.78	21.4	21.29	3	13461.0	6962.20	472.7	231.60	5
Prionotus longispinosus	85.3	64.66	0.5	0.42	2	13.3	13.33	0.1	0.12	3	434.8	148.42	5.5	1.88	5
Cynoscion nothus	17.1	12.93	0.2	0.02	2	109.1	89.15	4.6	4.54	3	357.9	136.99	18.3	7.35	5
Leiostomus xanthurus	181.0	178.97	4.7	4.56	2	0.0	0.00	0.0	0.00	3	308.5	168.68	22.2	12.79	5
Chloroscombrus chrysurus	63.0	44.56	2.4	2.34	2	129.1	129.13	5.9	5.88	3	64.2	57.81	3.3	3.05	5
Peprilus burti	5.2	5.17	0.2	0.20	2	4.3	4.35	0.2	0.16	3	169.3	95.07	7.3	3.99	5
Anchoa mitchilli	245.8	245.77	0.3	0.27	2	0.0	0.00	0.0	0.00	3	7.2	7.20	0.0	0.02	5
Cynoscion arenarius	3.5	3.46	0.7	0.66	2	36.0	36.00	1.8	1.75	3	91.4	25.57	9.0	2.49	5
Squid spp	33.7	17.11	0.2	0.14	2	169.6	165.63	1.8	1.75	3	14.8	9.71	0.1	0.03	5

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 2007 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 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	54.6	37.01	2	41.6	27.6	3	556.0	258.9	5	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish	43.9	26.5	2	37.7	26.88	3	550.0	259.1	5	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean	9.9	9.92	2	3.0	1.19	2	5.1	1.9	5	0.0	0	0	0.0	0	0	0.0	0	0
Total other	0.7	0.47	2	5.3	0	1	0.3	0.2	5	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	30.0	0.42	3	29.0	0.12	4	29.0	0.14	6	0.0	0	0	0.0	0	0	0.0	0	0
Midwater temperature	29.3	0.64	3	28.7	0.24	4	28.7	0.25	6	0.0	0	0	0.0	0	0	0.0	0	0
Bottom temperature	29.8	0.34	3	27.1	0.74	4	25.6	0.65	6	0.0	0	0	0.0	0	0	0.0	0	0
Surface salinity	28.6	0.66	3	31.9	1.19	4	33.2	0.87	6	0.0	0	0	0.0	0	0	0.0	0	0
Midwater salinity	28.5	0.68	3	33.4	1.57	4	35.3	0.25	6	0.0	0	0	0.0	0	0	0.0	0	0
Bottom salinity	29.5	0.57	3	34.9	0.88	4	36.2	0.11	6	0.0	0	0	0.0	0	0	0.0	0	0
Surface chlorophyll	5.6	0	1	0.8	0.53	3	0.1	0.02	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	5.8	0.24	3	6.0	0.12	4	5.8	0.12	6	0.0	0	0	0.0	0	0	0.0	0	0
Midwater oxygen	5.5	0.09	3	5.6	0.37	4	5.7	0.15	6	0.0	0	0	0.0	0	0	0.0	0	0
Bottom oxygen	5.1	0.03	3	2.3	1.03	4	2.2	0.66	6	0.0	0	0	0.0	0	0	0.0	0	0

Table 7a

Statistical Zone 15

Summary of dominant organisms taken in statistical zone 15 during the 2007 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 31-40 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
Farfantepenaeus aztecus	548.8	521.15	2.9	2.68	2	51.8	31.17	0.7	0.39	7	190.6	85.06	3.1	1.46	14
Callinectes similis	3.1	3.08	0.0	0.01	2	66.9	37.53	0.8	0.52	7	300.6	150.04	6.1	3.06	14
Trachypenaeus similis	0.0	0.00	0.0	0.00	2	167.1	162.20	0.7	0.65	7	165.5	106.18	2.6	1.93	14
Squilla spp	0.0	0.00	0.0	0.00	2	316.4	171.76	1.8	0.97	7	38.0	18.57	0.3	0.17	14
Portunus gibbesii	0.0	0.00	0.0	0.00	2	36.4	12.95	0.2	0.07	7	74.0	31.98	0.4	0.16	14
Litopenaeus setiferus	90.7	15.31	2.5	0.01	2	92.9	41.89	3.6	1.60	7	20.4	3.89	0.9	0.16	14
Micropogonias undulatus	1348.0	1008.00	57.6	28.21	2	1748.0	1111.70	49.4	28.38	7	1373.0	474.10	46.8	14.85	14
Peprilus burti	110.4	100.38	3.1	2.81	2	30.2	19.08	0.9	0.56	7	469.7	159.06	18.0	6.23	14
Trachurus lathami	0.0	0.00	0.0	0.00	2	1.4	1.13	0.0	0.02	7	473.3	264.68	10.1	6.00	14
Anchoa hepsetus	0.0	0.00	0.0	0.00	2	88.8	60.85	1.7	1.16	7	371.1	149.52	6.4	2.84	14
Chloroscombrus chrysurus	44.6	44.62	1.7	1.73	2	529.2	241.50	22.9	10.84	7	51.2	21.65	2.0	0.81	14
Trichiurus lepturus	58.8	17.23	1.5	0.56	2	116.0	105.98	2.0	1.91	7	186.1	61.43	5.5	1.92	14
Prionotus longispinosus	0.0	0.00	0.0	0.00	2	161.9	88.67	1.8	0.86	7	121.4	48.69	1.4	0.57	14
Stenotomus caprinus	0.0	0.00	0.0	0.00	2	23.1	12.65	0.2	0.13	7	153.5	46.42	1.5	0.43	14
Squid spp	80.8	20.77	1.1	0.57	2	201.9	86.57	2.1	0.85	7	38.4	6.83	0.3	0.06	14

Table 7a (continued)

Statistical Zone 15

Summary of dominant organisms taken in statistical zone 14 during the 2007 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 31-40 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
Farfantepenaeus aztecus	600.5	420.55	10.0	6.79	2	0.0	0.00	0.0	0.00	0	68.1	3.86	2.9	0.24	2
Callinectes similis	25.3	13.96	0.4	0.36	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2
Trachypenaeus similis	15.8	15.82	0.1	0.10	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2
Squilla spp	35.5	35.45	0.5	0.53	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2
Portunus gibbesii	15.8	15.82	0.1	0.07	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2
Litopenaeus setiferus	8.2	8.18	0.4	0.39	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2
Micropogonias undulatus	1475.1	1034.00	81.2	54.54	2	0.0	0.00	0.0	0.00	0	33.0	33.00	4.3	4.33	2
Peprilus burti	653.0	637.77	43.7	43.14	2	0.0	0.00	0.0	0.00	0	248.7	3.32	14.2	1.24	2
Trachurus lathami	56.3	41.01	1.2	0.96	2	0.0	0.00	0.0	0.00	0	24.0	6.00	0.4	0.12	2
Anchoa hepsetus	0.8	0.81	0.0	0.01	2	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	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2
Trichiurus lepturus	45.4	45.41	3.0	2.97	2	0.0	0.00	0.0	0.00	0	11.7	6.32	0.7	0.29	2
Prionotus longispinosus	51.5	49.92	0.8	0.65	2	0.0	0.00	0.0	0.00	0	3.5	2.46	0.2	0.06	2
Stenotomus caprinus	75.9	21.38	1.5	0.60	2	0.0	0.00	0.0	0.00	0	82.4	25.61	4.3	0.96	2
Squid spp	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	9.2	2.79	0.3	0.08	2

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 2007 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 31-40 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	94.7	27.65	2	103.0	24.57	7	129.0	21.21	14	0.0	0	0	0.0	0	0	45.0	3	2
Total finfish	78.3	29.52	2	89.2	24.57	7	114.0	21.46	14	0.0	0	0	0.0	0	0	38.3	1.94	2
Total crustacean	15.0	2.57	2	11.6	4.35	7	14.7	6.63	14	0.0	0	0	0.0	0	0	2.8	0.21	2
Total other	1.3	0.7	2	2.5	0.91	6	0.3	0.06	14	0.0	0	0	0.0	0	0	4.0	0.85	2
Surface temperature	29.6	0.65	2	28.8	0.2	8	29.0	0.14	15	0.0	0	0	0.0	0	0	29.4	0	1
Midwater temperature	29.6	0.65	2	28.8	0.22	8	28.9	0.15	15	0.0	0	0	0.0	0	0	24.6	0	1
Bottom temperature	30.8	1.6	2	28.1	0.25	8	26.3	0.45	15	0.0	0	0	0.0	0	0	18.9	0	1
Surface salinity	23.8	7.05	2	31.7	1.41	8	28.1	1.48	15	0.0	0	0	0.0	0	0	34.9	0	1
Midwater salinity	23.6	7.25	2	34.4	0.56	8	35.2	0.26	15	0.0	0	0	0.0	0	0	36.5	0	1
Bottom salinity	25.9	6.55	2	35.4	0.44	8	36.1	0.16	15	0.0	0	0	0.0	0	0	36.5	0	1
Surface chlorophyll	0.0	0	0	1.3	0.58	5	0.2	0.05	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	4.8	0.15	2	6.0	0.32	8	5.8	0.12	15	0.0	0	0	0.0	0	0	5.5	0	1
Midwater oxygen	0.0	0	2	5.5	0.55	8	5.3	0.18	15	0.0	0	0	0.0	0	0	6.0	0	1
Bottom oxygen	4.8	0.15	2	3.7	0.86	8	3.4	0.39	15	0.0	0	0	0.0	0	0	4.3	0	1

Table 8a

Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2007 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
Farfantepenaeus aztecus	476.1	243.54	3.1	1.46	6	0.8	0.77	0.0	0.01	6	167.4	78.22	3.6	1.75	11
Squilla spp	3.9	3.89	0.1	0.06	6	0.6	0.41	0.0	0.01	6	84.1	33.24	1.0	0.43	11
Xiphopenaeus kroyeri	305.1	291.22	1.6	1.48	6	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	11
Callinectes similis	2.1	1.36	0.0	0.03	6	0.5	0.45	0.0	0.05	6	56.7	37.87	1.1	0.61	11
Sicyonia brevirostris	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6	7.1	5.64	0.1	0.07	11
Litopenaeus setiferus	98.3	37.08	3.1	1.20	6	0.5	0.45	0.0	0.02	6	13.7	7.00	0.6	0.29	11
Micropogonias undulatus	2147.7	1207.80	56.5	16.92	6	10.0	10.00	0.3	0.28	6	1936.1	655.22	72.9	18.72	11
Peprilus burti	42.0	25.03	1.2	0.70	6	2.0	1.51	0.1	0.05	6	1064.9	558.27	35.4	17.22	11
Trichiurus lepturus	71.3	56.91	1.8	1.55	6	10.3	7.08	0.2	0.16	6	312.6	183.49	10.0	5.08	11
Stenotomus caprinus	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6	187.2	57.18	4.5	2.37	11
Cynoscion nothus	28.1	13.87	0.5	0.17	6	0.9	0.91	0.0	0.00	6	129.6	45.34	7.9	2.95	11
Trachurus lathami	0.0	0.00	0.0	0.00	6	0.4	0.38	0.0	0.01	6	49.6	27.53	1.0	0.53	11
Stellifer lanceolatus	519.8	268.02	7.1	3.77	6	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	11
Chloroscombrus chrysurus	133.9	109.33	14.2	13.36	6	60.4	53.49	2.1	1.86	6	62.7	58.01	2.2	2.04	11
Squid spp	94.5	31.28	1.4	0.46	6	10.2	6.97	0.1	0.04	6	24.4	10.25	0.5	0.19	11

Table 8a (continued)

Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2007 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
Farfantepenaeus aztecus	255.9	217.69	6.9	5.77	2	206.7	74.33	6.6	2.34	6	109.0	45.79	4.7	2.05	4
Squilla spp	52.5	49.26	0.9	0.88	2	4.5	3.25	0.1	0.06	6	0.8	0.77	0.0	0.00	4
Xiphopenaeus kroyeri	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	4
Callinectes similis	29.5	29.46	0.4	0.45	2	7.4	3.34	0.1	0.07	6	0.0	0.00	0.0	0.00	4
Sicyonia brevirostris	106.1	99.58	1.5	1.38	2	11.6	6.68	0.2	0.10	6	0.0	0.00	0.0	0.00	4
Litopenaeus setiferus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	4
Micropogonias undulatus	103.7	73.12	8.4	6.23	2	74.4	18.68	6.0	1.41	6	0.5	0.55	0.1	0.13	4
Peprilus burti	102.0	102.00	5.5	5.46	2	132.1	65.61	7.4	3.65	6	52.5	26.20	3.6	1.60	4
Trichiurus lepturus	13.1	13.09	2.1	2.07	2	27.3	14.59	2.0	1.07	6	37.9	21.16	2.7	1.49	4
Stenotomus caprinus	215.2	128.43	10.6	6.46	2	142.5	13.17	7.4	0.76	6	120.5	39.69	7.1	2.53	4
Cynoscion nothus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	4
Trachurus lathami	25.1	21.85	0.6	0.61	2	8.2	7.10	0.3	0.25	6	156.9	70.25	3.3	1.91	4
Stellifer lanceolatus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	4
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	4
Squid spp	0.0	0.00	0.0	0.00	2	4.2	1.96	0.0	0.01	6	26.5	6.56	0.7	0.25	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 2007 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	117.0	30.4	6	3.7	1.98	6	157.0	41.81	11	0.0	0	0	42.5	2.76	6	43.8	3.65	4
Total finfish	104.0	26.78	6	3.0	1.84	6	149.0	41.36	11	0.0	0	0	34.3	4.85	6	32.3	3.49	4
Total crustacean	11.5	3.98	6	0.1	0.11	6	6.8	2.22	11	0.0	0	0	7.3	2.55	6	4.8	2.06	4
Total other	1.6	0.52	6	0.6	0.25	6	0.5	0.19	11	0.0	0	0	1.0	0.46	6	6.7	2.84	4
Surface temperature	29.2	0.09	6	29.8	0.11	6	29.6	0.2	10	0.0	0	0	0.0	0	0	29.6	0.27	4
Midwater temperature	29.2	0.09	6	29.2	0.09	6	29.0	0.16	10	0.0	0	0	0.0	0	0	23.7	0.88	4
Bottom temperature	29.7	0.38	6	28.3	0.07	6	27.1	0.46	10	0.0	0	0	0.0	0	0	18.7	0.3	4
Surface salinity	23.0	1.21	6	27.4	0.8	6	29.1	0.23	10	0.0	0	0	0.0	0	0	33.7	0.86	4
Midwater salinity	24.2	1.93	6	30.0	0.68	6	33.5	0.81	10	0.0	0	0	0.0	0	0	36.4	0.02	4
Bottom salinity	26.0	2.63	6	35.1	0.36	6	35.9	0.14	10	0.0	0	0	0.0	0	0	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	4.8	0.3	6	6.8	0.25	6	6.0	0.16	10	0.0	0	0	0.0	0	0	5.6	0.03	4
Midwater oxygen	0.9	0.85	6	5.0	0.21	6	4.5	0.34	10	0.0	0	0	0.0	0	0	6.3	0.07	4
Bottom oxygen	4.0	0.84	6	0.6	0.35	6	2.0	0.39	10	0.0	0	0	0.0	0	0	4.2	0.05	4

Table 9a

Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2007 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
Farfantepenaeus aztecus	180.0	0.00	1.3	0.00	1	125.4	123.28	0.9	0.92	5	113.0	79.83	2.2	1.54	7
Sicyonia brevirostris	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	5	41.5	27.36	0.5	0.34	7
Callinectes similis	0.0	0.00	0.0	0.00	1	1.8	1.37	0.1	0.04	5	49.1	21.78	1.1	0.38	7
Squilla spp	0.0	0.00	0.0	0.00	1	4.9	4.04	0.0	0.03	5	23.7	13.95	0.3	0.17	7
Litopenaeus setiferus	128.0	0.00	4.1	0.00	1	29.8	25.15	1.1	0.93	5	5.6	2.80	0.2	0.12	7
Portunus gibbesii	0.0	0.00	0.0	0.00	1	41.3	38.76	0.2	0.16	5	9.2	8.49	0.1	0.04	7
Micropogonias undulatus	17840.0	0.00	228.7	0.00	1	3835.2	2500.20	87.4	55.38	5	1101.6	447.29	54.6	19.57	7
Stenotomus caprinus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	5	740.2	225.20	21.0	7.00	7
Peprilus burti	144.0	0.00	4.0	0.00	1	142.7	142.74	4.2	4.18	5	243.5	146.87	8.2	4.46	7
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	1	416.1	408.12	14.9	14.61	5	223.1	166.93	8.1	5.78	7
Trachurus lathami	0.0	0.00	0.0	0.00	1	0.7	0.71	0.0	0.00	5	175.3	117.23	3.7	2.55	7
Leiostomus xanthurus	44.0	0.00	0.8	0.00	1	16.3	12.51	0.9	0.73	5	168.8	108.32	16.2	10.45	7
Trichiurus lepturus	56.0	0.00	1.5	0.00	1	78.3	52.08	1.7	1.16	5	53.7	33.12	3.0	1.89	7
Cynoscion nothus	612.0	0.00	10.9	0.00	1	72.5	48.71	3.6	2.30	5	46.4	21.24	3.6	1.57	7
Squid spp	100.0	0.00	1.5	0.00	1	120.2	72.90	2.1	1.27	5	12.8	7.58	0.1	0.06	7

Table 9a (continued)

Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2007 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
Farfantepenaeus aztecus	417.3	283.17	9.7	5.26	5	54.1	21.92	3.0	1.08	5	0.0	0.00	0.0	0.00	0
Sicyonia brevirostris	45.7	22.51	0.6	0.29	5	0.7	0.65	0.0	0.02	5	0.0	0.00	0.0	0.00	0
Callinectes similis	30.3	22.43	0.6	0.37	5	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0
Squilla spp	10.8	7.33	0.2	0.13	5	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0
Litopenaeus setiferus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0
Portunus gibbesii	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	129.0	116.58	9.4	8.53	5	33.4	15.50	2.8	1.27	5	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	582.7	103.81	28.8	4.77	5	307.2	82.81	14.7	4.07	5	0.0	0.00	0.0	0.00	0
Peprilus burti	634.7	303.81	26.6	11.60	5	6.3	4.48	0.3	0.16	5	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	1.7	1.10	0.1	0.06	5	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0
Trachurus lathami	114.7	64.68	2.2	1.22	5	17.8	10.75	0.4	0.25	5	0.0	0.00	0.0	0.00	0
Leiostomus xanthurus	18.3	14.23	1.6	1.20	5	38.4	23.94	4.0	2.52	5	0.0	0.00	0.0	0.00	0
Trichiurus lepturus	45.4	14.41	8.3	6.29	5	6.0	3.79	0.2	0.17	5	0.0	0.00	0.0	0.00	0
Cynoscion nothus	7.5	6.50	0.7	0.59	5	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0
Squid spp	21.7	13.18	0.3	0.11	5	3.5	2.22	0.1	0.05	5	0.0	0.00	0.0	0.00	0

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 2007 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	305.0	0	1	126.0	77.02	5	145.0	26.93	7	0.0	0	0	45.1	12.3	5	0.0	0	0
Total finfish	296.0	0	1	120.0	73.52	5	139.0	26.36	7	0.0	0	0	41.7	11.65	5	0.0	0	0
Total crustacean	7.6	0	1	4.1	3.28	5	5.4	2.44	7	0.0	0	0	3.2	1.08	5	0.0	0	0
Total other	2.0	0	1	2.0	1.25	5	0.2	0.08	7	0.0	0	0	0.3	0.13	5	0.0	0	0
Surface temperature	28.4	0.38	12	28.7	0.18	7	28.8	0.15	8	0.0	0	0	29.0	0.17	2	29.2	0.13	3
Midwater temperature	28.1	0.31	12	28.0	0.37	7	28.7	0.15	8	0.0	0	0	26.1	0.33	2	22.9	0.25	3
Bottom temperature	27.6	0.38	12	27.6	0.47	7	27.4	0.25	8	0.0	0	0	22.1	0.1	2	19.2	0.27	3
Surface salinity	26.6	0.6	12	25.5	1.38	7	31.6	0.57	8	0.0	0	0	36.1	0.02	2	35.5	0.12	3
Midwater salinity	27.7	0.59	12	28.7	0.57	7	33.7	0.64	8	0.0	0	0	36.3	0.1	2	36.5	0.01	3
Bottom salinity	28.3	0.6	12	31.7	0.89	7	36.0	0.09	8	0.0	0	0	36.5	0	2	36.5	0.02	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	6.8	0.18	12	7.2	0.57	7	6.0	0.18	8	0.0	0	0	5.9	0.05	2	5.9	0.03	3
Midwater oxygen	5.7	0.22	12	6.1	0.24	7	5.4	0.18	8	0.0	0	0	6.6	0.05	2	6.8	0	3
Bottom oxygen	4.9	0.38	12	4.3	0.77	7	2.8	0.53	8	0.0	0	0	6.5	0	2	4.8	0.09	3

Table 10a

Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2007 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
Callinectes similis	21.7	0.00	0.2	0.00	1	2178.5	854.18	25.9	10.75	2	192.5	86.70	2.6	1.07	6
Farfantepenaeus aztecus	110.0	0.00	0.7	0.00	1	394.4	369.27	3.6	3.45	2	315.4	146.74	5.1	2.42	6
Squilla spp	43.3	0.00	0.3	0.00	1	1473.3	206.73	13.2	1.58	2	62.7	40.97	0.7	0.44	6
Litopenaeus setiferus	161.7	0.00	6.8	0.00	1	193.1	193.09	7.8	7.84	2	20.8	14.82	0.9	0.68	6
Xiphopenaeus kroyeri	763.3	0.00	2.3	0.00	1	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	6
Sicyonia brevirostris	0.0	0.00	0.0	0.00	1	87.3	87.27	0.7	0.75	2	41.6	34.28	0.4	0.33	6
Micropogonias undulatus	13608.0	0.00	104.6	0.00	1	12254.0	11626.0	280.1	265.40	2	449.7	290.05	12.7	7.96	6
Stenotomus caprinus	0.0	0.00	0.0	0.00	1	5382.5	5210.20	36.2	35.18	2	569.2	264.05	18.2	13.10	6
Peprilus burti	11.7	0.00	0.2	0.00	1	210.5	19.64	4.8	1.06	2	1386.5	641.43	48.1	24.52	6
Chloroscombrus chrysurus	33.3	0.00	0.1	0.00	1	75.3	58.91	2.4	1.71	2	515.5	256.93	18.2	8.16	6
Prionotus longispinosus	0.0	0.00	0.0	0.00	1	1578.0	994.36	11.4	7.03	2	24.3	19.32	0.4	0.27	6
Stellifer lanceolatus	2331.7	0.00	34.0	0.00	1	211.1	211.09	4.8	4.80	2	0.0	0.00	0.0	0.00	6
Trachurus lathami	0.0	0.00	0.0	0.00	1	32.7	32.73	0.5	0.49	2	333.5	233.65	5.2	3.60	6
Trichiurus lepturus	11.7	0.00	0.3	0.00	1	0.0	0.00	0.0	0.00	2	116.3	110.29	6.2	6.09	6
Squid spp	21.7	0.00	0.2	0.00	1	62.7	62.73	1.2	1.23	2	88.2	32.44	1.3	0.52	6

Table 10a (continued)

Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2007 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
Callinectes similis	20.1	8.12	0.3	0.02	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Farfantepenaeus aztecus	17.6	0.10	0.7	0.15	2	42.5	24.75	2.2	1.17	2	5.2	0.00	0.2	0.00	1
Squilla spp	1.8	1.76	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Litopenaeus setiferus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Xiphopenaeus kroyeri	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Sicyonia brevirostris	3.8	3.82	0.0	0.04	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Micropogonias undulatus	3.8	3.82	0.2	0.22	2	563.2	367.68	39.7	24.42	2	5.2	0.00	0.6	0.00	1
Stenotomus caprinus	972.7	263.29	45.1	13.45	2	179.4	106.06	9.1	4.95	2	133.0	0.00	5.7	0.00	1
Peprilus burti	17.2	10.11	1.2	0.69	2	110.6	3.94	8.7	0.03	2	172.2	0.00	12.8	0.00	1
Chloroscombrus chrysurus	95.4	81.30	4.5	3.80	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Prionotus longispinosus	3.9	0.42	0.1	0.03	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Stellifer lanceolatus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Trachurus lathami	135.8	121.67	2.7	2.38	2	8.1	0.81	0.2	0.12	2	20.9	0.00	0.2	0.00	1
Trichiurus lepturus	0.0	0.00	0.0	0.00	2	149.7	43.03	8.1	3.02	2	2.6	0.00	0.2	0.00	1
Squid spp	40.9	33.24	0.3	0.25	2	6.7	6.67	0.0	0.01	2	7.8	0.00	0.1	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 2007 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	173.0	0	1	444.0	237.2	2	148.0	36.47	6	0.0	0	0	92.7	38.53	2	30.9	0	1
Total finfish	162.0	0	1	386.0	252.7	2	135.0	35.68	6	0.0	0	0	90.1	36.99	2	30.5	0	1
Total crustacean	10.5	0	1	56.3	13.53	2	11.5	4.32	6	0.0	0	0	2.3	1.17	2	0.3	0	1
Total other	0.2	0	1	1.9	1.91	2	2.1	0.68	6	0.0	0	0	0.5	0.25	2	0.1	0	1
Surface temperature	28.6	0.62	8	28.4	0.41	11	28.3	0.13	9	0.0	0	0	29.1	0.07	3	29.3	0.03	2
Midwater temperature	27.9	0.58	8	27.5	0.45	11	28.1	0.12	9	0.0	0	0	25.1	0.38	3	23.2	0.03	2
Bottom temperature	27.9	0.59	8	27.1	0.44	11	26.6	0.19	9	0.0	0	0	21.2	0.07	3	19.9	0.4	2
Surface salinity	26.5	1.12	8	27.9	0.82	11	34.0	0.72	9	0.0	0	0	35.5	0.37	3	35.9	0.07	2
Midwater salinity	28.5	1.04	8	29.6	0.6	11	34.9	0.49	9	0.0	0	0	36.4	0.01	3	36.5	0	2
Bottom salinity	29.1	1.06	8	31.3	0.89	11	36.0	0.12	9	0.0	0	0	36.5	0	3	36.5	0.01	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	6.5	0.51	8	6.4	0.17	11	5.5	0.21	9	0.0	0	0	5.9	0	3	5.9	0	2
Midwater oxygen	5.2	0.48	8	5.2	0.42	11	5.3	0.1	9	0.0	0	0	6.7	0.06	3	6.9	0	2
Bottom oxygen	4.4	0.52	8	4.1	0.44	11	4.2	0.31	9	0.0	0	0	5.9	0.15	3	5.2	0.25	2

Table 11a

Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2007 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
Farfantepenaeus aztecus	5.8	0.00	0.0	0.00	1	71.5	27.68	0.6	0.22	10	999.0	360.57	13.2	4.29	18
Callinectes similis	7.7	0.00	0.1	0.00	1	69.0	39.77	0.6	0.37	10	440.8	224.21	5.1	2.25	18
Squilla spp	7.7	0.00	0.1	0.00	1	21.9	16.79	0.1	0.09	10	474.4	270.65	4.2	2.27	18
Trachypenaeus similis	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	10	183.4	138.33	0.7	0.50	18
Sicyonia brevirostris	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	10	13.9	13.22	0.1	0.13	18
Portunus spinicarpus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	10	2.9	2.77	0.0	0.01	18
Micropogonias undulatus	3646.5	0.00	75.2	0.00	1	5878.6	1864.70	125.5	36.97	10	1067.8	796.85	22.6	15.23	18
Peprilus burti	7.7	0.00	0.3	0.00	1	21.4	10.75	0.7	0.37	10	1451.0	886.06	27.3	14.98	18
Stenotomus caprinus	0.0	0.00	0.0	0.00	1	6.9	6.92	0.2	0.18	10	1142.2	369.19	17.1	6.17	18
Trachurus lathami	0.0	0.00	0.0	0.00	1	6.8	4.52	0.1	0.06	10	529.8	210.50	7.6	3.07	18
Cynoscion nothus	17.4	0.00	1.0	0.00	1	320.2	97.41	12.2	4.00	10	246.6	109.30	5.1	3.45	18
Upeneus parvus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	10	67.3	20.72	0.9	0.27	18
Chloroscombrus chrysurus	34.8	0.00	1.0	0.00	1	115.0	64.00	3.5	1.88	10	57.0	39.81	1.7	1.11	18
Trichiurus lepturus	272.9	0.00	14.5	0.00	1	126.2	59.11	7.3	3.48	10	30.8	14.89	0.7	0.47	18
Squid spp	67.7	0.00	1.0	0.00	1	143.2	105.90	1.9	1.24	10	204.6	94.80	2.4	1.02	18

Table 11a (continued)

Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2007 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
Farfantepenaeus aztecus	386.7	118.40	8.1	2.36	14	145.3	62.66	4.8	1.99	9	28.1	22.61	1.4	1.17	2
Callinectes similis	77.2	19.75	0.8	0.20	14	4.7	4.35	0.1	0.07	9	0.0	0.00	0.0	0.00	2
Squilla spp	50.0	15.56	0.7	0.24	14	2.5	1.30	0.0	0.02	9	2.7	2.67	0.0	0.03	2
Trachypenaeus similis	23.1	20.21	0.1	0.11	14	0.0	0.00	0.0	0.00	9	0.0	0.00	0.0	0.00	2
Sicyonia brevirostris	63.9	28.60	0.6	0.25	14	12.2	10.91	0.1	0.12	9	0.0	0.00	0.0	0.00	2
Portunus spinicarpus	22.0	13.88	0.1	0.08	14	58.7	32.61	0.4	0.20	9	12.2	1.48	0.1	0.01	2
Micropogonias undulatus	1.9	0.76	0.1	0.06	14	0.2	0.24	0.0	0.01	9	0.0	0.00	0.0	0.00	2
Peprilus burti	102.2	35.44	3.0	1.18	14	68.4	33.22	2.5	0.95	9	15.3	15.33	0.8	0.84	2
Stenotomus caprinus	433.3	108.12	15.9	2.81	14	196.7	43.61	7.8	1.39	9	140.8	50.12	5.9	1.66	2
Trachurus lathami	364.4	150.59	4.9	1.73	14	220.3	87.92	3.5	1.25	9	12.2	6.88	0.2	0.13	2
Cynoscion nothus	0.2	0.23	0.0	0.04	14	0.4	0.37	0.0	0.00	9	0.0	0.00	0.0	0.00	2
Upeneus parvus	29.1	5.74	0.7	0.13	14	158.5	42.51	3.3	0.87	9	107.0	17.00	3.9	0.96	2
Chloroscombrus chrysurus	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	2
Trichiurus lepturus	5.5	2.91	0.4	0.21	14	1.0	0.42	0.1	0.04	9	0.0	0.00	0.0	0.00	2
Squid spp	44.4	16.79	0.5	0.18	14	46.7	10.84	0.7	0.19	9	62.0	0.70	1.3	0.29	2

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 2007 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	117.0	0	1	188.0	44.91	10	125.0	21.24	18	0.0	0	0	40.9	3.44	9	48.5	7.34	2
Total finfish	110.0	0	1	177.0	43.75	10	97.8	22.37	18	0.0	0	0	33.8	3.56	9	42.4	4.78	2
Total crustacean	6.0	0	1	7.5	1.83	10	24.5	6.56	18	0.0	0	0	5.5	2.32	9	3.6	1.98	2
Total other	1.4	0	1	3.6	1.44	10	2.8	1.02	18	0.0	0	0	1.5	0.46	9	2.3	0.65	2
Surface temperature	28.6	0.24	5	28.7	0.15	18	28.8	0.04	20	0.0	0	0	28.9	0.13	5	28.8	0.11	5
Midwater temperature	27.8	0.73	5	27.9	0.33	18	27.8	0.23	20	0.0	0	0	24.4	0.62	5	23.0	0.64	5
Bottom temperature	27.8	0.72	5	27.5	0.29	18	25.9	0.05	20	0.0	0	0	20.9	0.48	5	19.5	0.54	5
Surface salinity	28.0	1.77	5	29.1	0.78	18	32.2	0.13	20	0.0	0	0	33.5	0.25	5	33.7	0.13	5
Midwater salinity	30.2	0.81	5	31.6	0.17	18	34.0	0.38	20	0.0	0	0	36.4	0.02	5	36.4	0.02	5
Bottom salinity	31.2	0.19	5	32.3	0.28	18	35.6	0.24	20	0.0	0	0	36.5	0.01	5	36.5	0.03	5
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	6.1	0.24	5	6.6	0.22	18	6.0	0.04	20	0.0	0	0	5.8	0.08	5	5.8	0.09	5
Midwater oxygen	5.3	0.37	5	5.7	0.09	18	5.6	0.12	20	0.0	0	0	6.5	0.04	5	6.4	0.15	5
Bottom oxygen	4.9	0.59	5	4.3	0.39	18	3.1	0.37	20	0.0	0	0	5.5	0.17	5	4.9	0.3	5

Table 12a

Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2007 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
Callinectes similis	3844.9	3343.10	21.2	16.59	2	1837.1	802.42	12.7	4.84	6	878.3	402.76	6.5	2.75	10
Portunus spinicarpus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	10
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	2	164.9	151.49	1.1	0.96	6	510.4	146.38	4.9	1.38	10
Trachypenaeus similis	0.0	0.00	0.0	0.00	2	43.9	43.91	0.1	0.13	6	280.8	110.64	1.0	0.39	10
Solenocera vioscai	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	10
Squilla spp	24.0	24.00	0.2	0.22	2	85.3	51.23	0.9	0.51	6	108.0	53.97	1.2	0.53	10
Trachurus lathami	2196.0	2196.00	26.7	26.75	2	0.0	0.00	0.0	0.00	6	1648.1	592.79	21.8	8.16	10
Peprilus burti	42.0	42.00	0.8	0.84	2	29.7	14.64	0.8	0.39	6	1347.4	751.86	21.3	12.63	10
Micropogonias undulatus	107.5	83.45	1.7	1.20	2	2684.6	999.69	47.3	17.61	6	571.4	446.69	14.9	11.89	10
Serranus atrobranchus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	6	8.6	6.01	0.0	0.03	10
Stenotomus caprinus	0.0	0.00	0.0	0.00	2	5.7	5.65	0.0	0.04	6	49.2	13.25	0.3	0.08	10
Chloroscombrus chrysurus	411.3	363.27	16.1	14.13	2	611.2	217.84	19.6	7.34	6	42.8	38.96	1.0	0.83	10
Larimus fasciatus	18.0	18.00	1.8	1.79	2	628.9	240.33	16.2	6.10	6	10.5	6.12	0.5	0.30	10
Cynoscion nothus	209.5	198.55	9.0	8.73	2	401.4	144.40	8.7	3.42	6	37.1	14.18	1.3	0.62	10
Squid spp	138.0	138.00	0.9	0.89	2	38.3	25.64	0.6	0.38	6	245.7	66.14	3.6	1.04	10

Table 12a (continued)

Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2007 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
Callinectes similis	84.0	0.00	0.7	0.00	1	58.0	36.99	0.4	0.22	6	0.0	0.00	0.0	0.00	6
Portunus spinicarpus	7.6	0.00	0.0	0.00	1	568.8	312.83	2.2	1.14	6	288.6	165.99	1.7	0.82	6
Farfantepenaeus aztecus	15.3	0.00	0.2	0.00	1	97.9	34.29	2.1	0.64	6	60.4	16.18	2.9	0.71	6
Trachypenaeus similis	50.2	0.00	0.3	0.00	1	34.5	28.82	0.2	0.18	6	4.6	3.77	0.0	0.00	6
Solenocera vioscai	0.0	0.00	0.0	0.00	1	196.8	105.23	1.1	0.55	6	61.4	31.06	0.5	0.25	6
Squilla spp	0.0	0.00	0.0	0.00	1	30.9	14.40	0.3	0.14	6	25.3	8.72	0.2	0.08	6
Trachurus lathami	413.5	0.00	6.2	0.00	1	29.3	19.06	0.5	0.33	6	291.8	178.21	5.2	2.79	6
Peprilus burti	1614.5	0.00	29.6	0.00	1	229.9	143.81	5.7	3.52	6	319.9	188.80	14.9	8.39	6
Micropogonias undulatus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6
Serranus atrobranchus	0.0	0.00	0.0	0.00	1	102.7	28.19	1.4	0.37	6	194.7	52.56	2.5	0.70	6
Stenotomus caprinus	183.3	0.00	5.0	0.00	1	98.9	37.17	3.9	1.37	6	107.3	38.74	5.2	1.86	6
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6
Larimus fasciatus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6
Cynoscion nothus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	6	0.0	0.00	0.0	0.00	6
Squid spp	160.4	0.00	3.5	0.00	1	17.0	7.40	0.4	0.19	6	279.4	153.88	2.9	1.41	6

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 2007 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	97.4	40.64	2	152.0	36.38	6	88.8	19.37	10	0.0	0	0	33.4	3.85	6	69.0	12.5	6
Total finfish	72.1	20.86	2	133.0	33.96	6	69.7	19.59	10	0.0	0	0	24.8	5.4	6	57.6	12.38	6
Total crustacean	24.0	18.57	2	17.3	6.75	6	14.5	5.12	10	0.0	0	0	7.5	2.41	6	6.7	1.32	6
Total other	1.2	1.2	2	1.4	0.52	6	4.6	1.1	10	0.0	0	0	1.1	0.46	6	4.8	1.52	6
Surface temperature	27.7	0.6	5	27.8	0.2	5	27.8	0.22	11	0.0	0	0	28.2	0	1	0.0	0	0
Midwater temperature	27.7	0.6	5	27.6	0.24	5	26.7	0.35	11	0.0	0	0	24.8	0	1	0.0	0	0
Bottom temperature	27.4	0.83	5	27.4	0.4	5	25.4	0.45	11	0.0	0	0	21.5	0	1	0.0	0	0
Surface salinity	30.3	1.87	5	30.2	1.93	5	31.8	1.27	11	0.0	0	0	32.9	0	1	0.0	0	0
Midwater salinity	30.3	1.88	5	31.8	1.46	5	34.9	0.66	11	0.0	0	0	36.3	0	1	0.0	0	0
Bottom salinity	30.5	1.95	5	32.6	1.44	5	35.4	0.23	11	0.0	0	0	36.4	0	1	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	7.1	0.46	5	7.6	0.4	5	7.0	0.39	11	0.0	0	0	5.6	0	1	0.0	0	0
Midwater oxygen	7.1	0.46	5	7.2	0.2	5	6.6	0.19	11	0.0	0	0	6.0	0	1	0.0	0	0
Bottom oxygen	7.0	0.53	5	6.2	0.2	5	5.8	0.25	11	0.0	0	0	4.9	0	1	0.0	0	0

Table 13a

Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2007 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.

	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
Portunus spinicarpus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	2.7	1.78	0.0	0.01	8
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	0	123.6	95.22	1.1	0.74	3	1613.0	819.72	13.6	6.42	8
Farfantepenaeus duorarum	0.0	0.00	0.0	0.00	0	442.2	249.32	8.6	4.79	3	367.9	233.40	5.2	3.29	8
Callinectes similis	0.0	0.00	0.0	0.00	0	210.0	135.86	1.4	0.76	3	220.6	88.42	1.3	0.59	8
Trachypenaeus similis	0.0	0.00	0.0	0.00	0	1.8	1.82	0.0	0.01	3	2.0	1.00	0.0	0.01	8
Solenocera vioscai	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	8
Trachurus lathami	0.0	0.00	0.0	0.00	0	1470.8	872.82	19.4	12.01	3	1533.2	784.70	18.7	9.65	8
Peprilus burti	0.0	0.00	0.0	0.00	0	10.9	10.91	0.1	0.15	3	959.4	585.18	11.0	6.47	8
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	449.2	363.37	2.7	2.25	3	866.7	343.66	5.1	2.19	8
Upeneus parvus	0.0	0.00	0.0	0.00	0	876.1	88.78	7.1	0.34	3	314.0	125.71	2.9	1.00	8
Serranus atrobranchus	0.0	0.00	0.0	0.00	0	1.8	1.82	0.0	0.02	3	12.9	12.92	0.1	0.06	8
Prionotus stearnsi	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	159.9	78.02	0.5	0.25	8
Saurida brasiliensis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	3	106.5	41.06	0.9	0.35	8
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	3.6	3.64	0.1	0.09	3	268.9	257.40	4.4	4.19	8
Squid spp	0.0	0.00	0.0	0.00	0	229.2	98.77	2.4	0.73	3	263.8	68.14	6.0	1.59	8

Table 13a (continued)

Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2007 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.

	21-30 fm					31-40 fm					>40 fm				
SPECIES	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N	NUM	SEM	WT	SEM	N
Portunus spinicarpus	597.4	313.94	2.8	1.51	8	11.7	0.00	0.1	0.00	1	46.0	0.00	0.5	0.00	1
Farfantepenaeus aztecus	103.8	32.32	2.0	0.66	8	60.0	0.00	2.7	0.00	1	33.5	0.00	1.9	0.00	1
Farfantepenaeus duorarum	0.1	0.14	0.0	0.01	8	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	1
Callinectes similis	44.2	18.03	0.3	0.15	8	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	1
Trachypenaeus similis	82.9	37.52	0.5	0.23	8	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	1
Solenocera vioscai	63.2	41.38	0.3	0.17	8	0.0	0.00	0.0	0.00	1	136.7	0.00	1.0	0.00	1
Trachurus lathami	136.7	56.13	1.8	0.68	8	593.3	0.00	9.4	0.00	1	0.0	0.00	0.0	0.00	1
Peprilus burti	87.3	72.29	2.3	1.86	8	2551.7	0.00	56.1	0.00	1	0.0	0.00	0.0	0.00	1
Stenotomus caprinus	138.0	38.46	4.0	1.01	8	126.7	0.00	5.1	0.00	1	11.2	0.00	0.5	0.00	1
Upeneus parvus	53.5	19.07	1.6	0.50	8	36.7	0.00	1.5	0.00	1	0.0	0.00	0.0	0.00	1
Serranus atrobranchus	76.6	23.66	0.9	0.26	8	6.7	0.00	0.1	0.00	1	266.5	0.00	4.4	0.00	1
Prionotus stearnsi	46.2	9.06	0.3	0.07	8	30.0	0.00	0.5	0.00	1	0.0	0.00	0.0	0.00	1
Saurida brasiliensis	63.5	16.57	0.5	0.15	8	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	1
Micropogonias undulatus	0.7	0.47	0.1	0.05	8	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	1
Squid spp	127.0	38.38	2.4	0.64	8	48.3	0.00	0.8	0.00	1	0.0	0.00	0.0	0.00	1

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 2007 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.

	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	0.0	0	0	54.2	7.73	3	80.3	16.36	8	0.0	0	0	92.3	0	1	42.0	0	1
Total finfish	0.0	0	0	39.5	10.48	3	50.9	15.17	8	0.0	0	0	84.5	0	1	34.0	0	1
Total crustacean	0.0	0	0	11.9	6.03	3	23.2	10.32	8	0.0	0	0	3.2	0	1	6.6	0	1
Total other	0.0	0	0	2.5	0.74	3	6.1	1.56	8	0.0	0	0	4.7	0	1	1.3	0	1
Surface temperature	25.0	0	2	25.6	0.25	12	26.8	0.16	14	0.0	0	0	29.0	0.55	2	28.3	0	1
Midwater temperature	25.0	0	2	24.5	0.24	12	24.6	0.34	14	0.0	0	0	23.3	0.14	2	23.1	0	1
Bottom temperature	24.5	0.5	2	23.7	0.28	12	23.1	0.29	14	0.0	0	0	20.5	0.95	2	20.4	0	1
Surface salinity	34.0	0	2	34.5	0.2	12	34.2	0.13	14	0.0	0	0	32.0	0.36	2	34.1	0	1
Midwater salinity	34.5	0.5	2	34.8	0.22	12	35.1	0.28	14	0.0	0	0	36.1	0.26	2	36.4	0	1
Bottom salinity	34.0	0	2	35.3	0.14	12	35.6	0.19	14	0.0	0	0	36.4	0.11	2	36.5	0	1
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	5.0	0	2	5.9	0.13	12	6.0	0.13	14	0.0	0	0	5.8	0.25	2	5.7	0	1
Midwater oxygen	4.5	0.5	2	5.9	0.16	12	6.1	0.18	14	0.0	0	0	6.2	0.4	2	6.4	0	1
Bottom oxygen	4.0	0	2	5.6	0.28	12	5.3	0.26	14	0.0	0	0	5.4	0.15	2	5.7	0	1

Table 14. 2007 Fall Shrimp/Groundfish Survey species composition list, 292 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	197000	8301.0	274	93.8
Stenotomus caprinus	longspine porgy	25672	817.1	204	69.9
Peprilus burti	gulf butterfish	16867	846.1	156	53.4
Chloroscombrus chrysurus	Atlantic bumper	15050	548.0	133	45.5
Leiostomus xanthurus	spot	11348	953.5	196	67.1
Cynoscion nothus	silver seatrout	10482	621.4	169	57.9
Trachurus lathami	rough scad	9684	264.3	105	36.0
Trichiurus lepturus	Atlantic cutlassfish	5414	192.6	124	42.5
Prionotus longispinosus	bigeye searobin	4660	119.6	185	63.4
Synodus foetens	inshore lizardfish	3716	487.2	217	74.3
Stellifer lanceolatus	star drum	3407	48.0	38	13.0
Lutjanus campechanus	red snapper	3067	90.7	165	56.5
Cynoscion arenarius	sand seatrout	3025	225.1	140	47.9
Syacium gunteri	shoal flounder	2748	61.9	137	46.9
Anchoa hepsetus	striped anchovy	2070	26.4	63	21.6
Larimus fasciatus	banded drum	1951	105.4	108	37.0
Upeneus parvus	dwarf goatfish	1787	69.0	68	23.3
Serranus atrobranchus	blackear bass	1764	17.6	65	22.3
Harengula jaguana	scaled sardine	1649	76.4	79	27.1
Prionotus roseus	bluespotted searobin	1481	27.6	13	4.5
Lagodon rhomboides	pinfish	1282	87.4	103	35.3
Eucinostomus gula	silver jenny	1245	36.1	92	31.5
Centropristis philadelphica	rock sea bass	1020	57.5	113	38.7
Cynoscion spp.	seatrouts	1018	2.8	27	9.2
Diplectrum bivittatum	dwarf sand perch	1018	18.3	80	27.4
Selene setapinnis	Atlantic moonfish	976	45.5	107	36.6

Table 14. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Pristipomoides aquilonaris	wenchman	921	89.8	42	14.4
Arius felis	hardhead catfish	851	148.0	64	21.9
Prionotus stearnsi	shortwing searobin	851	6.6	19	6.5
Chaetodipterus faber	Atlantic spadefish	807	36.3	118	40.4
Cyclopsetta chittendeni	Mexican flounder	767	61.8	117	40.1
Lutjanus synagris	lane snapper	720	51.7	87	29.8
Anchoa mitchilli	bay anchovy	584	0.8	22	7.5
Sphoeroides parvus	least puffer	579	3.9	62	21.2
Prionotus paralatus	Mexican searobin	568	26.5	22	7.5
Halieutichthys aculeatus	pancake batfish	528	3.0	59	20.2
Trichopsetta ventralis	sash flounder	518	13.3	24	8.2
Opisthonema oglinum	Atlantic thread herring	488	18.1	57	19.5
Orthopristis chrysoptera	pigfish	482	35.4	35	12.0
Etropus crossotus	fringed flounder	479	8.6	74	25.3
Lepophidium brevibarbe	blackedge cusk-eel	464	16.5	59	20.2
Scomberomorus maculatus	Spanish mackerel	446	14.1	24	8.2
Citharichthys spilopterus	bay whiff	423	6.1	68	23.3
Menticirrhus americanus	southern kingfish	357	32.7	41	14.0
Peprilus alepidotus	harvestfish	334	23.1	49	16.8
Porichthys plectrodon	Atlantic midshipman	326	4.9	58	19.9
Brevoortia patronus	gulf menhaden	313	17.0	24	8.2
Balistes capriscus	gray triggerfish	289	23.7	61	20.9
Prionotus rubio	blackwing searobin	232	7.1	30	10.3
Mullus auratus	red goatfish	229	11.3	26	8.9
Lagocephalus laevigatus	smooth puffer	203	23.7	54	18.5
Saurida brasiliensis	largescale lizardfish	200	0.8	39	13.4
Scorpaena calcarata	smoothhead scorpionfish	177	3.1	21	7.2
Bollmannia communis	ragged goby	146	0.4	17	5.8
Scomberomorus cavalla	king mackerel	139	27.6	36	12.3
Selene vomer	lookdown	133	1.7	35	12.0

Table 14. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Bagre marinus	gafftopsail catfish	132	15.2	23	7.9
Ogcocephalus declivirostris	slantbrow batfish	125	1.8	27	9.2
Sphyraena guachancho	guaguanche	114	14.8	25	8.6
Paralichthys lethostigma	southern flounder	108	31.2	35	12.0
Syacium papillosum	dusky flounder	108	4.2	7	2.4
Peprilus triacanthus	butterfish	100	4.2	6	2.1
Diplectrum formosum	sand perch	98	8.5	8	2.7
Polydactylus octonemus	Atlantic threadfin	97	4.9	17	5.8
Ancylopsetta quadrocellata	ocellated flounder	96	12.0	28	9.6
Urophycis floridana	southern hake	96	11.2	16	5.5
Rhomboplites aurorubens	vermilion snapper	94	5.0	13	4.5
Synodus poeyi	offshore lizardfish	93	0.7	26	8.9
Caranx crysos	blue runner	91	8.6	30	10.3
Haemulon aurolineatum	tomtate	91	3.0	11	3.8
Conodon nobilis	barred grunt	88	10.5	8	2.7
Symphurus diomedianus	spottedfin tonguefish	80	2.0	19	6.5
Ophidion welshi	crested cusk-eel	77	3.1	20	6.8
Brotula barbata	bearded brotula	76	4.8	21	7.2
Equetus umbrosus	cubbyu	73	2.1	10	3.4
Menticirrhus littoralis	gulf kingfish	73	9.7	9	3.1
Hoplunnis macrurus	freckled pike-conger	72	0.8	16	5.5
Eucinostomus argenteus	spotfin mojarra	67	1.0	7	2.4
Hildebrandia flava	yellow conger	67	4.2	11	3.8
Sardinella aurita	Spanish sardine	67	1.8	11	3.8
Rhizoprionodon terraenovae	Atlantic sharpnose shark	65	62.3	23	7.9
Symphurus plagiusa	blackcheek tonguefish	56	1.1	18	6.2
Selar crumenophthalmus	bigeye scad	54	5.5	12	4.1
Monacanthus hispidus	planehead filefish	50	1.2	13	4.5
Prionotus ophryas	bandtail searobin	49	0.6	16	5.5
Dorosoma petenense	threadfin shad	48	4.7	1	0.3

Table 14. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Caranx hippos	crevalle jack	46	3.3	11	3.8
Gymnachirus texae	fringed sole	46	0.7	13	4.5
Caulolatilus intermedius	anchor tilefish	41	5.0	14	4.8
Prionotus tribulus	bighead searobin	41	3.7	14	4.8
Raja texana	roundel skate	41	18.6	29	9.9
Ancylopsetta dilecta	three-eye flounder	36	2.8	10	3.4
Cyclopsetta fimbriata	spotfin flounder	34	1.6	3	1.0
Sphyrna tiburo	bonnethead	34	44.2	24	8.2
Kathetostoma albigutta	lancer stargazer	31	1.5	9	3.1
Equetus wamotoi	blackbar drum	29	2.3	8	2.7
Hemicaranx amblyrhynchus	bluntnose jack	26	2.1	10	3.4
Ogcocephalus pantostictus	spotted batfish	26	4.8	9	3.1
Symphurus civitatus	offshore tonguefish	26	0.5	9	3.1
Priacanthus arenatus	bigeye	23	3.4	8	2.7
Pisces	fishes	22	0.2	3	1.0
Citharichthys macrops	spotted whiff	19	0.7	4	1.4
Peristedion gracile	slender searobin	18	0.4	1	0.3
Lepophidium jeannae	mottled cusk-eel	16	0.9	3	1.0
Syacium micrurum	channel flounder	15	0.4	3	1.0
Rypticus maculatus	whitespotted soapfish	14	0.5	6	2.1
Squatina dumeril	Atlantic angel shark	14	27.4	8	2.7
Antennarius radiosus	singlespot frogfish	12	0.3	3	1.0
Decapterus punctatus	round scad	12	0.7	4	1.4
Citharichthys cornutus	horned whiff	11	0.1	4	1.4
Dasyatis americana	southern stingray	11	13.6	8	2.7
Pomatomus saltatrix	bluefish	11	3.9	7	2.4
Sphoeroides dorsalis	marbled puffer	10	0.3	3	1.0
Urophycis cirrata	gulf hake	10	0.3	4	1.4
Bellator militaris	horned searobin	9	0.1	5	1.7
Cheilopogon cyanopterus	margined flyingfish	9	0.2	1	0.3

Table 14. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Decodon puellaris	red hogfish	9	0.2	3	1.0
Narcine brasiliensis	lesser electric ray	9	3.5	5	1.7
Prionotus scitulus	leopard searobin	9	0.2	5	1.7
Trachinotus carolinus	Florida pompano	9	2.2	7	2.4
Anchoa lyolepis	dusky anchovy	8	0.0	3	1.0
Elops saurus	ladyfish	8	1.2	4	1.4
Mustelus canis	smooth dogfish	8	8.5	6	2.1
Pontinus longispinis	longspine scorpionfish	8	0.5	2	0.7
Umbrina coroides	sand drum	8	0.5	3	1.0
Bregmaceros atlanticus	antenna codlet	7	0.0	2	0.7
Centropristis ocyura	bank sea bass	7	0.3	1	0.3
Lactophrys quadricornis	scrawled cowfish	7	1.0	5	1.7
Rachycentron canadum	cobia	7	2.2	5	1.7
Sphoeroides spengleri	bandtail puffer	7	0.2	2	0.7
Bathyanthias mexicanus	yellowtail bass	6	0.2	3	1.0
Dasyatis sabina	Atlantic stringray	6	0.7	3	1.0
Gymnothorax nigromarginatus	blackedge moray	6	0.7	3	1.0
Paralichthys albigutta	gulf flounder	6	0.8	3	1.0
Physiculus fulvus	metallic codling	6	0.0	4	1.4
Estropus microstomus	smallmouth flounder	5	0.0	3	1.0
Estropus microstomus	smallmouth flounder	5	0.0	3	1.0
Eucinostomus melanopterus	flagfin mojarra	5	0.1	1	0.3
Gobionellus oceanicus	highfin goby	5	0.0	2	0.7
Sciaenops ocellatus	red drum	5	25.6	3	1.0
Trachinocephalus myops	snakefish	5	0.4	2	0.7
Antennarius ocellatus	ocellated frogfish	4	0.0	2	0.7
Ariomma regulus	spotted driftfish	4	0.1	1	0.3
Epinephelus flavolimbatus	yellowedge grouper	4	0.5	2	0.7
Hemanthias	sea basses and groupers	4	0.0	1	0.3
Paralichthys squamilentus	broad flounder	4	1.3	2	0.7

Table 14. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Scorpaena dispar	hunchback scorpionfish	4	0.2	2	0.7
Serranus phoebe	tattler	4	0.2	2	0.7
Aluterus schoepfi	orange filefish	3	0.8	1	0.3
Calamus leucosteus	whitebone porgy	3	1.7	2	0.7
Carcharhinus acronotus	blacknose shark	3	11.0	3	1.0
Echeneis naucrates	sharksucker	3	1.4	3	1.0
Gymnothorax saxicola	honeycomb moray	3	0.5	2	0.7
Hemanthias leptus	longtail bass	3	1.0	1	0.3
Neomerinthe hemingwayi	spinycheek scorpionfish	3	0.0	2	0.7
Opsanus pardus	leopard toadfish	3	0.2	2	0.7
Serranidae	sea basses and groupers	3	0.1	1	0.3
Tetrapturus pfluegeri	longbill spearfish	3	0.2	1	0.3
Trinectes maculatus	hogchoker	3	0.1	2	0.7
Apogon affinis	bigtooth cardinalfish	2	0.0	1	0.3
Chilomycterus schoepfi	striped burrfish	2	0.4	2	0.7
Etropus cyclosquamus	shelf flounder	2	0.0	2	0.7
Lutjanus griseus	grey snapper	2	0.1	1	0.3
Ophichthus gomesi	shrimp eel	2	0.2	2	0.7
Ophidion grayi	blotched cusk-eel	2	0.1	1	0.3
Ophidion holbrooki	bank cusk-eel	2	0.0	1	0.3
Pogonias cromis	black drum	2	13.2	2	0.7
Rhinobatos lentiginosus	Atlantic guitarfish	2	0.3	1	0.3
Rhinoptera bonasus	cownose ray	2	15.7	2	0.7
Rhinoptera brasiliensis	Brazilian cow-nosed ray	2	20.1	1	0.3
Symphurus urospilus	spottail tonguefish	2	0.0	1	0.3
Acanthostracion polygonius	honeycomb cowfish	1	0.0	1	0.3
Aluterus scriptus	scrawled filefish	1	0.1	1	0.3
Bairdiella chrysoura	silver perch	1	0.0	1	0.3
Bembrops anatirostris	longnose duckbill	1	0.1	1	0.3
Brevoortia gunteri	finescale menhaden	1	0.1	1	0.3

Table 14. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Dasyatis say	bluntnose stingray	1	0.7	1	0.3
Echiophis punctifer	snapper eel	1	0.2	1	0.3
Engyophrys senta	spiny flounder	1	0.0	1	0.3
Etrumeus teres	round herring	1	0.1	1	0.3
Gymnothorax kolpos	blacktail moray	1	0.2	1	0.3
Hemiramphus balao	balao	1	0.0	1	0.3
Hoplunnis tenuis	spotted pike conger	1	0.0	1	0.3
Microphis	freshwater pipefish	1	0.0	1	0.3
Mustelus norrisi	Florida smoothhound	1	1.1	1	0.3
Neobythites gillii	cusk-eel	1	0.0	1	0.3
Sciaenidae	croakers	1	0.0	1	0.3
Seriola dumerili	greater amberjack	1	0.2	1	0.3
Syngnathus louisianae	chain pipefish	1	0.0	1	0.3
Crustaceans					
Farfantepenaeus aztecus	brown shrimp	15029	372.9	249	85.3
Callinectes similis	lesser blue crab	4926	87.6	178	61.0
Litopenaeus setiferus	white shrimp	3924	103.1	114	39.0
Squilla empusa	mantis shrimp	1362	15.6	118	40.4
Portunus gibbesii	irridescent swimming crab	1135	7.0	92	31.5
Trachypenaeus similis	roughback shrimp	1047	3.6	51	17.5
Trachypenaeus constrictus	roughneck shrimp	1003	3.3	46	15.8
Portunus spinicarpus	longspine swimming crab	866	7.0	36	12.3
Callinectes sapidus	blue crab	841	38.7	54	18.5
Sicyonia dorsalis	lesser rock shrimp	508	1.8	21	7.2
Farfantepenaeus duorarum	pink shrimp	413	9.5	42	14.4
Sicyonia brevirostris	brown rock shrimp	404	6.2	31	10.6
Solenocera vioscai	humpback shrimp	397	1.5	25	8.6
Xiphopenaeus kroyeri	seabob	260	0.8	6	2.1

Table 14. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Calappa sulcata	yellow box crab	213	55.9	62	21.2
Portunus spinimanus	blotched swimming crab	193	6.6	35	12.0
Squilla chydaea	mantis shrimp	172	0.9	28	9.6
Anasimus latus	stilt spider crab	84	0.7	16	5.5
Stenorhynchus seticornis	yellowline arrow crab	33	0.2	10	3.4
Raninoides louisianensis	gulf frog crab	29	0.3	10	3.4
Ovalipes floridanus	Florida lady crab	25	0.6	10	3.4
Dardanus insignis	red brocade hermit	15	0.1	4	1.4
Hepatus epheliticus	calico crab	14	0.6	4	1.4
Podochela sidneyi	shortfinger neck crab	13	0.0	7	2.4
Paguristes sericeus	blue-eyed hermit	11	0.0	2	0.7
Paguristes triangulatus	hermit crab	10	0.0	3	1.0
Squilla neglecta	mantis shrimp	10	0.2	3	1.0
Pagurus bullisi	hermit crab	9	0.0	5	1.7
Parapenaeus politus	deepwater rose shrimp	9	0.0	3	1.0
Euphrosynoplax clausa	craggy bathyal crab	8	0.1	3	1.0
Pseudorhombila quadridentata	flecked squareback crab	8	0.1	4	1.4
Myropsis quinquespinosa	fivespine purse crab	7	0.0	2	0.7
Persephona crinita	pink purse crab	7	0.0	2	0.7
Iliacantha liodactylus	purse crab	6	0.0	4	1.4
Acanthocarpus alexandri	gladiator box crab	5	0.0	2	0.7
Arenaeus cribrarius	speckled swimming crab	5	0.1	2	0.7
Leiolambrus nitidus	white elbow crab	5	0.0	3	1.0
Leiolambrus nitidus	white elbow crab	5	0.0	3	1.0
Persephona mediterranea	mottled purse crab	5	0.0	2	0.7
Petrochirus diogenes	giant hermit crab	5	0.0	1	0.3
Libinia dubia	longnose spider crab	4	0.0	3	1.0
Scyllarus depressus	scaled slipper lobster	4	0.0	1	0.3
Calappa flammea	flame box crab	3	0.3	2	0.7
Parthenope granulata	bladetooth elbow crab	3	0.0	2	0.7

Table 14. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Libinia	spider crabs	2	0.0	1	0.3
Libinia emarginata	portly spider crab	2	0.0	2	0.7
Lironeca ovalis	isopod	2	0.0	1	0.3
Menippe adina	Gulf stone crab	2	0.1	2	0.7
Pagurus pollicaris	flatclaw hermit crab	2	0.0	1	0.3
Collodes robustus	spider crab	1	0.0	1	0.3
Danielum ixbauchac	red sea crab	1	0.0	1	0.3
Metoporhaphis calcarata	false arrow crab	1	0.0	1	0.3
Penaeopsis serrata	megalops shrimp	1	0.0	1	0.3
Plesionika longicauda	pandalid shrimp	1	0.0	1	0.3
Portunus sayi	sargassum swimming crab	1	0.0	1	0.3
Scyllarides nodifer	ridged slipper lobster	1	0.4	1	0.3
Stenocionops furcata	furcate crab	1	0.1	1	0.3
Others					
Amusium papyraceum	paper scallop	3304	36.9	54	18.5
Lolliguncula brevis	Atlantic brief squid	991	9.7	71	24.3
Loligo pleii	arrow squid	927	10.2	52	17.8
Renilla mulleri	short-stemmed sea pansy	555	1.4	27	9.2
Loligo pealeii	longfin squid	471	11.2	36	12.3
Astropecten cingulatus	starfish	307	3.6	34	11.6
Loligo spp.	squids	259	3.1	23	7.9
Aurelia aurita	moon jellyfish	206	45.8	42	14.4
Astropecten duplicatus	spiny beaded sea star	185	0.3	29	9.9
Pitar cordatus	Schwengel's pitar	102	2.3	17	5.8
Luidia clathrata	sea star	83	1.6	27	9.2
Anadara baughmani	Baughman's ark	76	1.0	5	1.7
Clypeaster prostratus	sea biscuit	60	12.4	1	0.3
Chrysaora quinquecirrha	sea nettle	39	0.7	10	3.4

Table 14. Species composition list (continued)

GENUS/SPECIES	COMMON NAME	TOTAL NUMBER CAUGHT	TOTAL WEIGHT CAUGHT (KG)	NUMBER OF TOWS WHERE CAUGHT	% FREQUENCY OCCURRENCE
Polystira albida	white giant turris	37	0.3	11	3.8
Styela plicata	tunicate	26	0.4	5	1.7
Chione clenchi	Clench venus	22	0.2	4	1.4
Sconsia striata	royal bonnet	17	0.3	6	2.1
Luidia alternata	banded luidia	15	0.5	2	0.7
Clypeaster ravenelii	cake urchin	10	0.5	4	1.4
Distorsio clathrata	Atlantic distorsio	7	0.1	2	0.7
Porifera	sponges	7	0.4	4	1.4
Mellita quinquiesperforata	five-slotted sand dollar	6	0.0	2	0.7
Solecurtus cumingianus	corrugate solecurtus	5	0.1	1	0.3
Calliactris tricolor	common sea anemone	4	0.0	1	0.3
Macoma brevifrons	short macoma	4	0.0	2	0.7
Ophiolepis elegans	brittle star	4	0.0	3	1.0
Tamoya haplonema	sea wasp	4	0.6	2	0.7
Tethyaster grandis	starfish	4	0.2	3	1.0
Conus austini	cone shell	3	0.0	2	0.7
Muricanthus fulvescens	giant eastern murex	3	0.2	2	0.7
Tonna galea	giant tun	3	0.9	2	0.7
Anadara ovalis	blood ark	2	0.0	1	0.3
Calliactis spp.	anemone	1	0.0	1	0.3
Caretta caretta	loggerhead turtle	1	40.0	1	0.3
Cyanea capillata	lion's mane	1	4.7	1	0.3
Echinaster spp.	thorny sea stars	1	0.0	1	0.3
Sargassum	sargassum	1	0.0	1	0.3

Table 15a

Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2007 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 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
Farfantepenaeus aztecus	10.3	10.26	0.1	0.15	4	76.9	27.29	1.3	0.47	12	137.7	51.63	3.1	1.18	17
Callinectes similis	3.5	2.26	0.0	0.02	4	6.3	3.10	0.1	0.05	12	19.4	12.56	0.5	0.31	17
Portunus gibbesii	9.8	6.11	0.0	0.03	4	3.5	1.78	0.0	0.01	12	13.4	8.13	0.1	0.05	17
Squilla spp	11.7	8.20	0.1	0.08	4	10.5	5.24	0.1	0.04	12	14.6	6.89	0.1	0.05	17
Litopenaeus setiferus	12.2	8.70	0.6	0.41	4	25.0	12.45	1.1	0.52	12	1.0	0.49	0.1	0.03	17
Farfantepenaeus duorarum	0.0	0.00	0.0	0.00	4	7.9	4.32	0.2	0.12	12	11.2	6.58	0.2	0.13	17
Micropogonias undulatus	472.0	344.44	19.4	14.23	4	1476.5	385.09	65.5	16.92	12	903.9	294.05	42.4	12.93	17
Chloroscombrus chrysurus	727.2	419.99	21.6	15.46	4	111.4	26.18	3.2	0.82	12	157.5	65.47	6.4	2.77	17
Stenotomus caprinus	0.0	0.00	0.0	0.00	4	65.0	55.48	1.2	1.00	12	248.9	98.33	8.6	3.99	17
Peprilus burti	1.2	1.15	0.0	0.01	4	34.0	24.78	1.9	1.40	12	64.3	38.35	8.0	6.03	17
Anchoa hepsetus	17.8	11.45	0.3	0.18	4	129.2	64.80	1.3	0.64	12	18.3	16.56	0.2	0.16	17
Cynoscion nothus	7.5	3.90	0.3	0.14	4	93.1	73.23	8.0	6.57	12	45.1	30.57	5.6	4.23	17
Eucinostomus gula	3.2	3.16	0.0	0.04	4	5.5	3.11	0.1	0.06	12	87.4	30.66	3.1	1.91	17
Leiostomus xanthurus	25.8	14.11	2.2	1.20	4	55.3	16.66	3.6	1.25	12	42.8	13.62	5.0	2.35	17
Squid spp	5.4	3.73	0.1	0.05	4	2.5	1.36	0.0	0.03	12	6.2	2.51	0.1	0.03	17

Table 15a (continued)

Statistical Zone 11

Summary of dominant organisms taken in statistical zone 11 during the 2007 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 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
Farfantepenaeus aztecus	196.3	112.29	5.0	2.84	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes similis	20.0	20.00	0.4	0.37	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Portunus gibbesii	43.4	20.57	0.3	0.17	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla spp	20.0	20.00	0.2	0.18	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Litopenaeus setiferus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Farfantepenaeus duorarum	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	1398.6	421.43	70.8	23.90	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	97.6	80.43	2.2	1.87	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Peprilus burti	370.0	370.00	22.8	22.79	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Anchoa hepsetus	110.0	110.00	1.0	1.04	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion nothus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Eucinostomus gula	26.9	21.14	0.5	0.43	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Leiostomus xanthurus	24.0	24.00	2.1	2.06	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid spp	16.0	16.00	0.1	0.08	2	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 15b

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 2007 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 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	54.7	14.77	4	107.0	22.94	12	103.0	24.71	17	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish	51.9	15.62	4	99.3	23.41	12	96.5	24.73	17	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean	0.9	0.31	4	3.2	0.93	12	4.7	1.48	17	0.0	0	0	0.0	0	0	0.0	0	0
Total other	1.7	1.66	4	4.2	2.19	12	2.1	1.48	17	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	25.6	0.05	2	26.8	0.22	8	27.3	0.08	14	0.0	0	0	0.0	0	0	0.0	0	0
Midwater temperature	25.9	0.25	2	27.0	0.2	8	27.5	0.06	14	0.0	0	0	0.0	0	0	0.0	0	0
Bottom temperature	25.8	0.15	2	26.9	0.22	8	27.5	0.07	14	0.0	0	0	0.0	0	0	0.0	0	0
Surface salinity	33.8	1.3	2	35.6	0.16	8	36.1	0.03	14	0.0	0	0	0.0	0	0	0.0	0	0
Midwater salinity	33.7	1.2	2	35.4	0.14	8	36.0	0.06	14	0.0	0	0	0.0	0	0	0.0	0	0
Bottom salinity	33.8	1.25	2	35.6	0.17	8	36.1	0.08	14	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	6.2	0.05	2	5.8	0.06	8	5.7	0.04	14	0.0	0	0	0.0	0	0	0.0	0	0
Midwater oxygen	6.0	0	2	5.8	0.04	8	5.7	0.03	14	0.0	0	0	0.0	0	0	0.0	0	0
Bottom oxygen	6.1	0	2	5.7	0.06	8	5.7	0.05	14	0.0	0	0	0.0	0	0	0.0	0	0

Table 16a

Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2007 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 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
Litopenaeus setiferus	193.6	0.00	2.4	0.00	1	199.6	18.91	2.9	0.29	4	88.5	25.47	2.7	0.89	13
Farfantepenaeus aztecus	2.7	0.00	0.0	0.00	1	160.5	60.93	1.0	0.36	4	76.0	29.46	0.7	0.25	13
Squilla spp	2.7	0.00	0.0	0.00	1	119.9	112.80	0.9	0.90	4	67.8	27.10	0.5	0.21	13
Callinectes similis	2.7	0.00	0.1	0.00	1	24.5	18.02	0.2	0.13	4	87.6	19.41	1.7	0.44	13
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	1	195.1	193.16	0.4	0.37	4	38.5	30.99	0.1	0.09	13
Trachypenaeus similis	0.0	0.00	0.0	0.00	1	27.3	27.27	0.0	0.03	4	17.1	9.53	0.0	0.02	13
Micropogonias undulatus	32.7	0.00	1.1	0.00	1	142.5	67.24	4.8	2.08	4	1949.1	726.44	77.4	26.52	13
Cynoscion nothus	90.0	0.00	0.7	0.00	1	475.8	353.10	2.8	1.88	4	422.6	171.41	5.8	2.79	13
Trichiurus lepturus	267.3	0.00	2.5	0.00	1	278.5	204.26	2.0	1.88	4	263.1	128.05	2.8	1.27	13
Cynoscion arenarius	0.0	0.00	0.0	0.00	1	788.6	773.51	5.5	4.80	4	165.3	76.31	3.1	0.90	13
Prionotus longispinosus	0.0	0.00	0.0	0.00	1	20.5	11.14	0.6	0.31	4	226.2	121.89	4.0	1.75	13
Prionotus roseus	0.0	0.00	0.0	0.00	1	0.0	0.00	0.0	0.00	4	154.8	126.97	2.8	2.24	13
Cynoscion spp.	0.0	0.00	0.0	0.00	1	46.4	46.36	0.0	0.04	4	5.8	3.91	0.0	0.00	13
Leiostomus xanthurus	0.0	0.00	0.0	0.00	1	82.7	39.69	5.8	2.62	4	31.1	16.43	2.1	1.26	13
Squid spp	13.6	0.00	0.1	0.00	1	63.7	45.17	0.5	0.27	4	47.1	25.45	0.3	0.16	13

Table 16a (continued)

Statistical Zone 13

Summary of dominant organisms taken in statistical zone 13 during the 2007 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 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
Litopenaeus setiferus	63.2	14.69	1.7	0.27	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Farfantepenaeus aztecus	39.2	11.47	0.4	0.15	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla spp	48.0	30.99	0.5	0.29	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes similis	42.5	18.92	1.7	0.75	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachypenaeus similis	47.0	33.00	0.1	0.07	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	368.0	102.28	20.5	4.94	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion nothus	210.3	106.28	5.2	1.24	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trichiurus lepturus	24.7	8.15	1.2	0.64	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion arenarius	17.3	9.55	2.3	1.48	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus longispinosus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Prionotus roseus	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion spp.	85.5	63.91	0.2	0.17	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Leiostomus xanthurus	7.3	2.55	0.7	0.29	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid spp	23.8	12.89	0.1	0.06	4	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 16b

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 2007 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 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	10.4	0	1	41.3	5.1	4	116.0	33.59	13	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish	7.1	0	1	31.5	5.41	4	108.0	32.7	13	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean	2.5	0	1	5.9	1.91	4	6.9	1.25	13	0.0	0	0	0.0	0	0	0.0	0	0
Total other	0.8	0	1	5.2	4.03	3	1.0	0.25	6	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	21.0	0	1	22.1	1.1	6	24.7	0.88	14	0.0	0	0	0.0	0	0	0.0	0	0
Midwater temperature	21.7	0	1	22.3	1.15	6	25.1	0.84	14	0.0	0	0	0.0	0	0	0.0	0	0
Bottom temperature	23.7	0	1	24.4	0.76	6	26.5	0.47	14	0.0	0	0	0.0	0	0	0.0	0	0
Surface salinity	25.7	0	1	27.8	1.21	6	31.2	0.47	14	0.0	0	0	0.0	0	0	0.0	0	0
Midwater salinity	30.5	0	1	31.8	0.38	6	32.5	0.35	14	0.0	0	0	0.0	0	0	0.0	0	0
Bottom salinity	33.8	0	1	34.8	0.37	6	34.9	0.58	14	0.0	0	0	0.0	0	0	0.0	0	0
Surface chlorophyll	0.0	0	0	2.0	0.08	4	1.8	0.22	11	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	8.7	0	1	7.2	0.44	6	6.7	0.71	14	0.0	0	0	0.0	0	0	0.0	0	0
Midwater oxygen	6.6	0	1	6.0	0.6	6	5.6	0.38	14	0.0	0	0	0.0	0	0	0.0	0	0
Bottom oxygen	2.9	0	1	3.8	0.46	6	4.0	0.33	14	0.0	0	0	0.0	0	0	0.0	0	0

Table 17a

Statistical Zone 14

Summary of dominant organisms taken in statistical zone 14 during the 2007 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 21-30 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
Farfantepenaeus aztecus	20.8	13.72	0.3	0.12	3	22.4	7.48	0.1	0.05	6	129.6	73.49	1.6	0.85	22
Litopenaeus setiferus	114.9	53.59	2.7	1.17	3	52.5	28.01	1.4	0.74	6	8.4	2.71	0.4	0.13	22
Callinectes similis	27.3	16.50	0.1	0.08	3	19.3	8.08	0.2	0.16	6	21.7	7.56	0.6	0.19	22
Trachypenaeus similis	5.0	5.00	0.0	0.01	3	25.2	24.65	0.1	0.05	6	3.3	1.42	0.0	0.01	22
Portunus gibbesii	9.1	6.38	0.1	0.04	3	19.2	14.70	0.1	0.09	6	2.8	1.20	0.0	0.01	22
Callinectes sapidus	0.0	0.00	0.0	0.00	3	8.5	7.78	1.1	0.98	6	6.6	4.06	0.8	0.47	22
Micropogonias undulatus	1307.4	424.27	57.7	10.57	3	649.5	280.11	27.7	12.05	6	1892.9	395.43	77.4	15.25	22
Leiostomus xanthurus	6.7	4.41	0.5	0.32	3	37.3	21.70	1.2	0.68	6	142.6	47.48	11.6	3.93	22
Stenotomus caprinus	0.0	0.00	0.0	0.00	3	0.5	0.45	0.0	0.01	6	42.4	17.36	0.8	0.29	22
Prionotus longispinosus	0.0	0.00	0.0	0.00	3	5.6	5.60	0.1	0.12	6	63.8	17.03	1.3	0.35	22
Prionotus roseus	0.0	0.00	0.0	0.00	3	146.1	136.45	2.5	2.46	6	28.2	23.91	0.5	0.41	22
Cynoscion nothus	1.4	1.43	0.0	0.03	3	4.0	1.90	0.4	0.21	6	55.0	29.61	5.0	2.81	22
Trichiurus lepturus	33.3	27.11	0.3	0.27	3	56.9	53.90	1.2	1.01	6	45.0	37.33	1.1	0.84	22
Eucinostomus gula	0.0	0.00	0.0	0.00	3	2.0	2.00	0.0	0.04	6	28.5	12.14	0.8	0.30	22
Squid spp	99.1	94.45	0.5	0.43	3	22.1	11.11	0.1	0.05	6	28.6	16.37	0.3	0.15	22

Table 17a (continued)

Statistical Zone 14

Summary of dominant organisms taken in statistical zone 14 during the 2007 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 21-30 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
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	0	147.2	56.17	4.0	1.40	4	101.6	40.39	4.1	1.55	3
Litopenaeus setiferus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	3
Callinectes similis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	3
Trachypenaeus similis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	4	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	4	0.0	0.00	0.0	0.00	3
Callinectes sapidus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	3
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	118.7	42.37	9.7	3.62	4	4.6	4.57	0.5	0.49	3
Leiostomus xanthurus	0.0	0.00	0.0	0.00	0	412.2	348.24	41.3	35.71	4	2.7	1.38	0.4	0.21	3
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	39.9	14.10	2.1	0.74	4	116.6	52.30	8.1	3.75	3
Prionotus longispinosus	0.0	0.00	0.0	0.00	0	27.5	14.74	1.0	0.54	4	16.4	4.46	1.0	0.49	3
Prionotus roseus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	3
Cynoscion nothus	0.0	0.00	0.0	0.00	0	24.7	24.72	2.4	2.38	4	0.0	0.00	0.0	0.00	3
Trichiurus lepturus	0.0	0.00	0.0	0.00	0	11.0	9.81	0.9	0.78	4	3.0	1.50	0.1	0.09	3
Eucinostomus gula	0.0	0.00	0.0	0.00	0	26.6	12.25	1.2	0.55	4	0.0	0.00	0.0	0.00	3
Squid spp	0.0	0.00	0.0	0.00	0	4.2	1.85	0.1	0.09	4	13.2	8.02	0.4	0.28	3

Table 17b

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 2007 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 21-30 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	75.0	14.6	3	45.6	18.25	6	119.0	21.9	22	0.0	0	0	91.3	38.56	4	51.6	17.02	3
Total finfish	67.8	16.06	3	41.2	17.57	6	114.0	21.65	22	0.0	0	0	84.5	36.47	4	45.6	16.21	3
Total crustacean	3.3	1.03	3	3.2	1.26	6	3.9	1.22	22	0.0	0	0	4.8	1.91	4	4.2	1.57	3
Total other	3.9	3.02	3	2.0	1.01	4	0.6	0.22	14	0.0	0	0	2.1	1.24	4	1.8	0.46	3
Surface temperature	28.3	0.1	2	25.6	1.25	7	24.2	0.39	25	0.0	0	0	25.5	0.25	4	25.8	0	1
Midwater temperature	28.2	0.08	2	25.6	1.24	7	24.5	0.39	25	0.0	0	0	25.3	0.16	4	25.4	0	1
Bottom temperature	28.0	0.09	2	25.8	1.21	7	24.6	0.36	25	0.0	0	0	23.2	0.97	4	19.6	0	1
Surface salinity	29.3	1.05	2	32.2	0.57	7	34.8	0.32	26	0.0	0	0	36.3	0.06	4	36.4	0	1
Midwater salinity	29.4	1.04	2	32.4	0.53	7	35.5	0.18	26	0.0	0	0	36.3	0.04	4	36.3	0	1
Bottom salinity	31.3	1.72	2	32.9	0.53	7	36.0	0.05	26	0.0	0	0	36.5	0.09	4	36.5	0	1
Surface chlorophyll	2.3	0.88	2	1.4	0.36	5	1.2	0.19	15	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	5.7	0.7	2	6.9	0.33	7	6.4	0.2	26	0.0	0	0	5.9	0.03	4	5.9	0	1
Midwater oxygen	5.6	0.1	2	6.5	0.18	7	6.0	0.25	26	0.0	0	0	5.9	0.03	4	5.9	0	1
Bottom oxygen	5.4	0.2	2	6.0	0.38	7	5.8	0.24	26	0.0	0	0	5.1	0.22	4	4.2	0	1

Table 18a

Statistical Zone 15

Summary of dominant organisms taken in statistical zone 15 during the 2007 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
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	0	29.7	9.62	0.2	0.07	14	35.4	11.33	0.5	0.15	16
Callinectes similis	0.0	0.00	0.0	0.00	0	59.0	32.23	0.7	0.41	14	36.9	10.13	0.7	0.21	16
Trachypenaeus similis	0.0	0.00	0.0	0.00	0	69.2	37.73	0.3	0.13	14	9.2	4.20	0.0	0.01	16
Litopenaeus setiferus	0.0	0.00	0.0	0.00	0	46.5	12.56	1.8	0.56	14	18.1	7.27	0.8	0.32	16
Portunus gibbesii	0.0	0.00	0.0	0.00	0	15.3	7.55	0.1	0.05	14	4.4	2.74	0.0	0.01	16
Squilla spp	0.0	0.00	0.0	0.00	0	3.0	1.61	0.0	0.02	14	8.7	4.85	0.1	0.05	16
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	4035.7	1193.00	147.5	42.66	14	2264.7	338.86	90.2	12.68	16
Leiostomus xanthurus	0.0	0.00	0.0	0.00	0	539.1	305.88	41.9	23.91	14	29.3	9.26	2.0	0.64	16
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	2.5	1.78	0.0	0.03	14	109.3	25.05	2.3	0.57	16
Stellifer lanceolatus	0.0	0.00	0.0	0.00	0	254.5	159.19	3.9	2.48	14	0.0	0.00	0.0	0.00	16
Cynoscion nothus	0.0	0.00	0.0	0.00	0	47.7	20.60	1.9	1.15	14	102.5	39.71	8.1	3.23	16
Prionotus longispinosus	0.0	0.00	0.0	0.00	0	89.1	24.13	1.7	0.48	14	56.3	17.94	1.4	0.45	16
Cynoscion arenarius	0.0	0.00	0.0	0.00	0	38.7	23.04	1.2	0.63	14	53.4	12.49	6.0	1.40	16
Prionotus roseus	0.0	0.00	0.0	0.00	0	106.4	72.35	2.1	1.41	14	6.9	4.73	0.2	0.16	16
Squid spp	0.0	0.00	0.0	0.00	0	11.3	4.44	0.3	0.12	14	4.7	1.93	0.0	0.02	16

Table 18a (continued)

Statistical Zone 15

Summary of dominant organisms taken in statistical zone 15 during the 2007 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
Farfantepenaeus aztecus	70.2	26.77	1.7	0.74	5	420.5	122.03	9.4	1.63	3	71.2	31.10	2.6	0.80	3
Callinectes similis	123.7	75.25	2.5	1.41	5	49.0	18.98	1.1	0.40	3	0.0	0.00	0.0	0.00	3
Trachypenaeus similis	3.8	2.54	0.0	0.01	5	1.3	1.25	0.0	0.00	3	0.0	0.00	0.0	0.00	3
Litopenaeus setiferus	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	3
Portunus gibbesii	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	3
Squilla spp	18.1	8.24	0.3	0.12	5	3.3	3.27	0.1	0.06	3	0.0	0.00	0.0	0.00	3
Micropogonias undulatus	1218.8	393.92	59.9	15.89	5	188.2	15.59	15.2	1.07	3	6.5	5.98	0.6	0.54	3
Leiostomus xanthurus	58.0	12.51	5.0	1.31	5	491.9	412.57	43.8	35.33	3	0.4	0.36	0.0	0.04	3
Stenotomus caprinus	339.5	126.33	12.6	4.97	5	31.1	17.13	1.3	0.74	3	76.1	36.69	5.0	2.60	3
Stellifer lanceolatus	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	3
Cynoscion nothus	50.5	25.22	4.3	2.18	5	3.1	1.61	0.3	0.19	3	1.0	1.03	0.1	0.13	3
Prionotus longispinosus	23.3	10.94	1.0	0.22	5	31.2	11.39	1.2	0.61	3	13.5	6.65	0.9	0.44	3
Cynoscion arenarius	19.9	7.80	3.2	1.28	5	18.3	9.61	3.6	1.35	3	3.5	1.76	1.1	0.57	3
Prionotus roseus	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	3
Squid spp	0.4	0.44	0.0	0.03	5	1.3	1.25	0.1	0.11	3	9.2	9.23	0.1	0.11	3

Table 18b

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 2007 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	0.0	0	0	212.0	65.4	14	125.0	16.28	16	0.0	0	0	87.0	34.74	3	35.9	9.68	3
Total finfish	0.0	0	0	207.0	64.58	14	121.0	16.1	16	0.0	0	0	75.7	35.7	3	31.5	9.8	3
Total crustacean	0.0	0	0	5.0	1.23	14	3.4	0.8	15	0.0	0	0	10.6	1.35	3	2.6	0.82	3
Total other	0.0	0	0	1.0	0.38	7	0.1	0.04	8	0.0	0	0	0.7	0.08	3	1.7	0.5	3
Surface temperature	21.3	3.16	3	23.6	1.05	13	24.4	0.62	18	0.0	0	0	25.2	0	1	25.4	0.06	2
Midwater temperature	21.3	3.17	3	23.6	1.06	13	24.5	0.59	18	0.0	0	0	25.2	0	1	25.5	0.01	2
Bottom temperature	21.4	3.12	3	23.7	1.06	13	24.8	0.56	18	0.0	0	0	25.3	0	1	20.2	0.16	2
Surface salinity	31.4	0.83	3	33.5	0.14	13	34.6	0.26	18	0.0	0	0	36.1	0	1	36.3	0.02	2
Midwater salinity	31.4	0.85	3	33.5	0.13	13	34.9	0.16	18	0.0	0	0	36.2	0	1	36.4	0.01	2
Bottom salinity	31.5	0.9	3	33.8	0.07	13	35.5	0.16	18	0.0	0	0	36.3	0	1	36.5	0.02	2
Surface chlorophyll	2.8	0.67	3	1.4	0.24	11	0.7	0.12	10	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	7.3	0.59	3	6.8	0.24	13	6.3	0.18	18	0.0	0	0	5.9	0	1	5.9	0	2
Midwater oxygen	7.1	0.55	3	6.6	0.22	13	6.2	0.14	18	0.0	0	0	5.9	0	1	5.9	0	2
Bottom oxygen	6.9	0.47	3	6.5	0.21	13	5.7	0.26	18	0.0	0	0	5.9	0	1	4.2	0.1	2

Table 19a

Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2007 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 or 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
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	0	16.7	7.17	0.1	0.05	6	26.8	11.54	0.3	0.16	11
Callinectes similis	0.0	0.00	0.0	0.00	0	3.8	1.43	0.0	0.01	6	45.6	27.04	0.5	0.30	11
Litopenaeus setiferus	0.0	0.00	0.0	0.00	0	37.9	7.44	1.3	0.27	6	12.5	7.61	0.5	0.32	11
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	0	38.9	25.92	0.1	0.07	6	0.0	0.00	0.0	0.00	11
Squilla spp	0.0	0.00	0.0	0.00	0	19.7	11.24	0.2	0.08	6	6.9	3.75	0.1	0.05	11
Sicyonia brevirostris	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	11
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	910.8	199.77	28.4	5.95	6	3632.5	695.01	129.8	24.70	11
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	264.9	97.25	4.8	1.74	6	252.9	50.62	4.8	0.96	11
Cynoscion nothus	0.0	0.00	0.0	0.00	0	42.0	20.65	1.8	0.86	6	322.4	112.97	25.9	9.26	11
Trichiurus lepturus	0.0	0.00	0.0	0.00	0	263.3	110.76	2.9	0.99	6	185.6	81.49	10.1	3.38	11
Peprilus burti	0.0	0.00	0.0	0.00	0	100.2	39.79	3.9	1.49	6	73.9	23.89	4.0	1.28	11
Leiostomus xanthurus	0.0	0.00	0.0	0.00	0	19.1	10.98	1.3	0.75	6	104.5	31.49	7.8	2.47	11
Prionotus longispinosus	0.0	0.00	0.0	0.00	0	69.0	39.66	1.0	0.55	6	52.9	33.48	1.3	0.82	11
Trachurus lathami	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	6	17.3	6.16	0.5	0.17	11
Squid spp	0.0	0.00	0.0	0.00	0	46.4	15.39	0.7	0.14	6	1.9	1.08	0.1	0.07	11

Table 19a (continued)

Statistical Zone 16

Summary of dominant organisms taken in statistical zone 16 during the 2007 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 or 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
Farfantepenaeus aztecus	183.9	52.40	3.9	1.07	3	29.3	9.55	0.8	0.19	3	0.0	0.00	0.0	0.00	0
Callinectes similis	163.7	53.85	3.5	1.28	3	6.5	6.52	0.1	0.11	3	0.0	0.00	0.0	0.00	0
Litopenaeus setiferus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Trachypenaeus constrictus	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Squilla spp	25.2	13.77	0.4	0.21	3	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0
Sicyonia brevirostris	32.5	18.07	0.5	0.30	3	10.4	7.41	0.2	0.13	3	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	1010.8	493.99	51.3	14.68	3	186.4	74.59	14.7	5.73	3	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	164.5	83.45	5.2	1.50	3	263.2	18.32	12.2	0.65	3	0.0	0.00	0.0	0.00	0
Cynoscion nothus	18.2	7.81	1.9	0.67	3	1.8	1.82	0.2	0.16	3	0.0	0.00	0.0	0.00	0
Trichiurus lepturus	2.2	2.18	0.6	0.59	3	21.4	5.32	1.8	0.45	3	0.0	0.00	0.0	0.00	0
Peprilus burti	3.3	3.27	0.4	0.40	3	431.6	74.10	28.5	5.73	3	0.0	0.00	0.0	0.00	0
Leiostomus xanthurus	72.9	27.07	6.9	2.55	3	50.0	23.28	5.5	2.47	3	0.0	0.00	0.0	0.00	0
Prionotus longispinosus	55.8	23.53	2.3	1.00	3	4.0	4.00	0.1	0.10	3	0.0	0.00	0.0	0.00	0
Trachurus lathami	0.0	0.00	0.0	0.00	3	280.3	36.47	14.6	1.94	3	0.0	0.00	0.0	0.00	0
Squid spp	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	0

Table 19b

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 2007 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 or 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	0.0	0	0	55.4	9.32	6	208.0	31.81	11	0.0	0	0	107.0	15.16	3	0.0	0	0
Total finfish	0.0	0	0	52.1	9.41	6	205.0	31.68	11	0.0	0	0	105.0	15.2	3	0.0	0	0
Total crustacean	0.0	0	0	1.9	0.32	6	2.7	1.04	11	0.0	0	0	1.8	0.05	3	0.0	0	0
Total other	0.0	0	0	1.5	0.29	6	0.2	0.11	11	0.0	0	0	0.3	0.03	3	0.0	0	0
Surface temperature	0.0	0	0	22.4	0.22	6	24.4	0.21	10	0.0	0	0	25.5	0	1	0.0	0	0
Midwater temperature	0.0	0	0	22.4	0.25	6	24.3	0.16	10	0.0	0	0	25.5	0	1	0.0	0	0
Bottom temperature	0.0	0	0	22.9	0.28	6	24.6	0.19	10	0.0	0	0	25.3	0	1	0.0	0	0
Surface salinity	0.0	0	0	32.5	0.38	6	35.1	0.18	10	0.0	0	0	36.2	0	1	0.0	0	0
Midwater salinity	0.0	0	0	32.5	0.4	6	35.2	0.15	10	0.0	0	0	36.2	0	1	0.0	0	0
Bottom salinity	0.0	0	0	33.1	0.42	6	35.4	0.15	10	0.0	0	0	36.3	0	1	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	0.27	6	6.2	0.06	10	0.0	0	0	5.8	0	1	0.0	0	0
Midwater oxygen	0.0	0	0	7.0	0.32	6	6.0	0.06	10	0.0	0	0	5.9	0	1	0.0	0	0
Bottom oxygen	0.0	0	0	5.8	0.41	6	5.7	0.08	10	0.0	0	0	5.4	0	1	0.0	0	0

Table 20a

Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2007 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
Farfantepenaeus aztecus	23.1	15.63	0.1	0.09	2	17.9	16.32	0.2	0.14	3	68.2	19.36	1.6	0.57	11
Callinectes similis	1.3	1.25	0.0	0.00	2	2.1	2.11	0.0	0.01	3	50.5	15.63	1.0	0.35	11
Portunus spinicarpus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	11
Sicyonia brevirostris	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	3	4.8	2.94	0.1	0.05	11
Trachypenaeus constrictus	61.3	61.25	0.2	0.15	2	3.2	3.16	0.0	0.01	3	7.5	4.80	0.0	0.02	11
Litopenaeus setiferus	53.8	31.25	1.3	0.65	2	12.0	7.26	0.4	0.22	3	2.9	2.55	0.1	0.12	11
Micropogonias undulatus	13.8	8.75	0.7	0.44	2	615.3	469.11	21.8	16.29	3	2395.6	301.78	118.2	13.99	11
Stenotomus caprinus	0.0	0.00	0.0	0.00	2	178.9	134.41	3.5	2.75	3	203.8	62.21	5.8	1.52	11
Peprilus burti	295.0	155.00	9.1	4.38	2	798.9	721.56	36.2	33.58	3	17.0	10.99	1.0	0.66	11
Trachurus lathami	0.0	0.00	0.0	0.00	2	2.4	2.42	0.1	0.05	3	9.1	8.21	0.3	0.23	11
Leiostomus xanthurus	6.9	6.88	0.5	0.51	2	1.8	1.82	0.2	0.17	3	146.1	41.29	13.1	4.03	11
Upeneus parvus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	3	0.3	0.30	0.0	0.01	11
Synodus foetens	1.3	1.25	0.0	0.02	2	6.5	5.01	0.8	0.66	3	29.6	6.82	3.7	1.01	11
Prionotus longispinosus	3.8	1.25	0.1	0.02	2	10.5	10.53	0.2	0.23	3	50.7	21.73	1.1	0.33	11
Squid spp	140.0	2.50	1.4	0.36	2	51.5	45.31	0.4	0.24	3	1.9	1.04	0.0	0.01	11

Table 20a (continued)

Statistical Zone 17

Summary of dominant organisms taken in statistical zone 17 during the 2007 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
Farfantepenaeus aztecus	107.2	41.32	3.5	1.22	7	89.8	33.91	3.1	1.14	5	97.3	30.31	3.7	0.94	8
Callinectes similis	9.3	5.02	0.2	0.10	7	0.7	0.65	0.0	0.02	5	0.0	0.00	0.0	0.00	8
Portunus spinicarpus	2.0	1.55	0.0	0.01	7	45.7	19.37	0.3	0.13	5	37.0	14.09	0.4	0.14	8
Sicyonia brevirostris	28.2	16.86	0.4	0.25	7	1.3	0.79	0.0	0.01	5	0.0	0.00	0.0	0.00	8
Trachypenaeus constrictus	0.7	0.47	0.0	0.00	7	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8
Litopenaeus setiferus	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	8
Micropogonias undulatus	338.4	89.37	21.6	5.96	7	59.2	53.69	3.3	2.87	5	0.5	0.33	0.0	0.03	8
Stenotomus caprinus	470.4	96.31	20.3	5.11	7	188.7	48.74	6.9	1.92	5	149.3	37.16	7.9	2.06	8
Peprilus burti	126.4	53.98	9.5	4.00	7	40.4	21.42	2.3	1.10	5	106.6	59.66	5.9	3.28	8
Trachurus lathami	106.9	36.38	3.5	1.14	7	91.0	42.00	2.8	1.29	5	105.7	56.48	3.6	1.77	8
Leiostomus xanthurus	20.0	5.52	2.3	0.63	7	4.1	2.53	0.4	0.27	5	1.4	1.24	0.2	0.14	8
Upeneus parvus	1.4	0.72	0.1	0.04	7	78.9	20.78	3.0	0.77	5	57.1	19.56	2.5	0.89	8
Synodus foetens	22.6	6.07	2.9	0.63	7	43.3	11.29	5.5	1.60	5	15.3	5.01	2.3	0.75	8
Prionotus longispinosus	16.4	4.77	0.6	0.17	7	6.5	2.11	0.5	0.20	5	5.8	3.70	0.5	0.29	8
Squid spp	3.2	2.47	0.0	0.01	7	6.4	3.98	0.1	0.04	5	6.7	4.29	0.3	0.21	8

Table 20b

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 2007 Fall hrimp/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	34.3	6.31	2	86.4	44.26	3	170.0	16.51	11	0.0	0	0	40.2	6.61	5	50.2	9.19	8
Total finfish	30.4	4.69	2	85.5	44.66	3	165.0	15.97	11	0.0	0	0	34.8	6.35	5	44.5	9.41	8
Total crustacean	1.8	1	2	0.6	0.06	3	4.1	1.15	11	0.0	0	0	4.0	1.25	5	4.6	1.06	8
Total other	2.1	0.63	2	0.4	0.29	3	0.1	0.04	11	0.0	0	0	1.4	0.68	5	1.1	0.32	8
Surface temperature	21.8	0.45	3	19.9	0.69	17	23.6	0.56	12	0.0	0	0	26.2	0.14	3	26.3	0.11	5
Midwater temperature	21.5	0.3	3	19.8	0.67	17	23.5	0.58	12	0.0	0	0	25.9	0.03	3	26.1	0.12	5
Bottom temperature	21.5	0.26	3	19.9	0.68	17	23.6	0.55	12	0.0	0	0	24.6	1.02	3	21.0	0.47	5
Surface salinity	30.1	1.1	3	30.4	0.57	17	34.2	0.64	12	0.0	0	0	36.4	0.01	3	36.4	0.02	5
Midwater salinity	30.2	1.1	3	30.3	0.51	17	34.2	0.64	12	0.0	0	0	36.4	0.02	3	36.4	0.01	5
Bottom salinity	30.3	1.14	3	30.6	0.46	17	34.5	0.43	12	0.0	0	0	36.4	0.03	3	36.5	0.01	5
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	7.3	0.24	3	6.5	0.13	17	6.1	0.09	12	0.0	0	0	5.7	0.03	3	5.8	0.02	5
Midwater oxygen	7.0	0.15	3	6.4	0.12	17	6.0	0.03	12	0.0	0	0	5.8	0.03	3	5.7	0.02	5
Bottom oxygen	6.3	0.5	3	6.1	0.16	17	5.9	0.04	12	0.0	0	0	5.2	0.47	3	4.4	0.07	5

Table 21a

Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2007 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
Litopenaeus setiferus	591.5	238.75	7.9	3.65	2	73.6	39.74	1.8	0.92	3	0.4	0.31	0.0	0.01	12
Farfantepenaeus aztecus	8.9	7.48	0.0	0.02	2	84.1	62.48	1.4	1.25	3	52.5	18.22	1.5	0.64	12
Callinectes similis	9.6	6.79	0.0	0.01	2	55.3	8.45	0.5	0.15	3	16.2	7.08	0.3	0.12	12
Xiphopenaeus kroyeri	136.0	136.05	0.4	0.42	2	0.0	0.00	0.0	0.00	3	0.0	0.00	0.0	0.00	12
Callinectes sapidus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	3	16.3	10.72	0.4	0.28	12
Squilla spp	3.6	3.64	0.1	0.05	2	38.6	7.04	0.4	0.10	3	2.8	2.06	0.0	0.03	12
Micropogonias undulatus	207.0	54.86	6.5	2.11	2	3343.9	982.07	110.1	37.72	3	2025.3	325.51	91.0	14.53	12
Stenotomus caprinus	0.0	0.00	0.0	0.00	2	18.2	9.30	0.4	0.19	3	276.3	132.52	8.0	3.79	12
Peprilus burti	213.7	50.04	12.4	4.25	2	319.4	103.54	12.2	3.89	3	64.3	24.50	3.8	1.50	12
Cynoscion nothus	116.2	112.60	1.3	1.11	2	62.1	17.07	2.6	0.93	3	95.4	79.59	6.2	5.07	12
Stellifer lanceolatus	598.8	398.84	6.7	5.61	2	64.9	53.33	1.0	0.86	3	0.0	0.00	0.0	0.00	12
Synodus foetens	0.0	0.00	0.0	0.00	2	2.7	1.35	0.3	0.13	3	46.5	13.45	6.2	1.47	12
Chloroscombrus chrysurus	0.9	0.91	0.0	0.00	2	0.0	0.00	0.0	0.00	3	48.5	26.76	2.3	1.28	12
Leiostomus xanthurus	4.1	1.33	0.3	0.12	2	24.5	15.74	1.5	0.86	3	30.9	14.60	2.5	1.11	12
Squid spp	25.6	9.26	0.2	0.00	2	12.5	3.29	0.2	0.05	3	0.7	0.73	0.0	0.00	12

Table 21a (continued)

Statistical Zone 18

Summary of dominant organisms taken in statistical zone 18 during the 2007 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
Litopenaeus setiferus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Farfantepenaeus aztecus	6.6	2.23	0.2	0.05	2	68.7	66.66	2.8	2.70	2	19.6	0.00	0.9	0.00	1
Callinectes similis	5.3	5.29	0.1	0.11	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Xiphopenaeus kroyeri	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Callinectes sapidus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Squilla spp	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Micropogonias undulatus	44.0	19.28	2.5	1.20	2	33.9	27.67	2.6	2.02	2	0.0	0.00	0.0	0.00	1
Stenotomus caprinus	758.0	276.21	30.1	16.27	2	201.9	172.63	11.7	10.23	2	149.5	0.00	7.0	0.00	1
Peprilus burti	387.1	182.37	22.7	11.66	2	7.2	7.24	0.5	0.54	2	21.8	0.00	1.4	0.00	1
Cynoscion nothus	12.8	8.41	0.9	0.62	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Stellifer lanceolatus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Synodus foetens	17.9	1.52	3.3	0.24	2	32.2	2.97	4.6	1.13	2	24.0	0.00	4.9	0.00	1
Chloroscombrus chrysurus	43.4	27.51	2.0	1.24	2	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	1
Leiostomus xanthurus	7.9	7.94	0.8	0.81	2	58.5	58.46	6.3	6.29	2	0.0	0.00	0.0	0.00	1
Squid spp	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	2	18.5	0.00	2.2	0.00	1

Table 21b

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 2007 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	44.0	6.21	2	143.0	42.87	3	130.0	14.41	12	0.0	0	0	62.1	10.72	2	57.7	0	1
Total finfish	35.4	2.29	2	138.0	42.69	3	127.0	14.43	12	0.0	0	0	56.2	14.97	2	52.9	0	1
Total crustacean	8.4	4.03	2	4.2	0.21	3	2.4	0.86	12	0.0	0	0	4.5	4.28	2	1.9	0	1
Total other	0.2	0.02	2	0.2	0.04	3	0.0	0.02	12	0.0	0	0	1.2	0.01	2	2.9	0	1
Surface temperature	22.3	0.19	3	20.9	1.05	12	22.2	0.92	15	0.0	0	0	25.9	0.16	3	26.1	0.11	3
Midwater temperature	22.0	0.5	3	20.9	1.06	12	22.2	0.92	15	0.0	0	0	25.9	0.14	3	26.3	0.05	3
Bottom temperature	22.0	0.5	3	20.9	1.07	12	22.3	0.9	15	0.0	0	0	23.8	1.19	3	20.2	0.91	3
Surface salinity	29.6	0.78	3	28.6	0.46	12	32.3	0.89	15	0.0	0	0	36.2	0.04	3	36.4	0.08	3
Midwater salinity	29.6	0.78	3	29.0	0.55	12	32.3	0.89	15	0.0	0	0	36.3	0.04	3	36.5	0.03	3
Bottom salinity	29.6	0.78	3	29.3	0.53	12	32.5	0.85	15	0.0	0	0	36.5	0.1	3	36.5	0.02	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	6.2	0.19	3	7.0	0.21	12	6.6	0.24	15	0.0	0	0	5.8	0.03	3	5.7	0	3
Midwater oxygen	6.3	0.21	3	6.8	0.23	12	6.6	0.24	15	0.0	0	0	5.7	0.07	3	5.7	0.03	3
Bottom oxygen	6.3	0.21	3	6.3	0.22	12	6.4	0.2	15	0.0	0	0	4.8	0.07	3	4.3	0.27	3

Table 22a

Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2007 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 or greater than 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
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	0	5.5	2.66	0.0	0.02	8	106.5	35.42	3.4	1.19	11
Litopenaeus setiferus	0.0	0.00	0.0	0.00	0	236.4	78.01	5.5	1.42	8	13.6	7.62	0.5	0.29	11
Callinectes similis	0.0	0.00	0.0	0.00	0	17.0	5.00	0.2	0.14	8	13.1	3.43	0.2	0.06	11
Squilla spp	0.0	0.00	0.0	0.00	0	18.6	5.50	0.2	0.05	8	9.1	2.36	0.1	0.02	11
Portunus gibbesii	0.0	0.00	0.0	0.00	0	25.9	12.92	0.1	0.08	8	3.0	1.77	0.0	0.01	11
Sicyonia dorsalis	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	8	1.4	0.92	0.0	0.00	11
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	1924.0	364.31	82.6	15.52	8	1414.5	267.56	62.7	11.39	11
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	8	284.1	111.30	6.3	2.47	11
Peprilus burti	0.0	0.00	0.0	0.00	0	71.0	35.69	2.9	1.49	8	240.5	180.08	10.3	7.44	11
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	0	12.0	9.07	0.5	0.39	8	145.2	85.79	4.8	2.49	11
Trachurus lathami	0.0	0.00	0.0	0.00	0	0.4	0.39	0.0	0.01	8	102.6	100.26	2.4	2.36	11
Syacium gunteri	0.0	0.00	0.0	0.00	0	18.8	7.69	0.6	0.25	8	82.4	14.19	1.8	0.31	11
Stellifer lanceolatus	0.0	0.00	0.0	0.00	0	157.1	67.69	2.4	1.07	8	0.3	0.29	0.0	0.00	11
Cynoscion nothus	0.0	0.00	0.0	0.00	0	54.0	35.43	2.7	1.80	8	31.6	23.16	1.7	1.11	11
Squid spp	0.0	0.00	0.0	0.00	0	24.5	7.13	0.3	0.10	8	12.4	8.10	0.2	0.13	11

Table 22a (continued)

Statistical Zone 19

Summary of dominant organisms taken in statistical zone 19 during the 2007 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 or greater than 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
Farfantepenaeus aztecus	182.1	49.05	6.2	1.69	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Litopenaeus setiferus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Callinectes similis	61.9	20.60	1.1	0.35	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squilla spp	17.3	5.85	0.2	0.07	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Portunus gibbesii	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Sicyonia dorsalis	5.4	5.40	0.0	0.02	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Micropogonias undulatus	605.2	105.42	31.0	5.31	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stenotomus caprinus	270.5	84.12	7.8	2.22	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Peprilus burti	23.4	15.72	1.2	0.74	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Chloroscombrus chrysurus	71.4	64.98	3.4	3.15	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Trachurus lathami	1.3	1.33	0.0	0.03	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Syacium gunteri	15.2	5.30	0.3	0.08	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Stellifer lanceolatus	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Cynoscion nothus	5.4	3.74	0.3	0.18	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0
Squid spp	0.7	0.67	0.0	0.00	5	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	0

Table 22b

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 2007 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 or greater than 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	0.0	0	0	113.0	18.35	8	110.0	20.88	11	0.0	0	0	0.0	0	0	0.0	0	0
Total finfish	0.0	0	0	106.0	19.39	8	105.0	21.48	11	0.0	0	0	0.0	0	0	0.0	0	0
Total crustacean	0.0	0	0	6.2	1.36	8	4.6	1.16	11	0.0	0	0	0.0	0	0	0.0	0	0
Total other	0.0	0	0	0.8	0.23	8	0.4	0.16	11	0.0	0	0	0.0	0	0	0.0	0	0
Surface temperature	23.0	0	1	26.4	0.66	11	25.3	0.56	23	0.0	0	0	0.0	0	0	0.0	0	0
Midwater temperature	23.0	0	1	26.4	0.66	11	25.3	0.57	23	0.0	0	0	0.0	0	0	0.0	0	0
Bottom temperature	22.0	0	1	26.5	0.67	11	25.3	0.56	23	0.0	0	0	0.0	0	0	0.0	0	0
Surface salinity	28.0	0	1	30.0	0.47	11	32.1	0.49	23	0.0	0	0	0.0	0	0	0.0	0	0
Midwater salinity	28.0	0	1	30.3	0.49	11	32.2	0.5	23	0.0	0	0	0.0	0	0	0.0	0	0
Bottom salinity	28.0	0	1	30.7	0.56	11	32.5	0.49	23	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	5.0	0	1	5.6	0.11	11	5.4	0.27	23	0.0	0	0	0.0	0	0	0.0	0	0
Midwater oxygen	5.0	0	1	5.4	0.09	11	5.4	0.27	23	0.0	0	0	0.0	0	0	0.0	0	0
Bottom oxygen	5.0	0	1	5.2	0.1	11	5.3	0.26	23	0.0	0	0	0.0	0	0	0.0	0	0

Table 23a

Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2007 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
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	0	109.6	109.62	1.1	1.12	2	241.9	83.70	5.9	2.00	8
Callinectes sapidus	0.0	0.00	0.0	0.00	0	2.9	2.86	0.4	0.38	2	56.4	54.00	1.4	1.04	8
Portunus gibbesii	0.0	0.00	0.0	0.00	0	365.1	132.03	2.3	0.87	2	16.3	10.38	0.1	0.05	8
Callinectes similis	0.0	0.00	0.0	0.00	0	11.8	2.53	0.2	0.07	2	24.8	19.73	0.4	0.29	8
Squilla spp	0.0	0.00	0.0	0.00	0	15.5	9.84	0.2	0.08	2	10.3	5.34	0.1	0.06	8
Portunus spinicarpus	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	8
Micropogonias undulatus	0.0	0.00	0.0	0.00	0	997.7	929.18	49.5	43.96	2	973.1	287.66	49.9	14.07	8
Chloroscombrus chrysurus	0.0	0.00	0.0	0.00	0	52.6	38.79	3.0	2.28	2	933.0	493.37	33.1	17.76	8
Peprilus burti	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	220.4	160.04	7.1	5.43	8
Trachurus lathami	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	332.3	190.95	6.9	3.88	8
Stenotomus caprinus	0.0	0.00	0.0	0.00	0	7.5	1.76	0.2	0.01	2	92.8	55.22	1.8	1.02	8
Lutjanus campechanus	0.0	0.00	0.0	0.00	0	599.8	265.55	8.6	3.26	2	92.4	41.80	1.2	0.55	8
Syacium gunteri	0.0	0.00	0.0	0.00	0	47.1	12.86	1.0	0.23	2	126.5	30.07	2.6	0.71	8
Synodus foetens	0.0	0.00	0.0	0.00	0	0.0	0.00	0.0	0.00	2	20.2	6.88	1.3	0.38	8
Squid spp	0.0	0.00	0.0	0.00	0	9.5	4.84	0.2	0.19	2	30.6	8.59	0.3	0.12	8

Table 23a (continued)

Statistical Zone 20

Summary of dominant organisms taken in statistical zone 20 during the 2007 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
Farfantepenaeus aztecus	87.3	38.33	2.9	1.31	7	48.3	23.43	1.3	0.61	4	74.2	0.00	3.4	0.00	1
Callinectes sapidus	15.0	10.87	0.3	0.24	7	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	1
Portunus gibbesii	0.0	0.00	0.0	0.00	7	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	1
Callinectes similis	10.7	8.66	0.2	0.13	7	3.0	1.85	0.0	0.03	4	0.0	0.00	0.0	0.00	1
Squilla spp	7.3	4.69	0.1	0.06	7	1.3	1.30	0.0	0.02	4	0.0	0.00	0.0	0.00	1
Portunus spinicarpus	2.3	1.07	0.0	0.01	7	3.5	0.80	0.0	0.01	4	116.8	0.00	1.2	0.00	1
Micropogonias undulatus	347.6	83.71	18.7	4.29	7	36.3	17.74	2.0	0.97	4	11.1	0.00	0.7	0.00	1
Chloroscombrus chrysurus	189.8	108.08	8.4	4.38	7	17.8	11.49	1.0	0.68	4	0.0	0.00	0.0	0.00	1
Peprilus burti	332.4	142.63	17.0	7.16	7	349.0	164.42	11.8	4.13	4	23.7	0.00	1.8	0.00	1
Trachurus lathami	45.1	36.06	0.9	0.72	7	215.4	153.27	3.2	2.21	4	20.5	0.00	1.2	0.00	1
Stenotomus caprinus	227.6	58.19	7.4	2.09	7	103.2	37.00	4.0	1.55	4	44.2	0.00	2.7	0.00	1
Lutjanus campechanus	24.6	5.02	1.8	0.47	7	10.7	6.66	0.5	0.31	4	0.0	0.00	0.0	0.00	1
Syacium gunteri	6.3	3.53	0.1	0.06	7	6.6	5.52	0.3	0.29	4	0.0	0.00	0.0	0.00	1
Synodus foetens	42.0	12.61	5.7	1.63	7	46.2	11.31	6.9	1.79	4	3.2	0.00	0.3	0.00	1
Squid spp	12.8	7.72	0.2	0.10	7	44.6	20.76	0.5	0.30	4	4.7	0.00	0.5	0.00	1

Table 23b

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 2007 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 dpeths 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	0.0	0	0	222.0	70.36	2	130.0	30.3	8	0.0	0	0	40.7	10.51	4	47.4	0	1
Total finfish	0.0	0	0	159.0	12.99	2	120.0	31.97	8	0.0	0	0	37.9	9.72	4	39.8	0	1
Total crustacean	0.0	0	0	5.4	0.32	2	8.7	2.92	8	0.0	0	0	1.8	0.79	4	5.5	0	1
Total other	0.0	0	0	57.4	57.17	2	0.5	0.12	8	0.0	0	0	1.0	0.39	4	2.1	0	1
Surface temperature	23.0	0	1	25.6	1.51	4	25.6	0.53	20	0.0	0	0	28.1	0.26	3	28.3	0.17	4
Midwater temperature	23.0	0	1	25.6	1.52	4	25.6	0.58	20	0.0	0	0	28.5	0.17	3	27.9	0.52	4
Bottom temperature	23.0	0	1	25.7	1.54	4	25.7	0.59	20	0.0	0	0	24.2	0.42	3	21.7	0.26	4
Surface salinity	33.0	0	1	32.3	0.51	4	31.9	0.22	20	0.0	0	0	33.0	1.43	3	34.2	0.99	4
Midwater salinity	33.0	0	1	32.5	0.67	4	33.0	0.24	20	0.0	0	0	35.6	0.09	3	36.2	0.05	4
Bottom salinity	33.0	0	1	32.3	0.44	4	33.5	0.3	20	0.0	0	0	36.4	0.02	3	36.5	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	8.0	0	1	6.9	0.62	4	6.6	0.17	20	0.0	0	0	5.7	0.12	3	5.5	0.1	4
Midwater oxygen	8.0	0	1	6.7	0.51	4	6.4	0.21	20	0.0	0	0	5.4	0.06	3	5.0	0.31	4
Bottom oxygen	8.0	0	1	6.7	0.52	4	6.0	0.35	20	0.0	0	0	5.0	0.23	3	5.2	0.08	4

Table 24a

Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2007 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
Farfantepenaeus aztecus	0.0	0.00	0.0	0.00	2	7.8	2.89	0.2	0.07	8	193.5	62.60	4.9	1.61	9
Callinectes similis	2.7	2.73	0.0	0.04	2	12.9	9.18	0.3	0.18	8	49.2	26.50	0.8	0.42	9
Sicyonia dorsalis	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	8	0.2	0.25	0.0	0.00	9
Portunus spinicarpus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	8	1.0	0.95	0.0	0.01	9
Solenocera vioscai	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	9
Farfantepenaeus duorarum	0.0	0.00	0.0	0.00	2	18.5	10.26	0.5	0.29	8	44.4	17.39	0.9	0.37	9
Micropogonias undulatus	548.2	548.18	24.3	24.34	2	1252.5	610.07	65.4	36.86	8	850.9	280.58	34.5	10.07	9
Chloroscombrus chrysurus	883.6	872.73	37.5	37.32	2	104.9	37.63	4.8	1.57	8	366.4	168.61	12.9	6.93	9
Trachurus lathami	0.0	0.00	0.0	0.00	2	7.2	7.24	0.1	0.14	8	133.7	73.55	2.8	1.56	9
Stenotomus caprinus	2.7	2.73	0.1	0.08	2	14.1	13.09	0.3	0.26	8	164.8	107.30	3.8	2.50	9
Peprilus burti	70.9	70.91	1.8	1.77	2	50.1	21.27	1.3	0.55	8	38.0	16.90	1.1	0.48	9
Serranus atrobranchus	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	8	1.2	0.95	0.0	0.01	9
Lutjanus campechanus	0.0	0.00	0.0	0.00	2	49.0	13.39	0.8	0.18	8	162.4	24.36	2.3	0.48	9
Prionotus stearnsi	0.0	0.00	0.0	0.00	2	0.0	0.00	0.0	0.00	8	0.0	0.00	0.0	0.00	9
Squid spp	16.4	0.00	0.1	0.01	2	3.4	2.24	0.0	0.01	8	123.8	101.00	0.7	0.56	9

Table 24a (continued)

Statistical Zone 21

Summary of dominant organisms taken in statistical zone 21 during the 2007 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
Farfantepenaeus aztecus	276.5	71.92	6.7	1.70	5	324.4	104.68	9.1	2.41	4	268.2	0.00	8.8	0.00	1
Callinectes similis	206.2	90.58	3.4	1.54	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	1
Sicyonia dorsalis	105.6	58.31	0.4	0.21	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	1
Portunus spinicarpus	17.9	17.89	0.1	0.10	5	106.1	62.11	0.7	0.40	4	38.8	0.00	0.2	0.00	1
Solenocera vioscai	57.0	33.61	0.2	0.09	5	18.1	6.66	0.1	0.03	4	54.7	0.00	0.3	0.00	1
Farfantepenaeus duorarum	0.0	0.00	0.0	0.00	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	1
Micropogonias undulatus	142.0	41.89	9.9	2.39	5	37.0	27.08	2.9	2.02	4	0.0	0.00	0.0	0.00	1
Chloroscombrus chrysurus	160.7	160.67	7.3	7.30	5	0.0	0.00	0.0	0.00	4	0.0	0.00	0.0	0.00	1
Trachurus lathami	267.2	256.87	4.8	4.65	5	235.0	190.61	3.3	2.68	4	0.0	0.00	0.0	0.00	1
Stenotomus caprinus	91.1	26.74	2.1	0.55	5	42.8	15.46	1.5	0.50	4	10.6	0.00	0.5	0.00	1
Peprilus burti	17.3	16.24	0.9	0.83	5	207.1	205.16	6.1	6.08	4	0.0	0.00	0.0	0.00	1
Serranus atrobranchus	186.5	80.01	1.5	0.63	5	115.4	41.00	1.1	0.47	4	252.4	0.00	2.9	0.00	1
Lutjanus campechanus	23.0	4.10	0.6	0.14	5	2.3	1.66	0.2	0.16	4	0.0	0.00	0.0	0.00	1
Prionotus stearnsi	8.9	8.42	0.0	0.05	5	147.9	60.52	1.0	0.40	4	457.1	0.00	3.4	0.00	1
Squid spp	18.4	14.42	0.1	0.05	5	39.7	16.07	0.7	0.28	4	19.4	0.00	0.9	0.00	1

Table 24b

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 2007 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	100.0	23.18	2	113.0	44.87	8	85.4	19.13	9	0.0	0	0	41.6	6.56	4	36.9	0	1
Total finfish	99.5	22.64	2	110.0	44.83	8	76.5	18.98	9	0.0	0	0	27.2	9.12	4	21.9	0	1
Total crustacean	0.5	0.55	2	1.5	0.69	8	8.1	1.98	9	0.0	0	0	10.7	3.05	4	9.5	0	1
Total other	0.3	0.27	2	1.2	0.51	8	0.9	0.56	9	0.0	0	0	3.6	1.74	4	5.5	0	1
Surface temperature	26.3	0.21	2	26.5	0.21	9	26.8	0.55	21	0.0	0	0	28.0	0.13	2	28.0	0.12	2
Midwater temperature	26.3	0.21	2	26.5	0.21	9	26.4	0.39	21	0.0	0	0	28.4	0.26	2	28.3	0.15	2
Bottom temperature	25.5	1.05	2	26.5	0.23	9	26.4	0.42	21	0.0	0	0	23.2	0.09	2	21.4	0.11	2
Surface salinity	34.5	0.38	2	34.4	0.2	9	33.6	0.3	21	0.0	0	0	34.0	1.69	2	35.0	0.67	2
Midwater salinity	34.5	0.38	2	34.4	0.2	9	33.8	0.26	21	0.0	0	0	35.9	0.28	2	36.1	0.18	2
Bottom salinity	34.7	0.15	2	34.4	0.19	9	34.0	0.3	21	0.0	0	0	36.5	0.01	2	36.5	0.01	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	5.8	0.05	2	5.9	0.14	9	6.0	0.13	21	0.0	0	0	5.8	0.05	2	5.6	0.1	2
Midwater oxygen	5.8	0	2	5.9	0.14	9	6.0	0.14	21	0.0	0	0	5.6	0.1	2	5.4	0.3	2
Bottom oxygen	5.9	0.05	2	5.8	0.16	9	5.8	0.19	21	0.0	0	0	5.9	0.75	2	5.6	0.2	2

Table 25. 2007 ReeffishSurvey species composition list, 60 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	65	69.9	8	2.3
Rhomboplites aurorubens	vermilion snapper	24	11.0	4	1.2
Balistes capriscus	gray triggerfish	14	8.9	2	0.6
Mycteroperca phenax	scamp	8	13.2	3	0.9
Pagrus pagrus	red porgy	7	10.2	4	1.2
Lutjanus synagris	lane snapper	4	2.5	1	0.3
Haemulon aurolineatum	tomtate	3	0.7	1	0.3
Lutjanus buccanella	blackfin snapper	2	0.4	1	0.3
Calamus leucosteus	whitebone porgy	1	0.3	1	0.3
Epinephelus adscensionis	rock hind	1	0.8	1	0.3

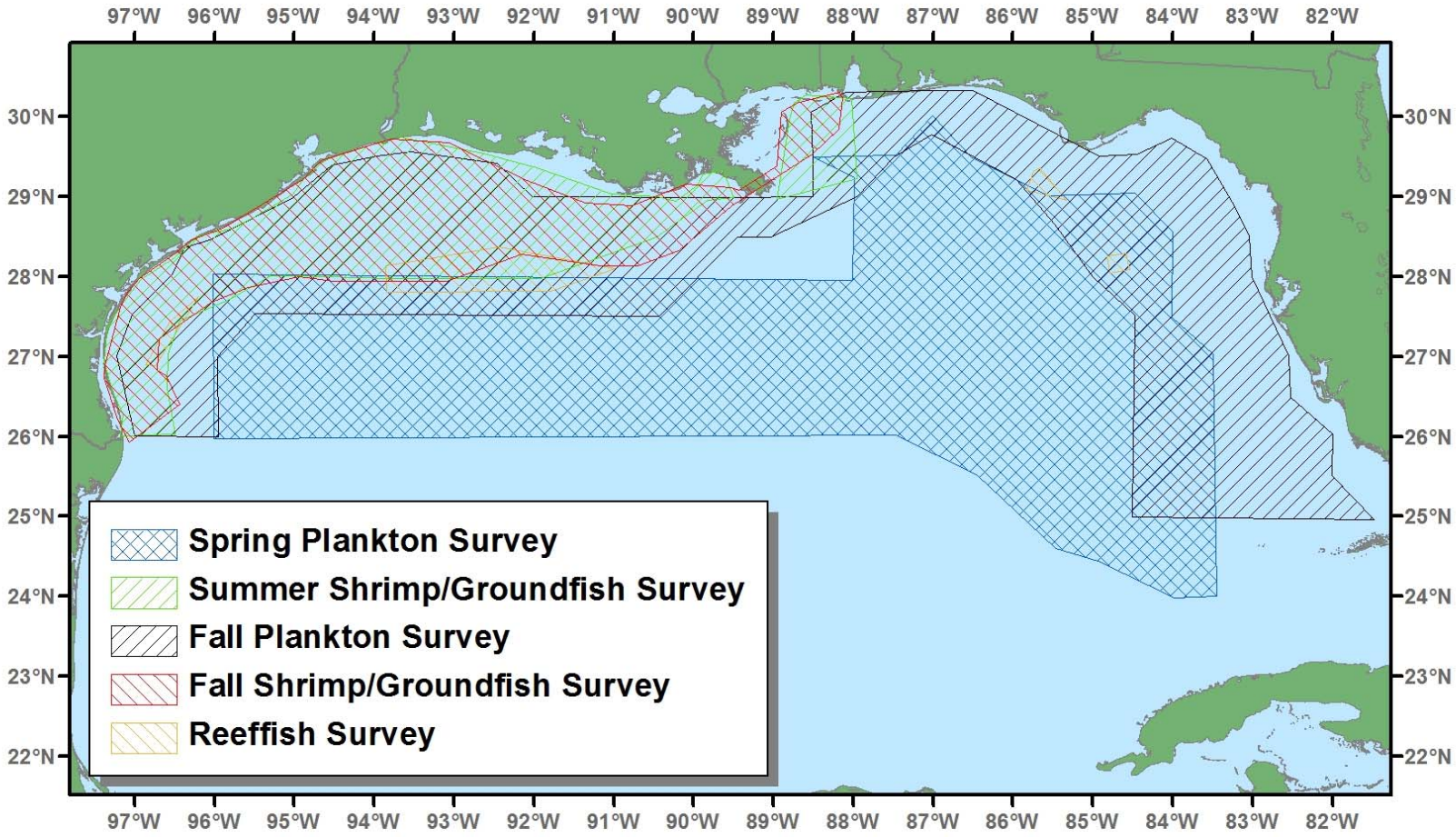

Figure 1. 2007 SEAMAP Surveys, Gulf of Mexico.

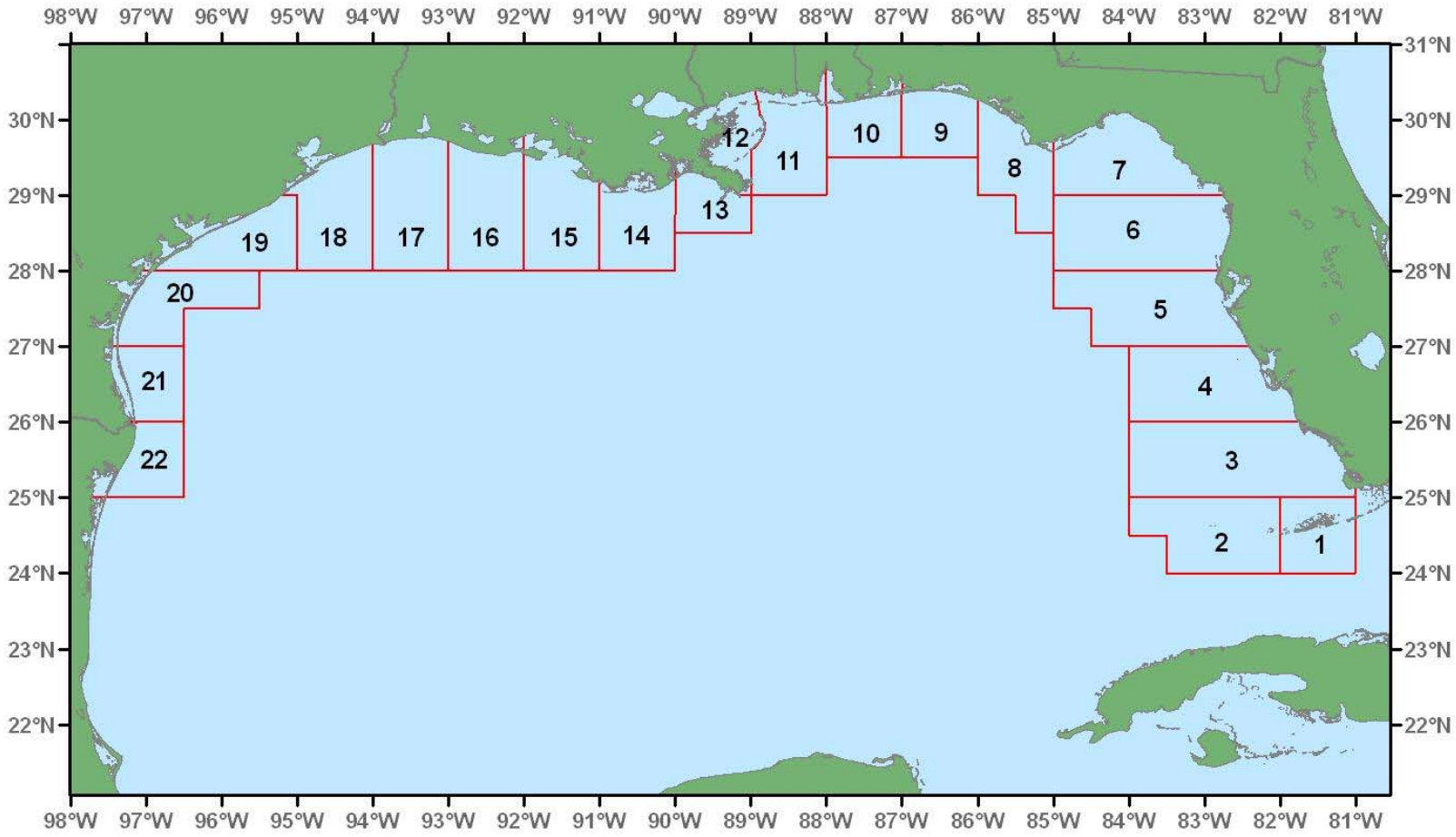

Figure 2. Statistical zones for shrimp in the Gulf of Mexico.

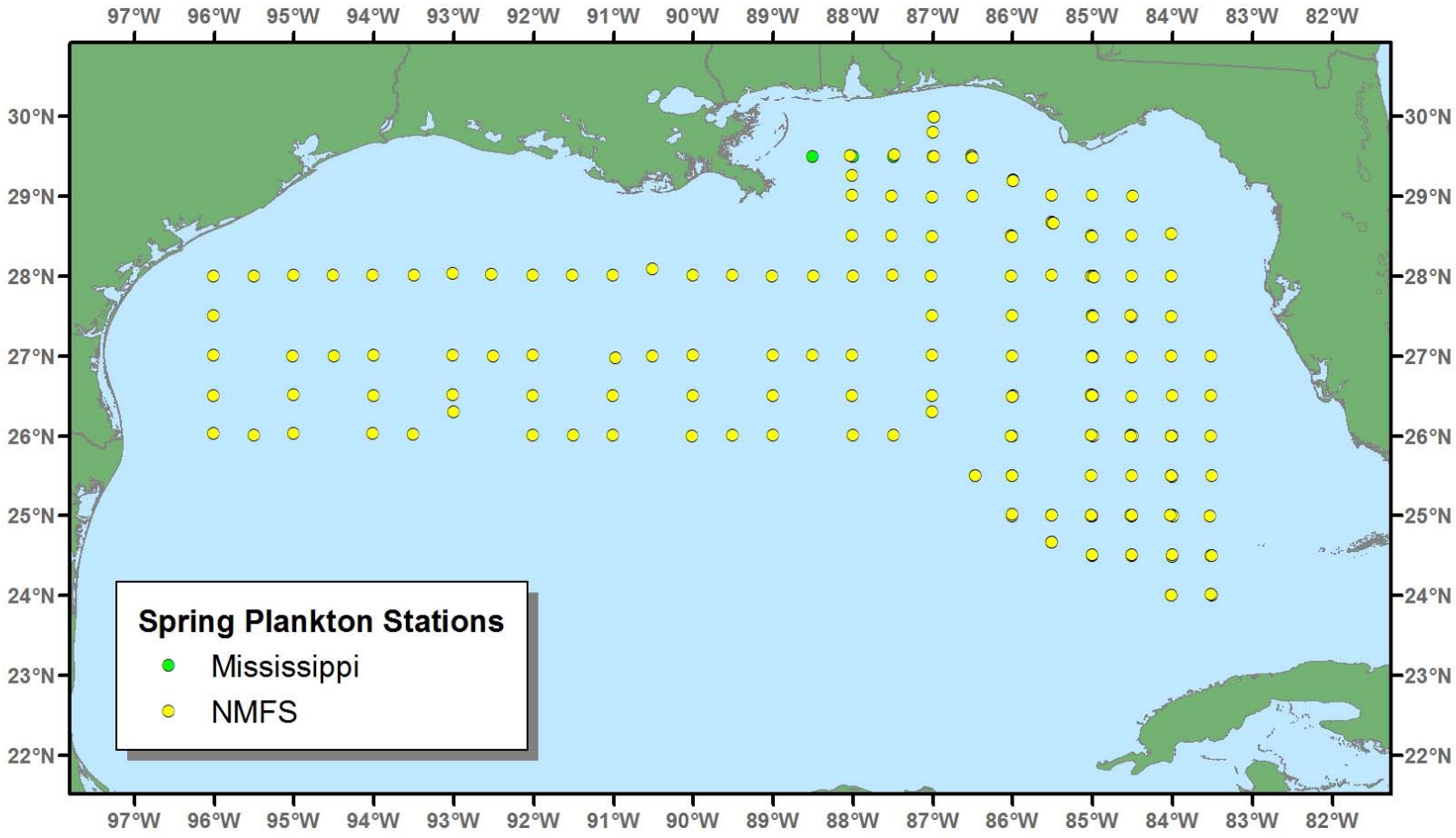

Figure 3. Locations of plankton and environmental stations during the 2007 Spring Plankton Survey.

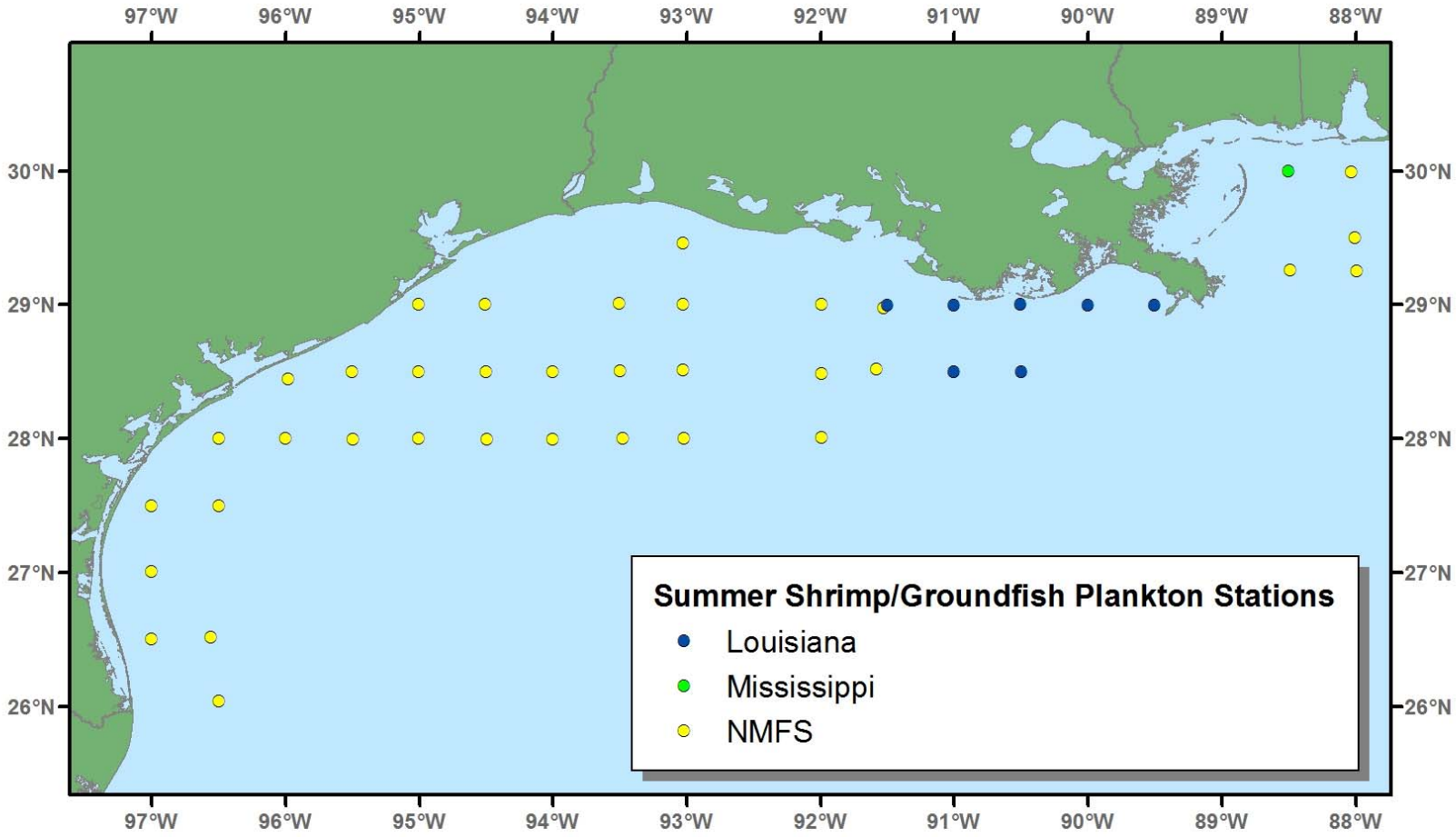

Figure 4. Locations of plankton stations during the 2007 Summer Shrimp/Groundfish Survey.

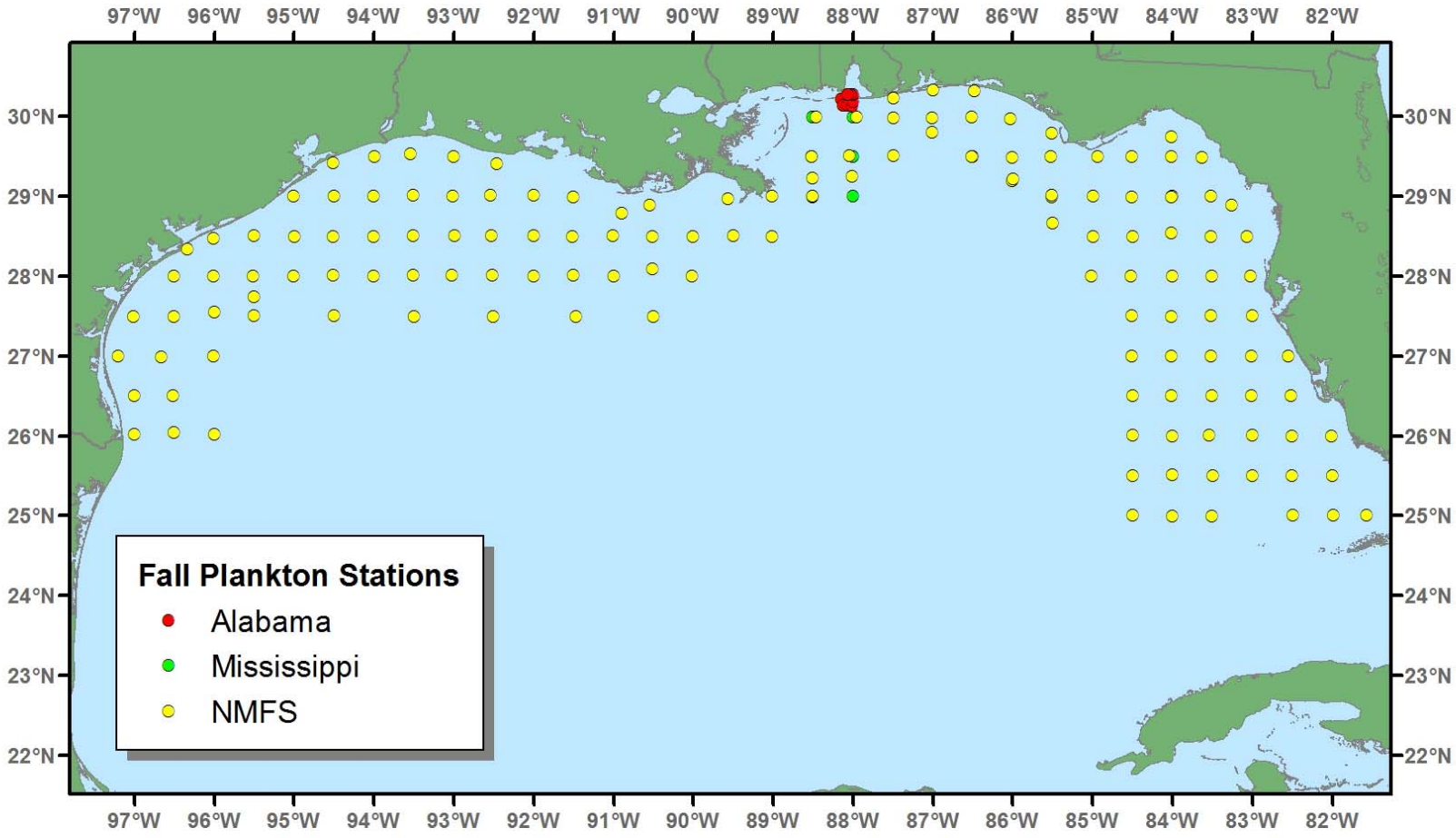

Figure 5. Locations of plankton and environmental stations during the 2007 Fall Plankton Survey.

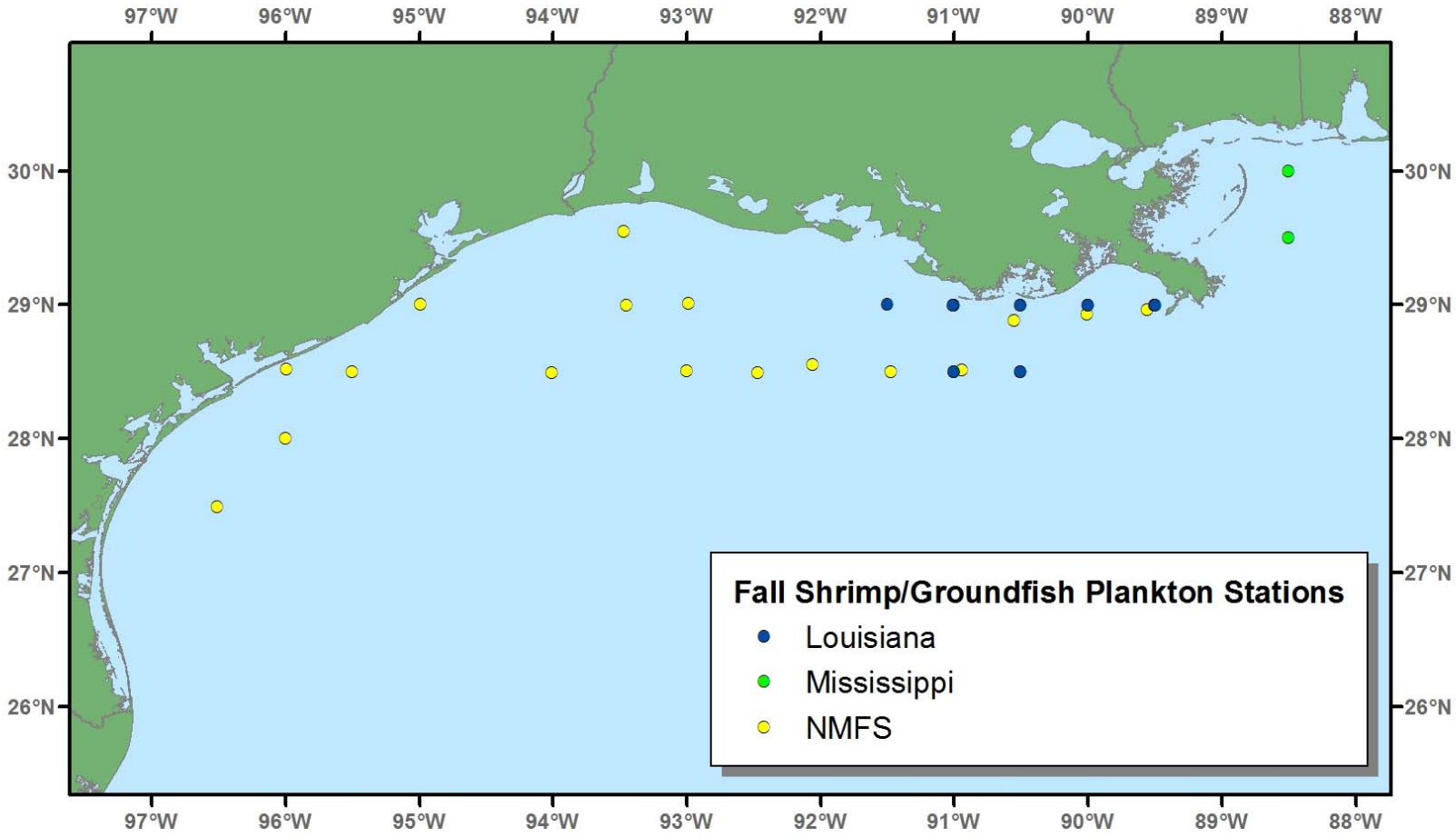

Figure 6. Locations of plankton stations during the 2007 Fall Shrimp/Groundfish Survey.

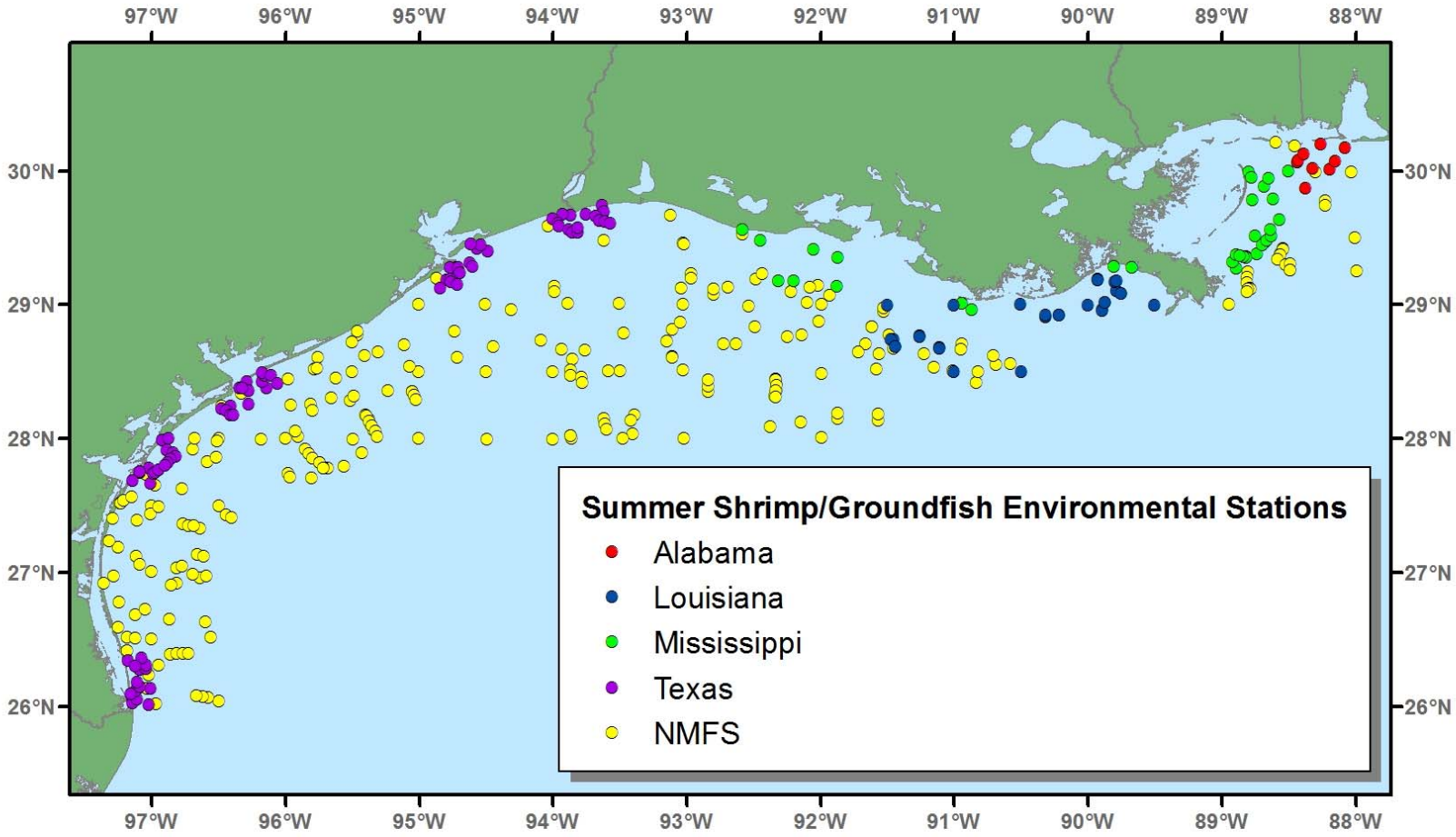

Figure 7. Locations of environmental stations during the 2007 Summer Shrimp/Groundfish Survey.

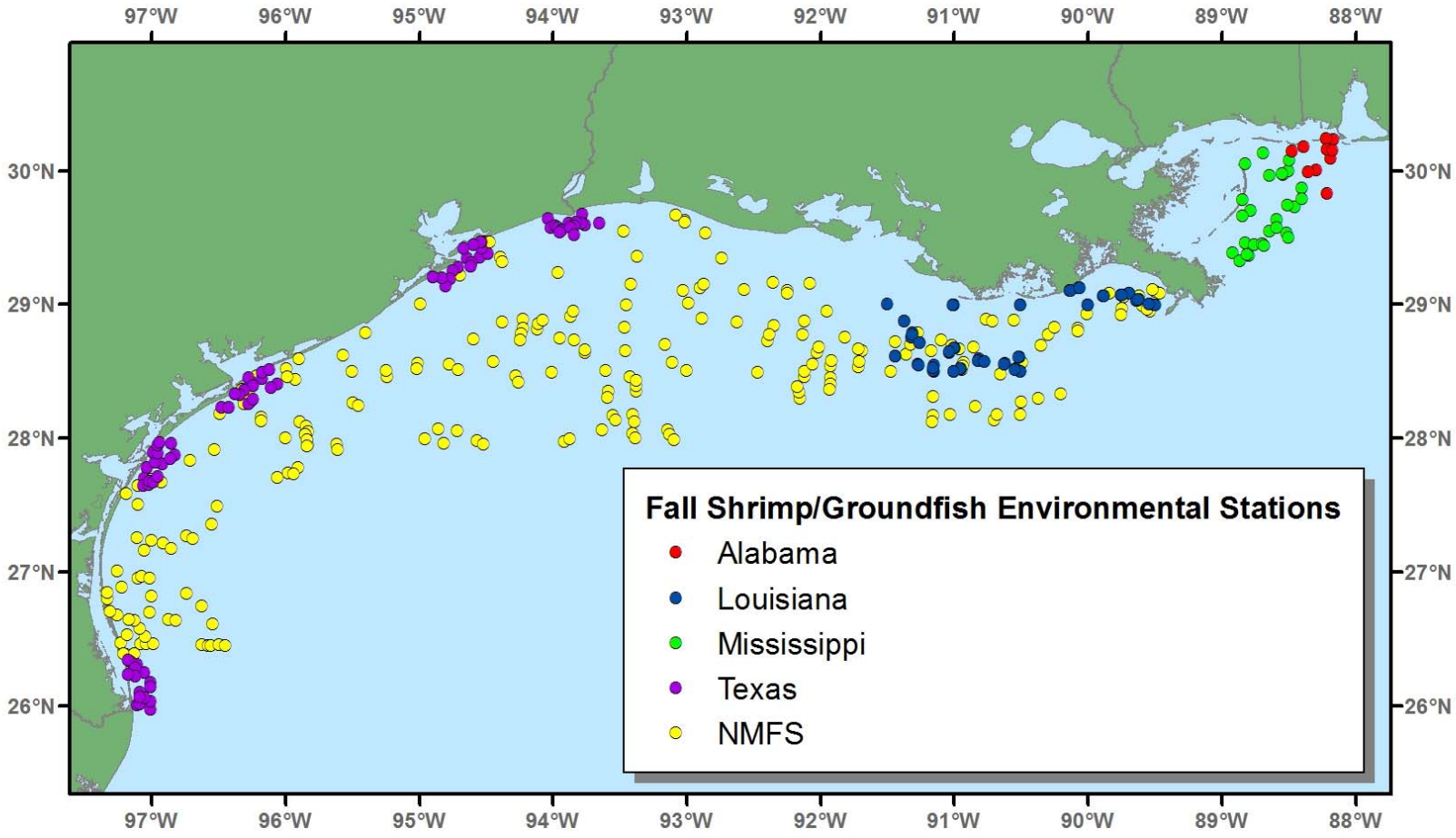

Figure 8. Locations of environmental stations during the 2007 Fall Shrimp/Groundfish Survey.

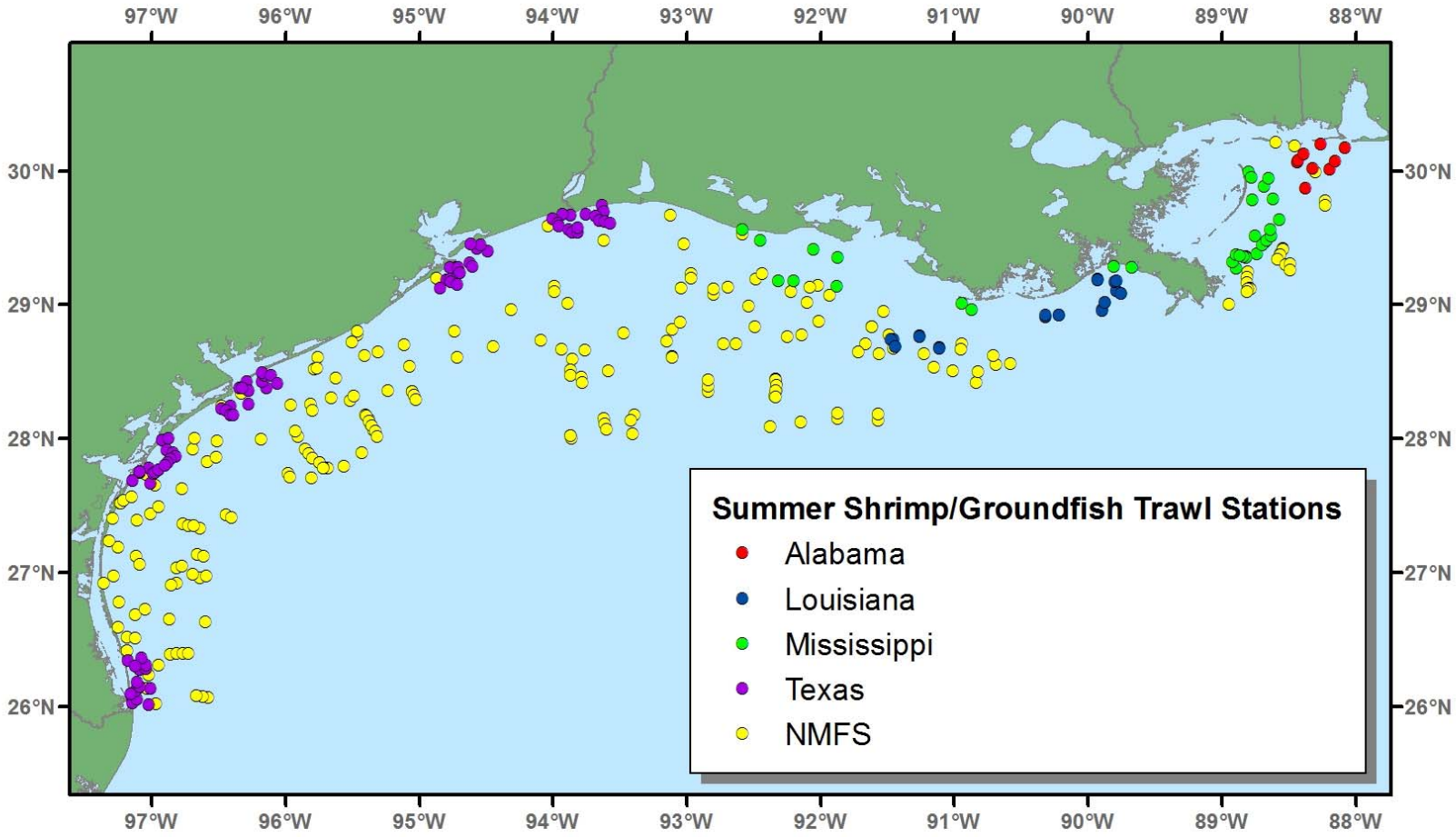

Figure 9. Locations of trawl stations during the 2007 Summer Shrimp/Groundfish Survey.

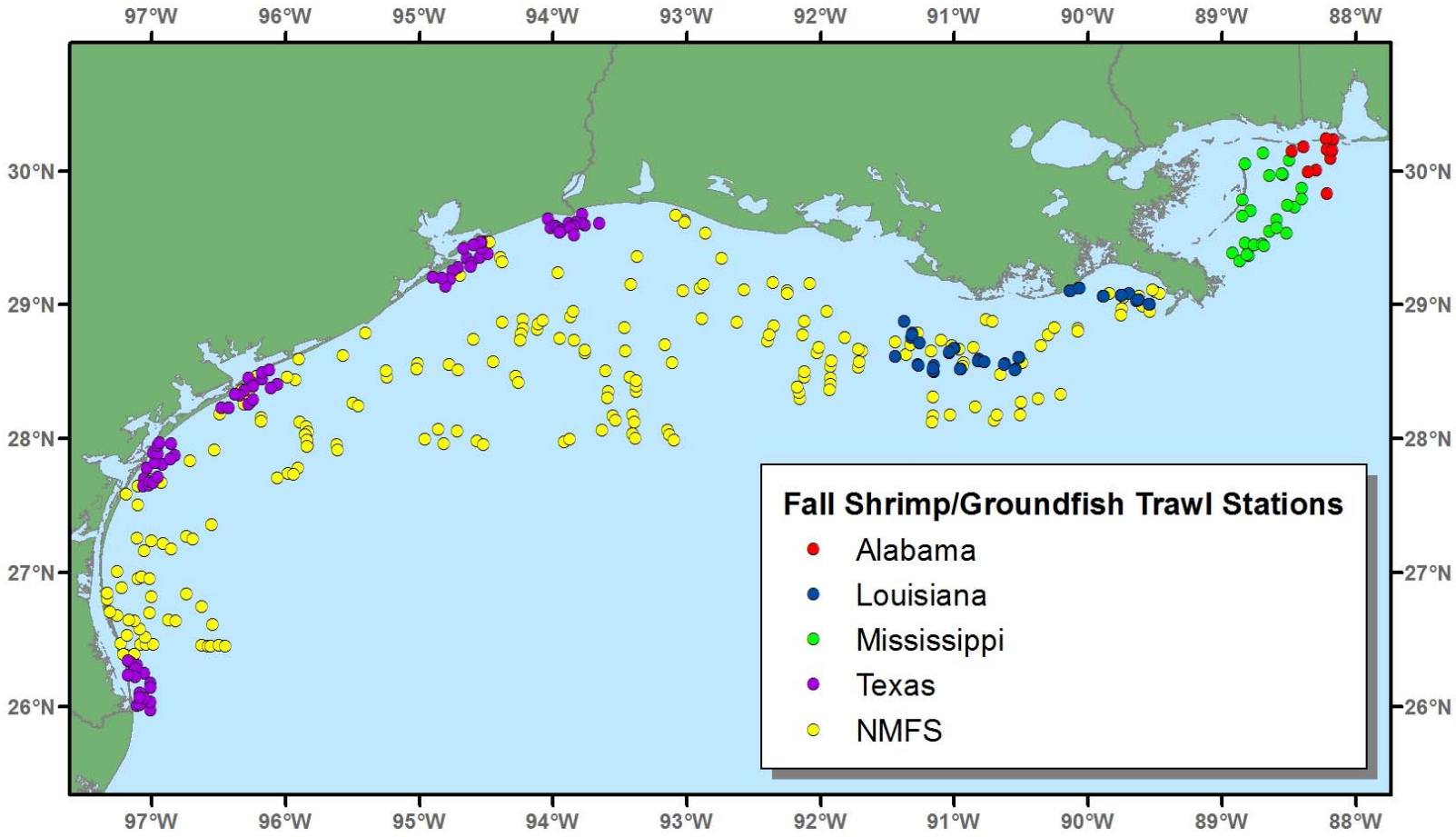

Figure 10. Locations of trawl stations during the 2007 Fall Shrimp/Groundfish Survey.

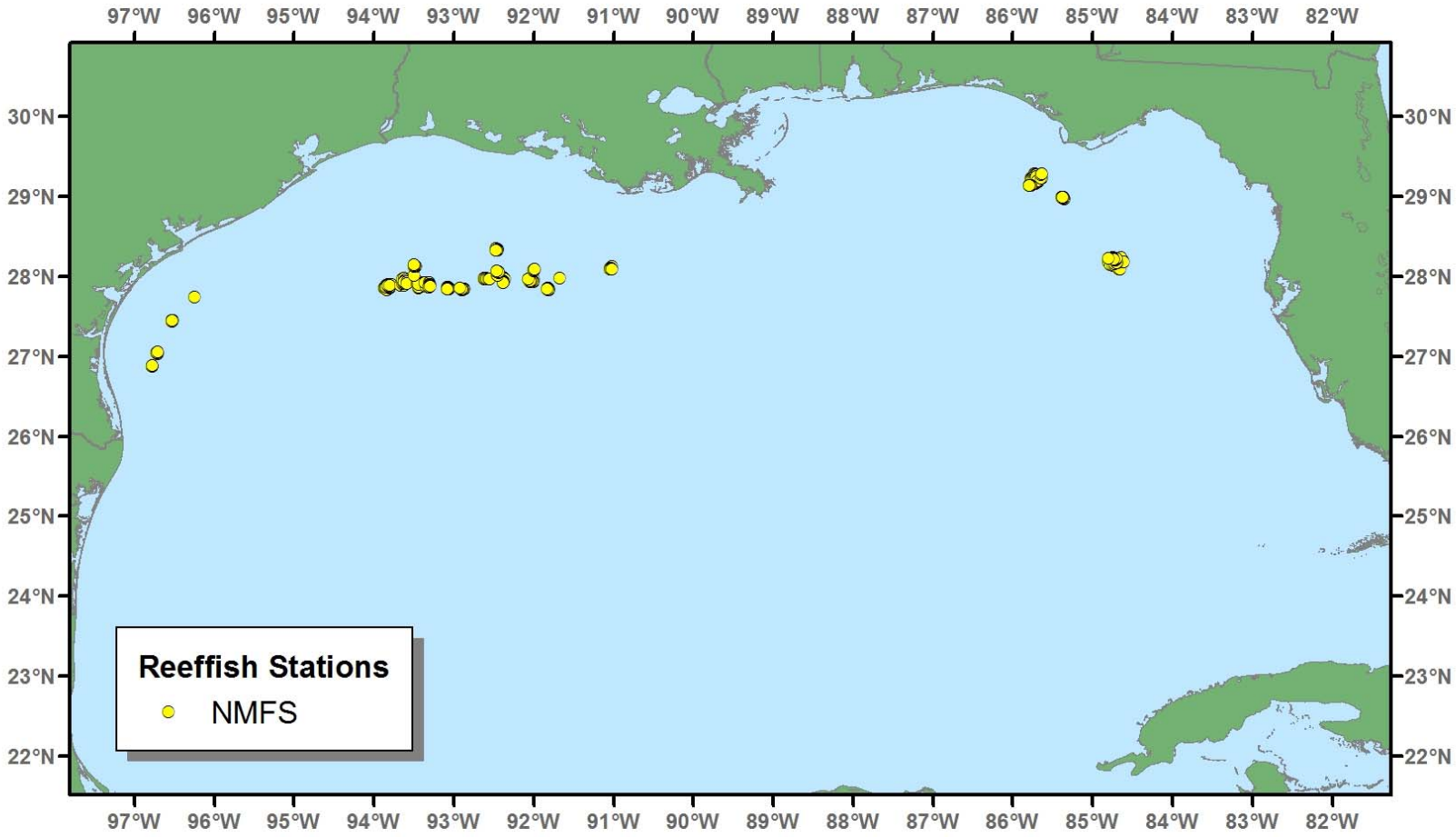

Figure 11. Locations of stations during the 2007 Reef Fish Survey.

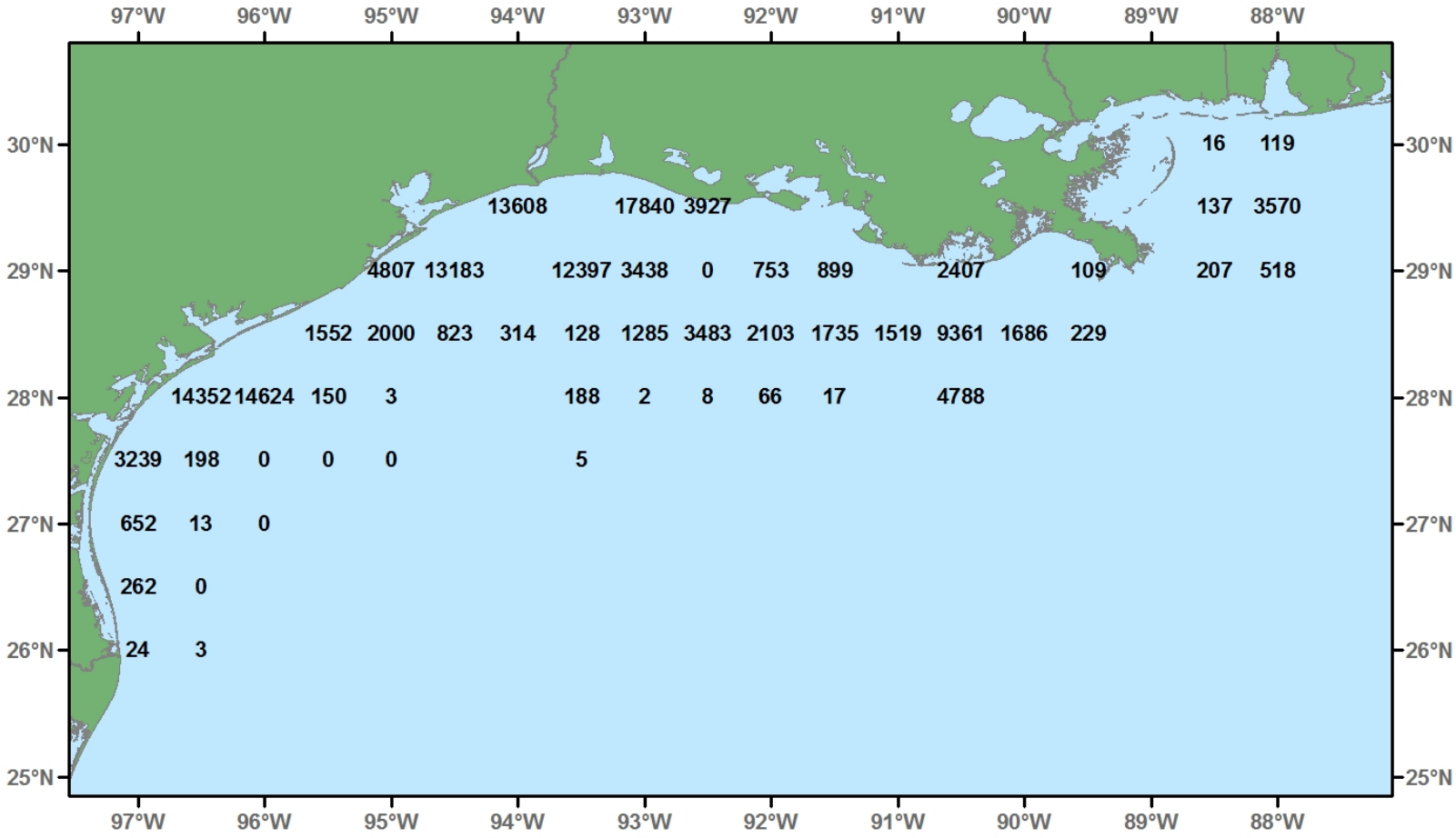

Figure 12. Atlantic croaker, Micropogonias undulatus, number/hour for June-July 2007.

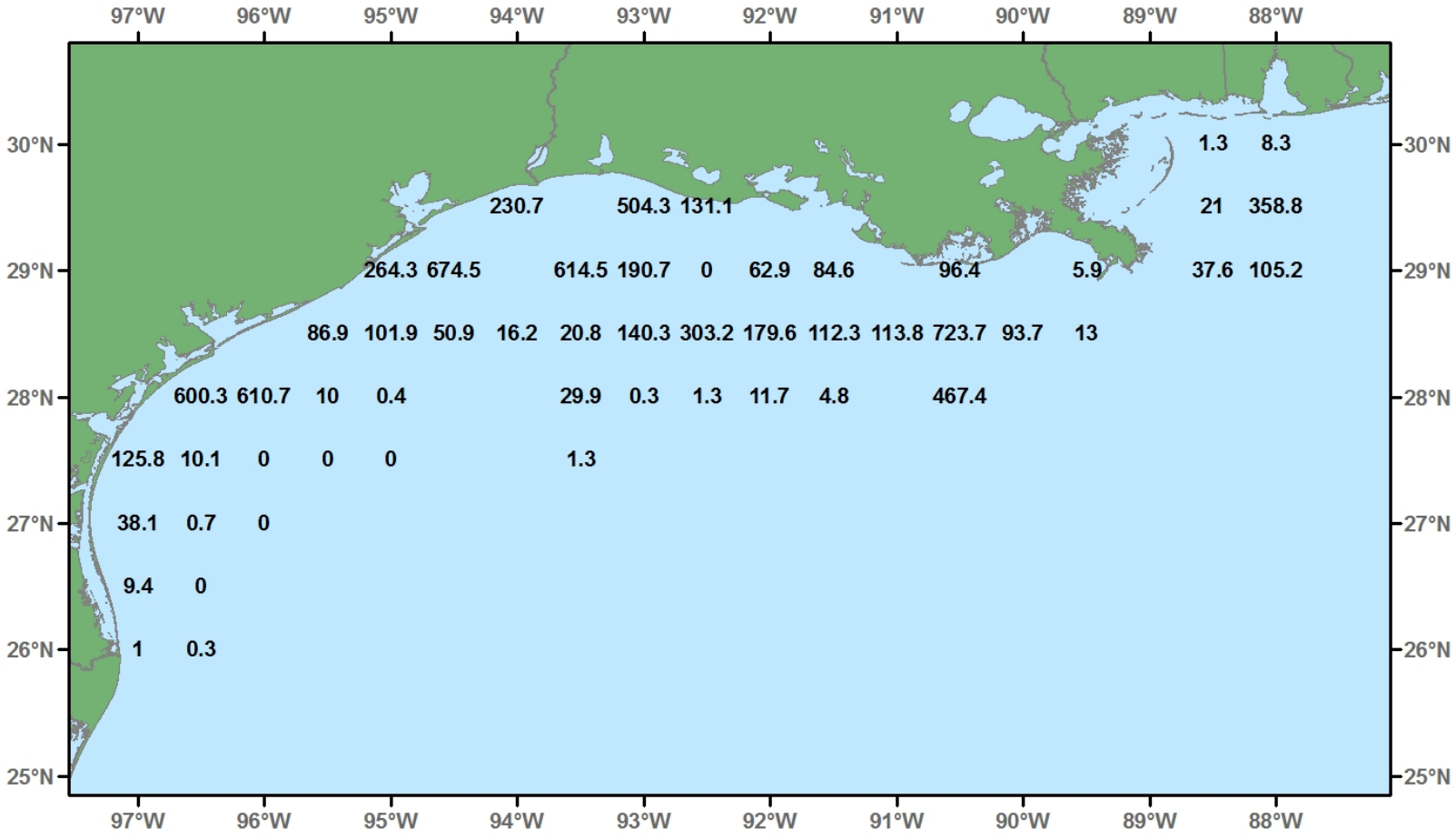

Figure 13. Atlantic croaker, Micropogonias undulatus, lb/hour for June-July 2007.

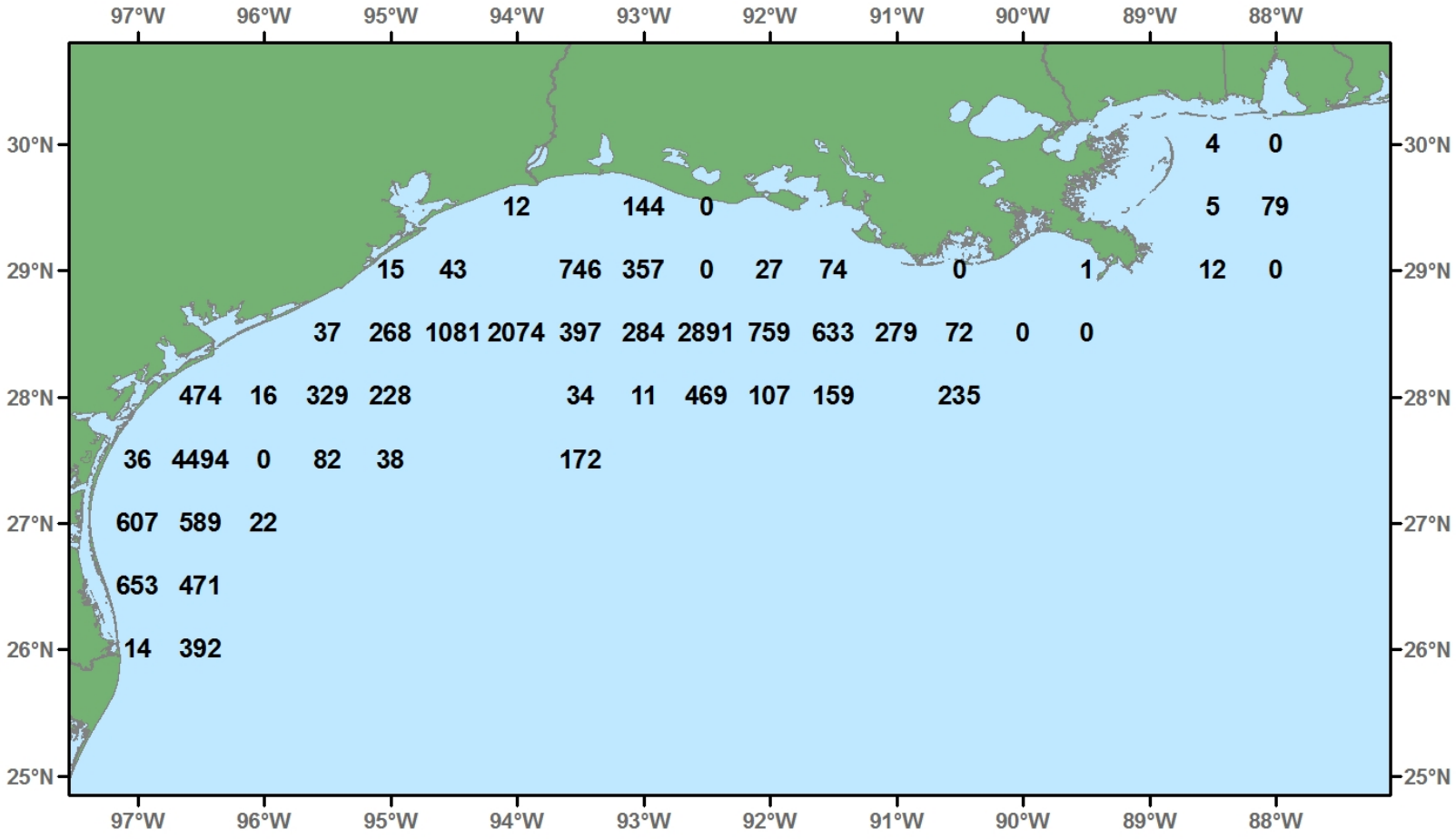

Figure 14. Gulf butterfish, Peprilus burti, number/hour for June-July 2007.

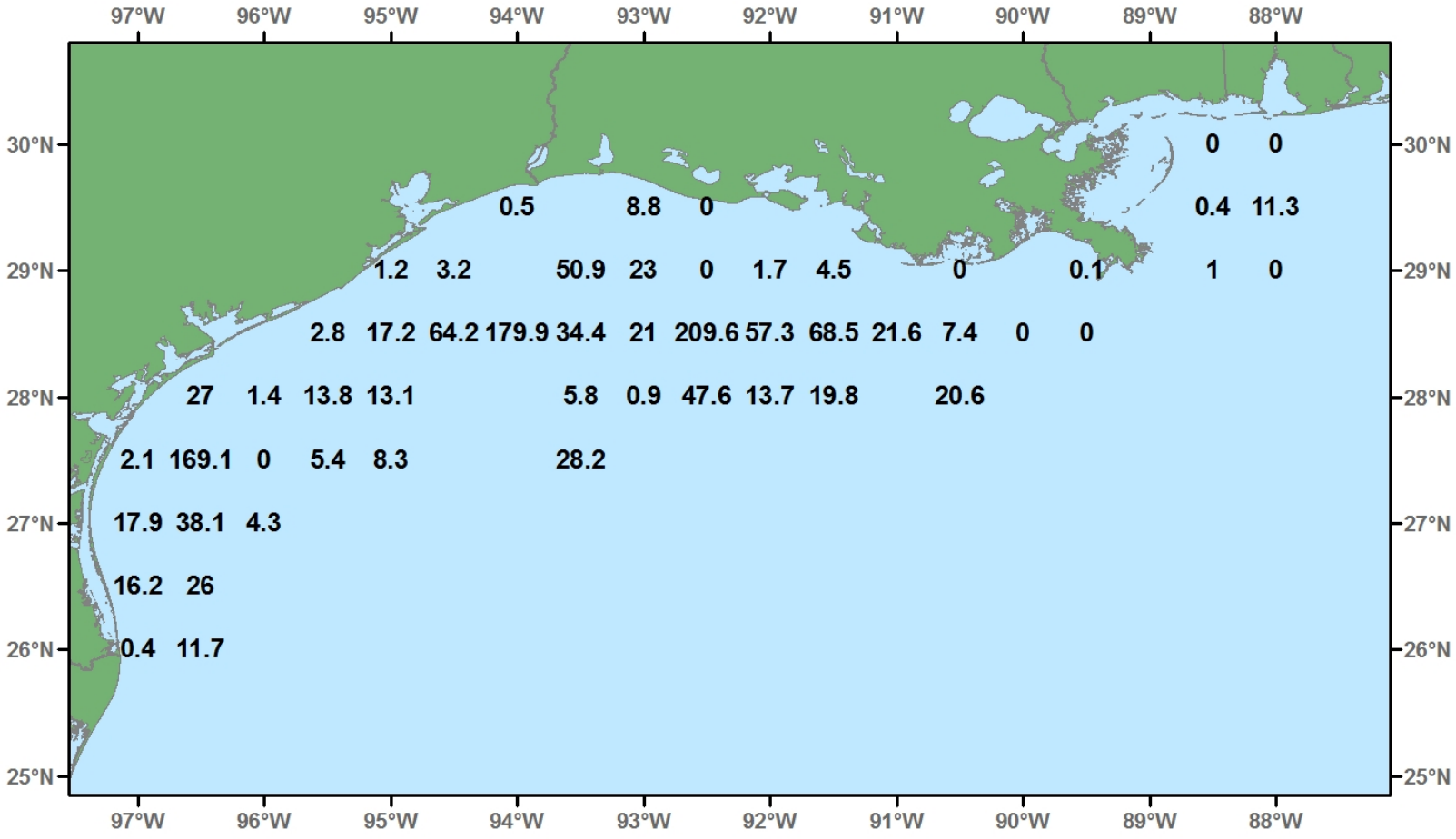

Figure 15. Gulf butterfish, Peprilus burti, lb/hour for June-July 2007.

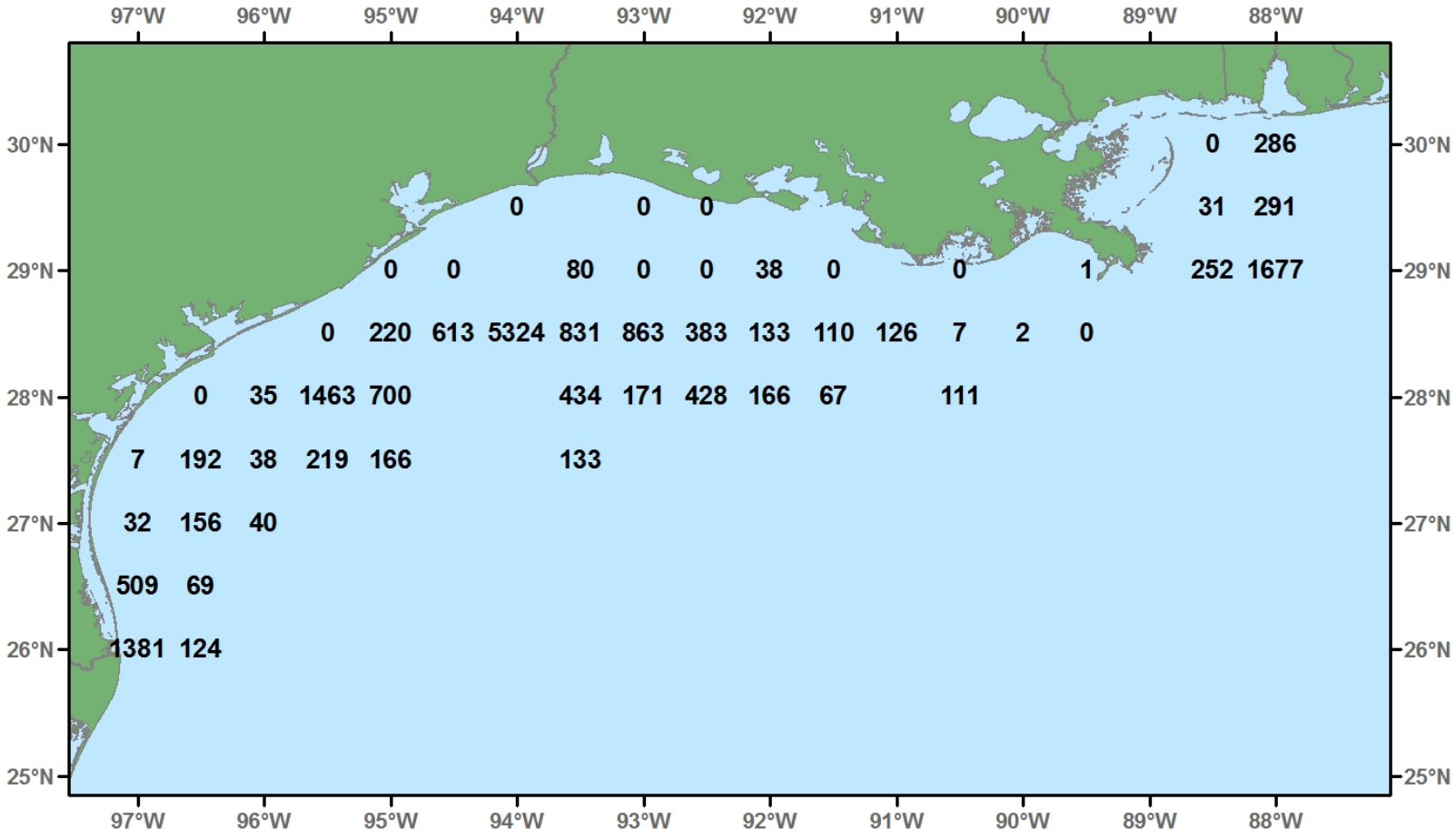

Figure 16. Longspine porgy, Stenotomus caprinus, number/hour for June-July 2007.

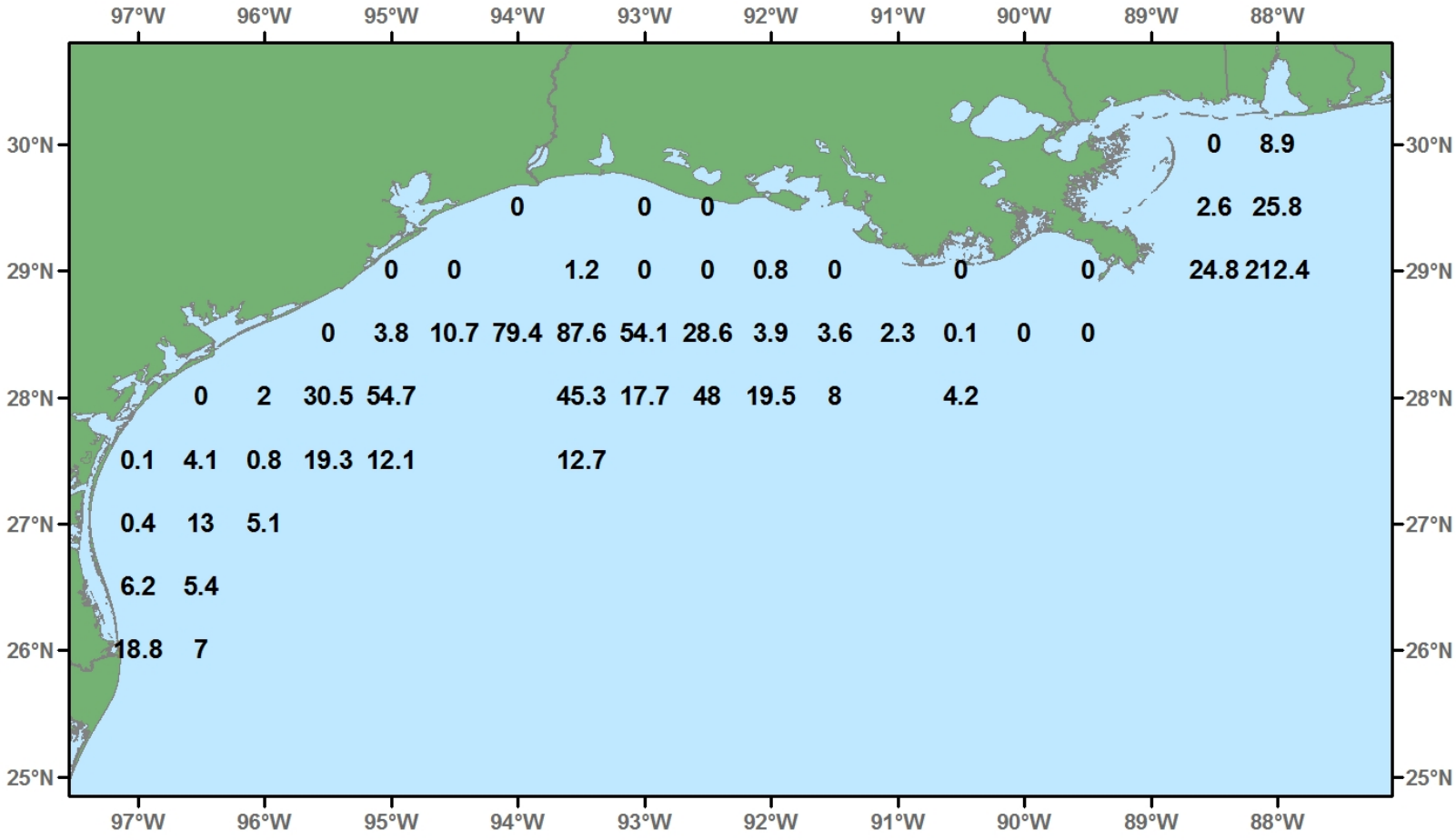

Figure 17. Longspine porgy, Stenotomus caprinus, lb/hour for June-July 2007.

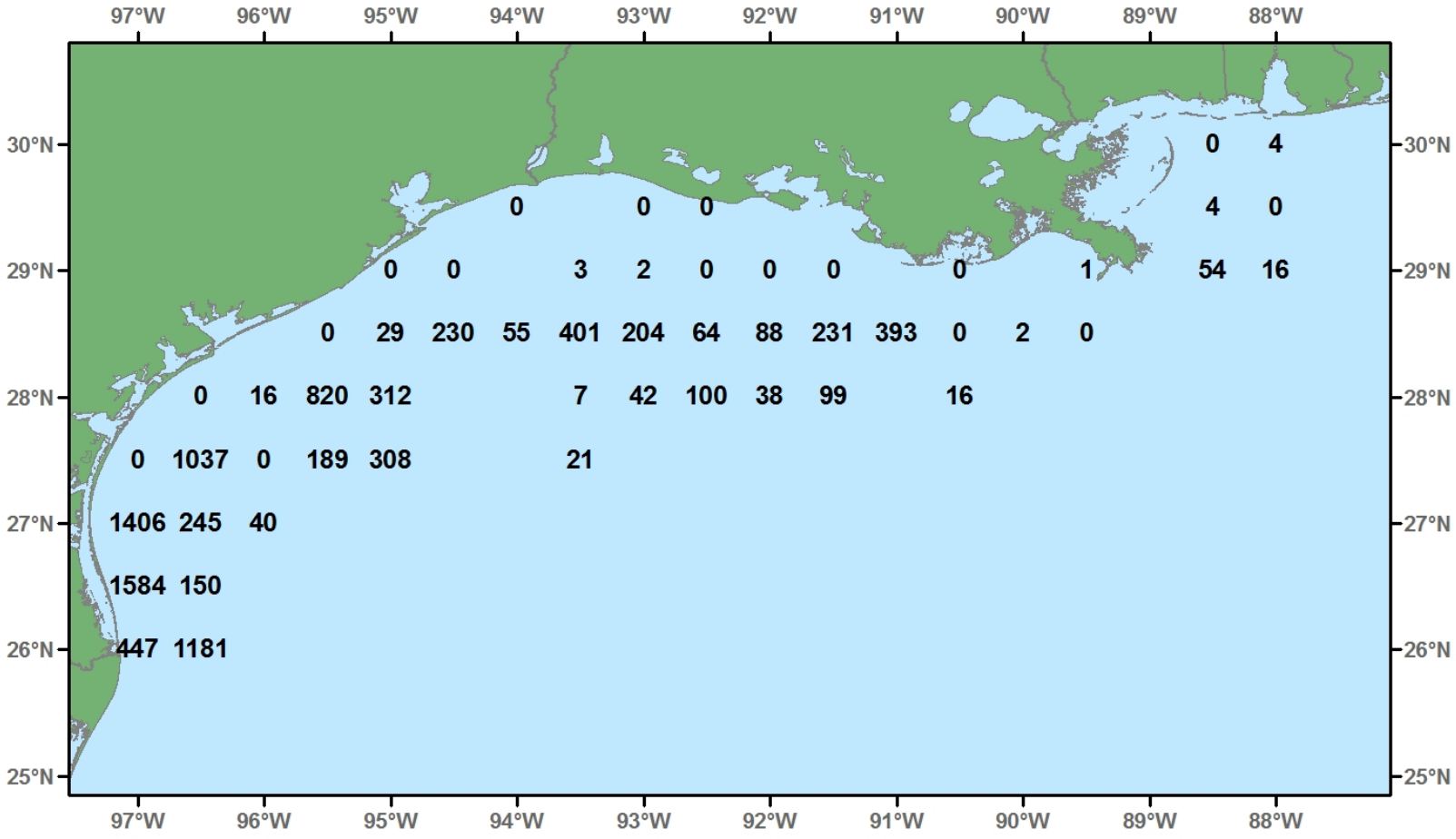

Figure 18. Rough scad, Trachurus lathami, number/hour for June-July 2007.

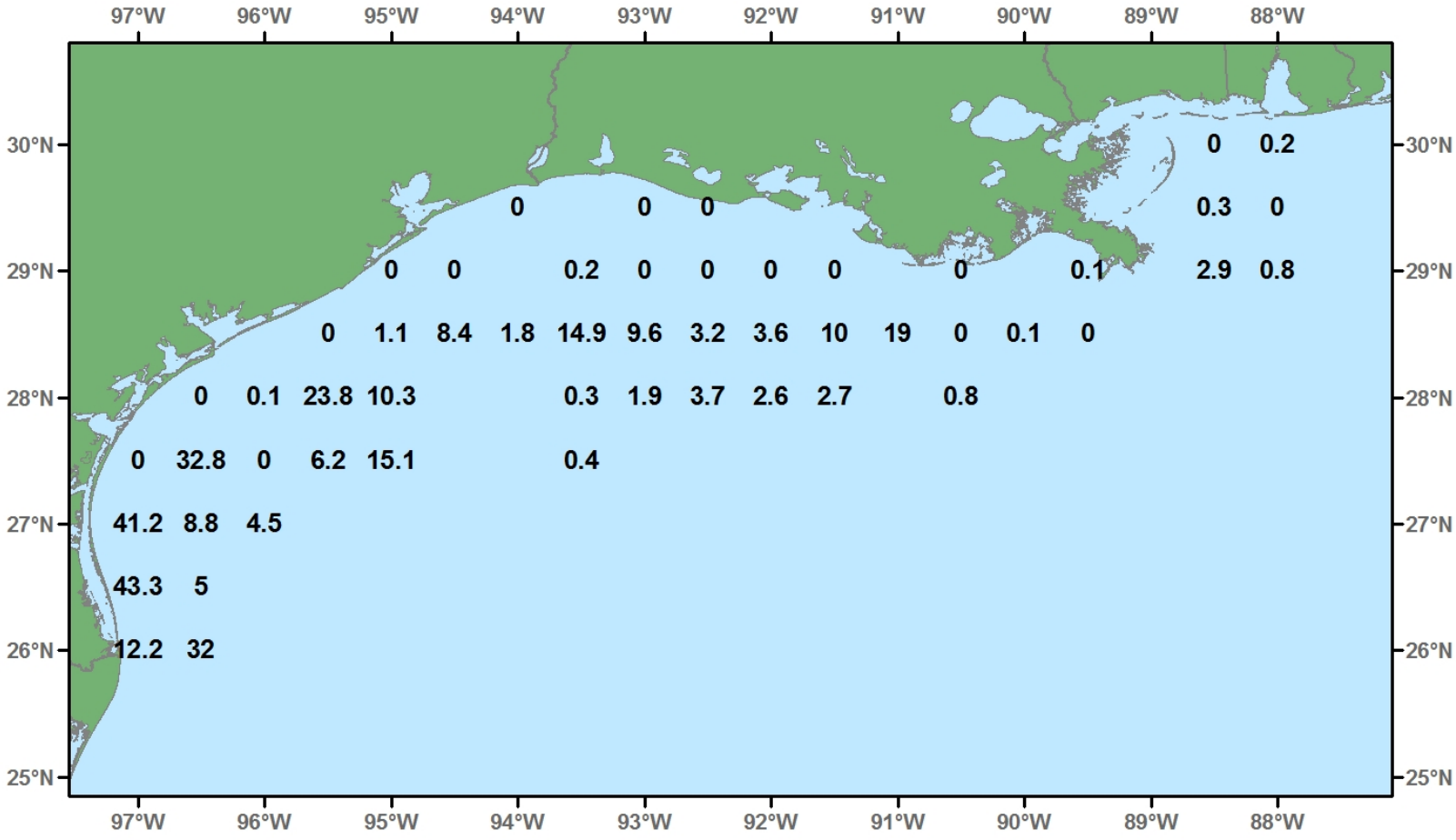

Figure 19. Rough scad, Trachurus lathami, lb/hour for June-July 2007.

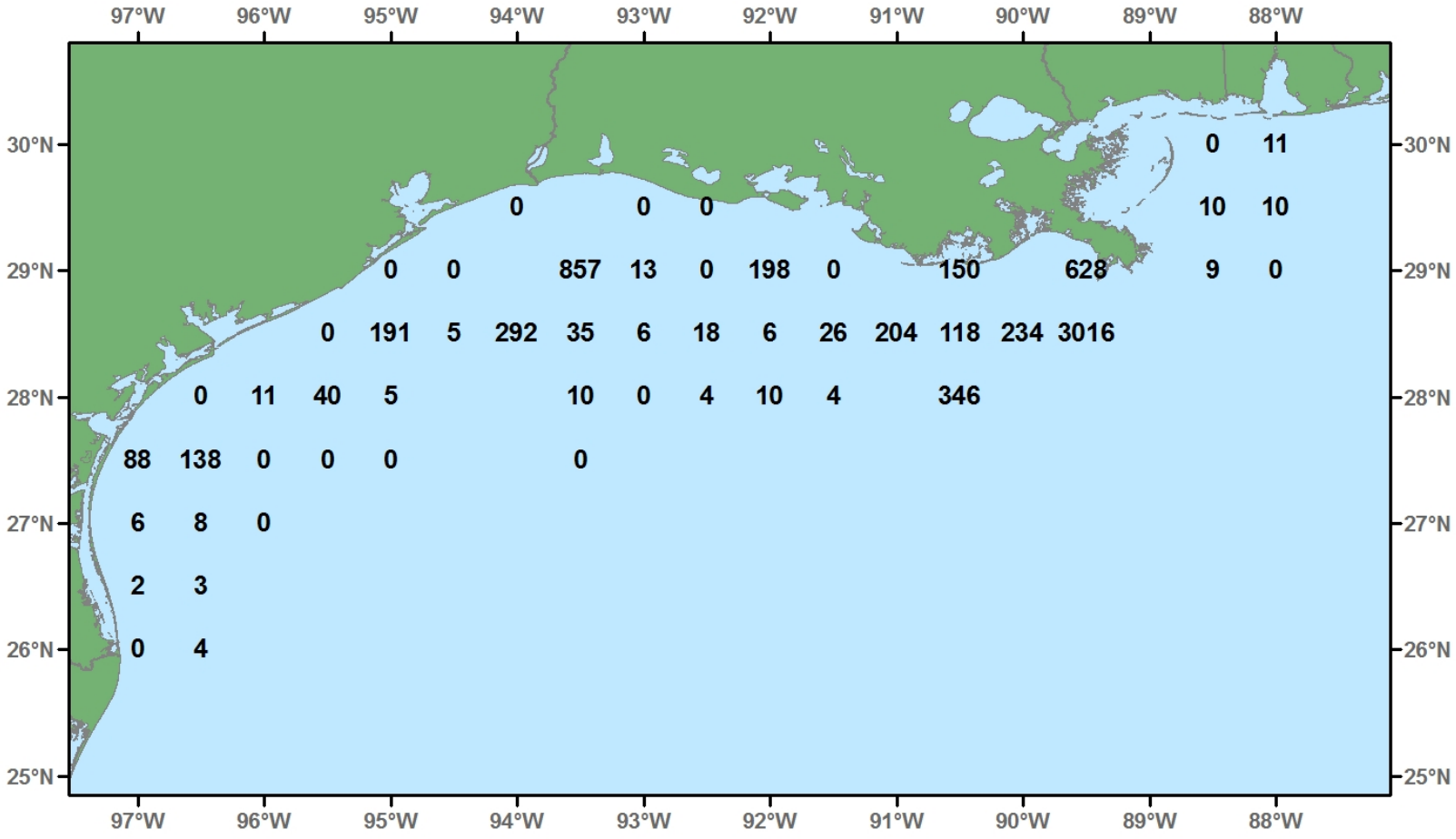

Figure 20. Bigeye searobin, Prionotus longispinosus, number/hour for June-July 2007.

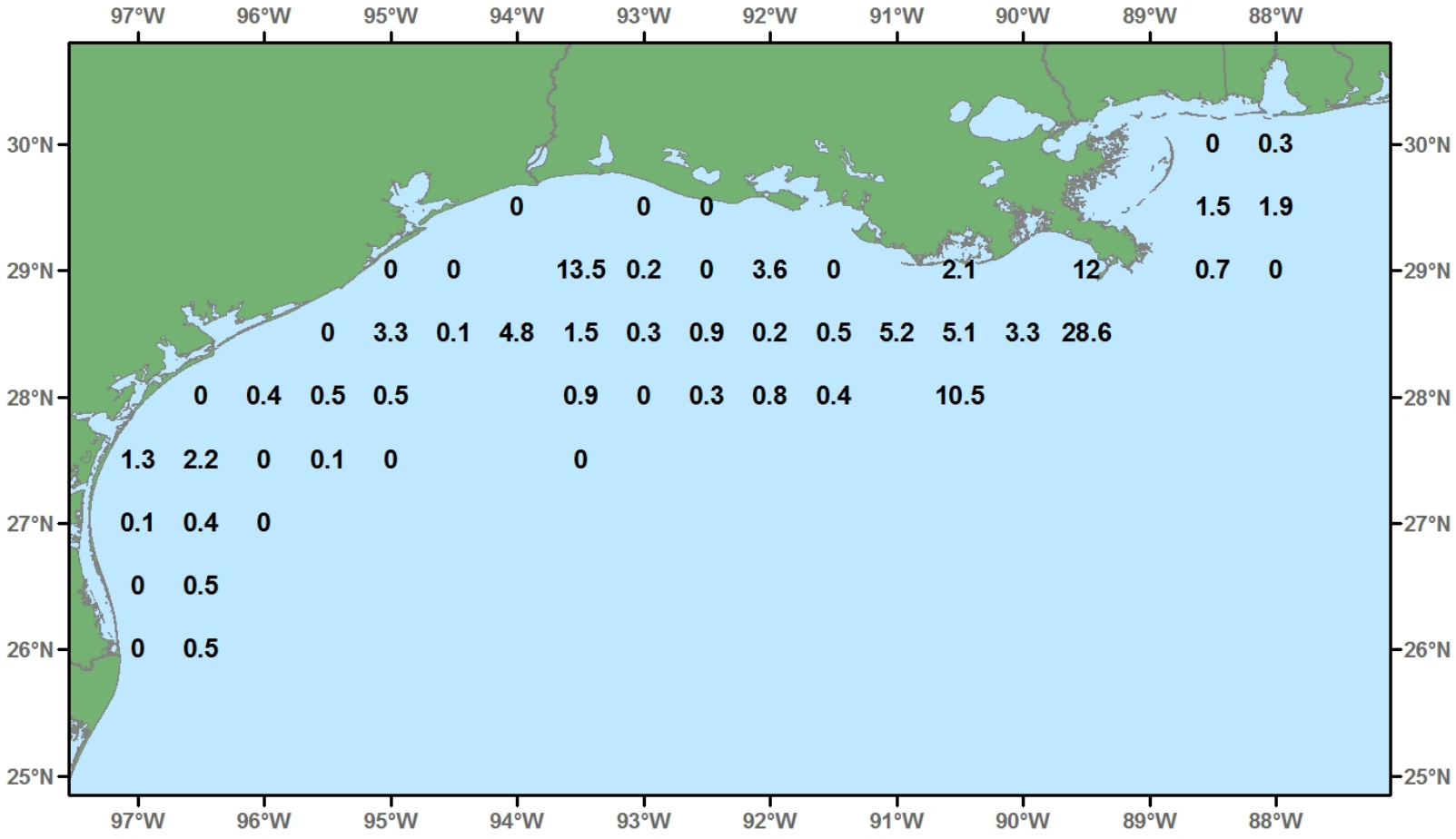

Figure 21. Bigeye searobin, Prionotus longispinosus, lb/hour for June-July 2007.

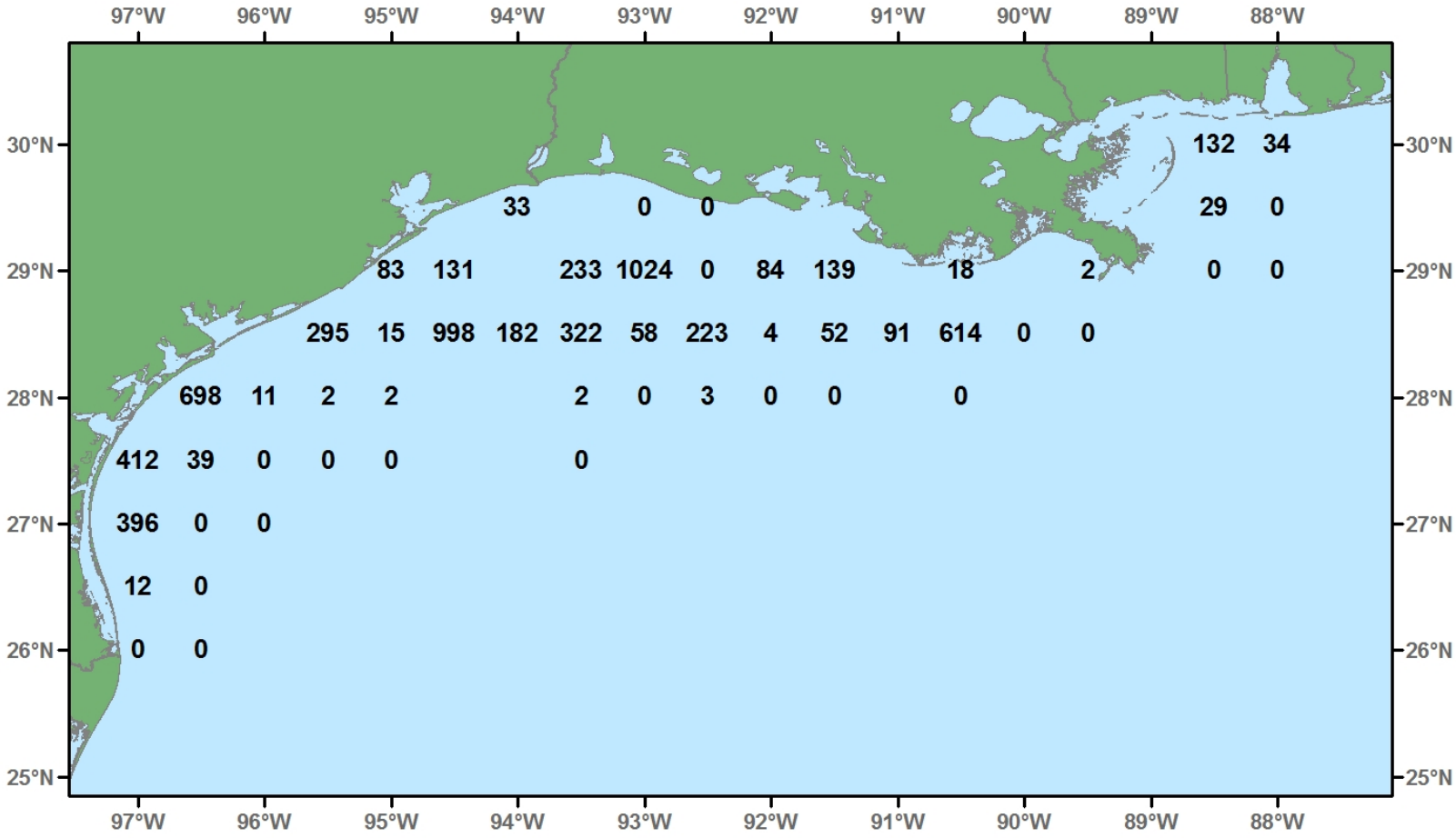

Figure 22. Atlantic bumper, Chloroscombrus chrysurus, number/hour for June-July 2007.

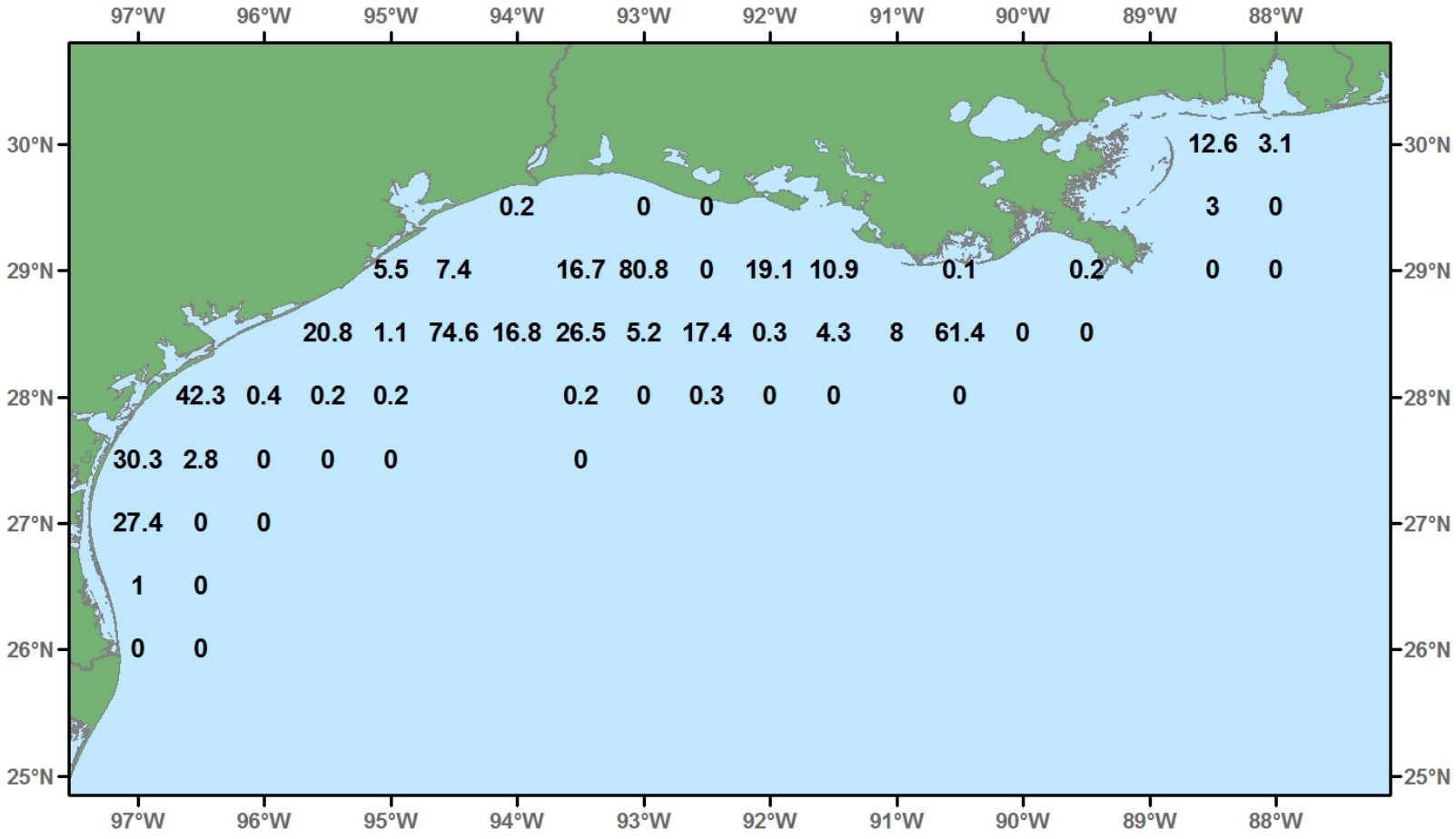

Figure 23. Atlantic bumper, Chloroscombrus chrysurus, lb/hour for June-July 2007.

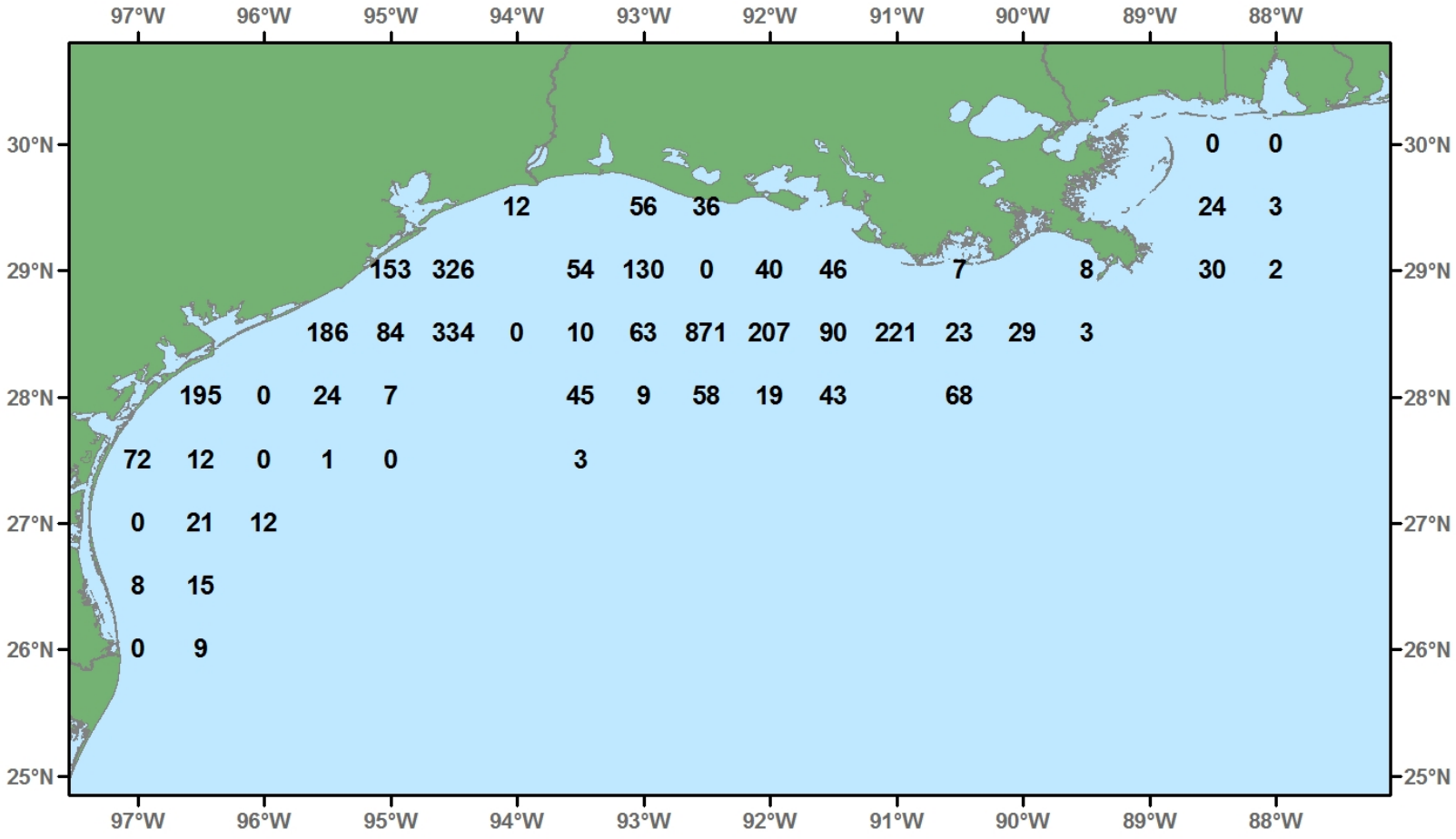

Figure 24. Atlantic cutlassfish, Trichiurus lepturus, number/hour for June-July 2007.

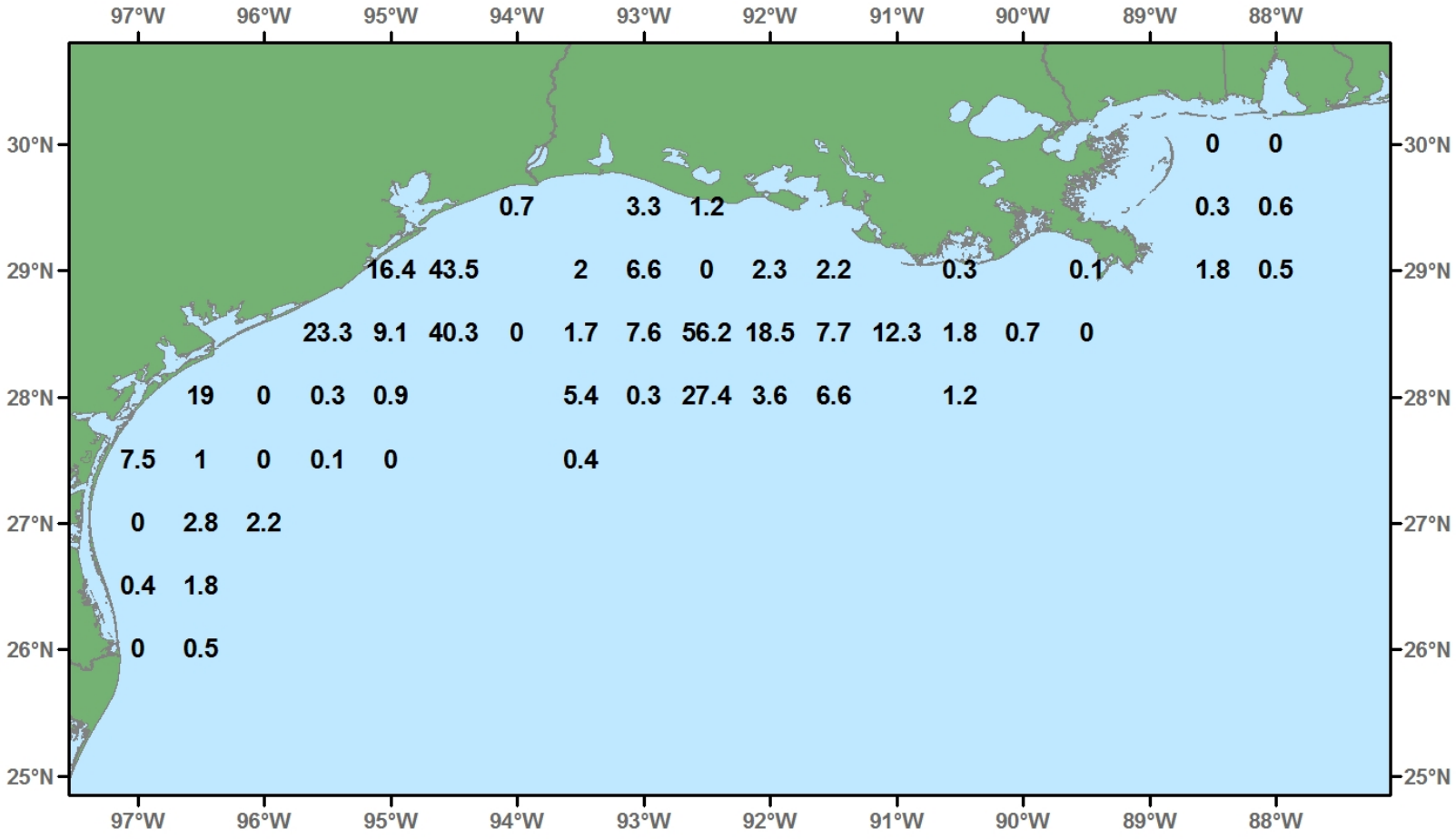

Figure 25. Atlantic cutlassfish, Trichiurus lepturus, lb/hour for June-July 2007.

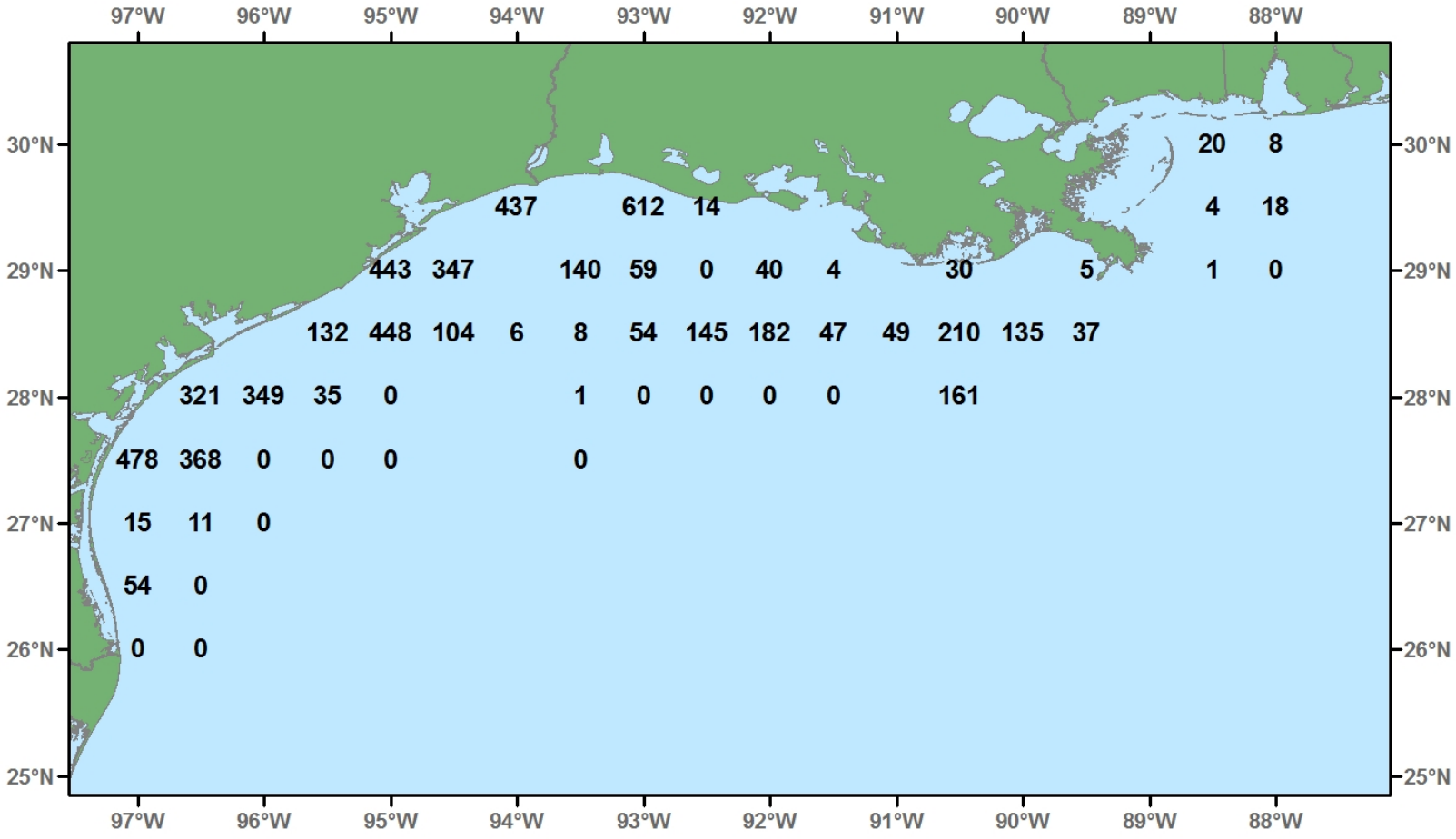

Figure 26. Silver seatrout, Cynoscion nothus, number/hour for June-July 2007.

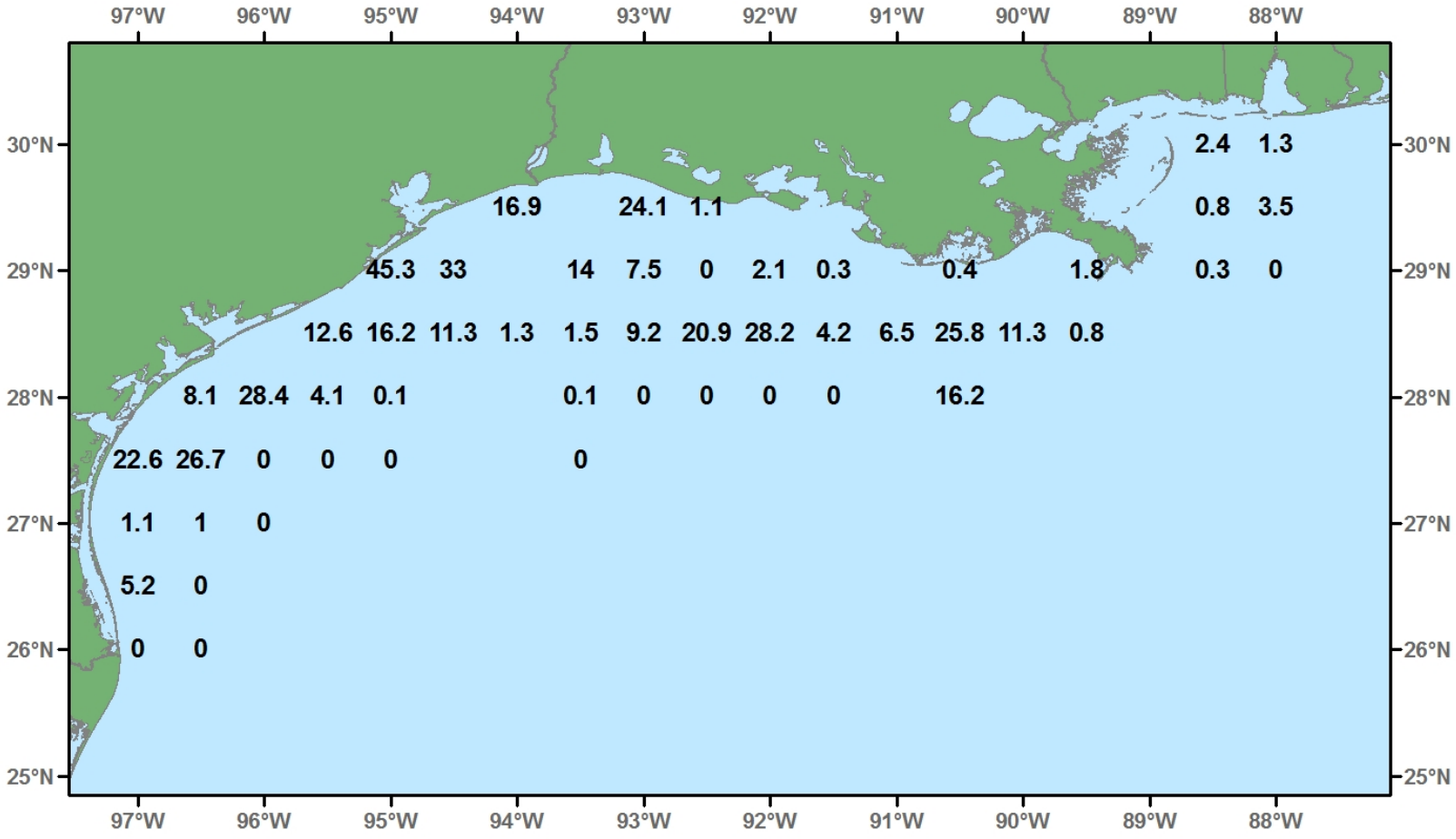

Figure 27. Silver seatrout, Cynoscion nothus, lb/hour for June-July 2007.

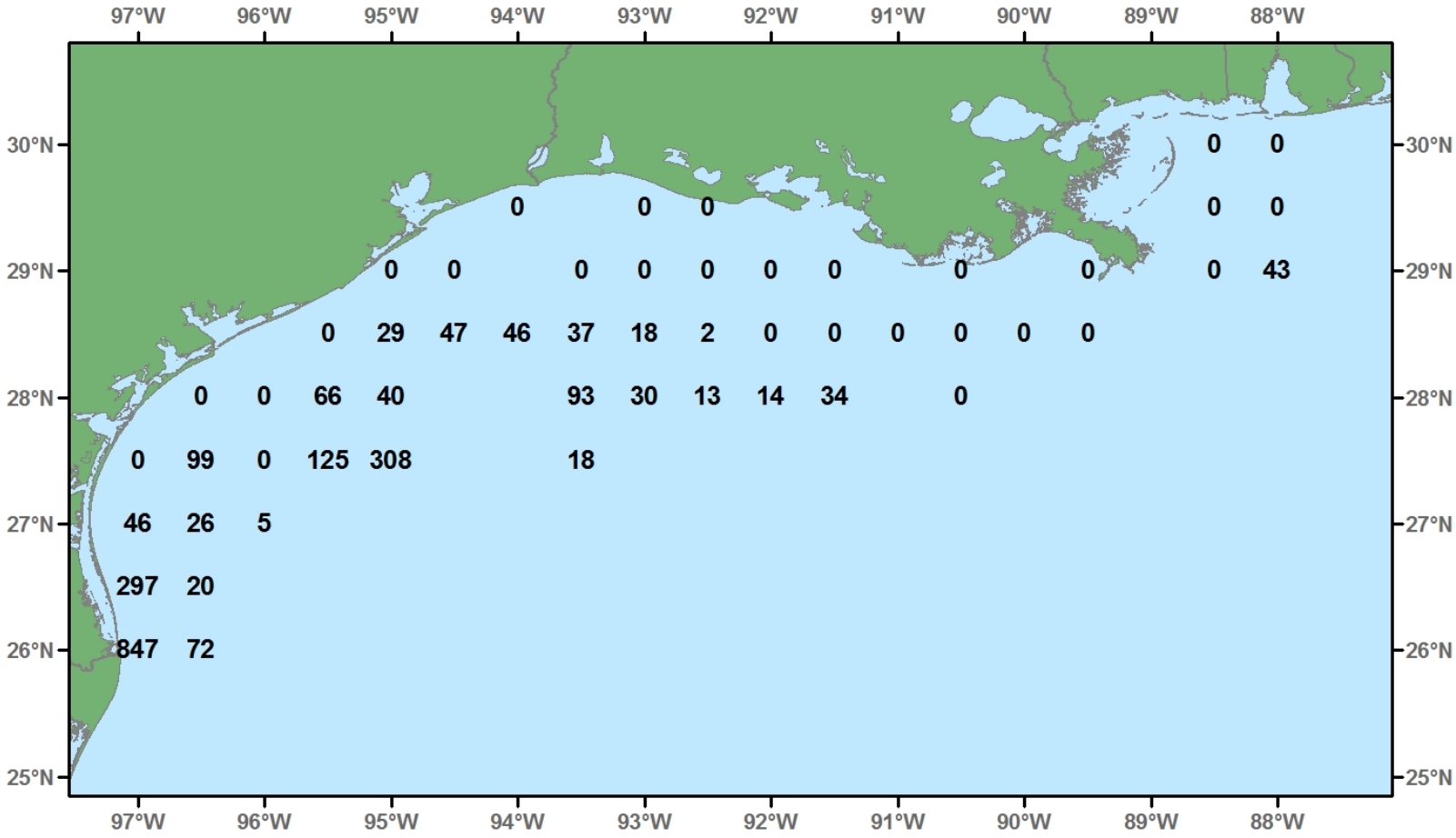

Figure 28. Dwarf goatfish, Upeneus parvus, number/hour for June-July 2007.

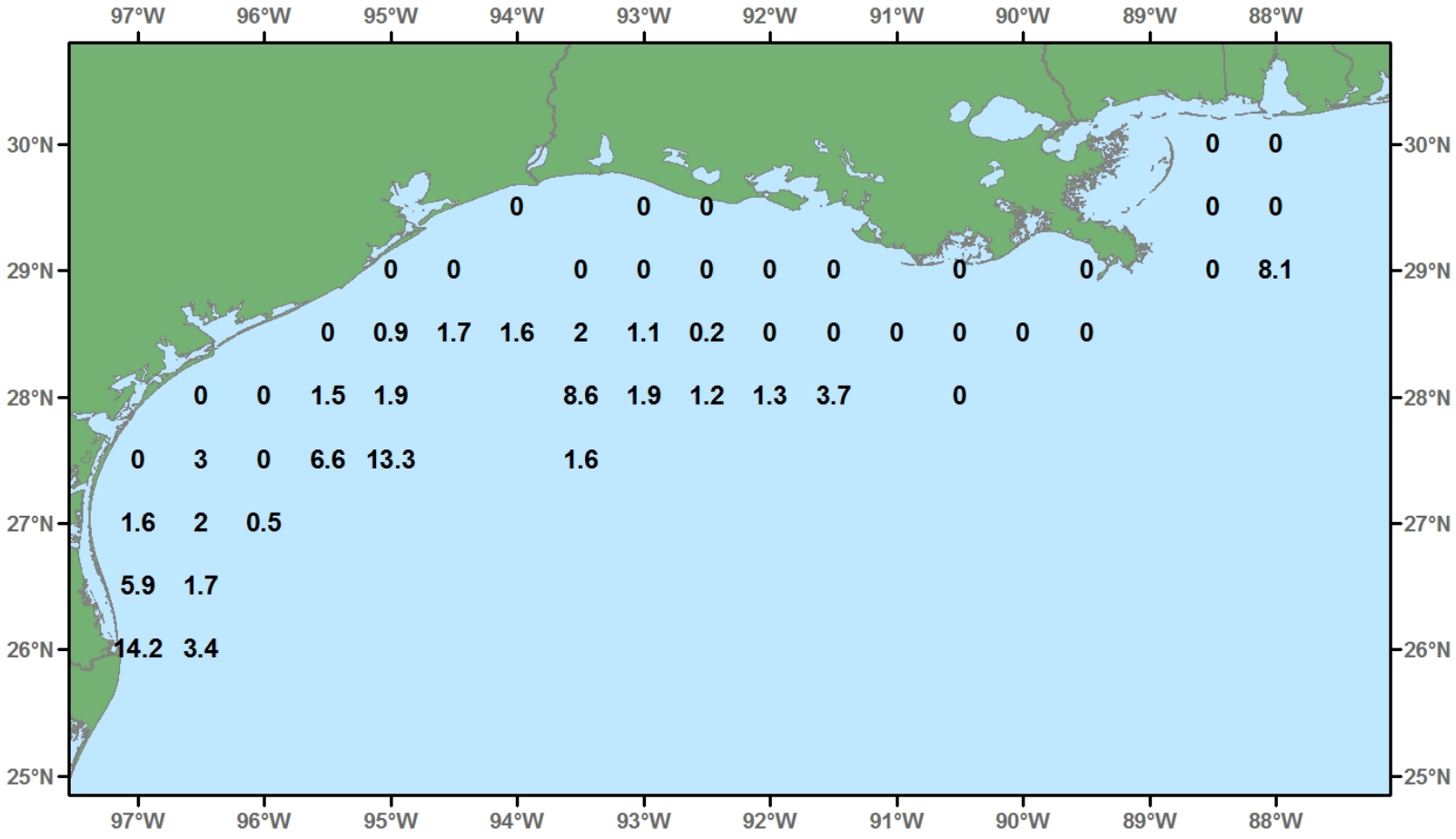

Figure 29. Dwarf goatfish, Upeneus parvus, lb/hour for June-July 2007.

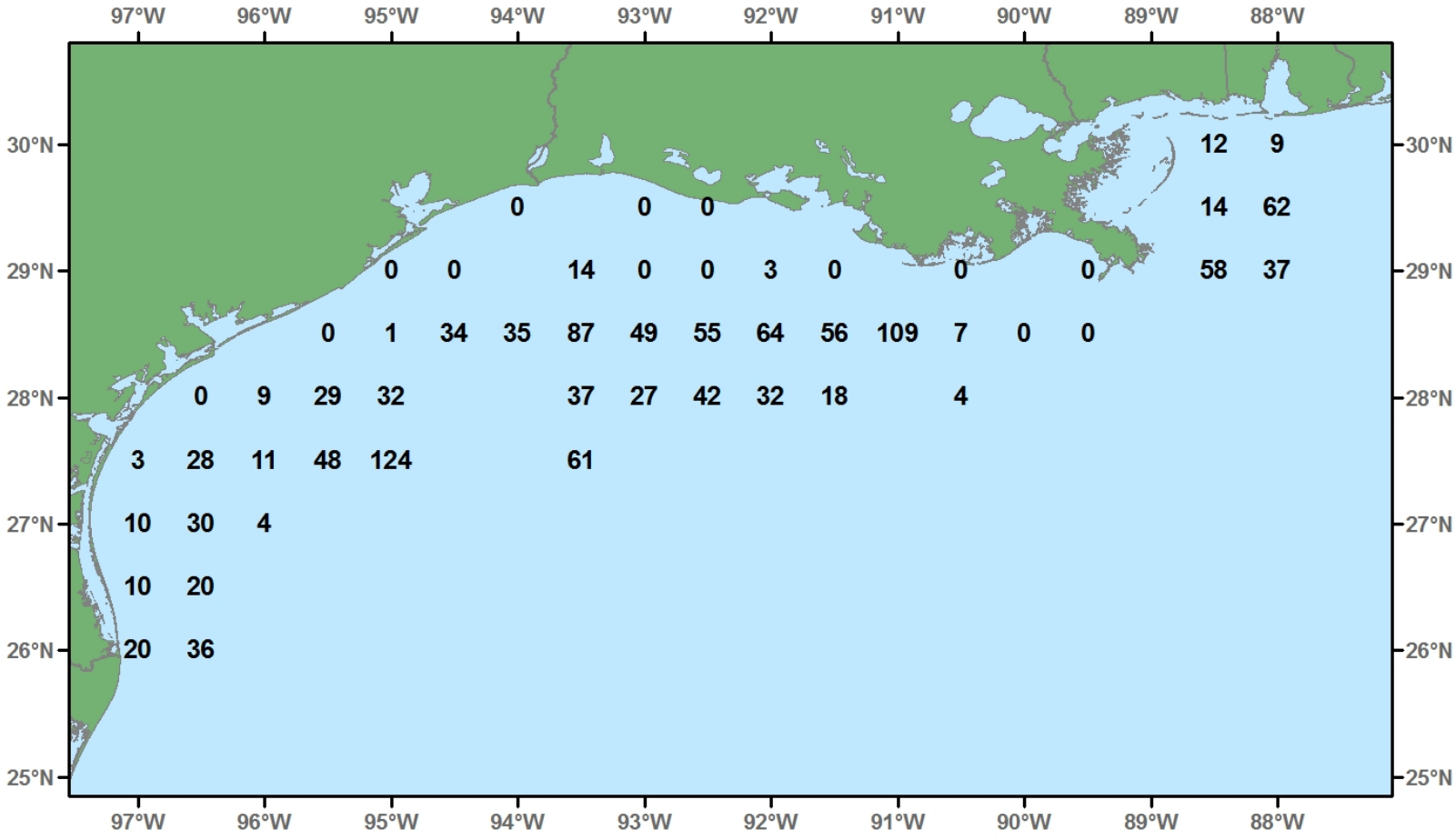

Figure 30. Inshore lizardfish, Synodus foetens, number/hour for June-July 2007.

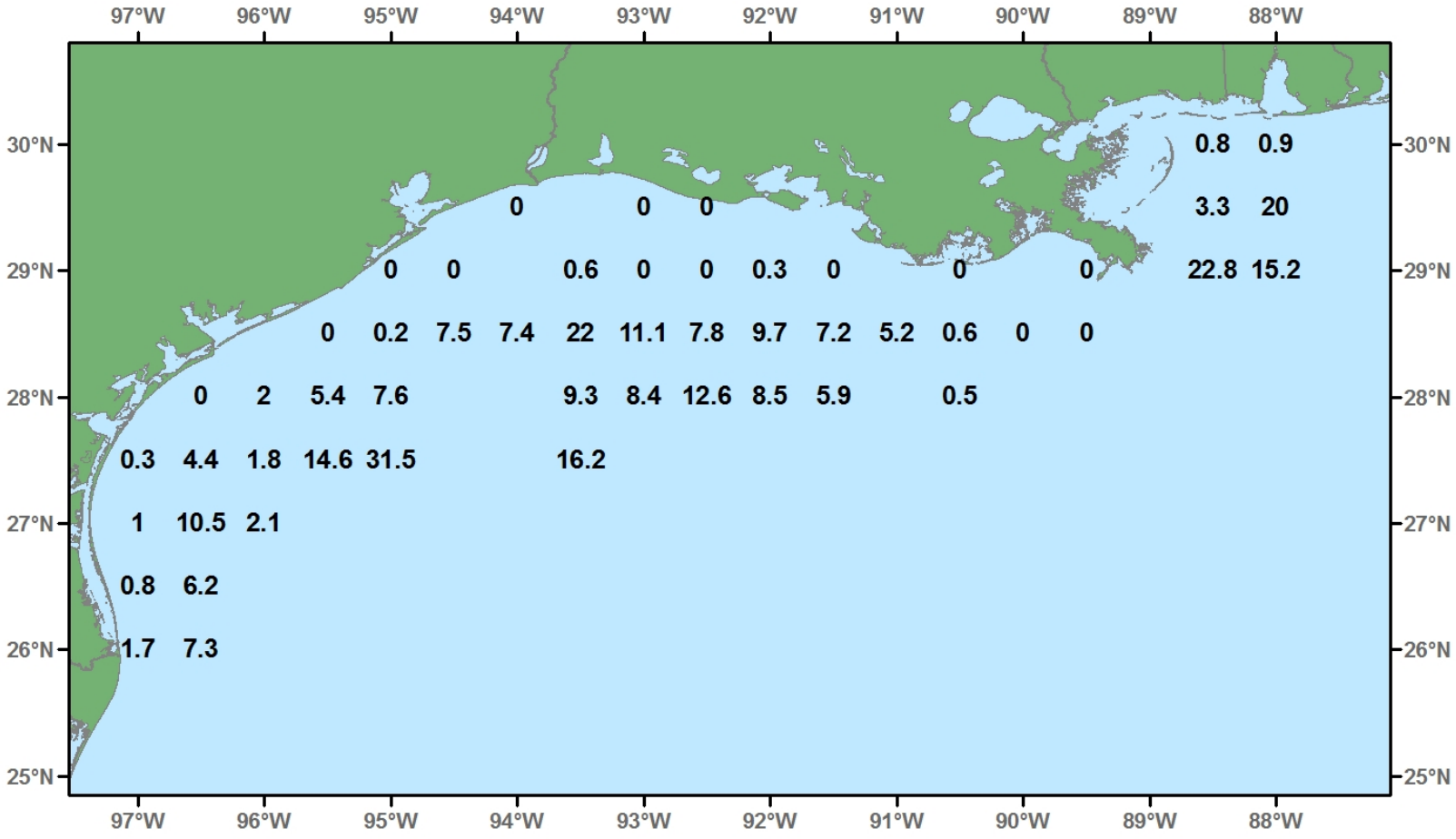

Figure 31. Inshore lizardfish, Synodus foetens, lb/hour for June-July 2007.

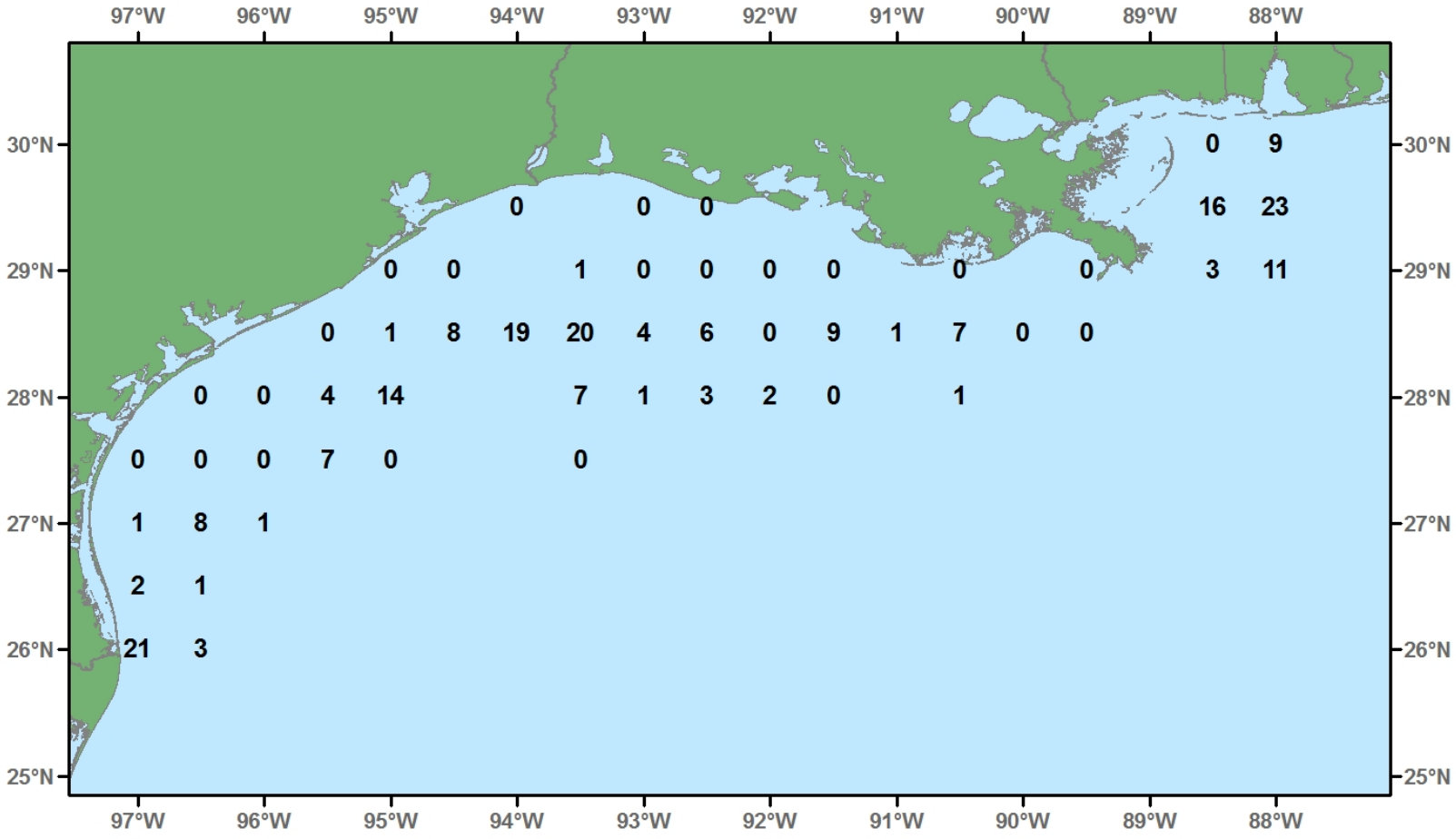

Figure 32. Red snapper, Lutjanus campechanus, number/hour for June-July 2007.

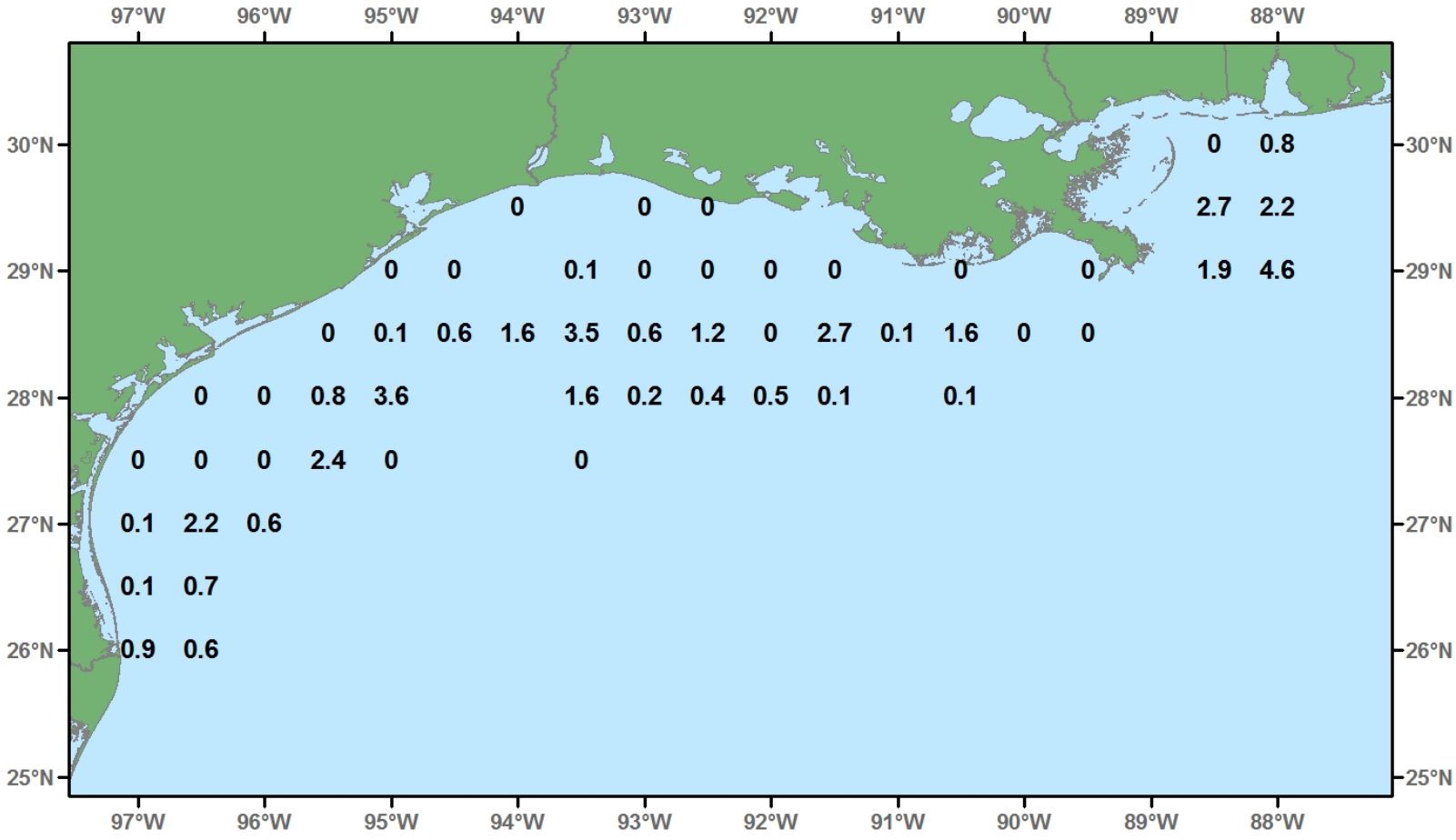

Figure 33. Red snapper, Lutjanus campechanus, lb/hour for June-July 2007.

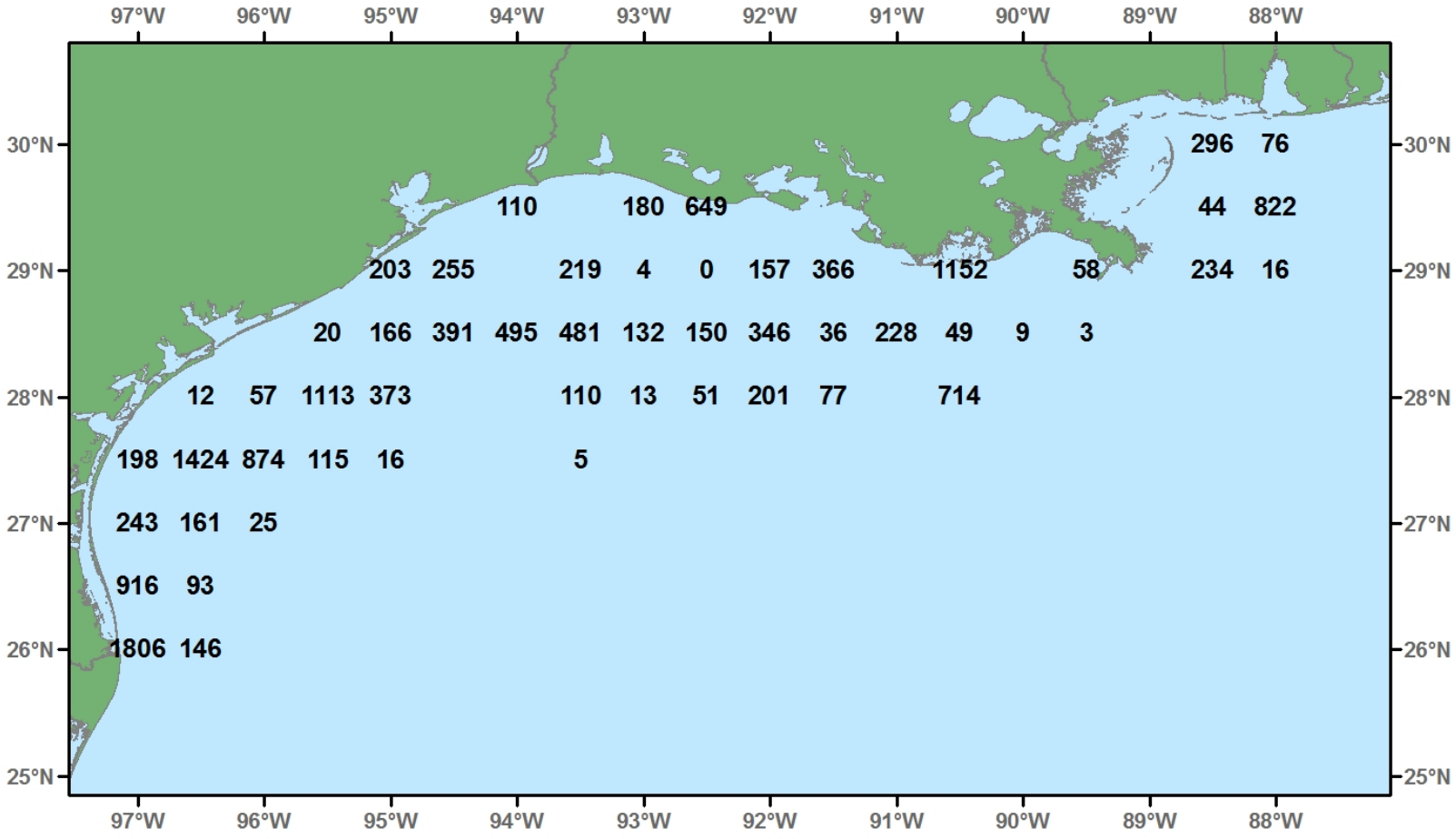

Figure 34. Brown shrimp, Farfantepenaeus aztecus, number/hour for June-July 2007.

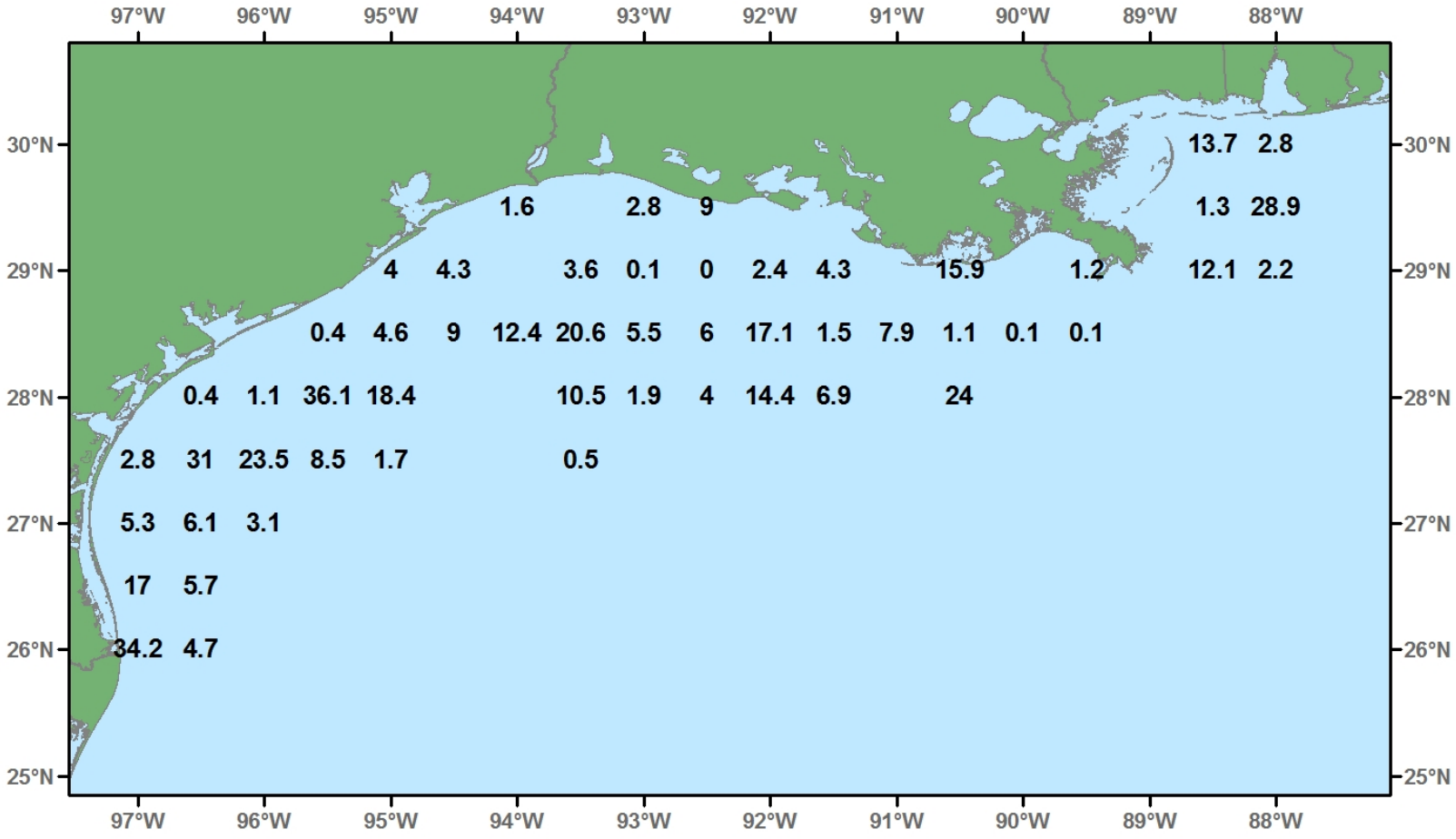

Figure 35. Brown shrimp, Farfantepenaeus aztecus, lb/hour for June-July 2007.

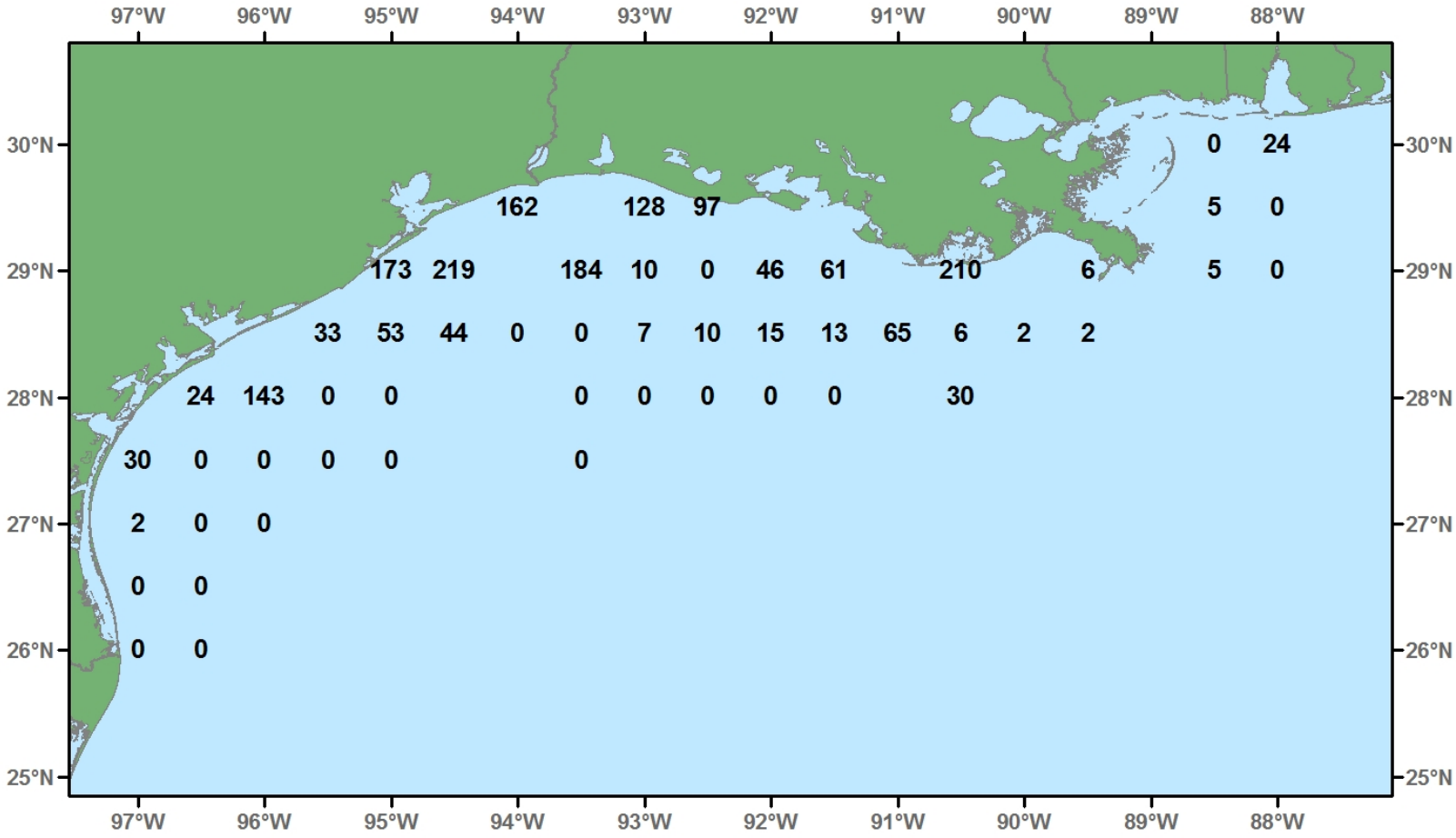

Figure 36. White shrimp, Litopenaeus setiferus, number/hour for June-July 2007.

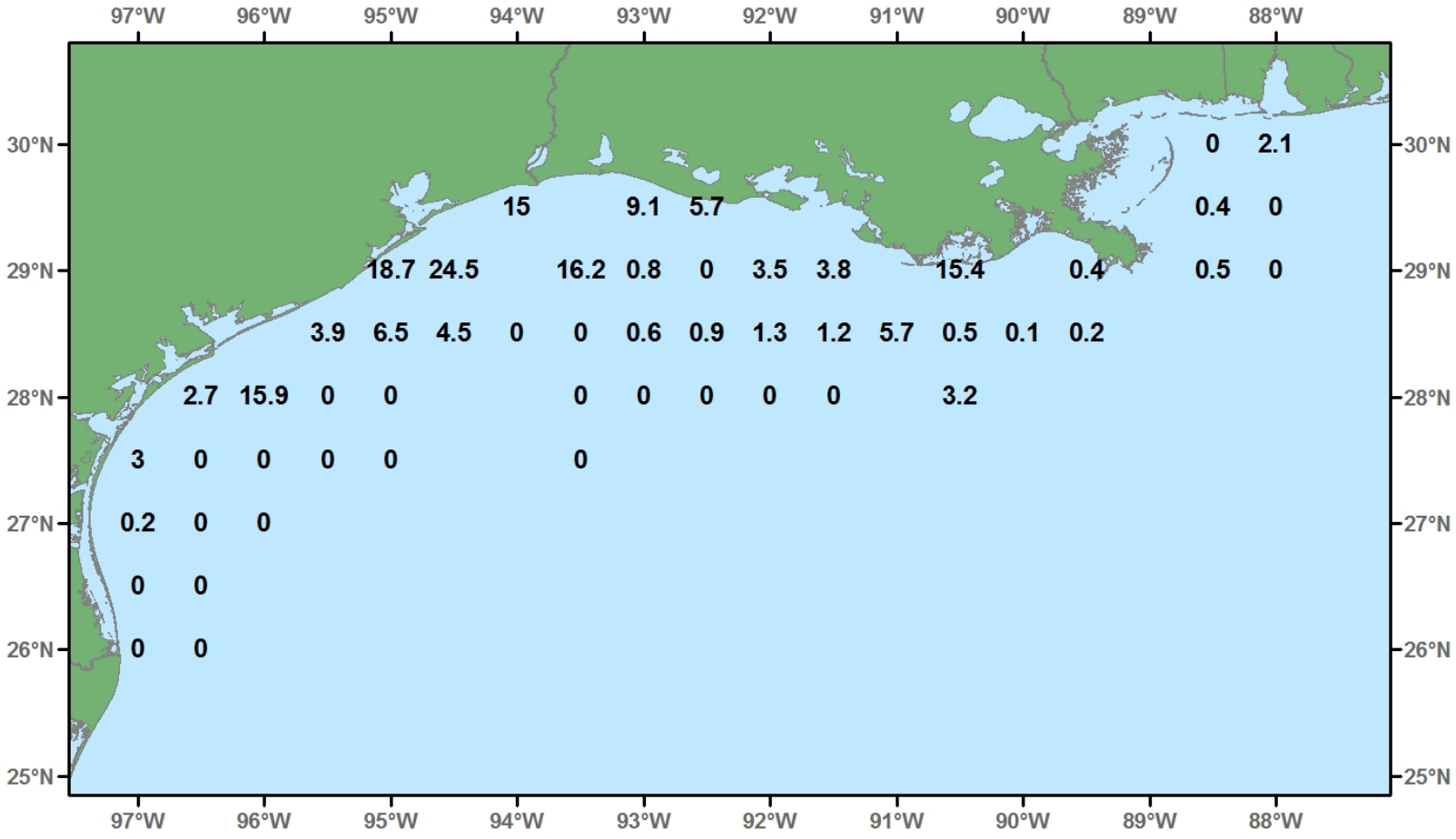

Figure 37. White shrimp, Litopenaeus setiferus, lb/hour for June-July 2007.

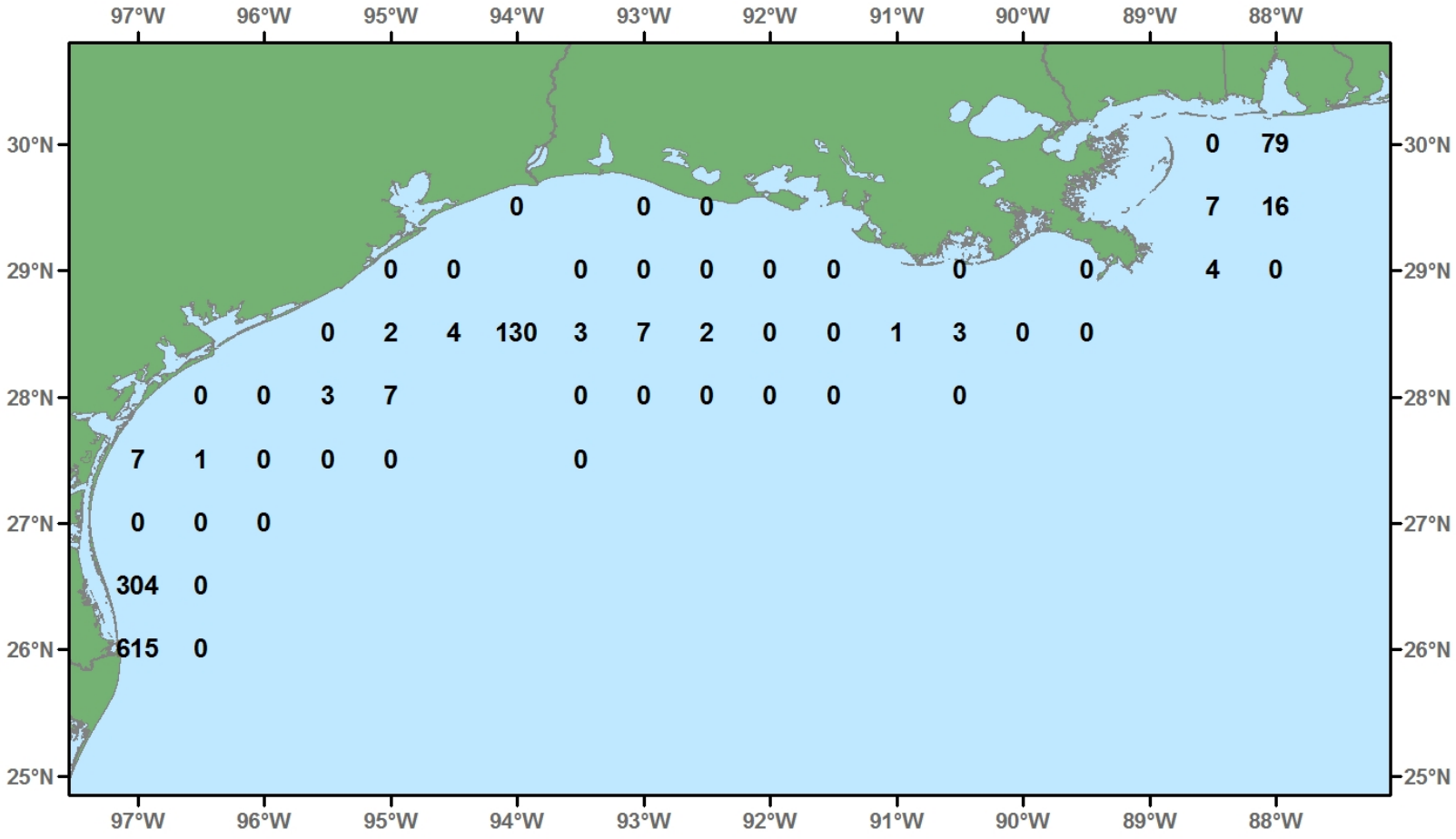

Figure 38. Pink shrimp, Farfantepenaeus duorarum, number/hour for June-July 2007.

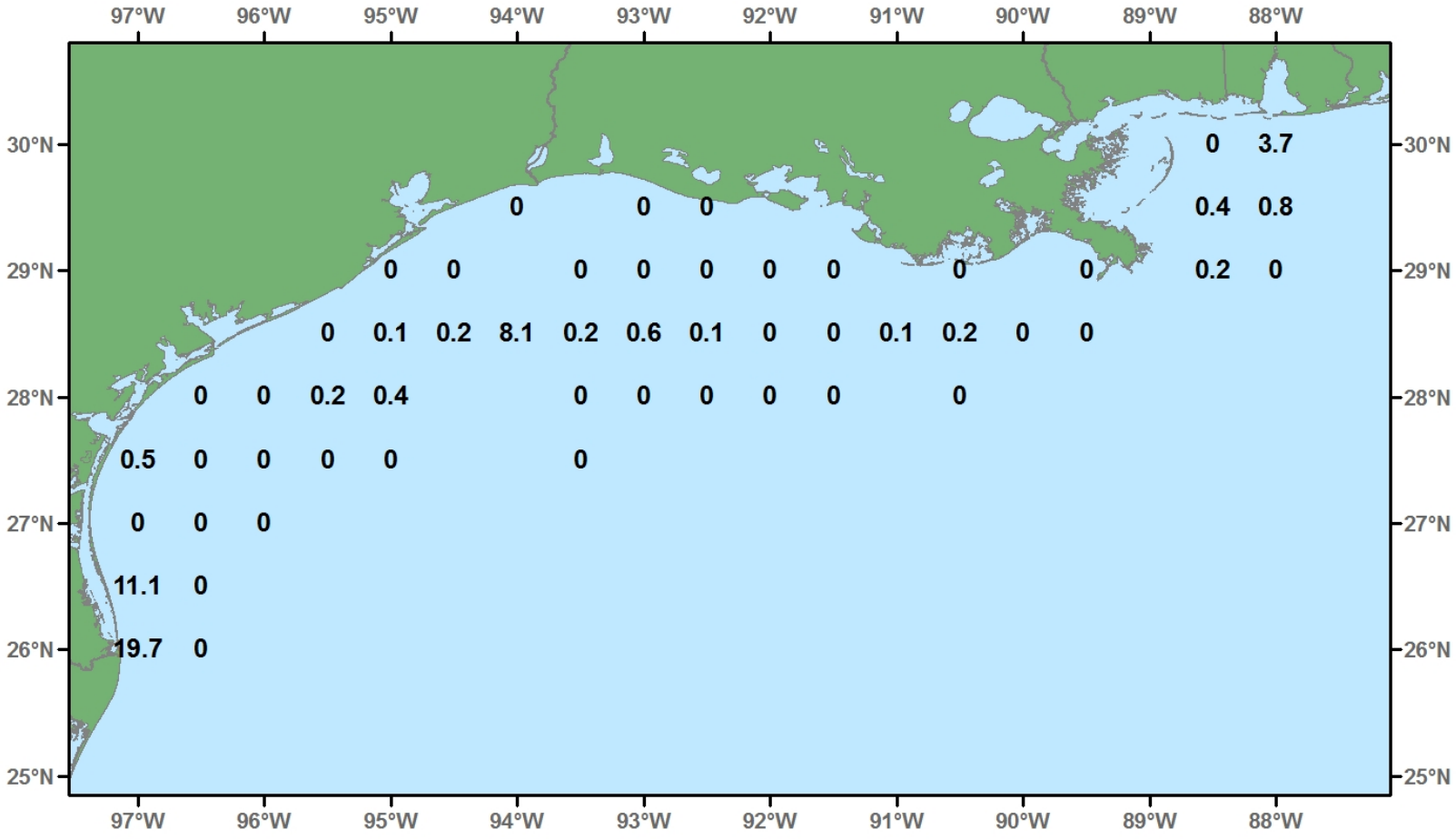

Figure 39. Pink shrimp, Farfantepenaeus duorarum, lb/hour for June-July 2007.

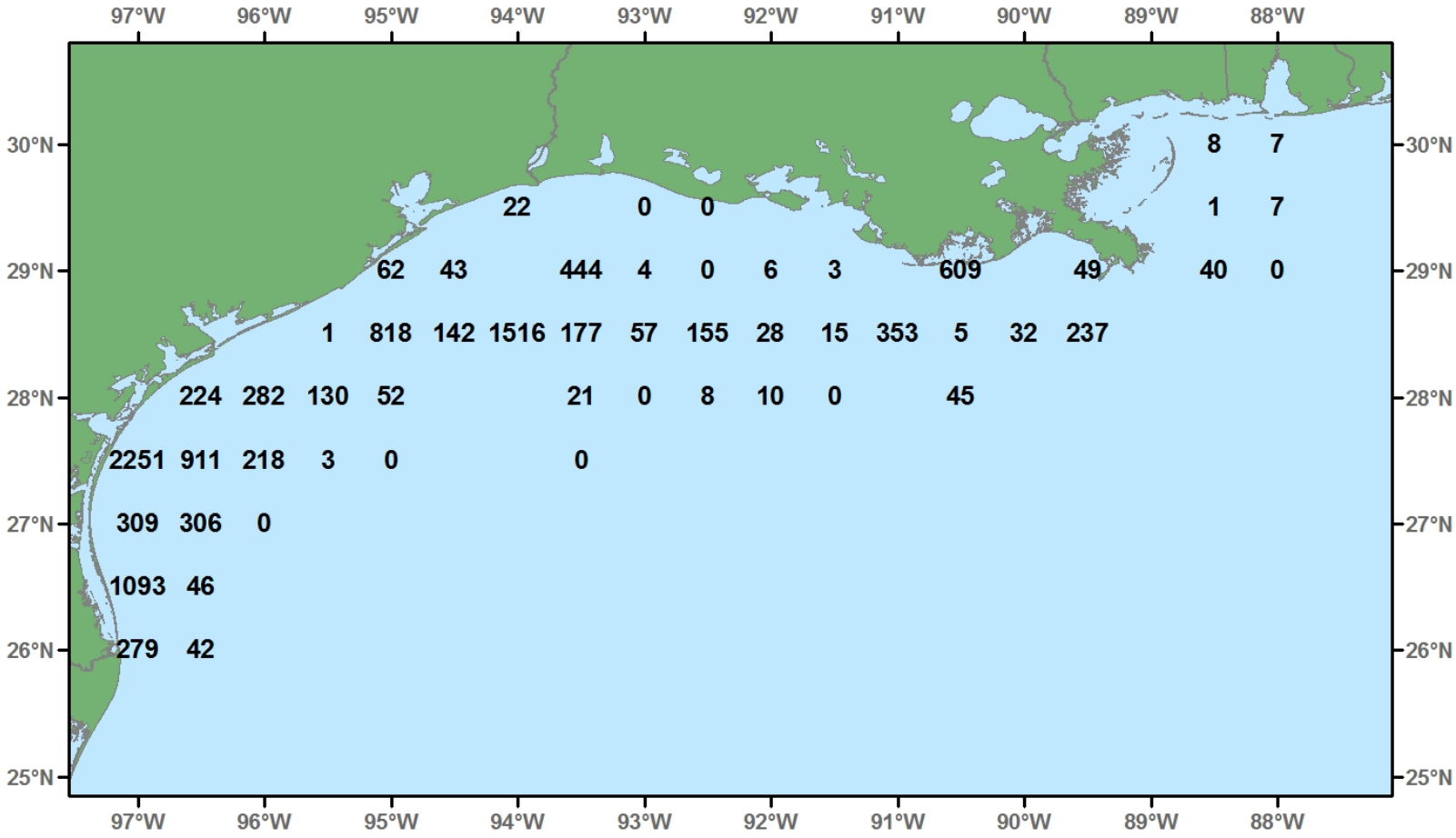

Figure 40. Lesser blue crab, Callinectes similis, number/hour for June-July 2007.

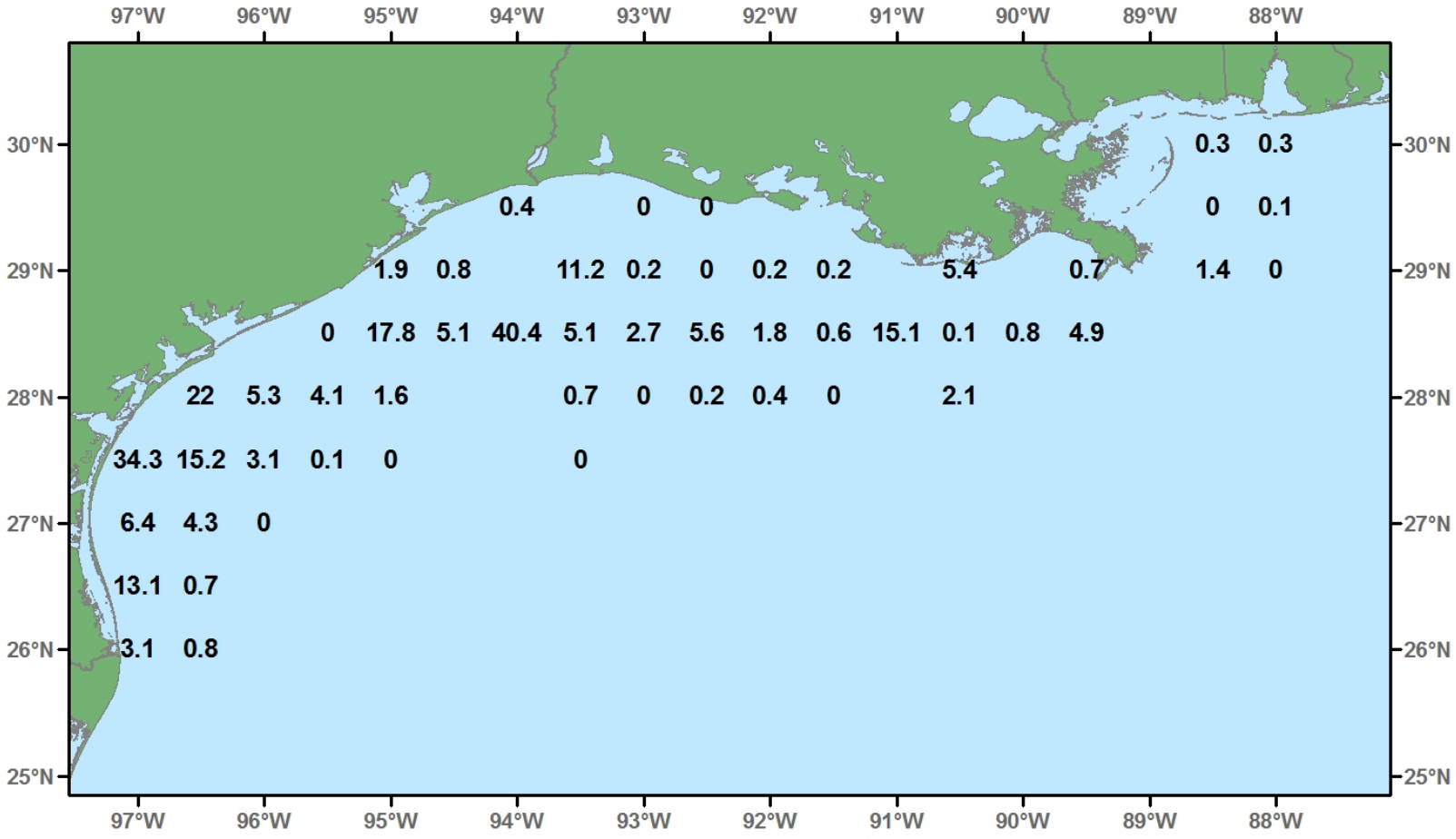

Figure 41. Lesser blue crab, Callinectes similis, lb/hour for June-July 2007.

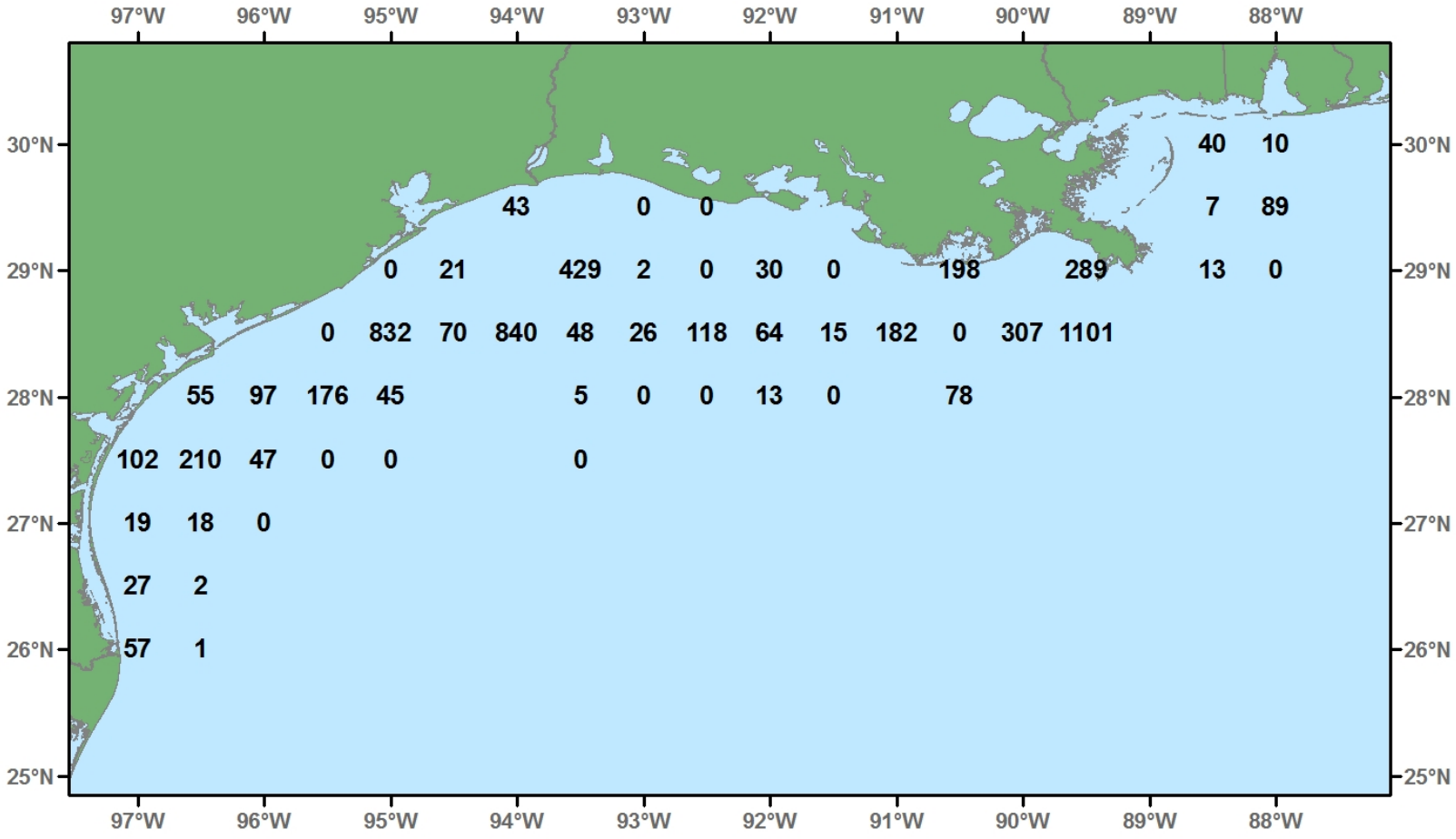

Figure 42. Mantis shrimp, Squilla empusa, number/hour for June-July 2007.

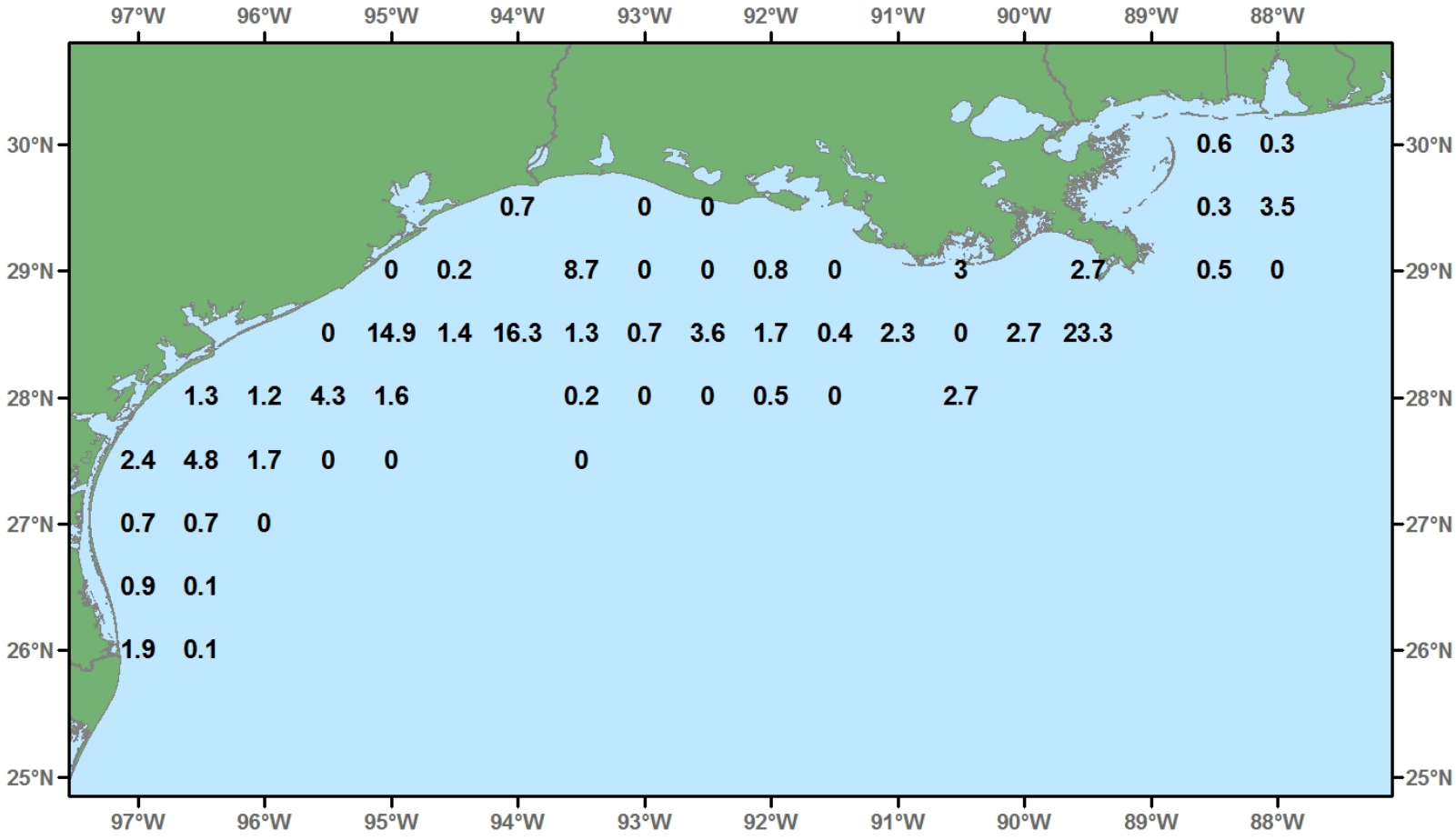

Figure 43. Mantis shrimp, Squilla empusa, lb/hour for June-July 2007.

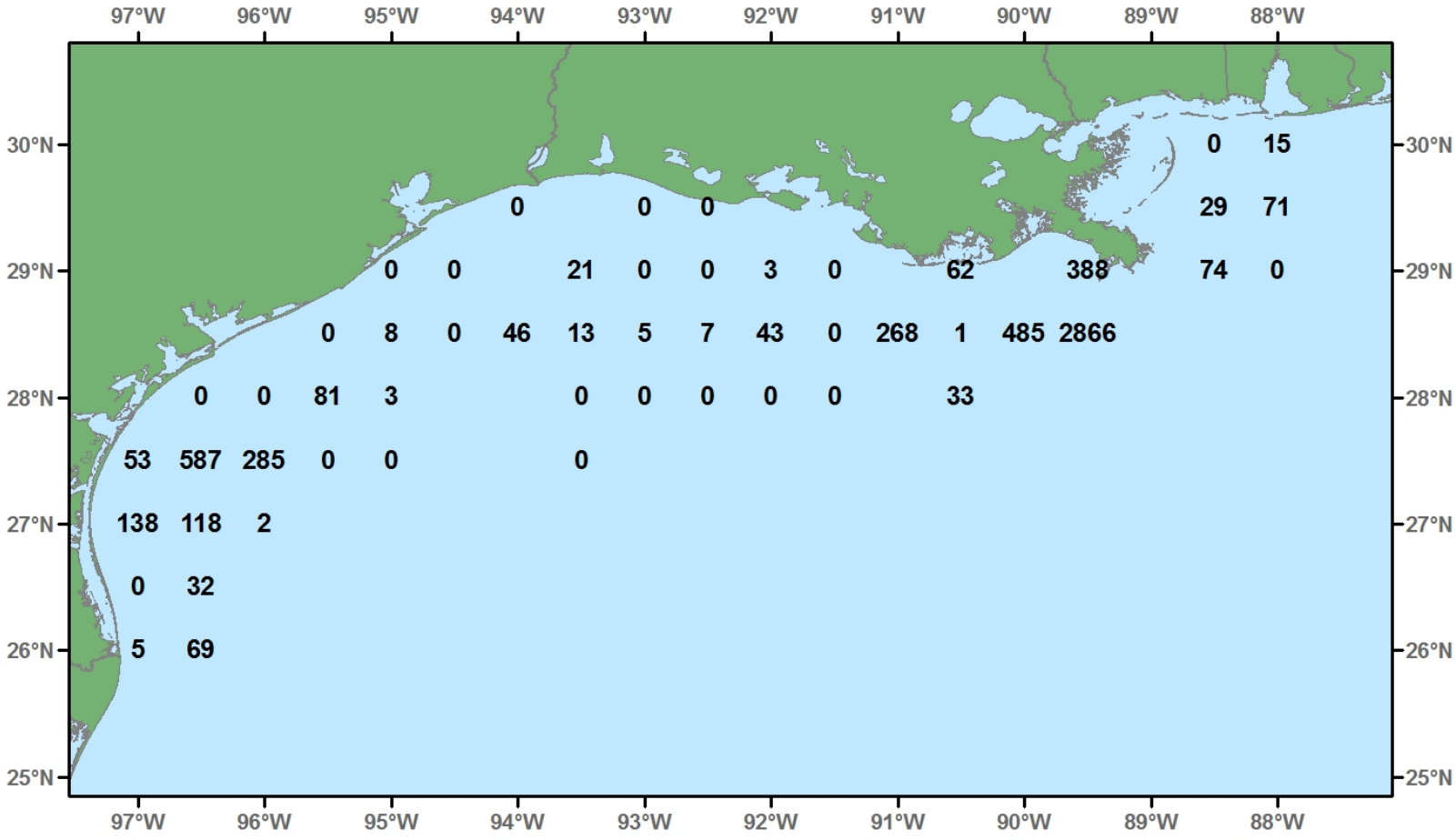

Figure 44. Roughback shrimp, Trachypenaeus similis, number/hour for June-July 2007.

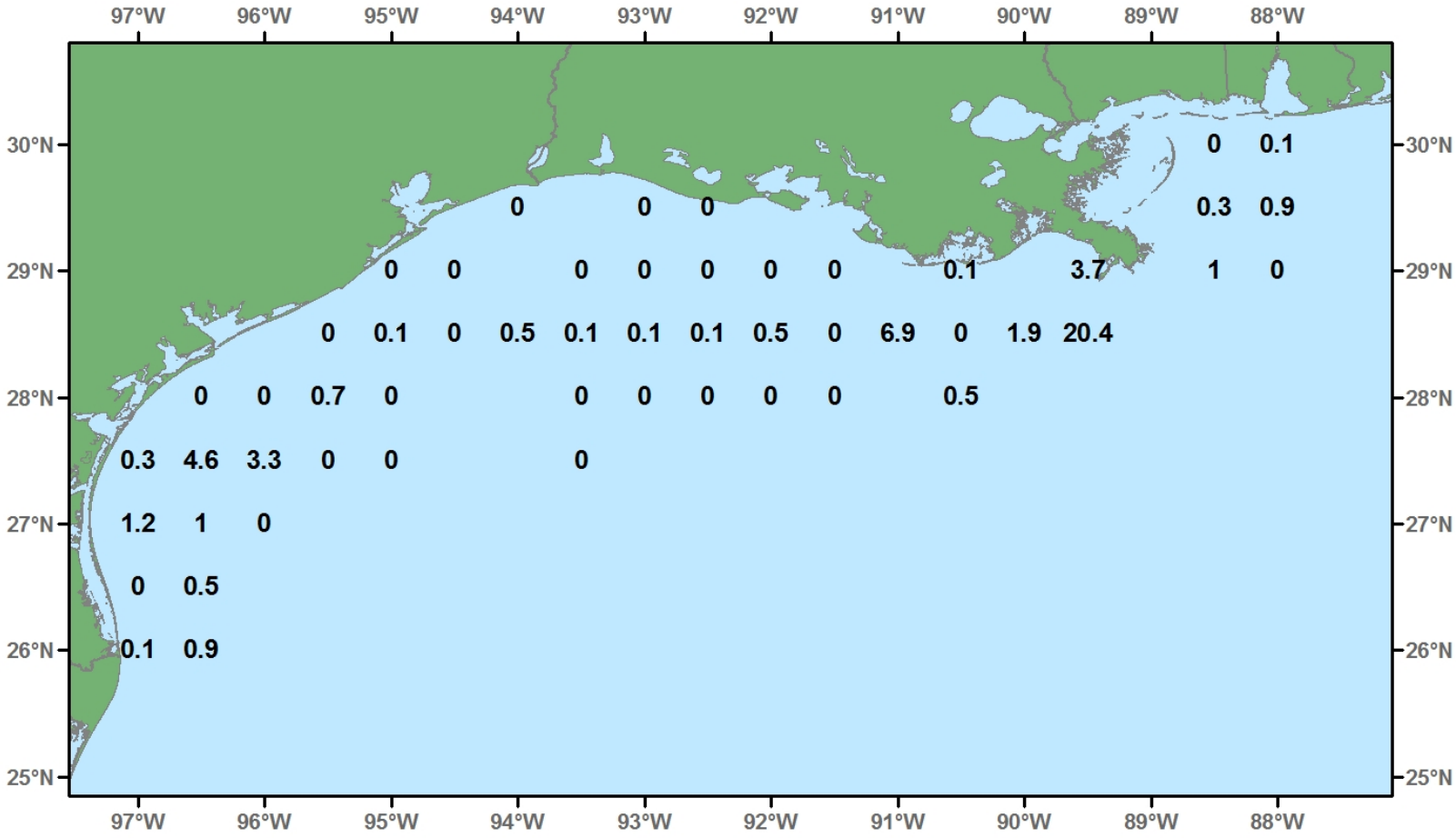

Figure 45. Roughback shrimp, Trachypenaeus similis, lb/hour for June-July 2007.

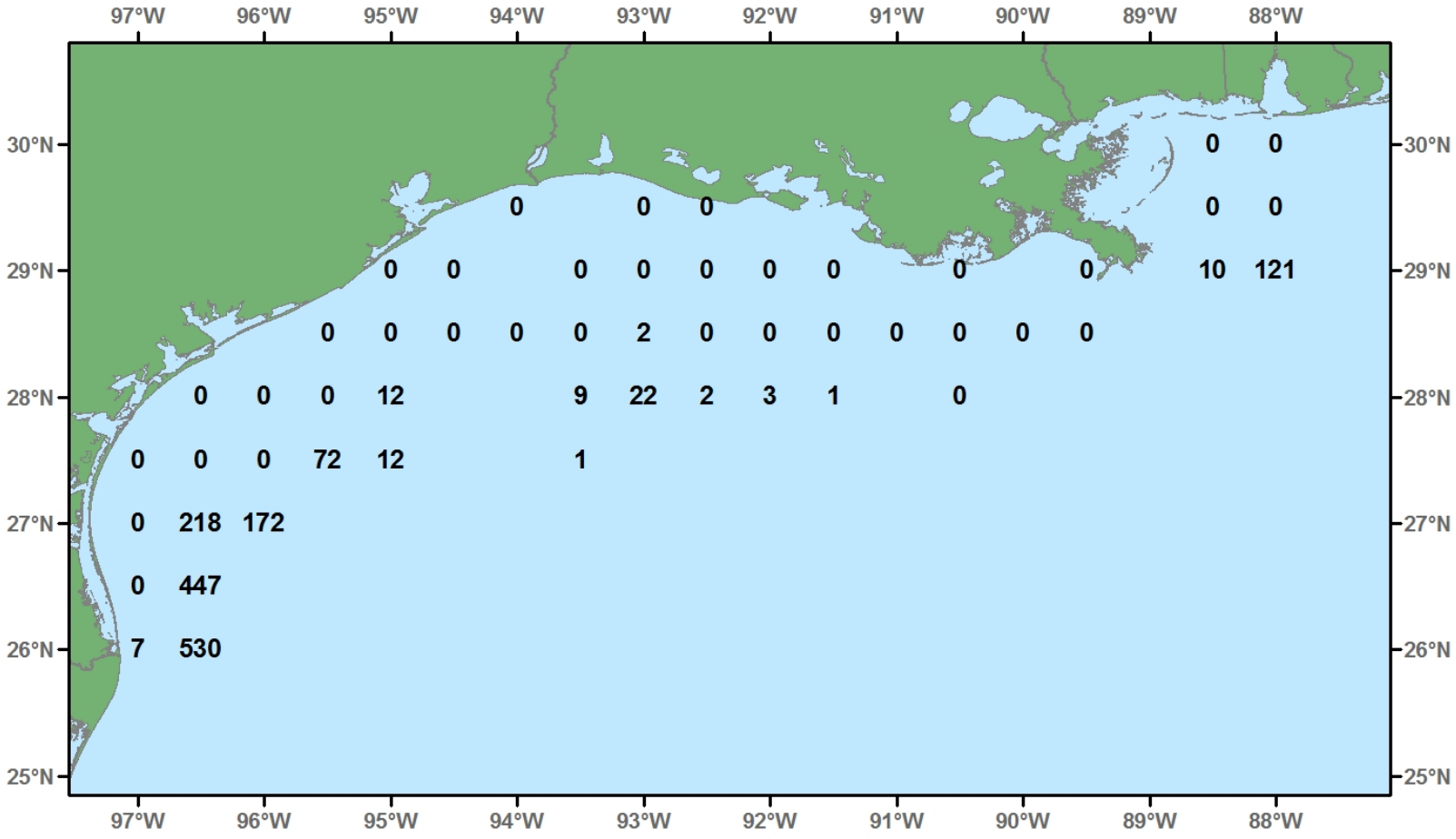

Figure 46. Longspine swimming crab, Portunis spinicarpus, number/hour for June-July 2007.

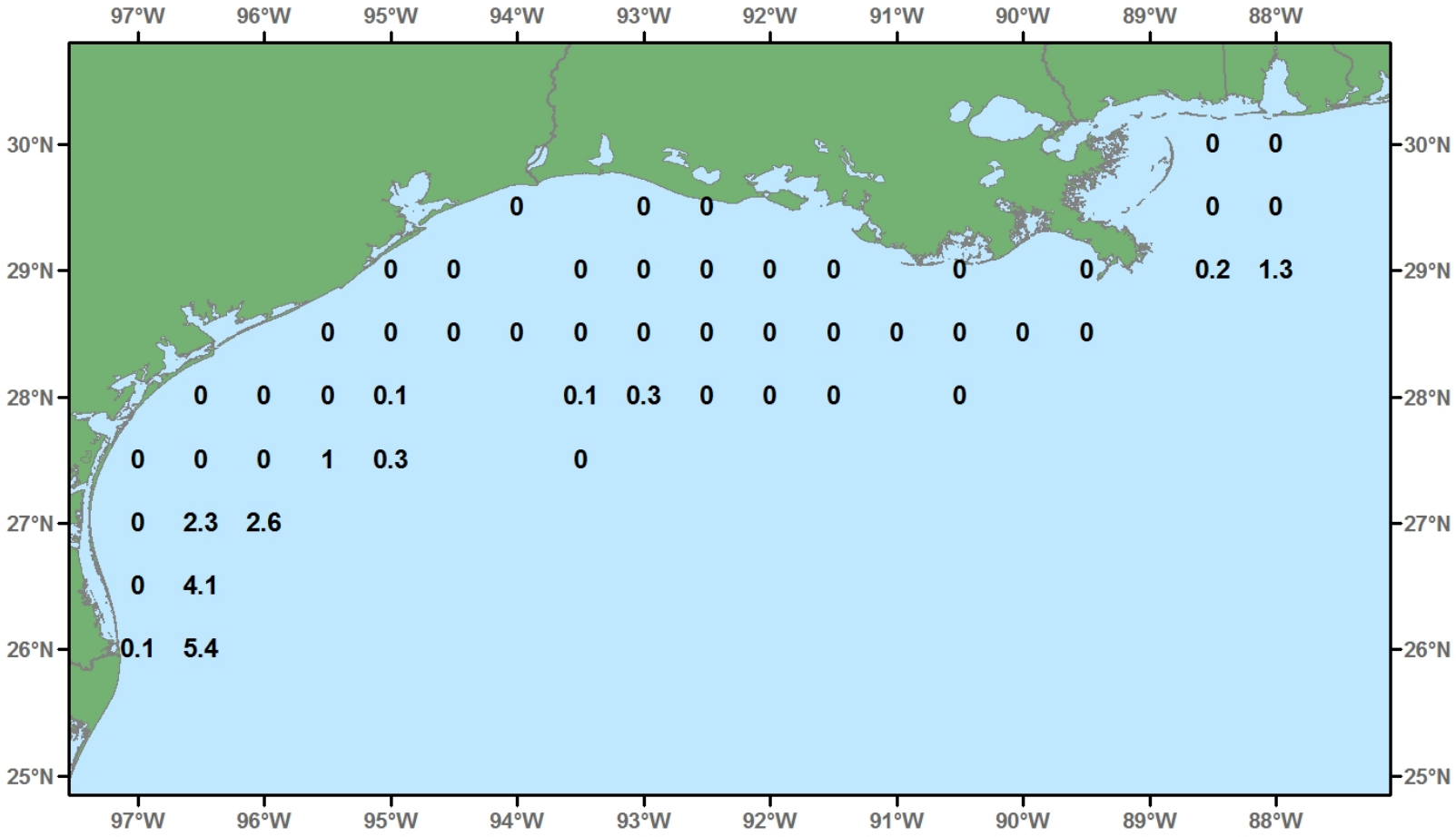

Figure 47. Longspine swimming crab, Portunis spinicarpus, lb/hour for June-July 2007.

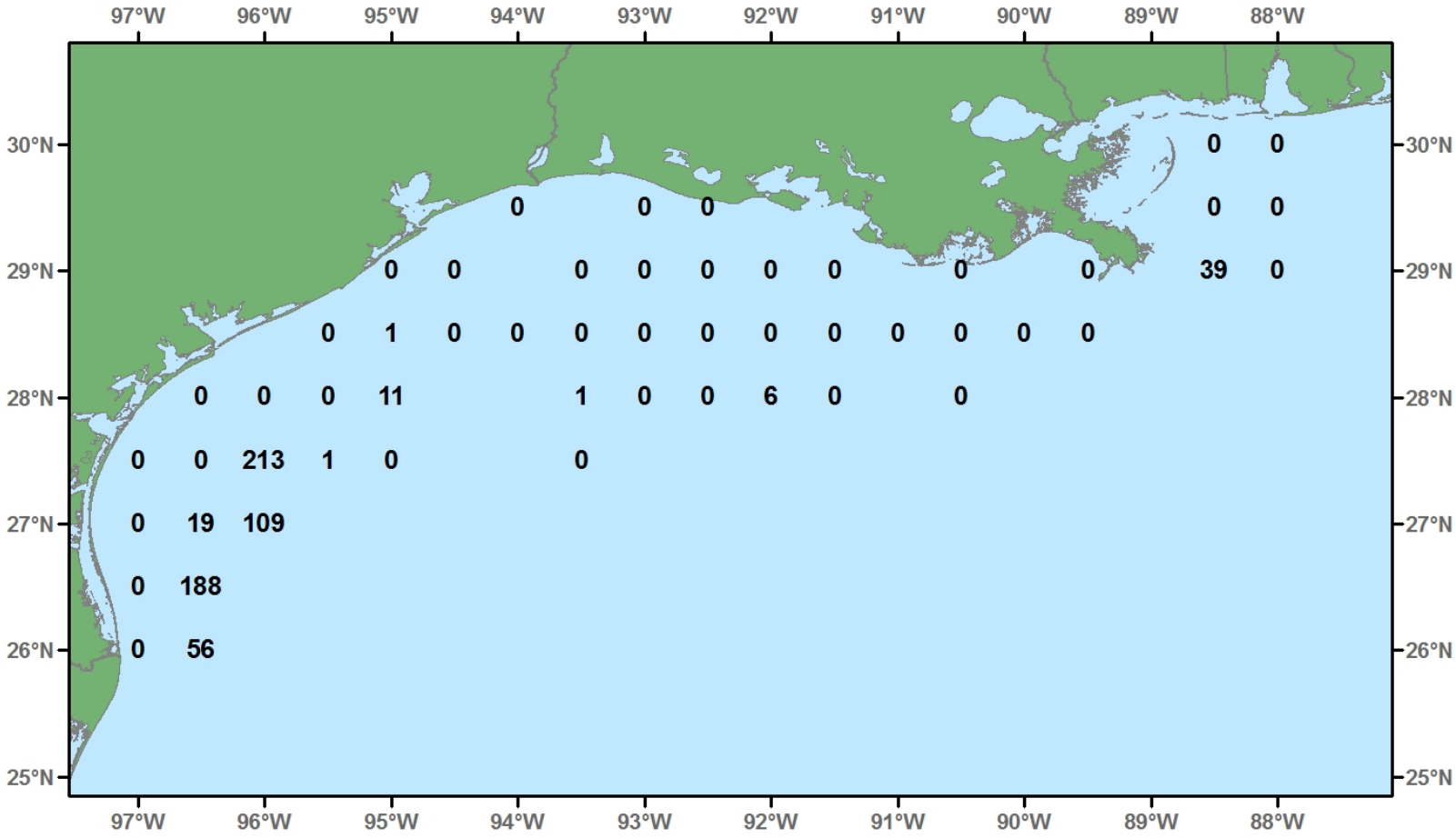

Figure 48. Humpback Shrimp, Solenocera vioscai, number/hour for June-July 2007.

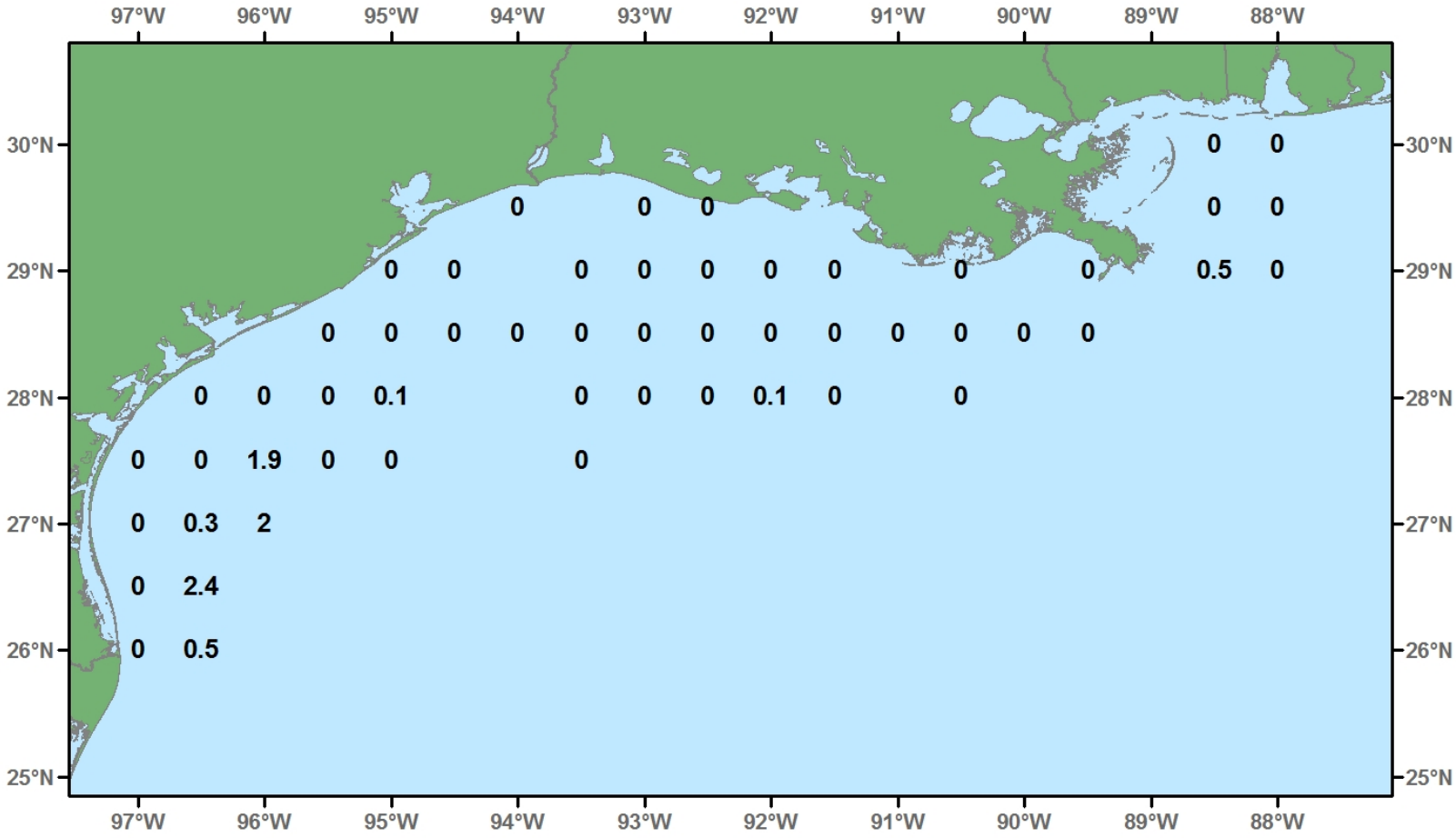

Figure 49. Humpback Shrimp, Solenocera vioscai, lb/hour for June-July 2007.

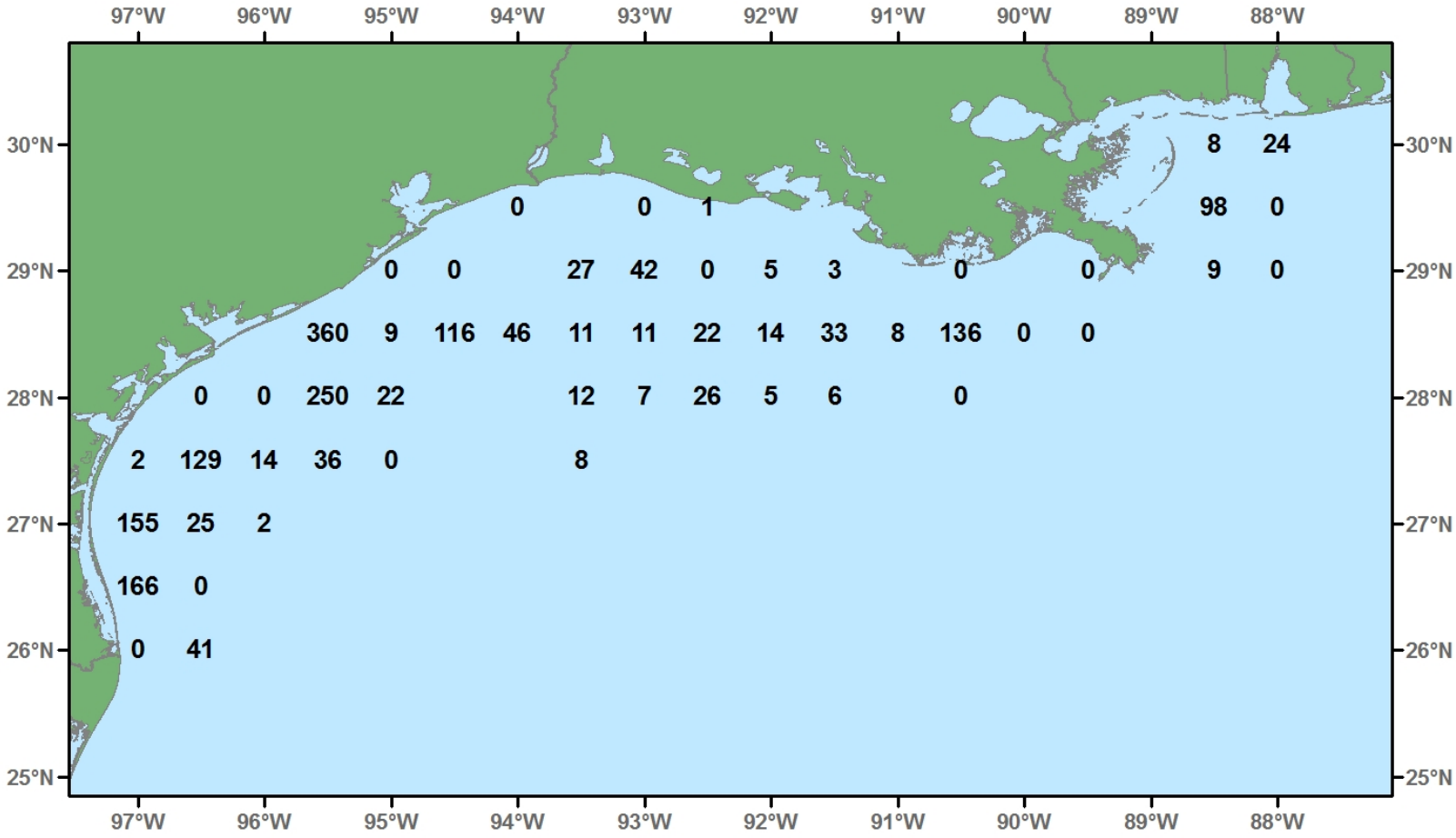

Figure 50. Arrow squid, Loligo pleii, number/hour for June-July 2007.

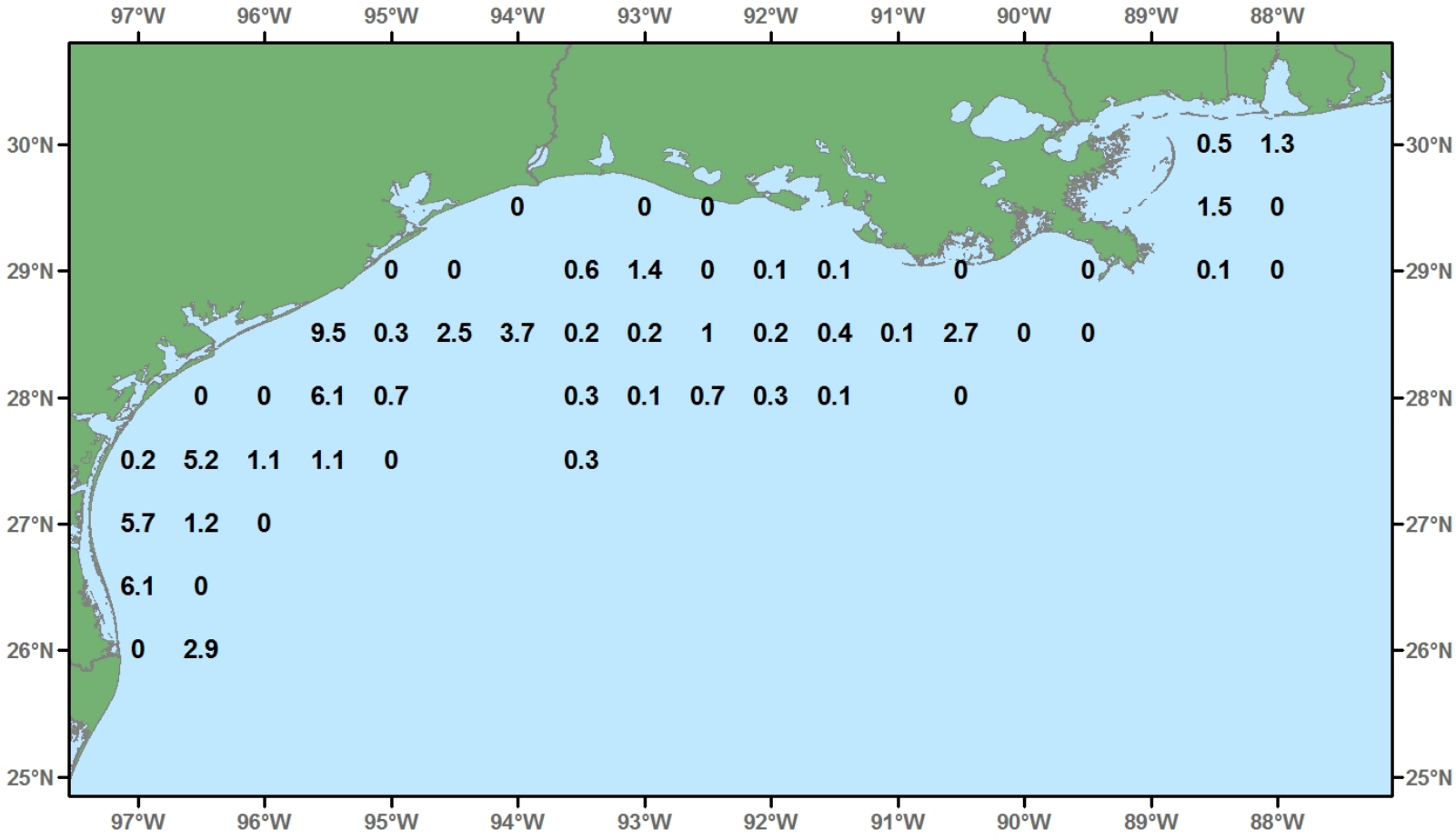

Figure 51. Arrow squid, Loligo pleii, lb/hour for June-July 2007.

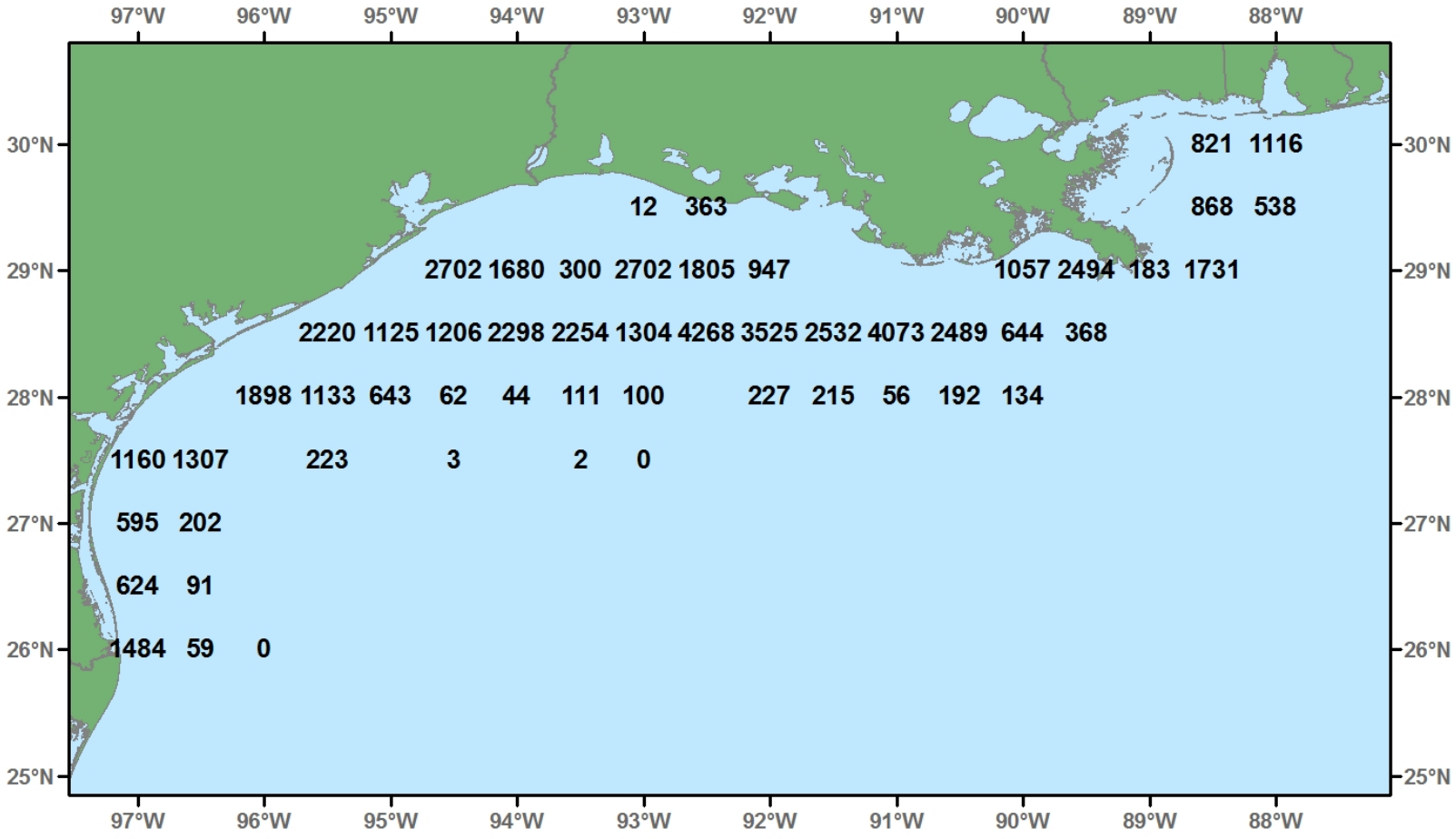

Figure 52. Atlantic croaker, Micropogonias undulatus, number/hour for October-December 2007.

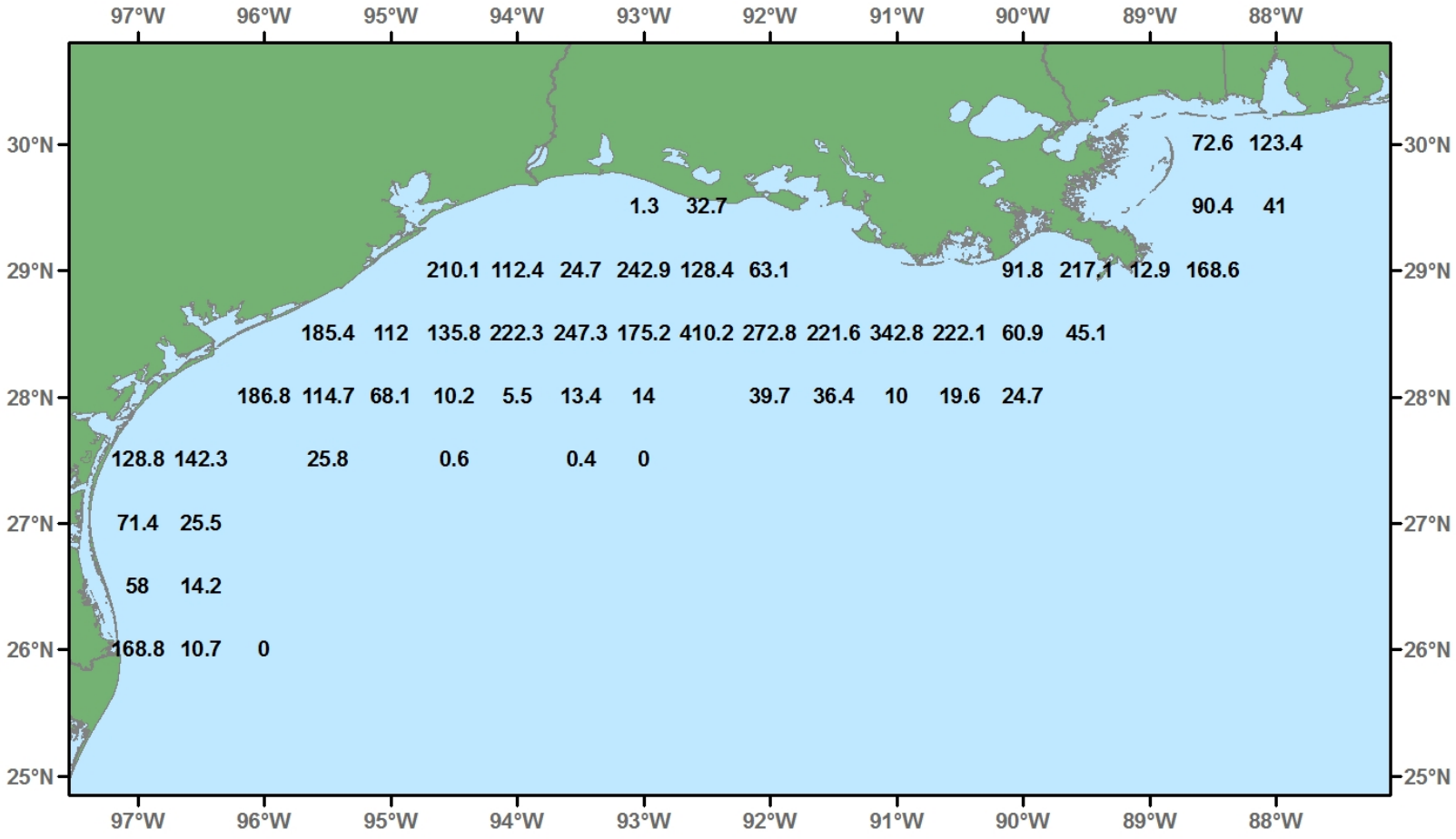

Figure 53. Atlantic croaker, Micropogonias undulatus, lb/hour for October-December 2007.

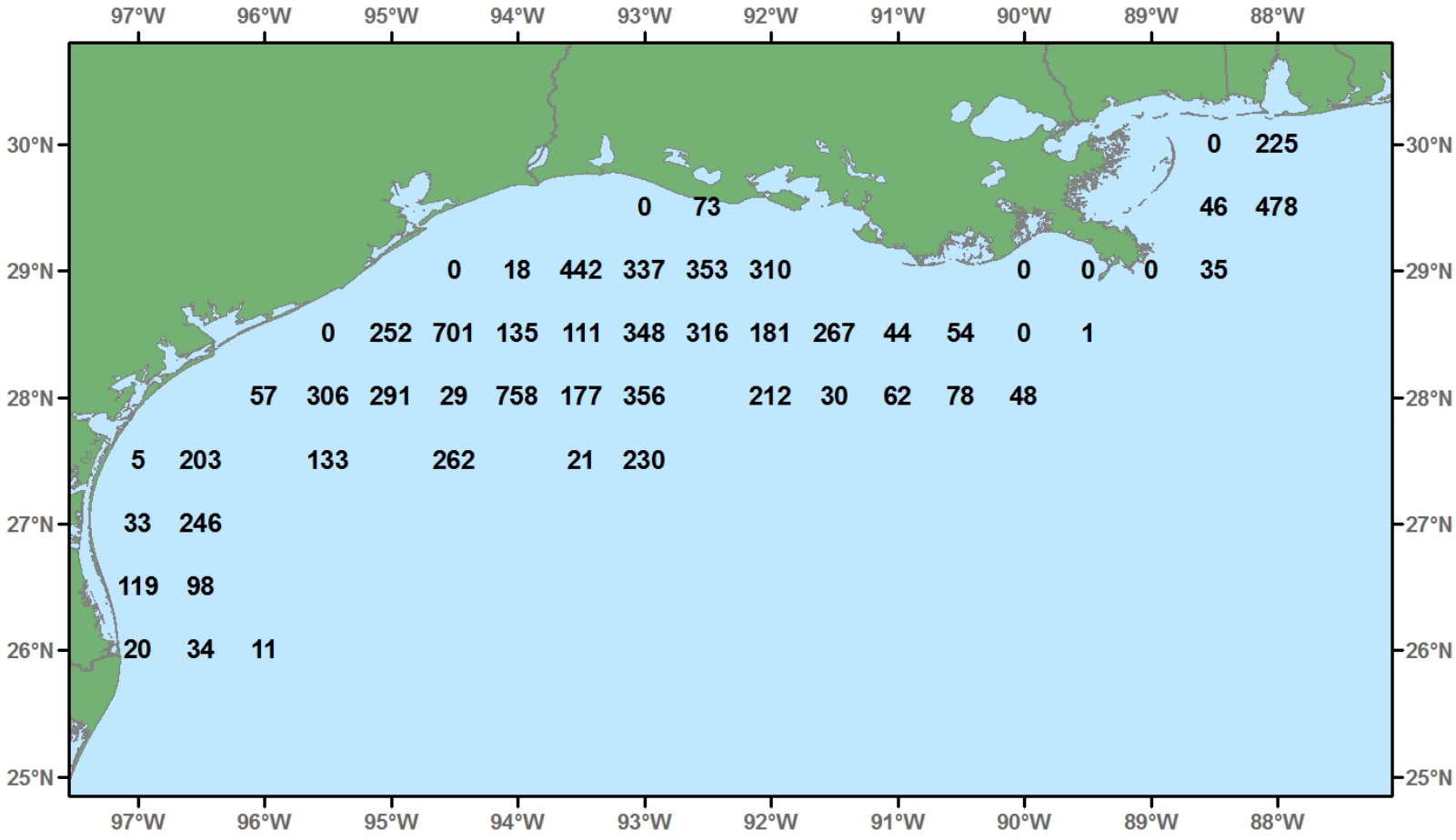

Figure 54. Longspine porgy, Stenotomus caprinus, number/hour for October-December 2007.

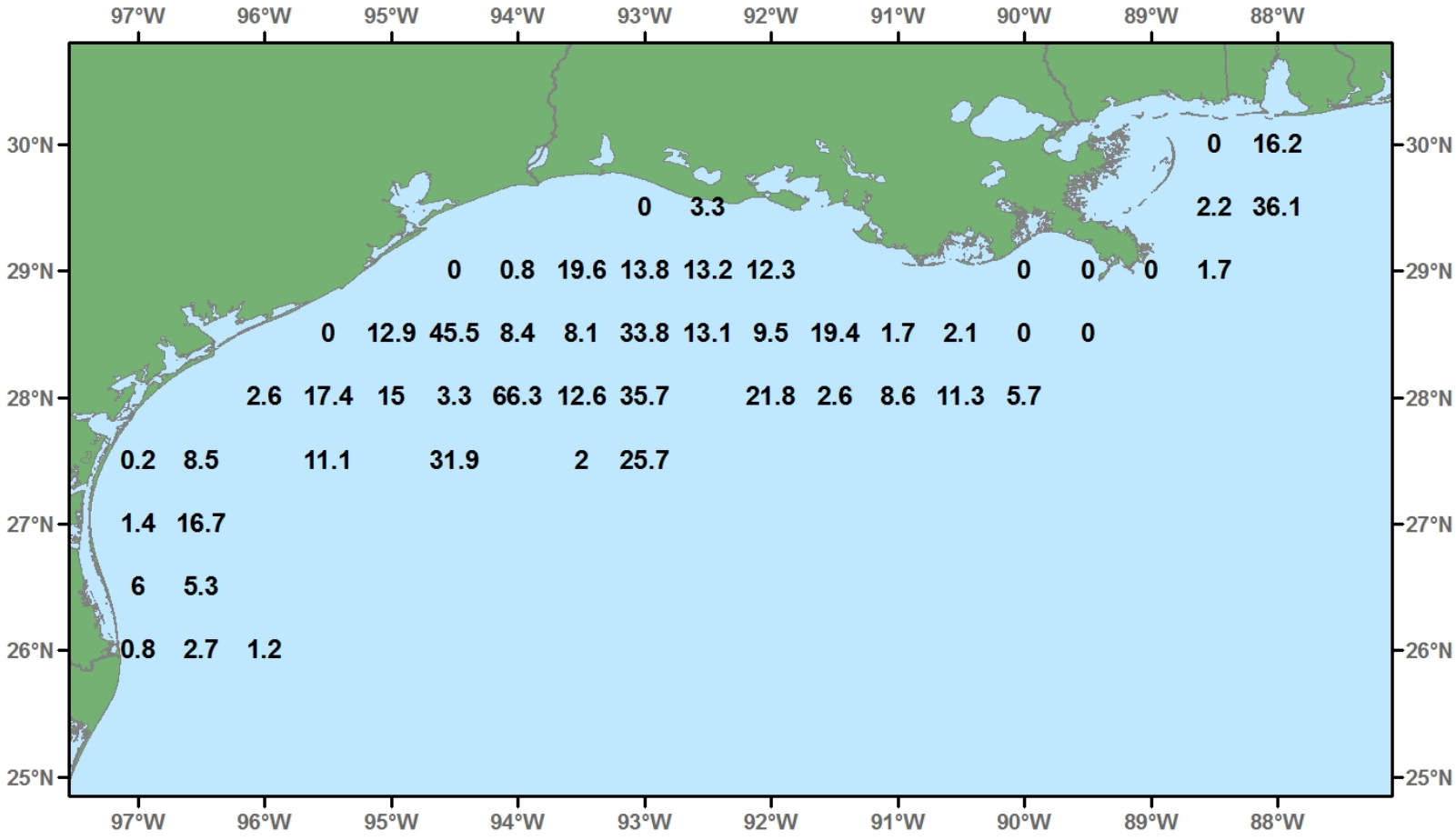

Figure 55. Longspine porgy, Stenotomus caprinus, lb/hour for October-December 2007.

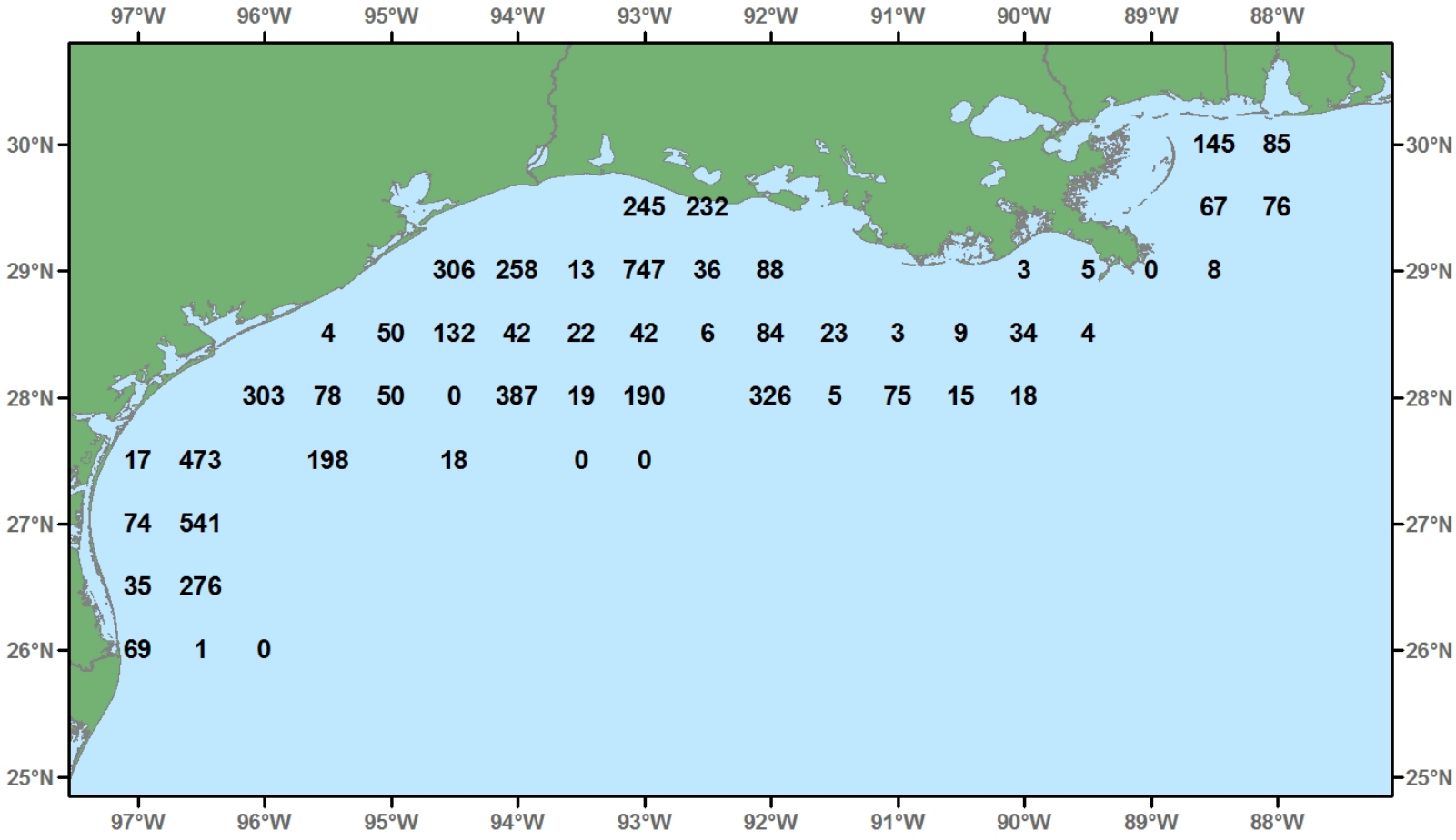

Figure 56. Gulf butterfish, Peprilus burti, number/hour for October-December 2007.

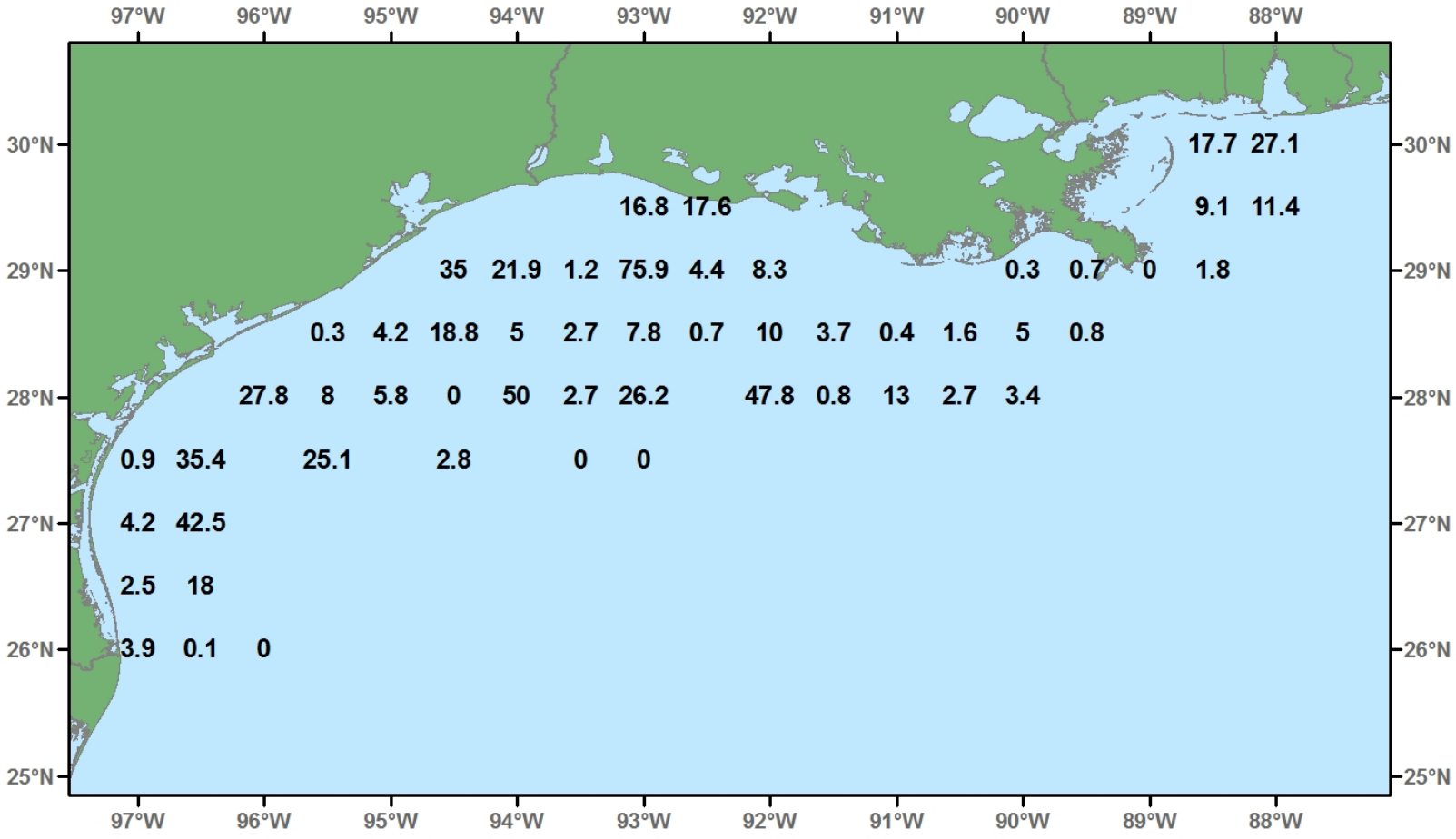

Figure 57. Gulf butterfish, Peprilus burti, lb/hour for October-December 2007.

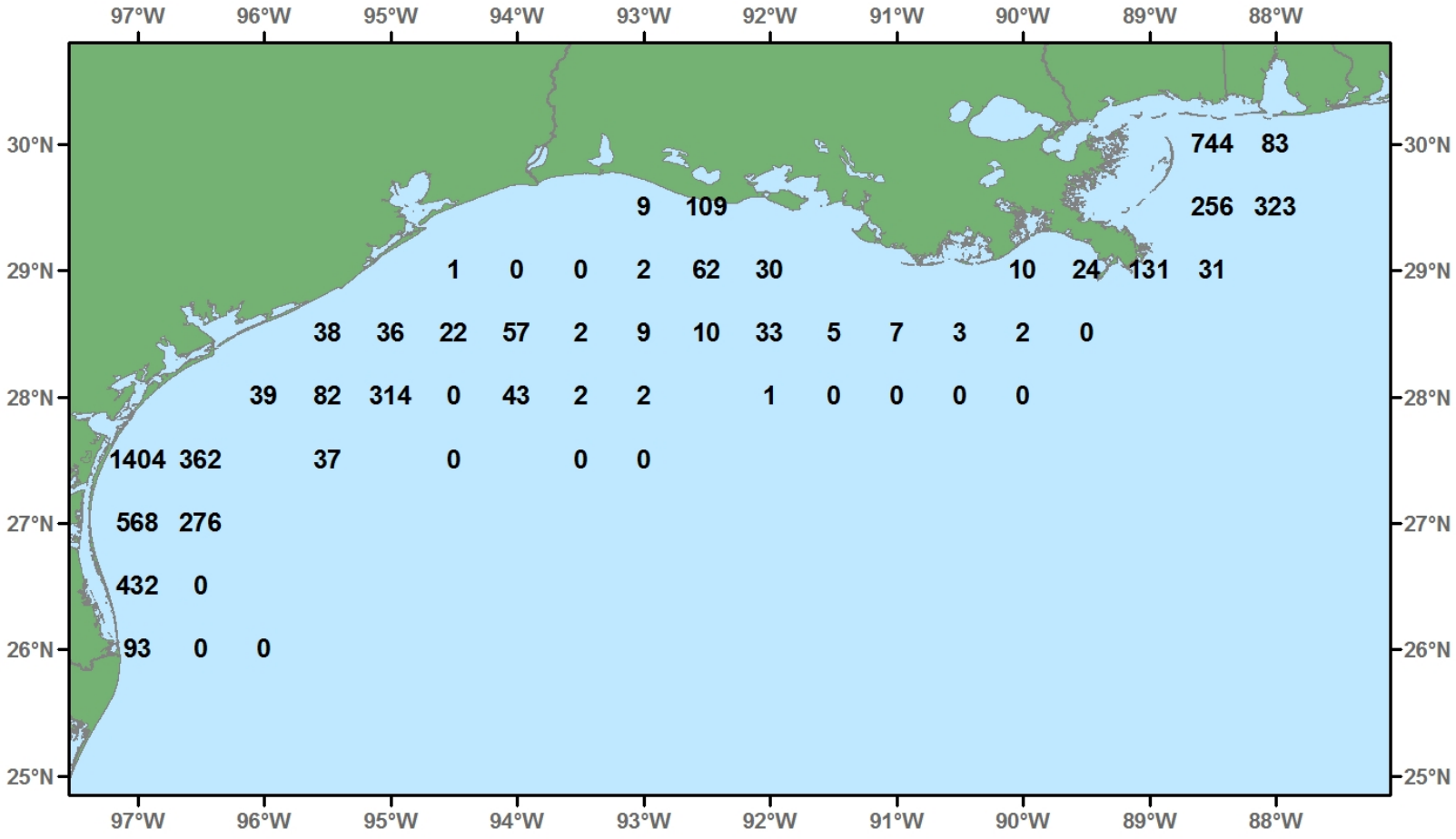

Figure 58. Atlantic bumper, Chloroscombrus chrysurus, number/hour for October-December 2007.

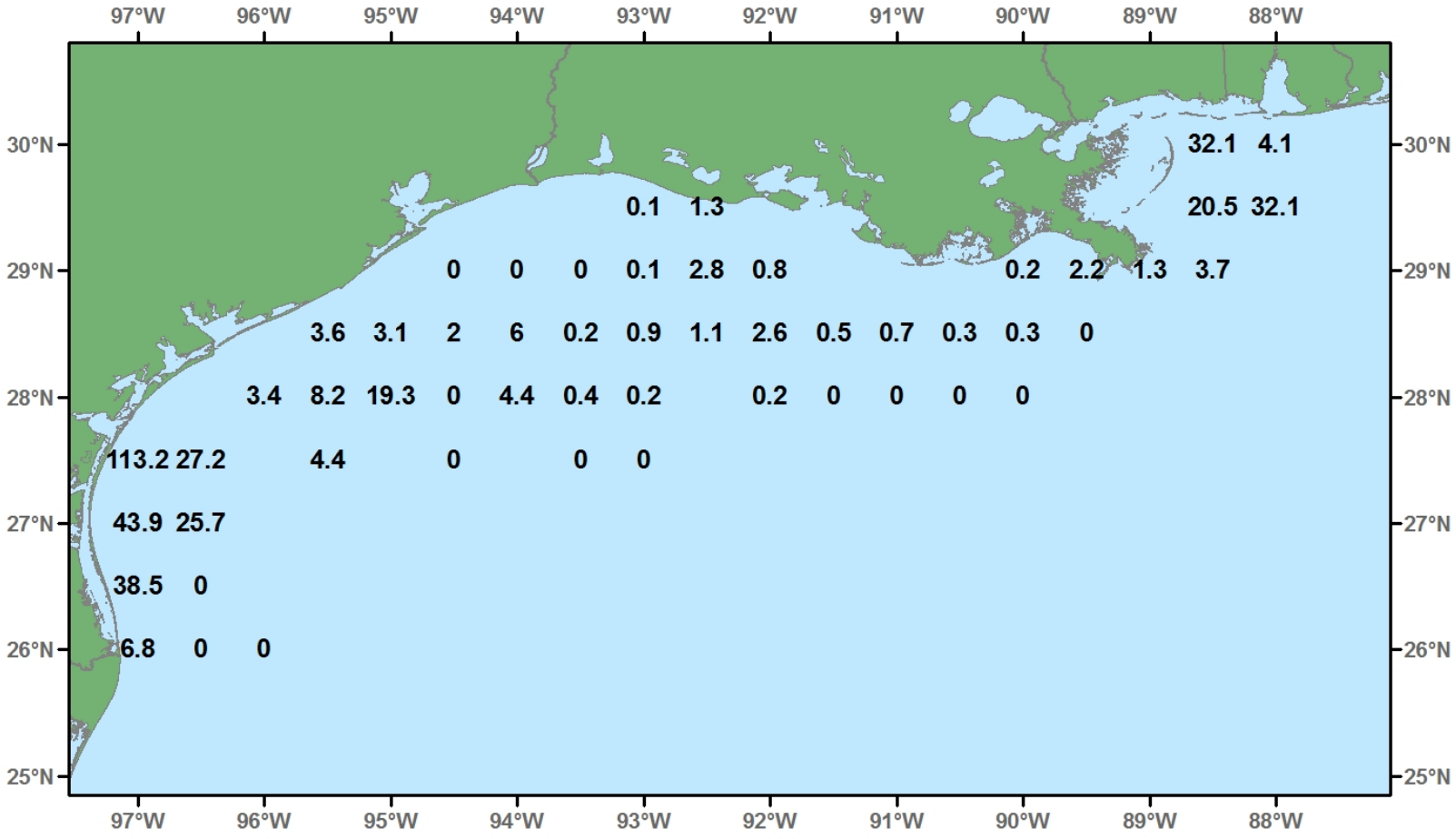

Figure 59. Atlantic bumper, Chloroscombrus chrysurus, lb/hour for October-December 2007.

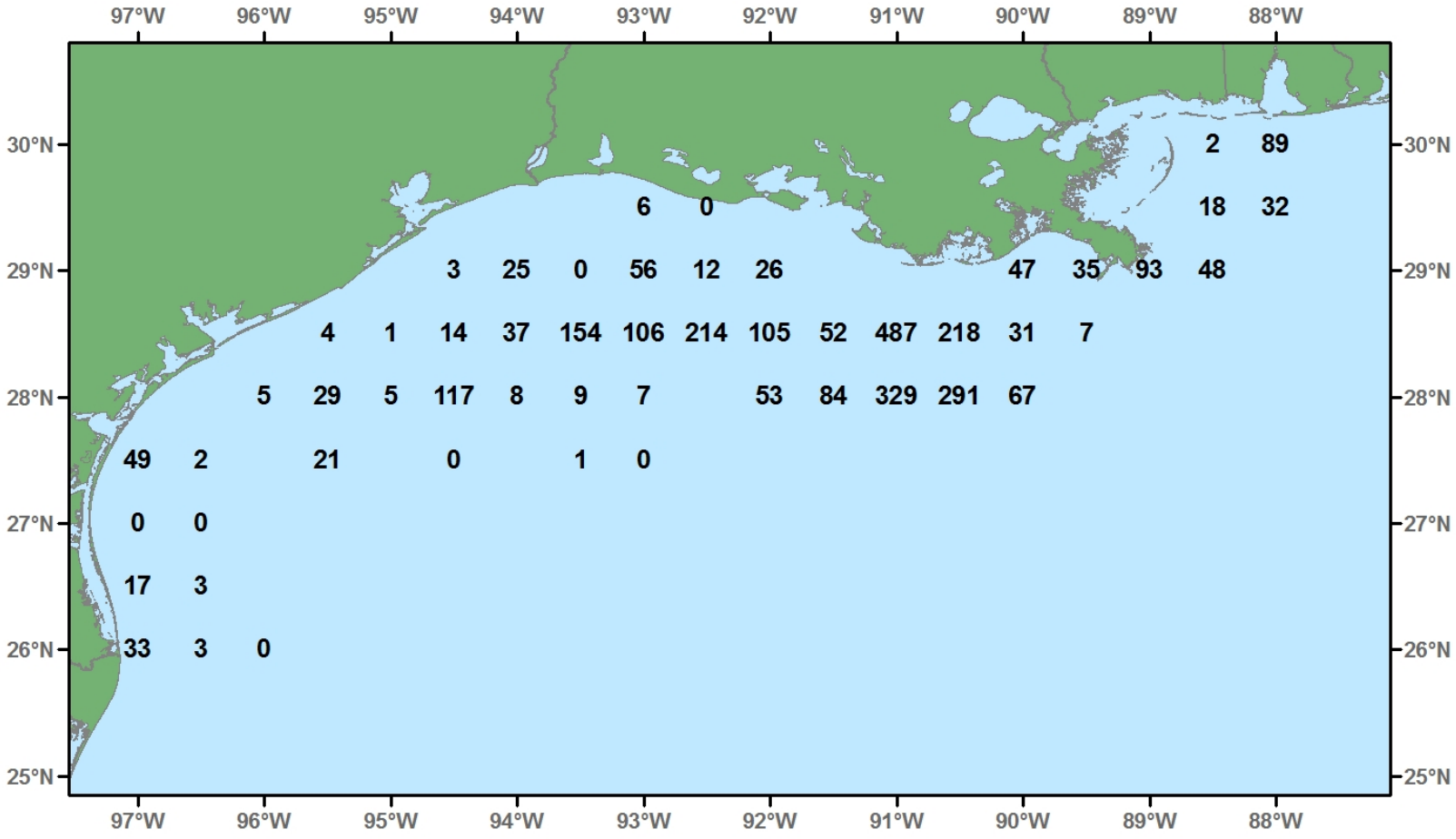

Figure 60. Spot, Leiostomus xanthurus, number/hour for October-December 2007.

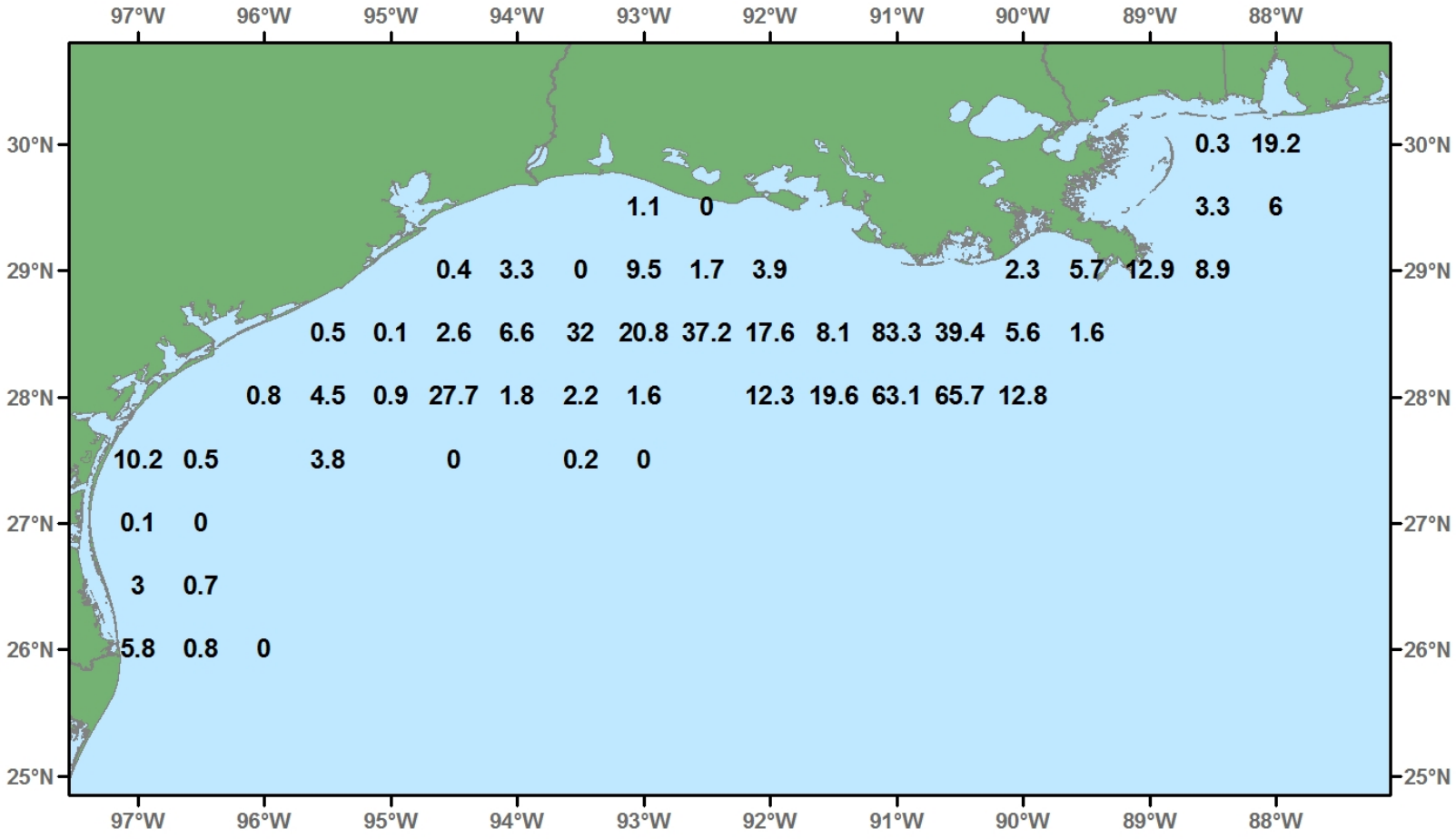

Figure 61. Spot, Leiostomus xanthurus, lb/hour for October-December 2007.

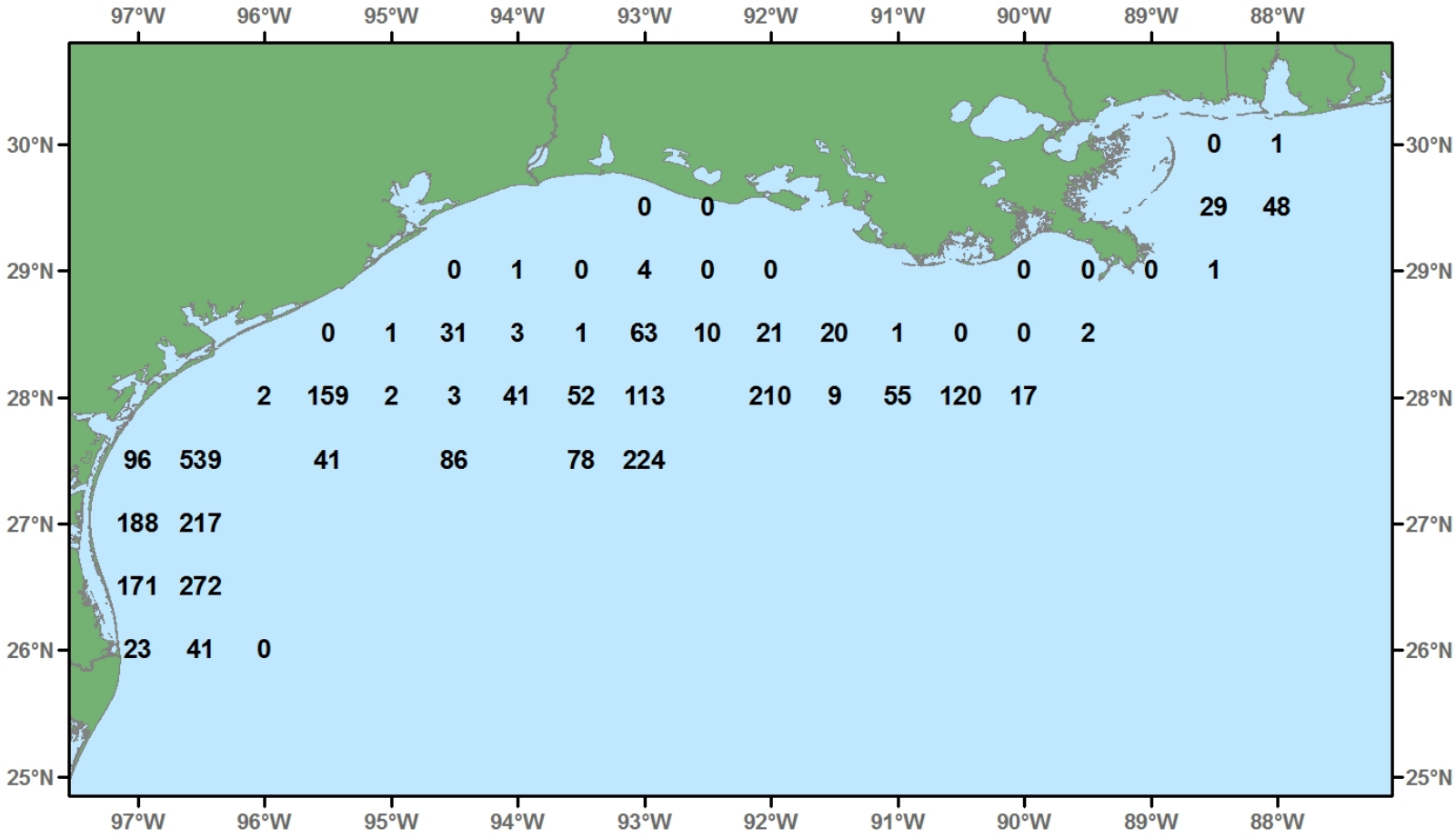

Figure 62. Rough scad, Trachurus lathami, number/hour for October-December 2007.

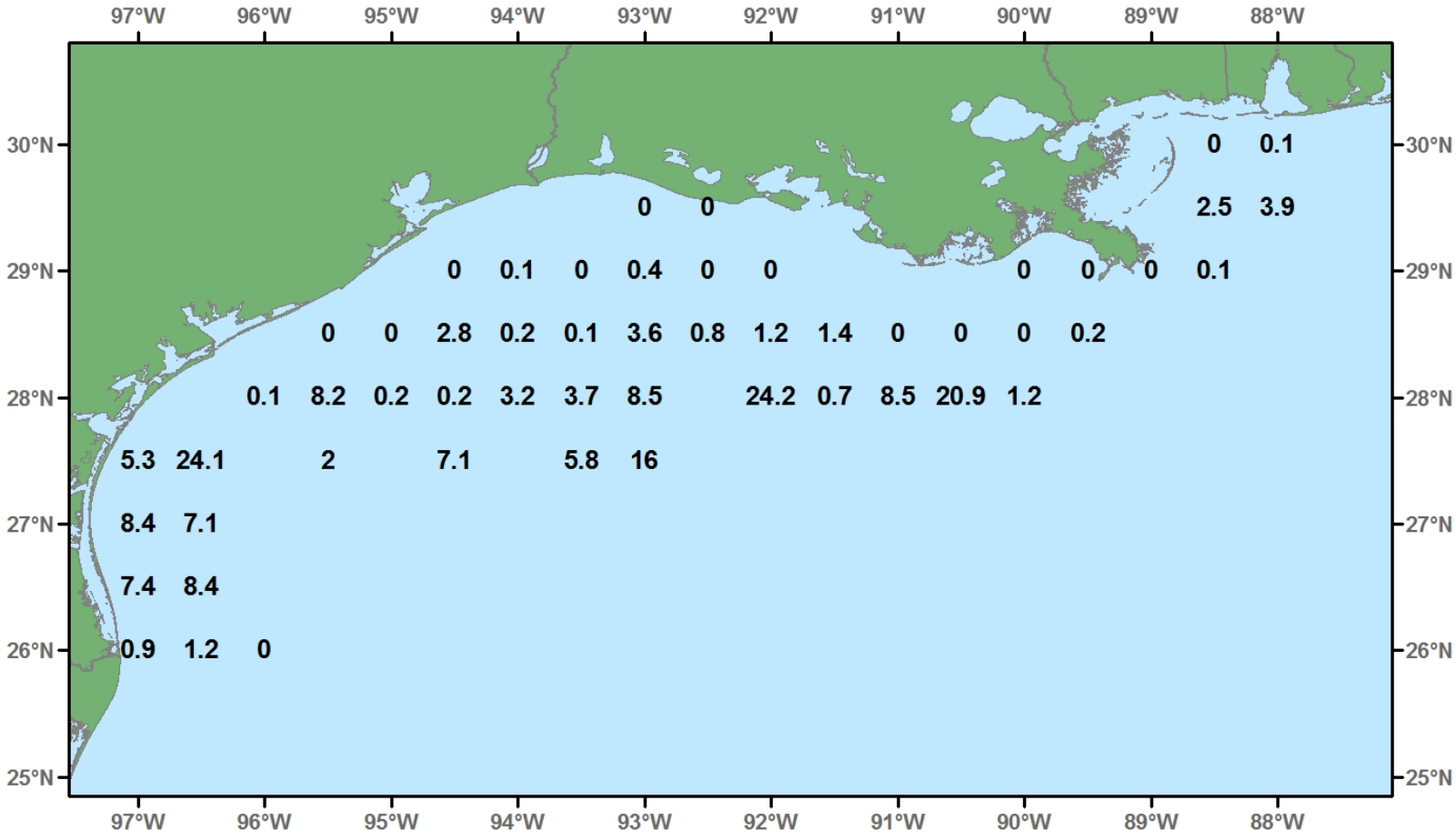

Figure 63. Rough scad, Trachurus lathami, lb/hour for October-December 2007.

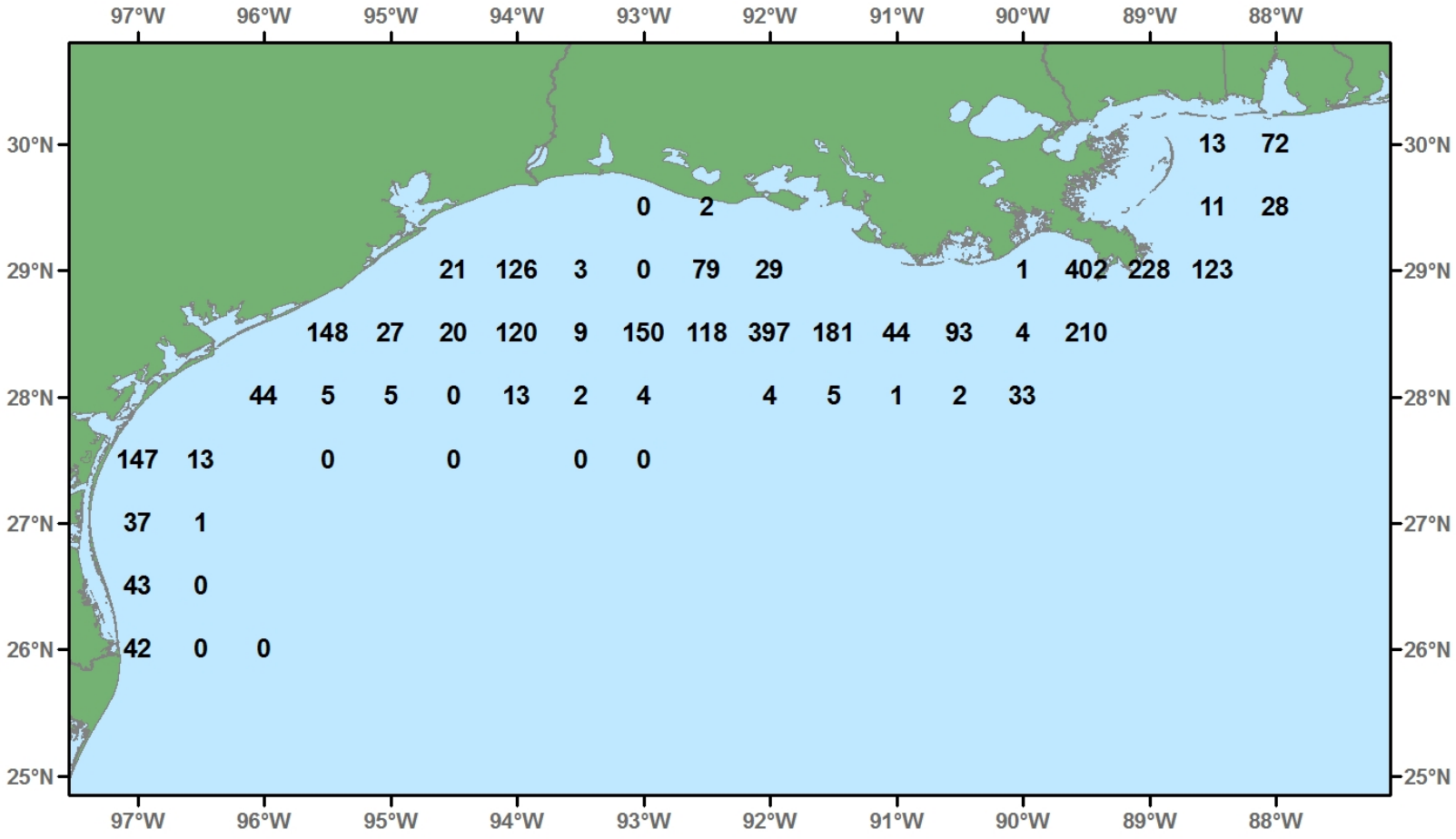

Figure 64. Silver seatrout, Cynoscion nothus, number/hour for October-December 2007.

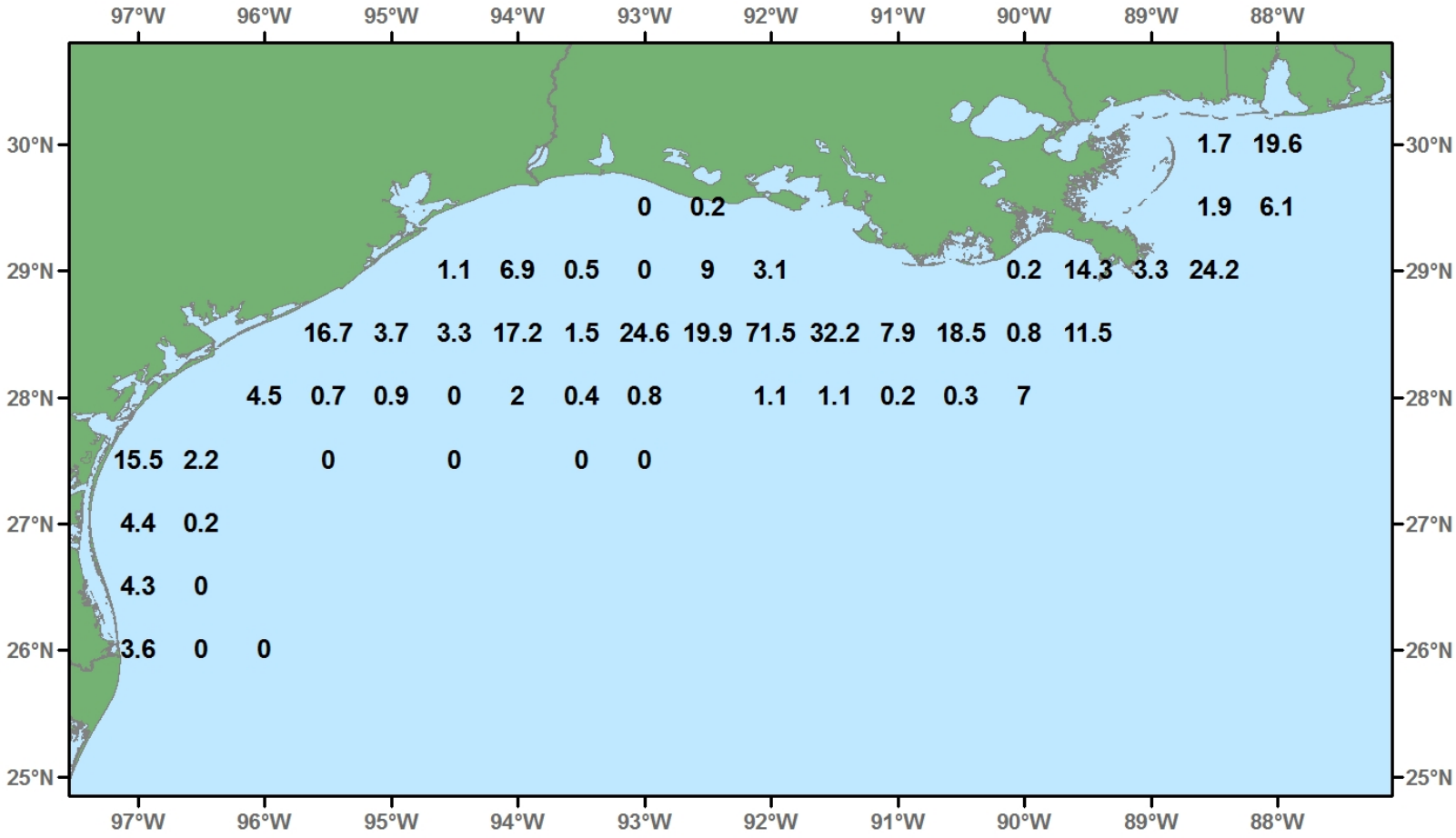

Figure 65. Silver seatrout, Cynoscion nothus, lb/hour for October-December 2007.

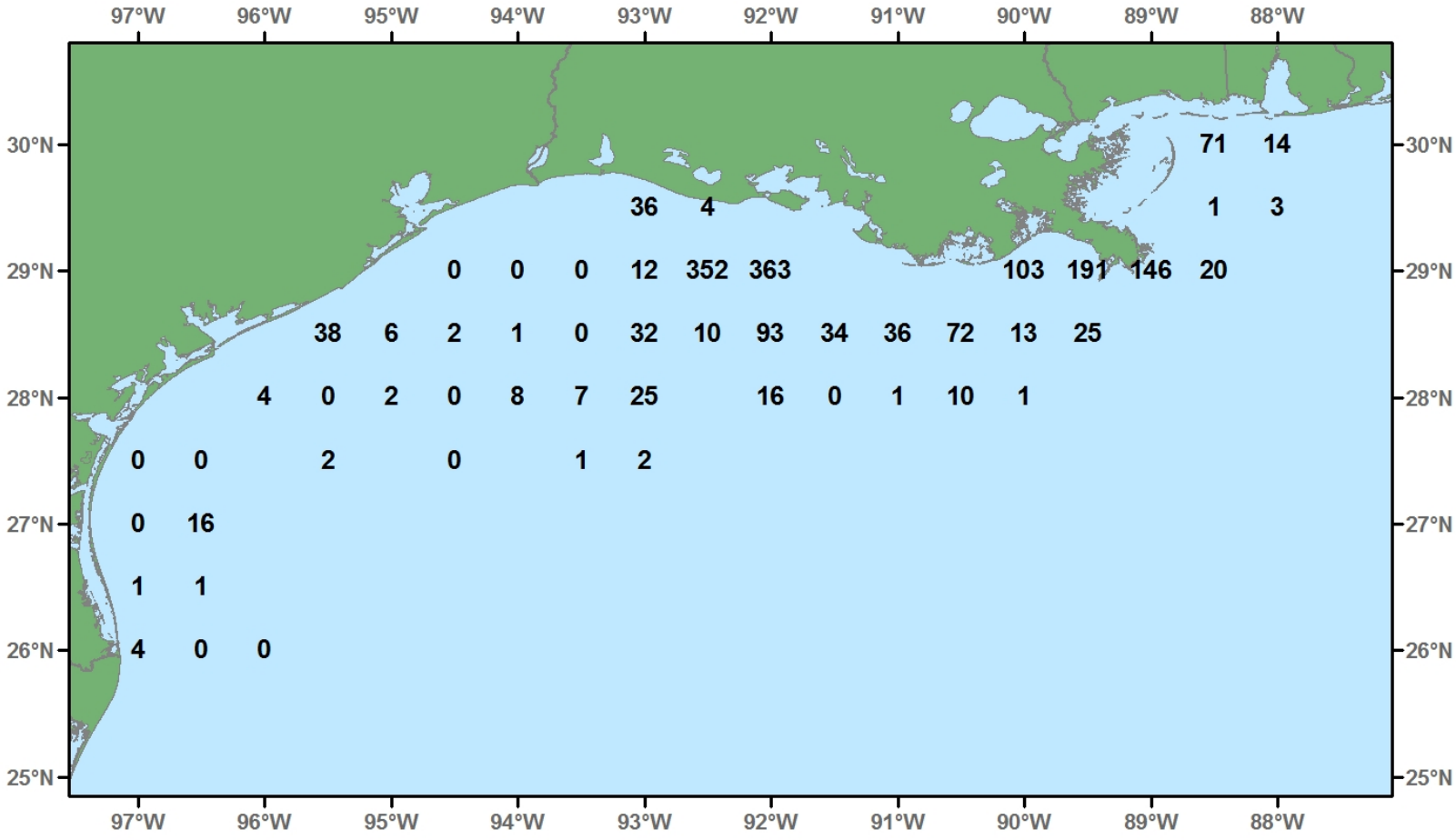

Figure 66. Atlantic cutlassfish, Trichiurus lepturus, number/hour for October-December 2007.

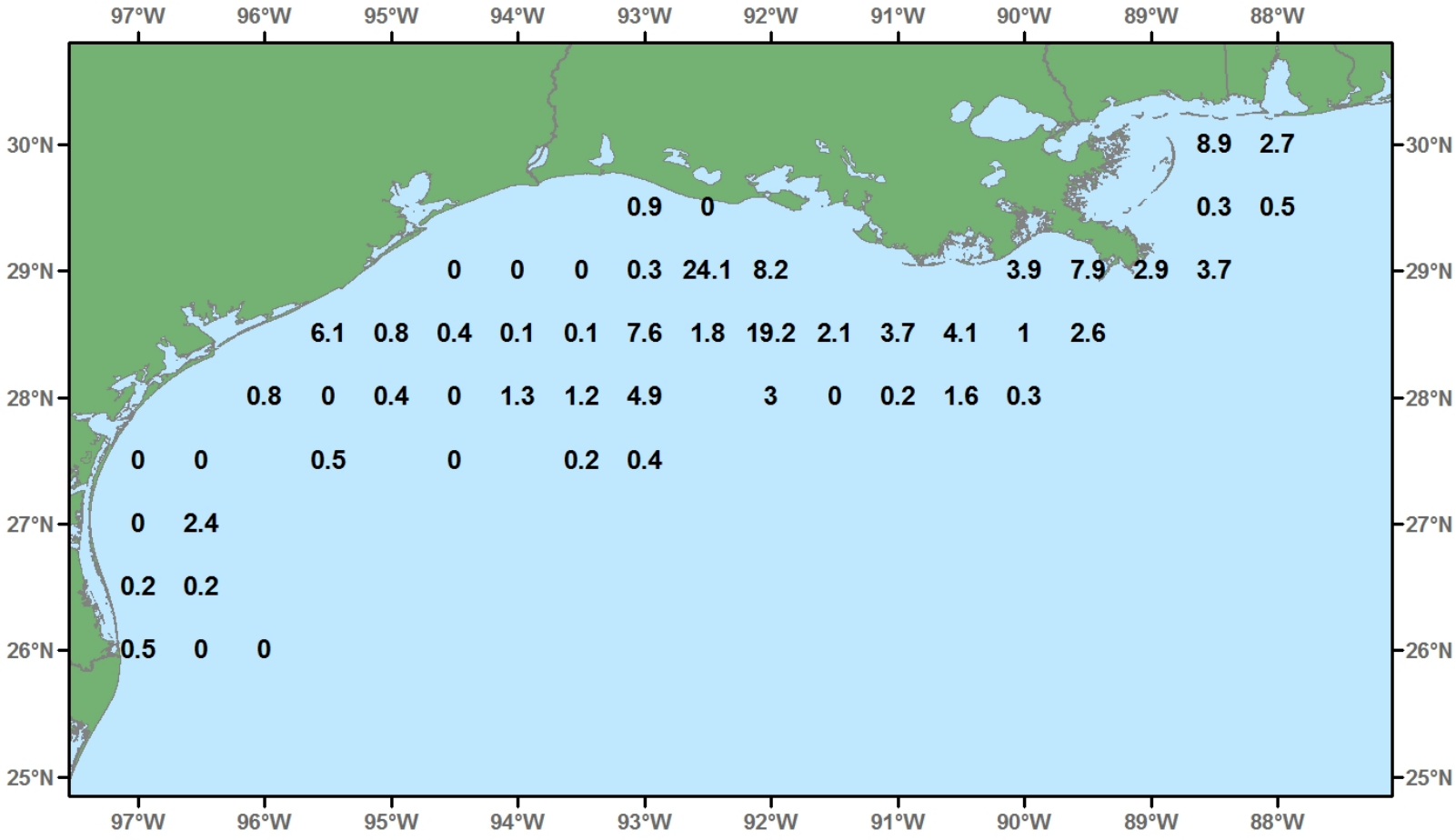

Figure 67. Atlantic cutlassfish, Trichiurus lepturus, lb/hour for October-December 2007.

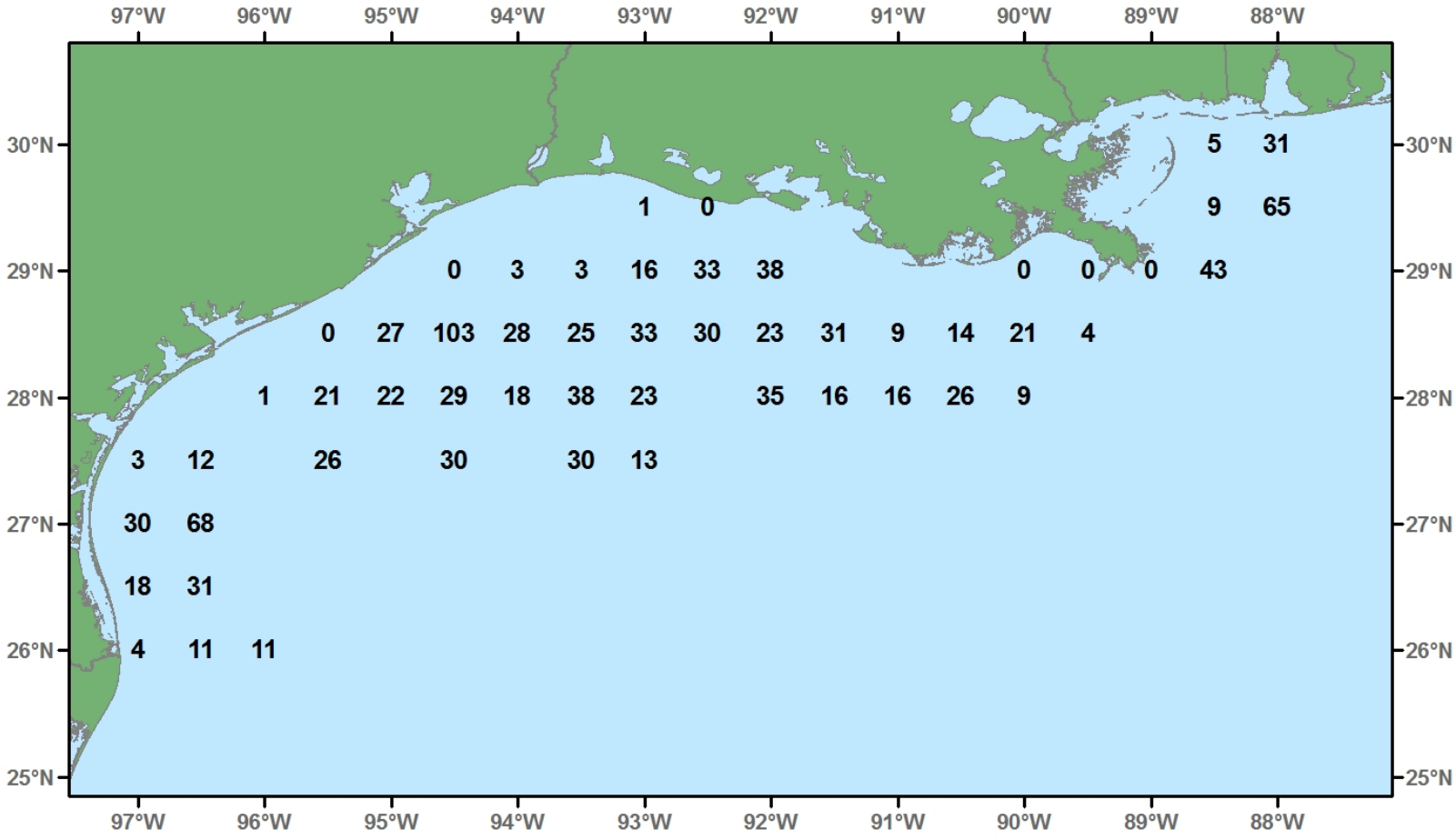

Figure 68. Inshore lizardfish, Synodus foetens, number/hour for October-December 2007.

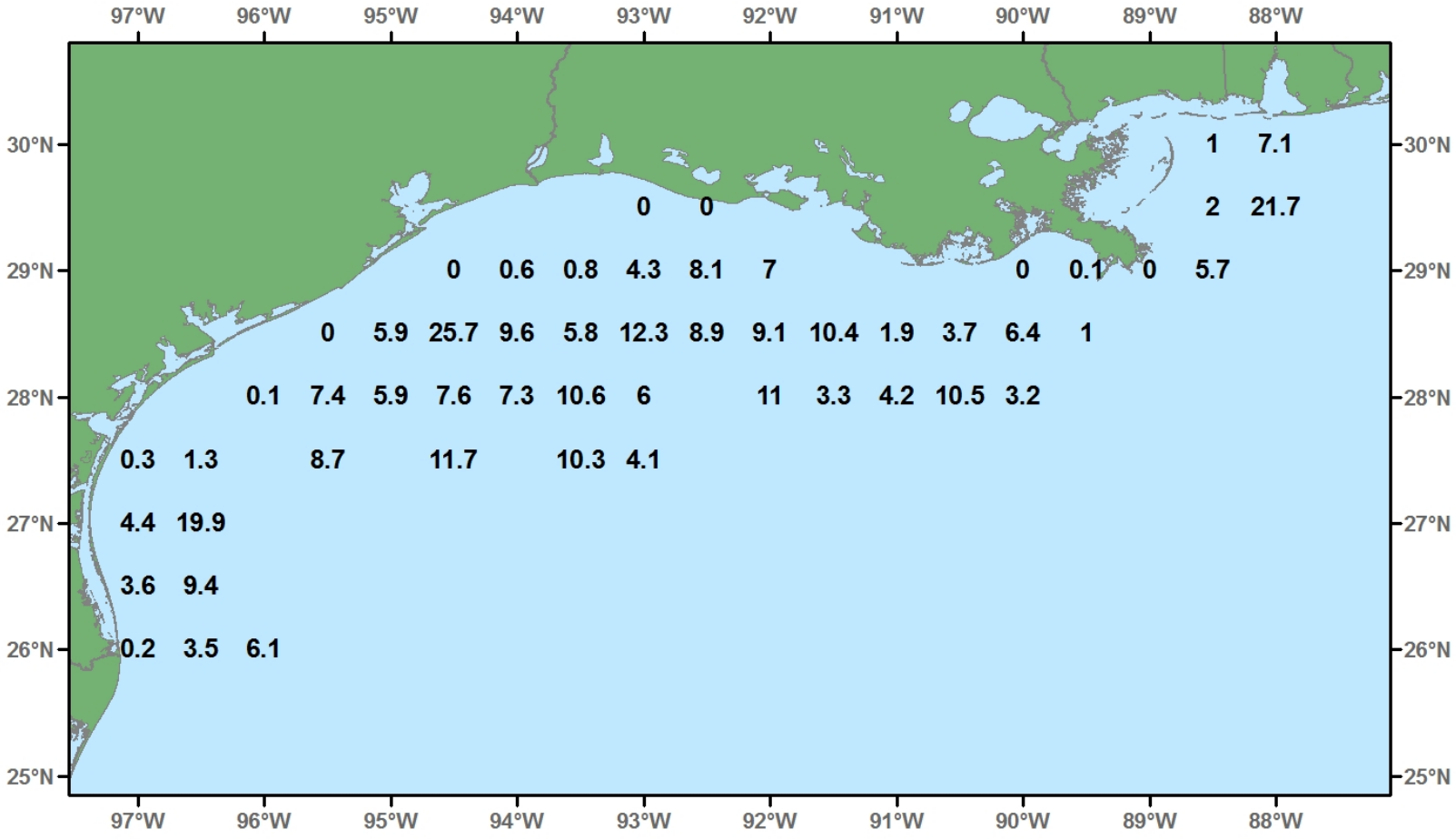

Figure 69. Inshore lizardfish, Synodus foetens, lb/hour for October-December 2007.

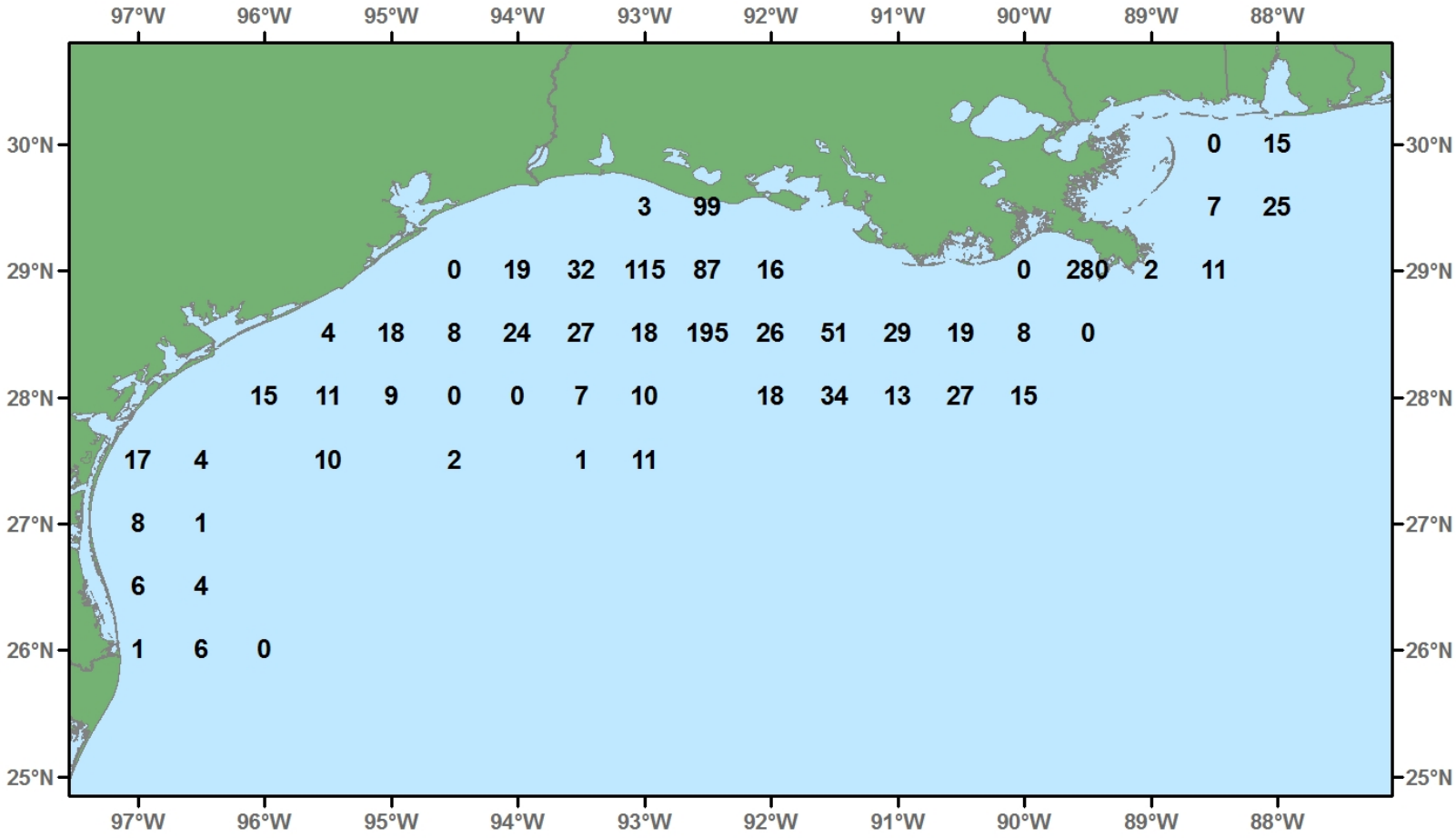

Figure 70. Bigeye searobin, Prionotus longispinosus, number/hour for October-December 2007.

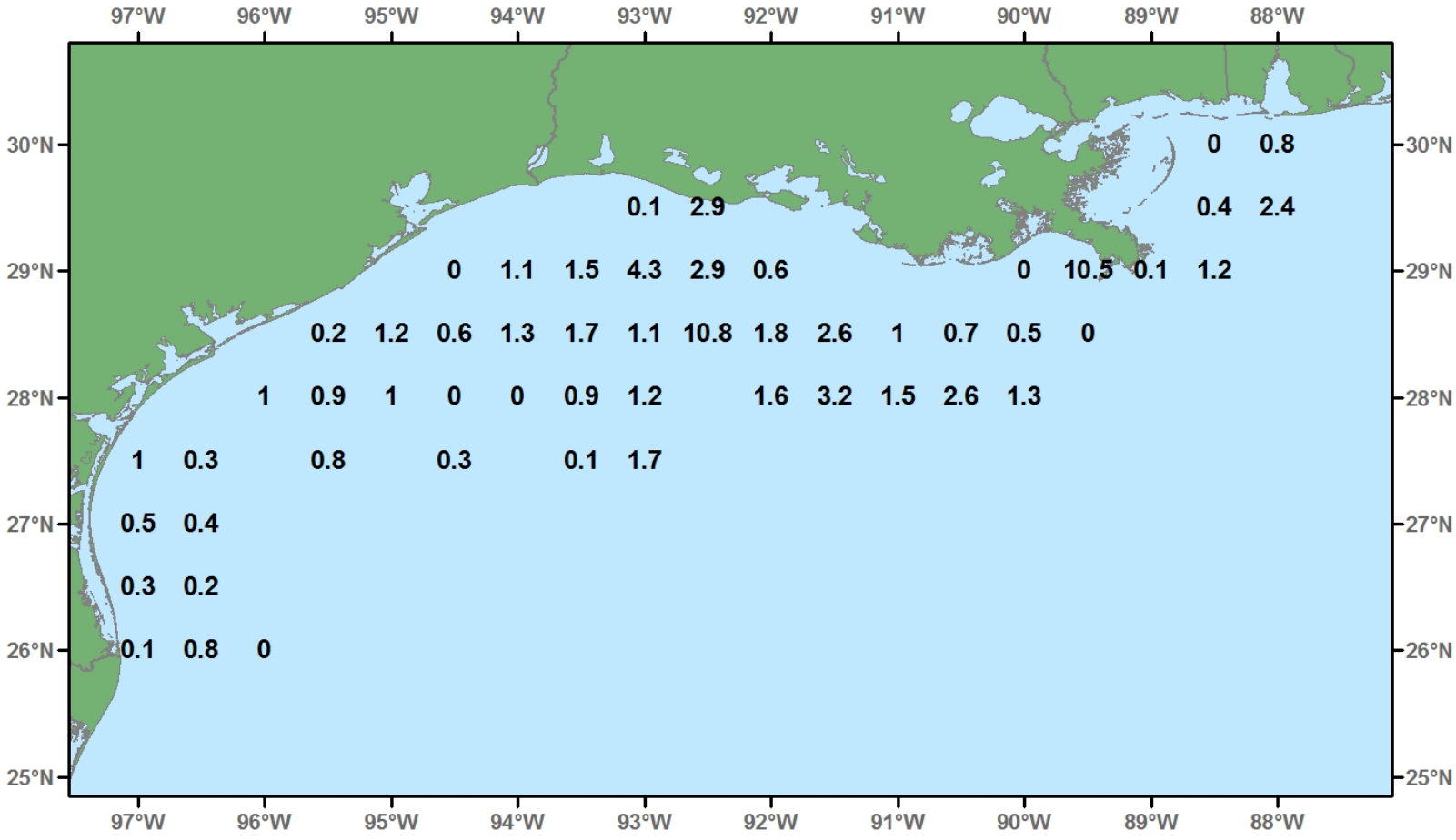

Figure 71. Bigeye searobin, Prionotus longispinosus, lb/hour for October-December 2007.

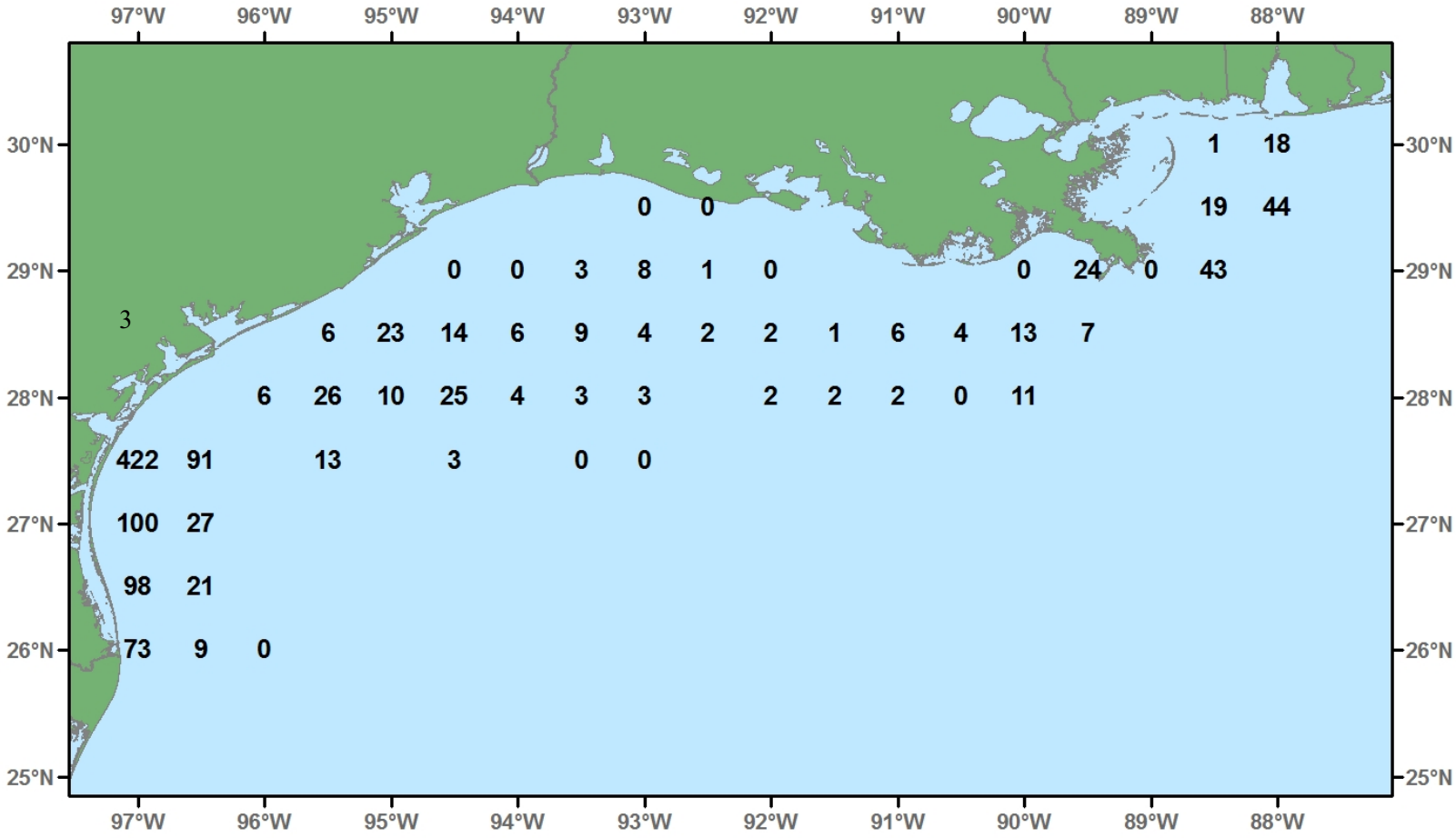

Figure 72. Red snapper, Lutjanus campechanus, number/hour for October-December 2007.

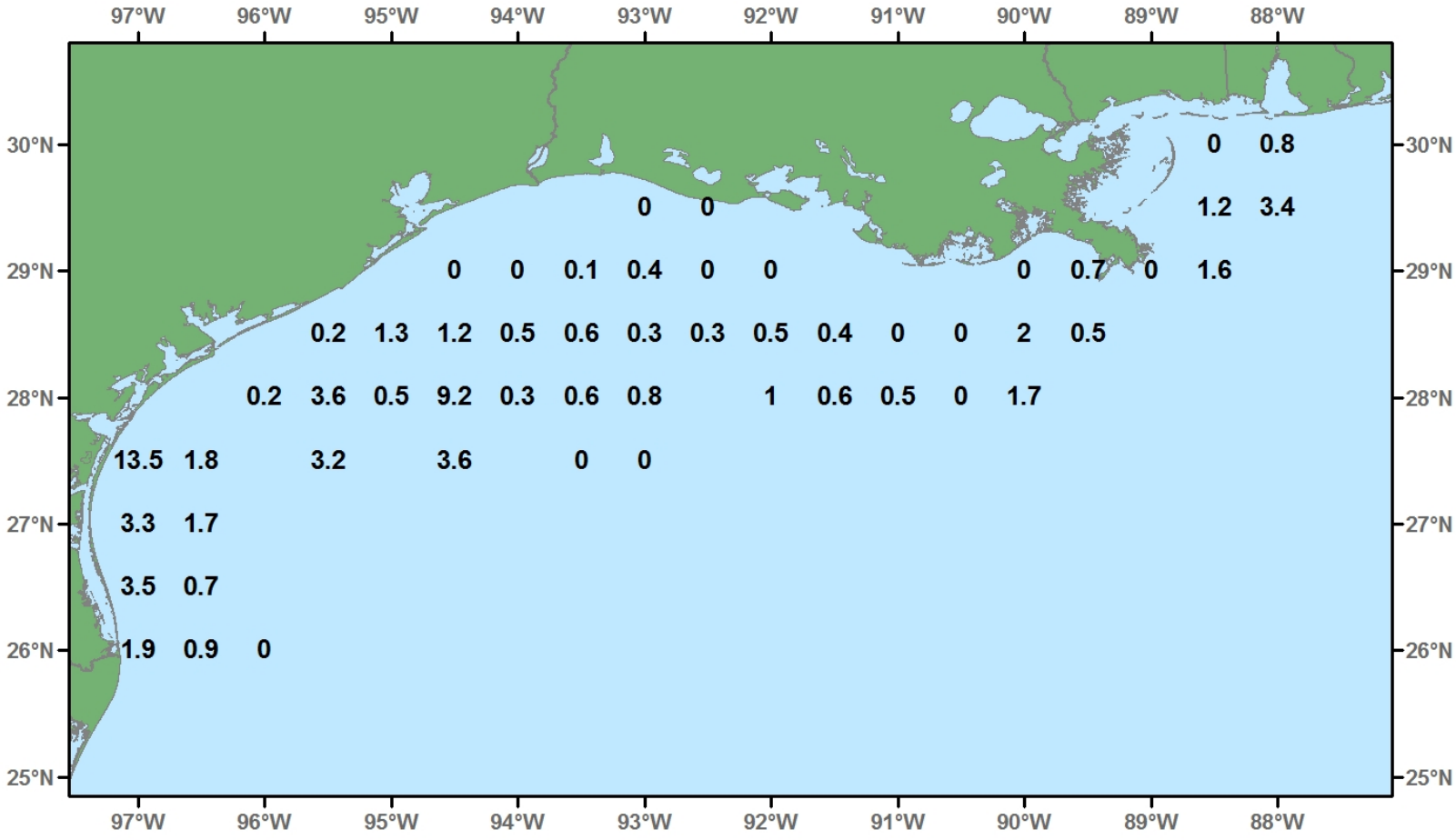

Figure 73. Red snapper, Lutjanus campechanus, lb/hour for October-December 2007.

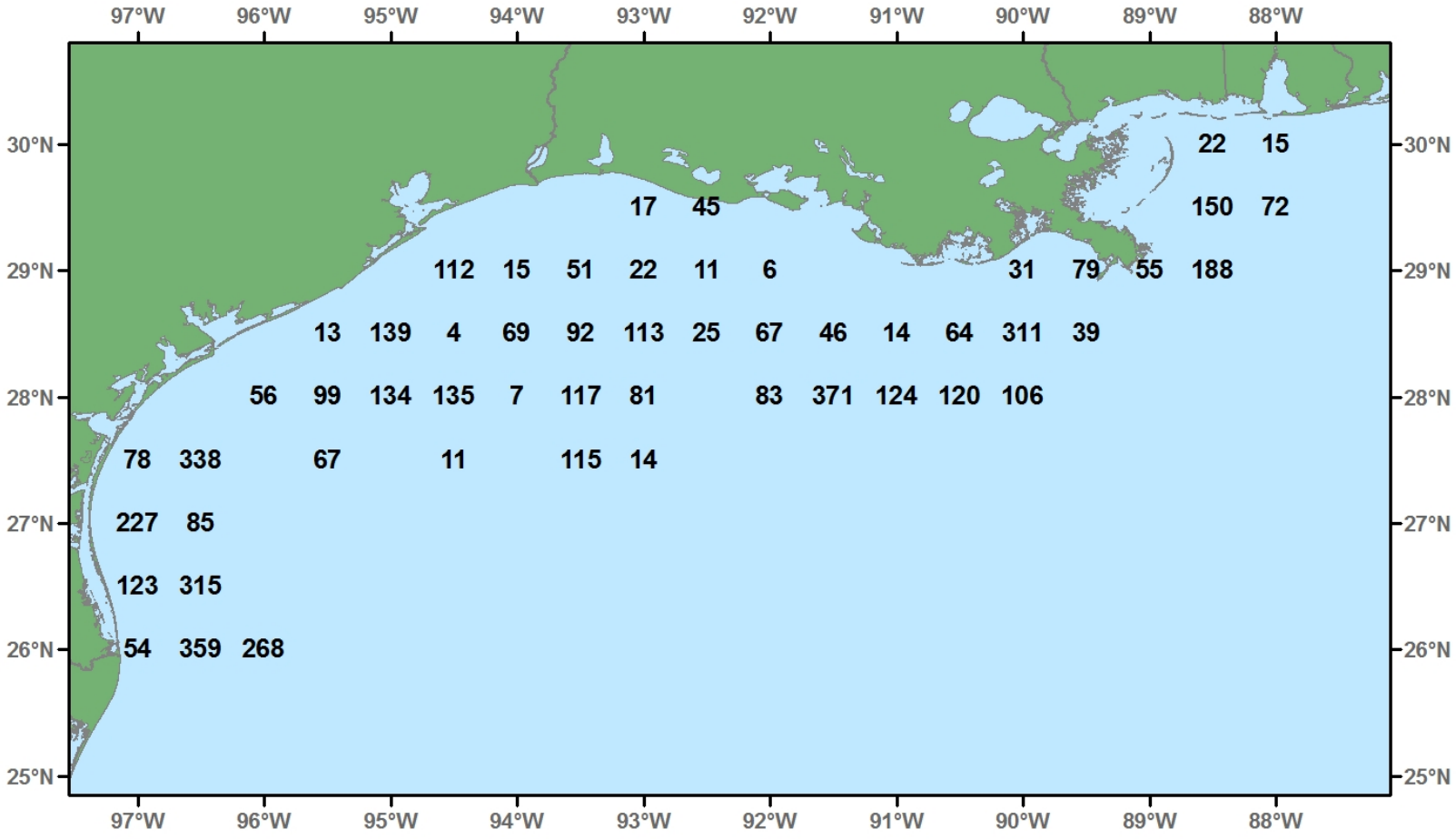

Figure 74. Brown shrimp, Farfantepenaeus aztecus, number/hour for October-December 2007.

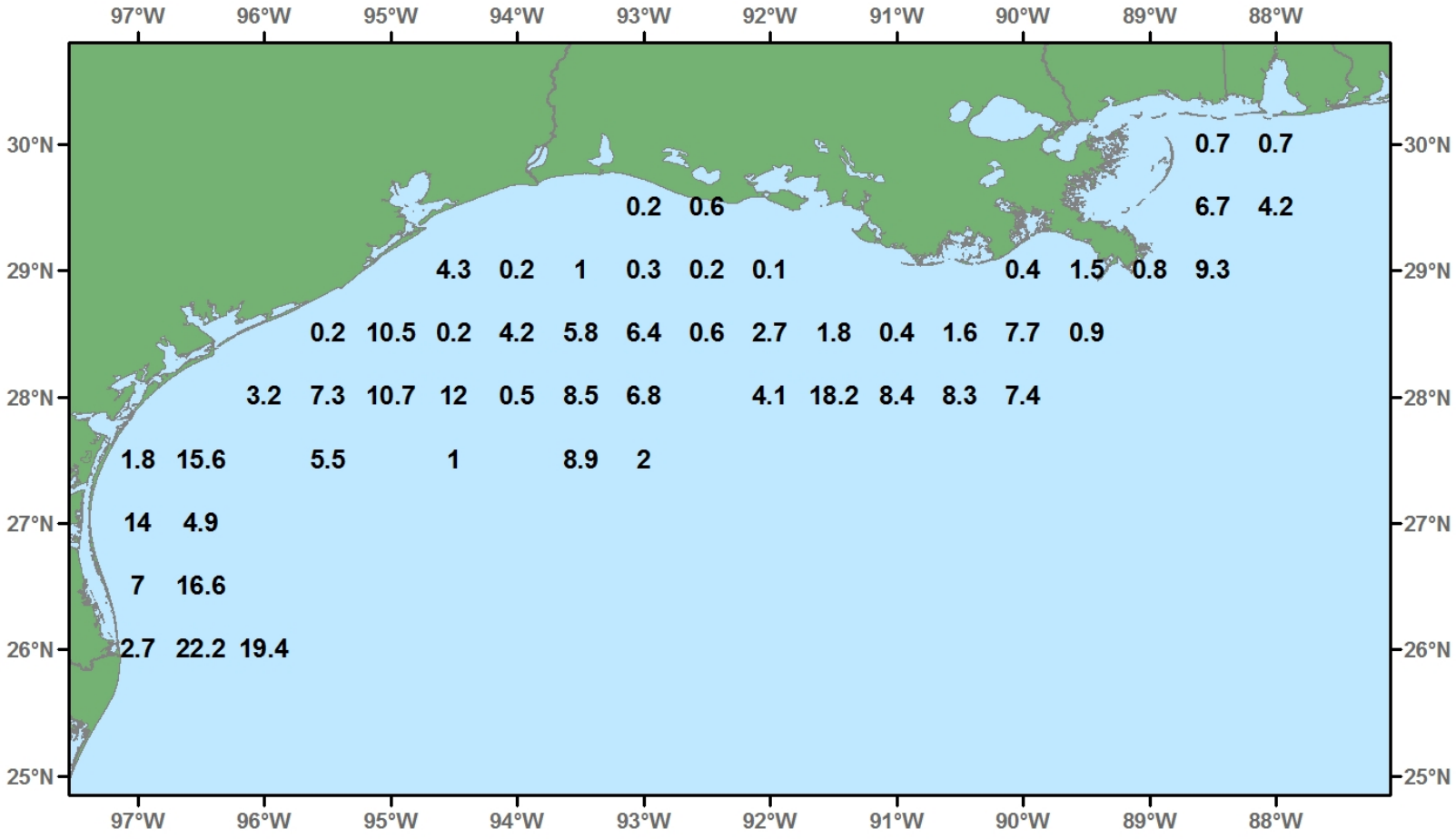

Figure 75. Brown shrimp, Farfantepenaeus aztecus, lb/hour for October-December 2007.

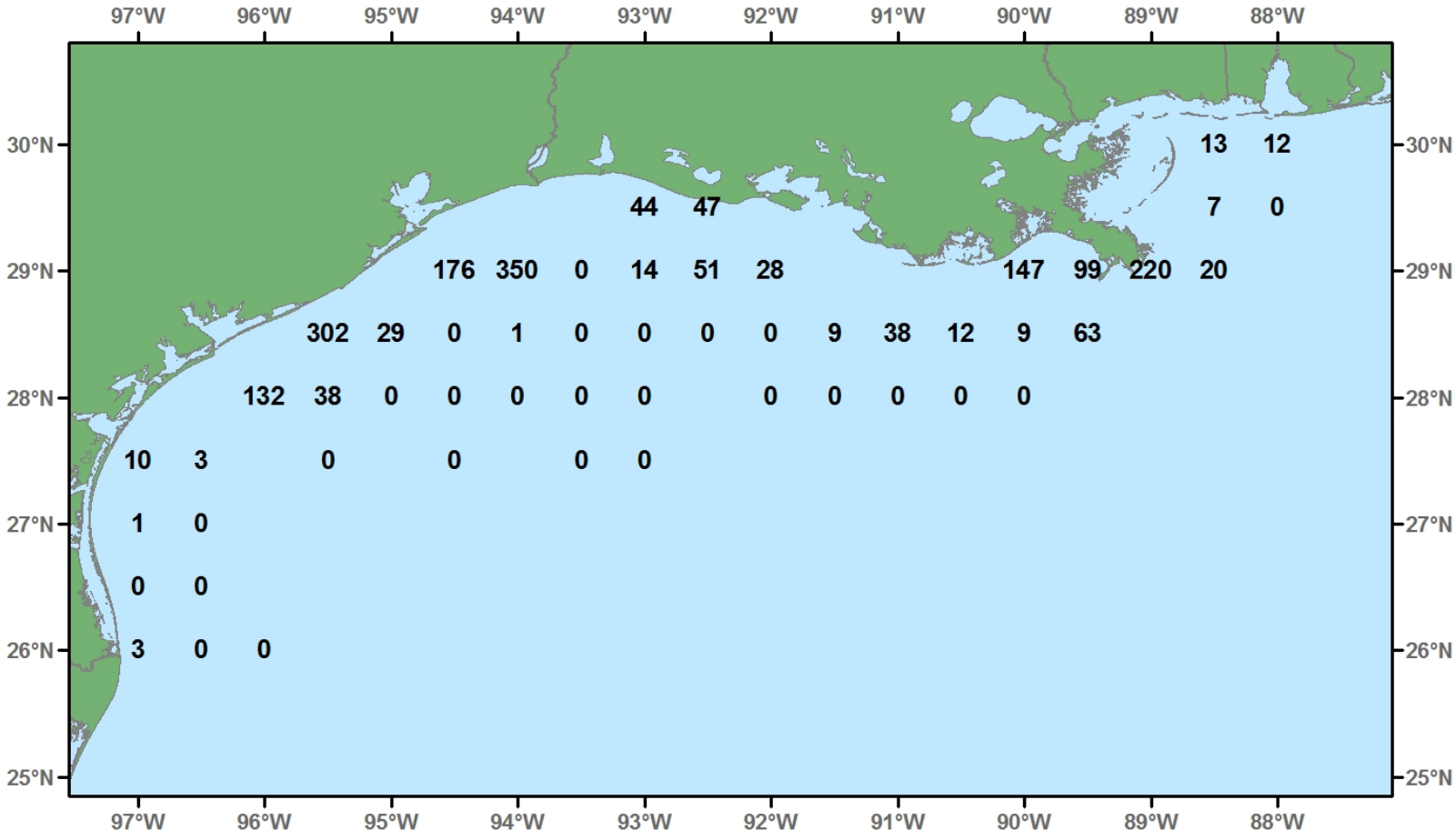

Figure 76. White shrimp, Litopenaeus setiferus, number/hour for October-December 2007.

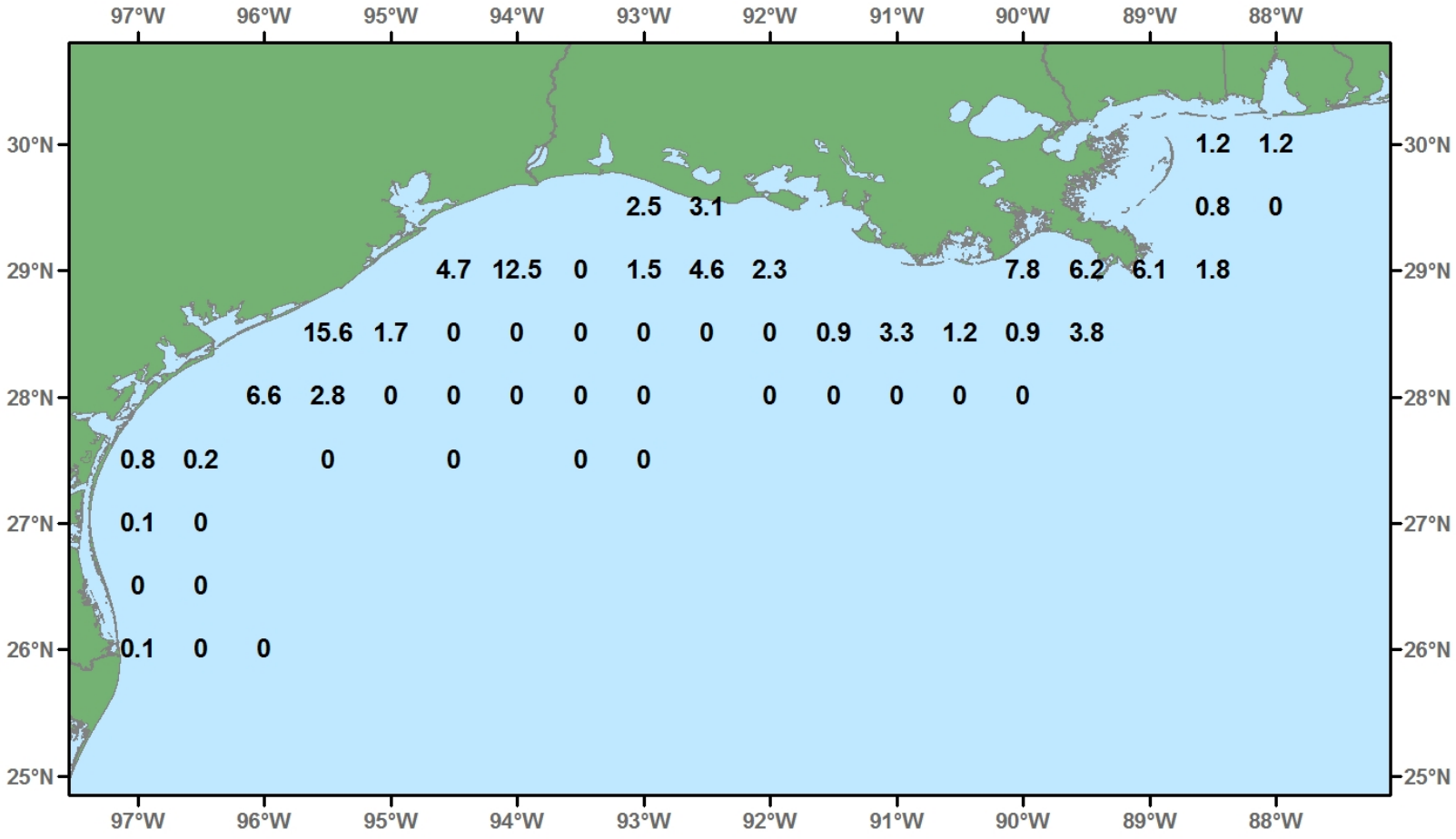

Figure 77. White shrimp, Litopenaeus setiferus, lb/hour for October-December 2007.

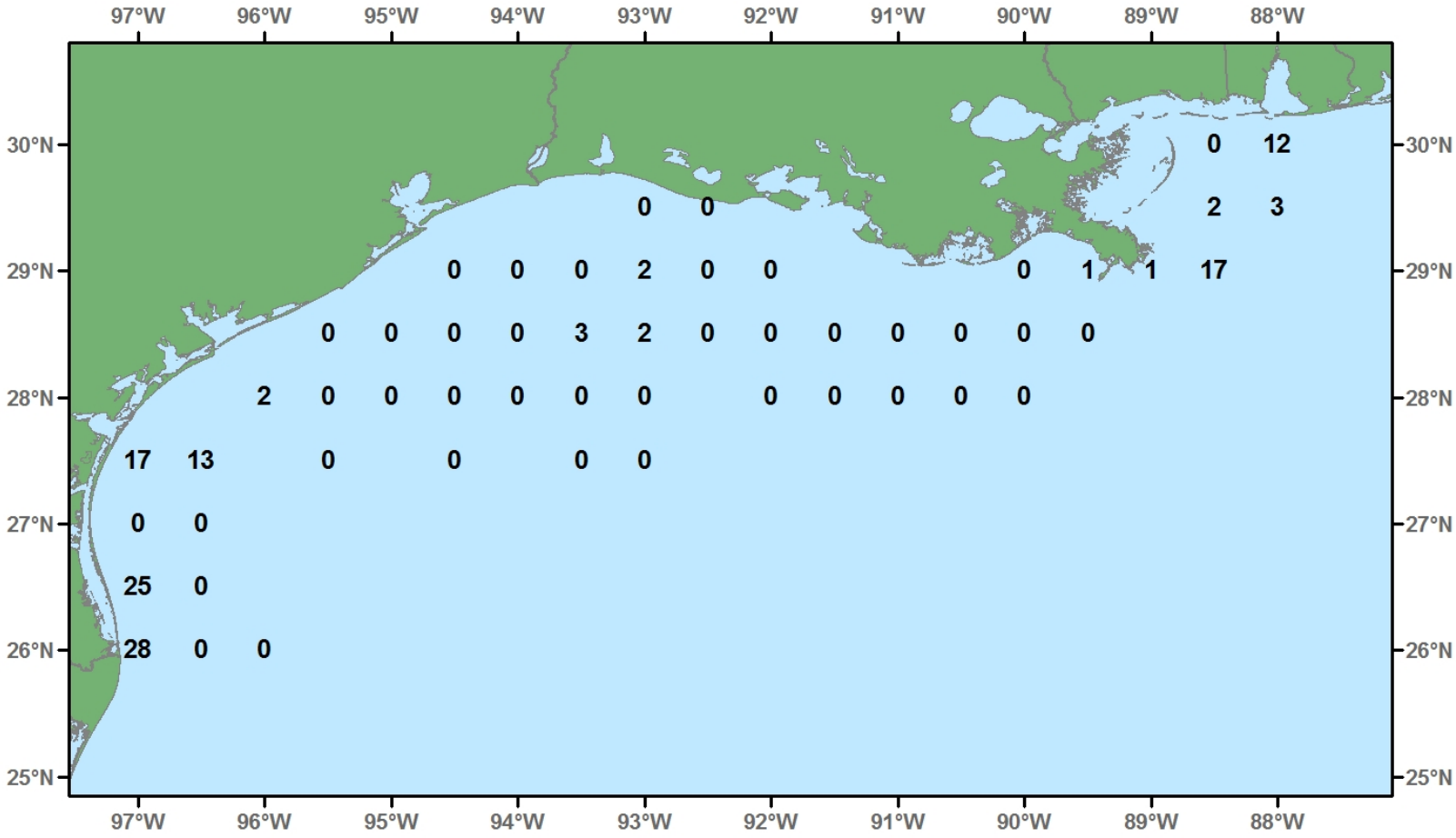

Figure 78. Pink shrimp, Farfantepenaeus duorarum, number/hour for October-December 2007.

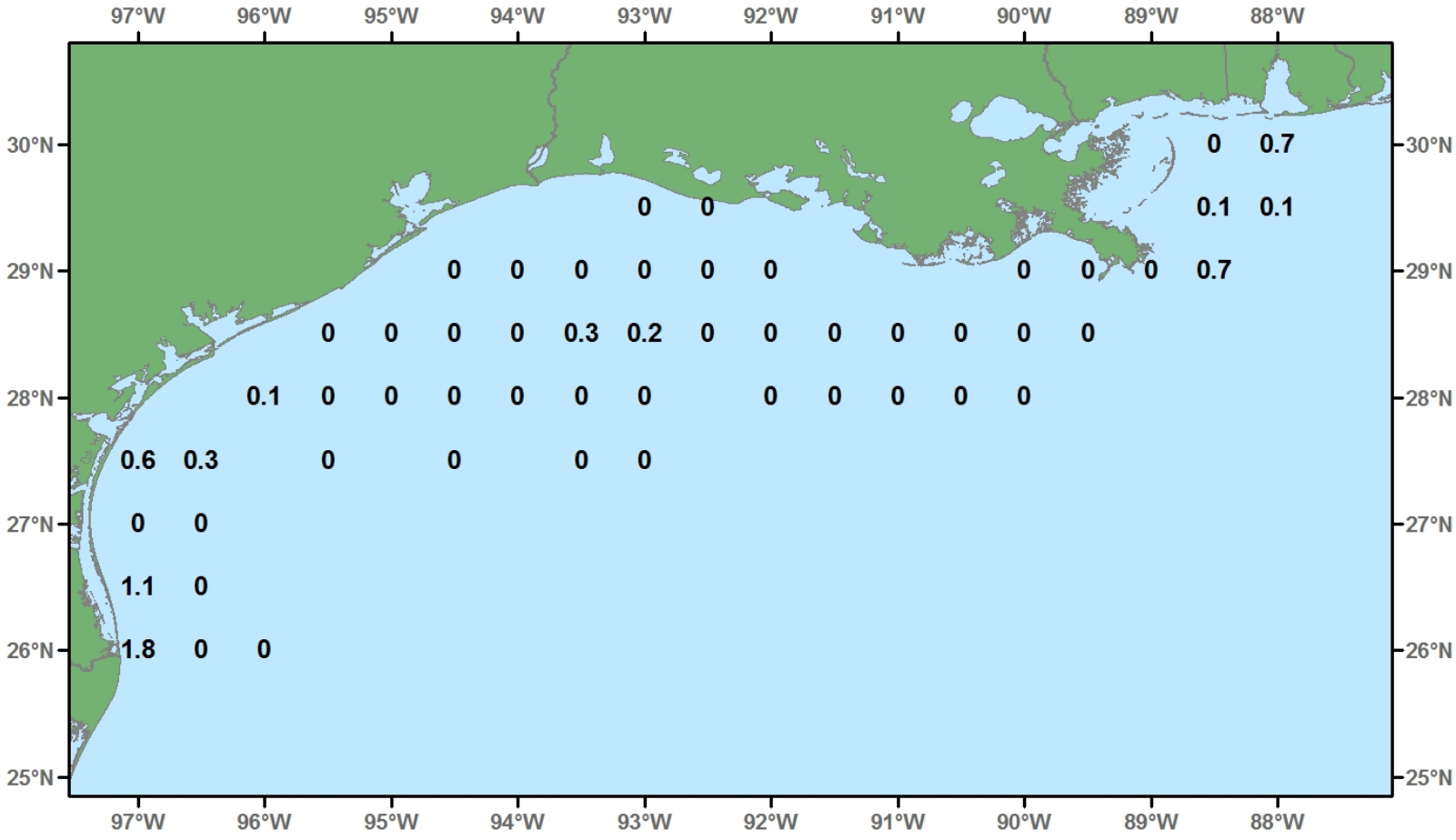

Figure 79. Pink shrimp, Farfantepenaeus duorarum, lb/hour for October-December 2007.

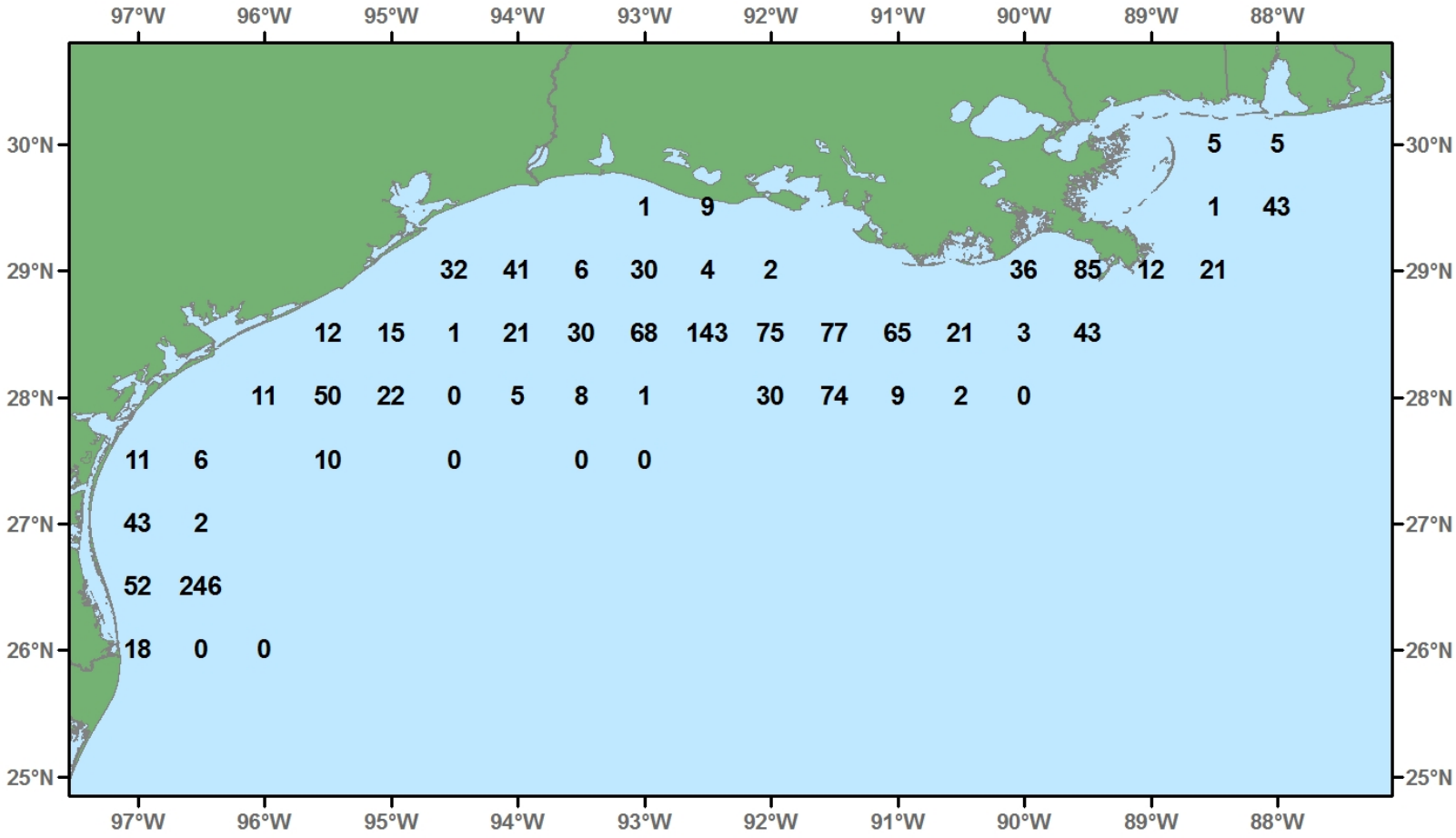

Figure 80. Lesser blue crab, Callinectes similis, number/hour for October-December 2007.

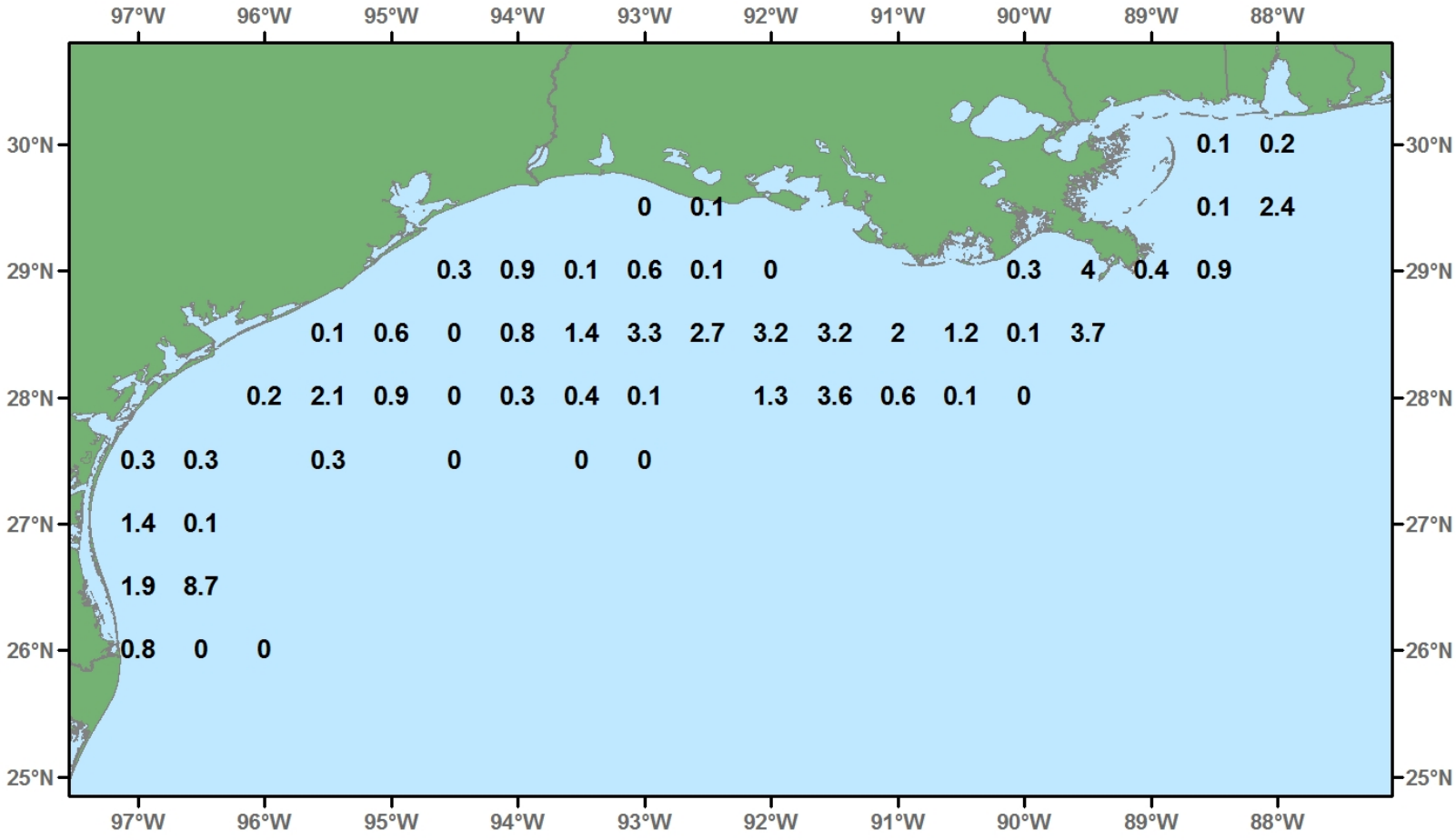

Figure 81. Lesser blue crab, Callinectes similis, lb/hour for October-December 2007.

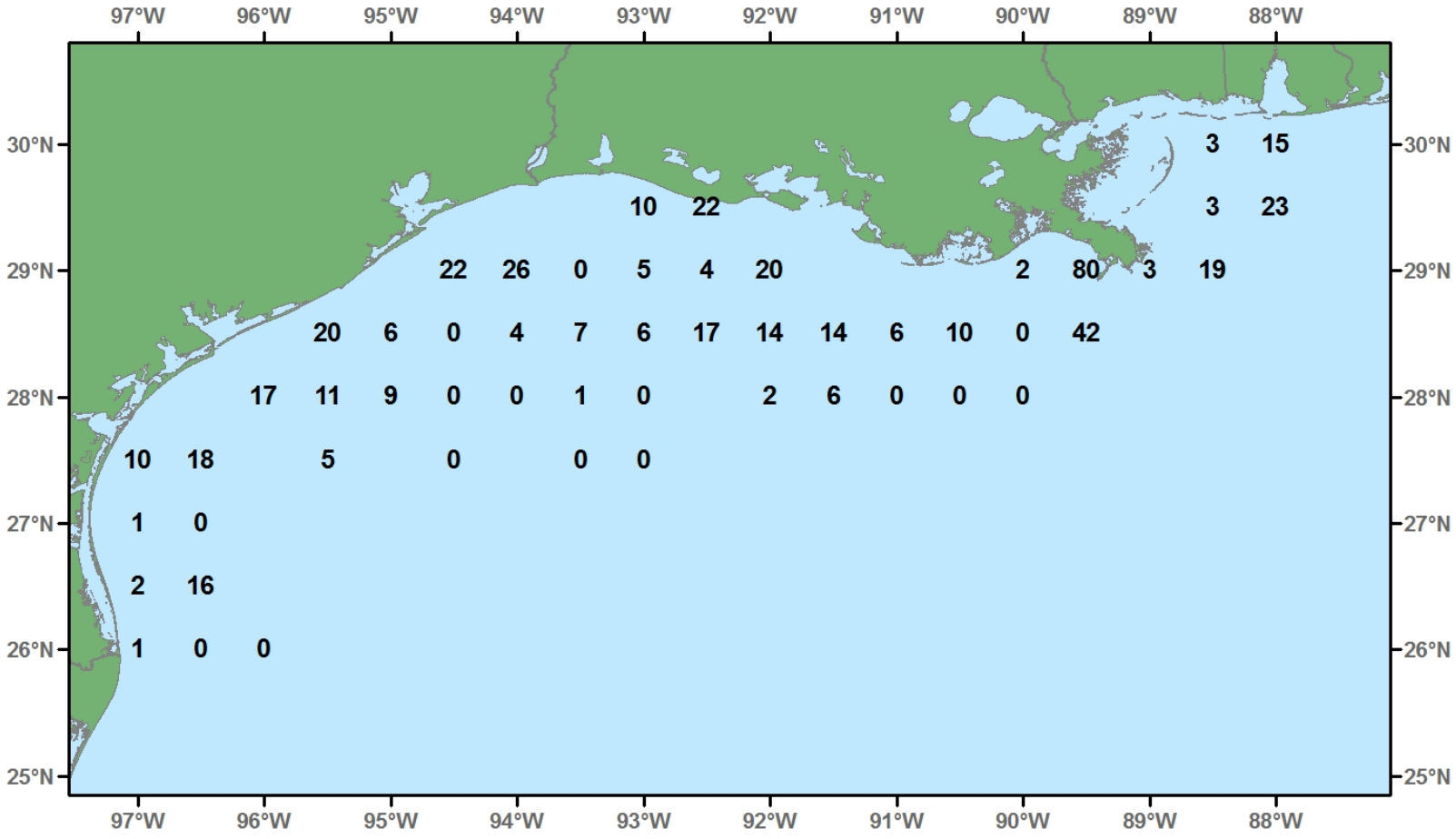

Figure 82. Mantis shrimp, Squilla empusa, number/hour for October-December 2007.

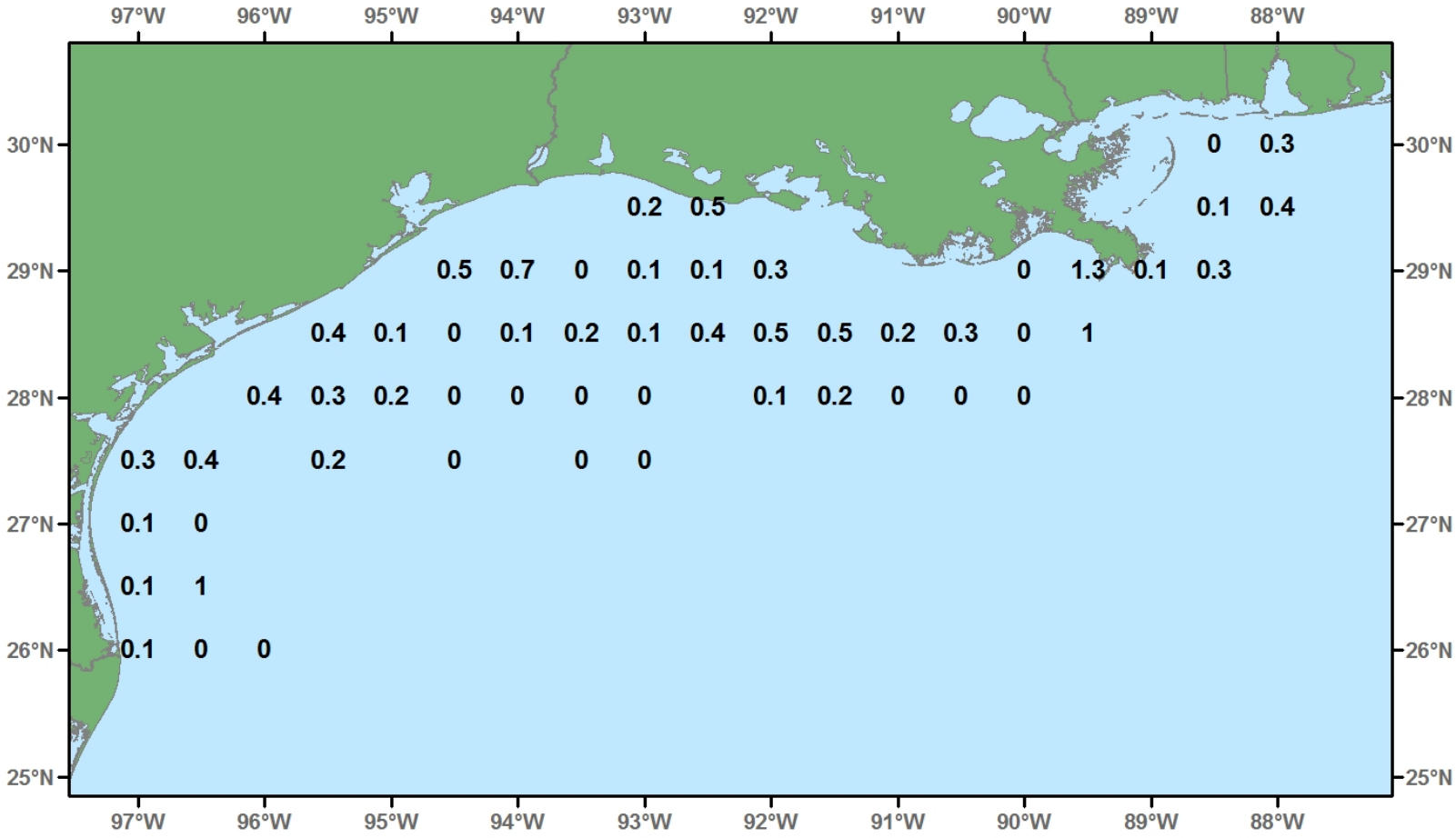

Figure 83. Mantis shrimp, Squilla empusa, lb/hour for October-December 2007.

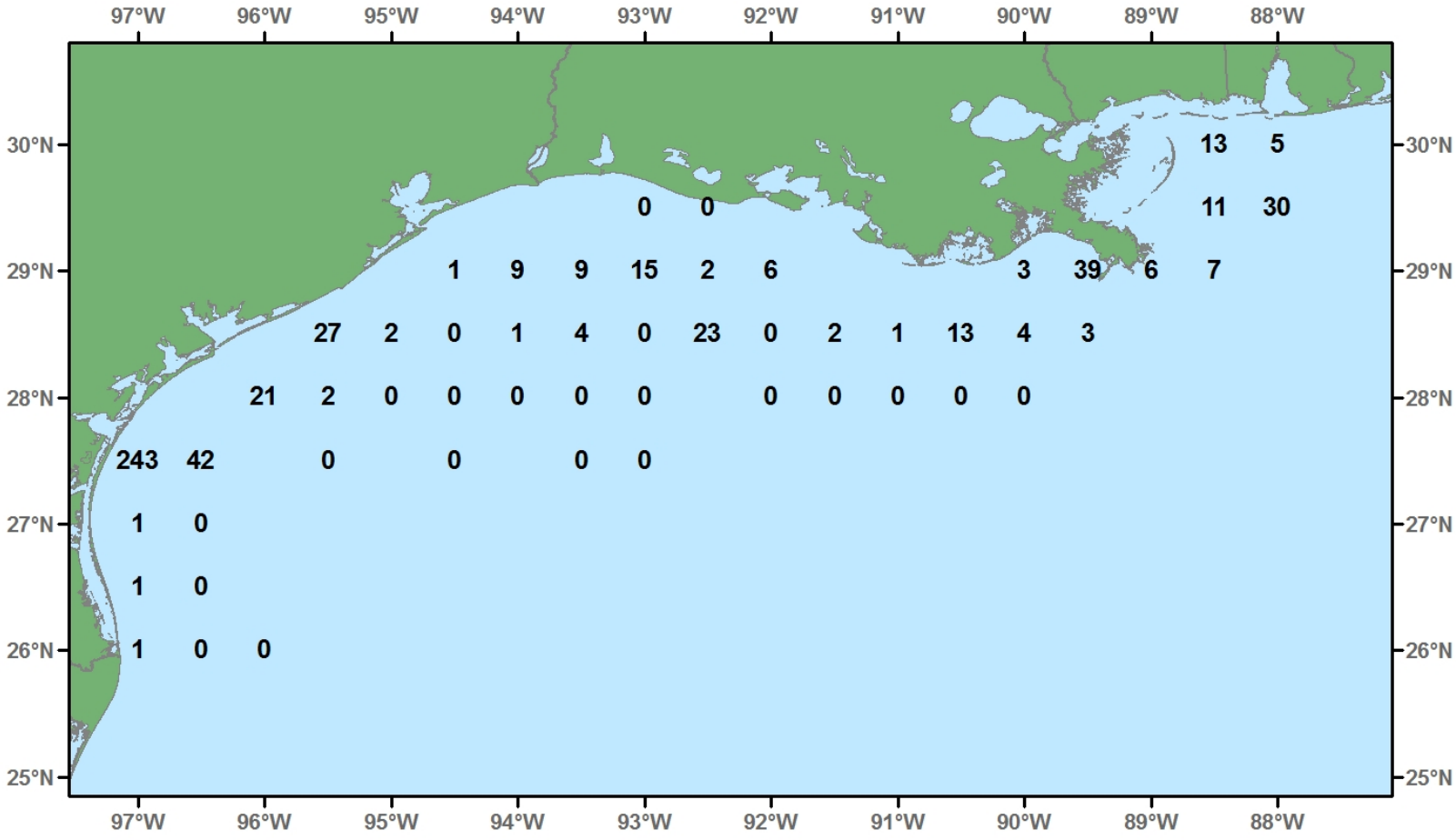

Figure 84. Iridescent swimming crab, Portunus gibbesii, number/hour for October-December 2007.

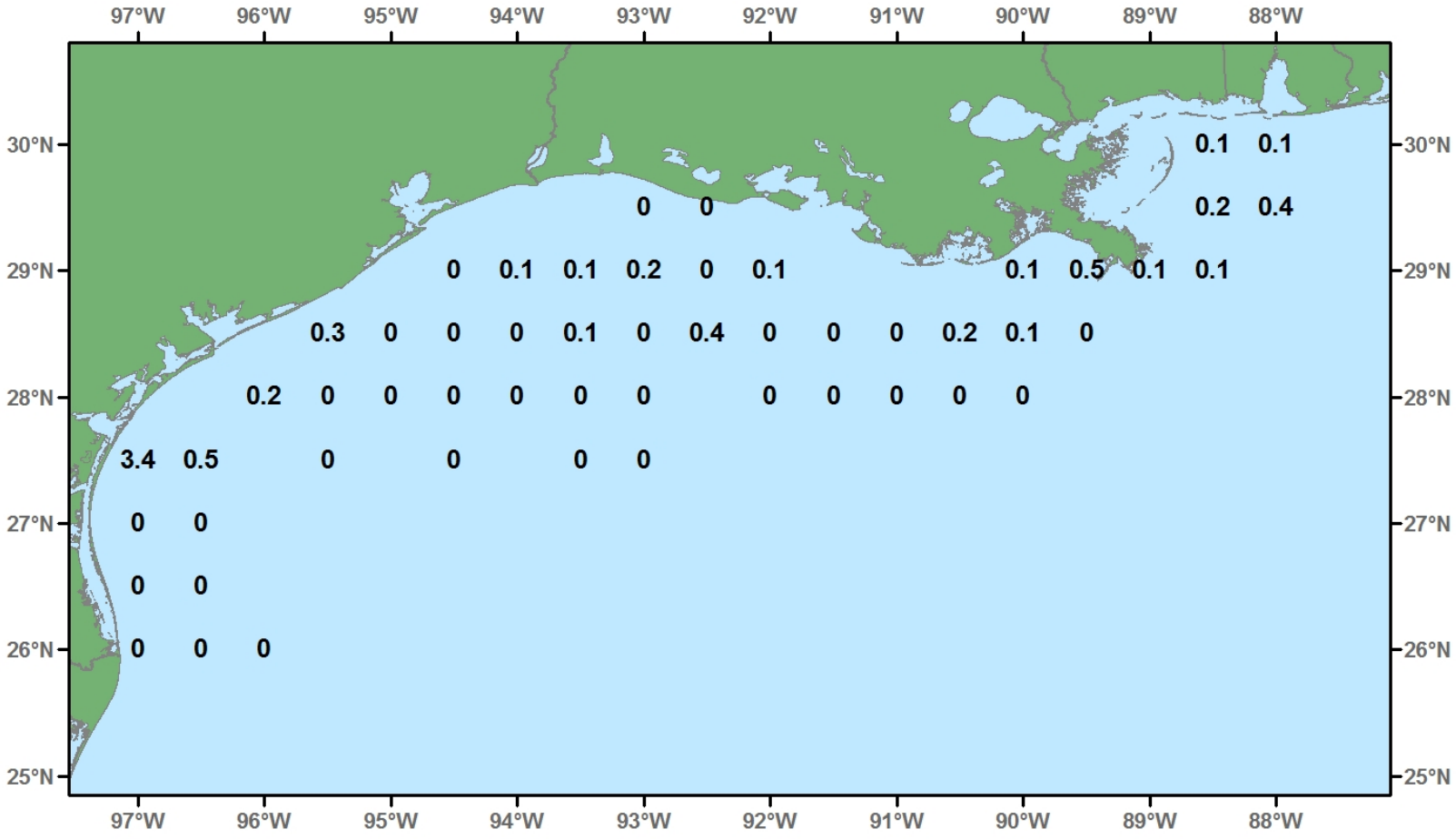

Figure 85. Iridescent swimming crab, Portunus gibbesii, lb/hour for October-December 2007.

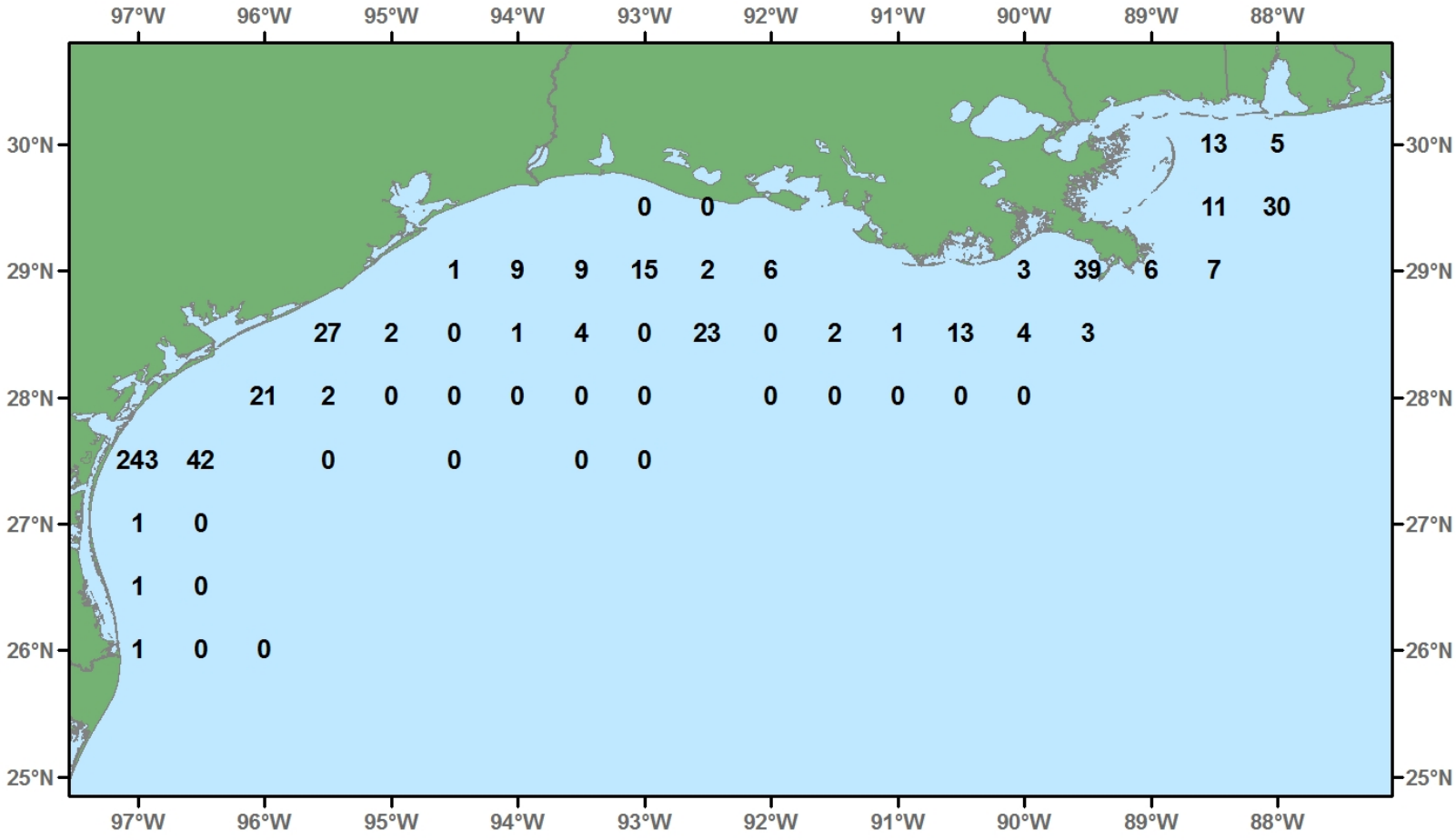

Figure 86. Longspine swimming crab, Portunis spinicarpus, number/hour for October-December 2007.

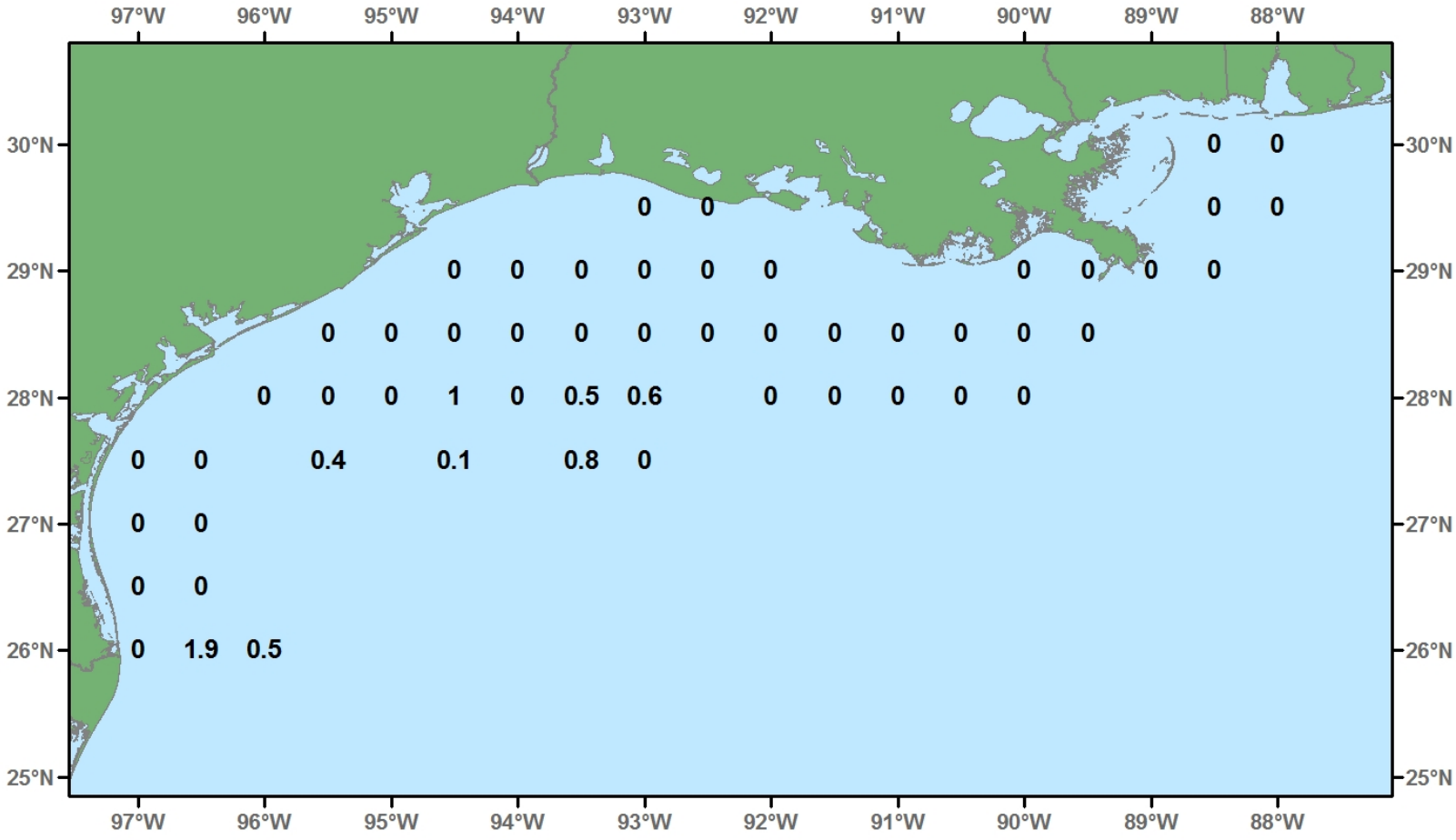

Figure 87. Longspine swimming crab, Portunis spinicarpus, lb/hour for October-December 2007.

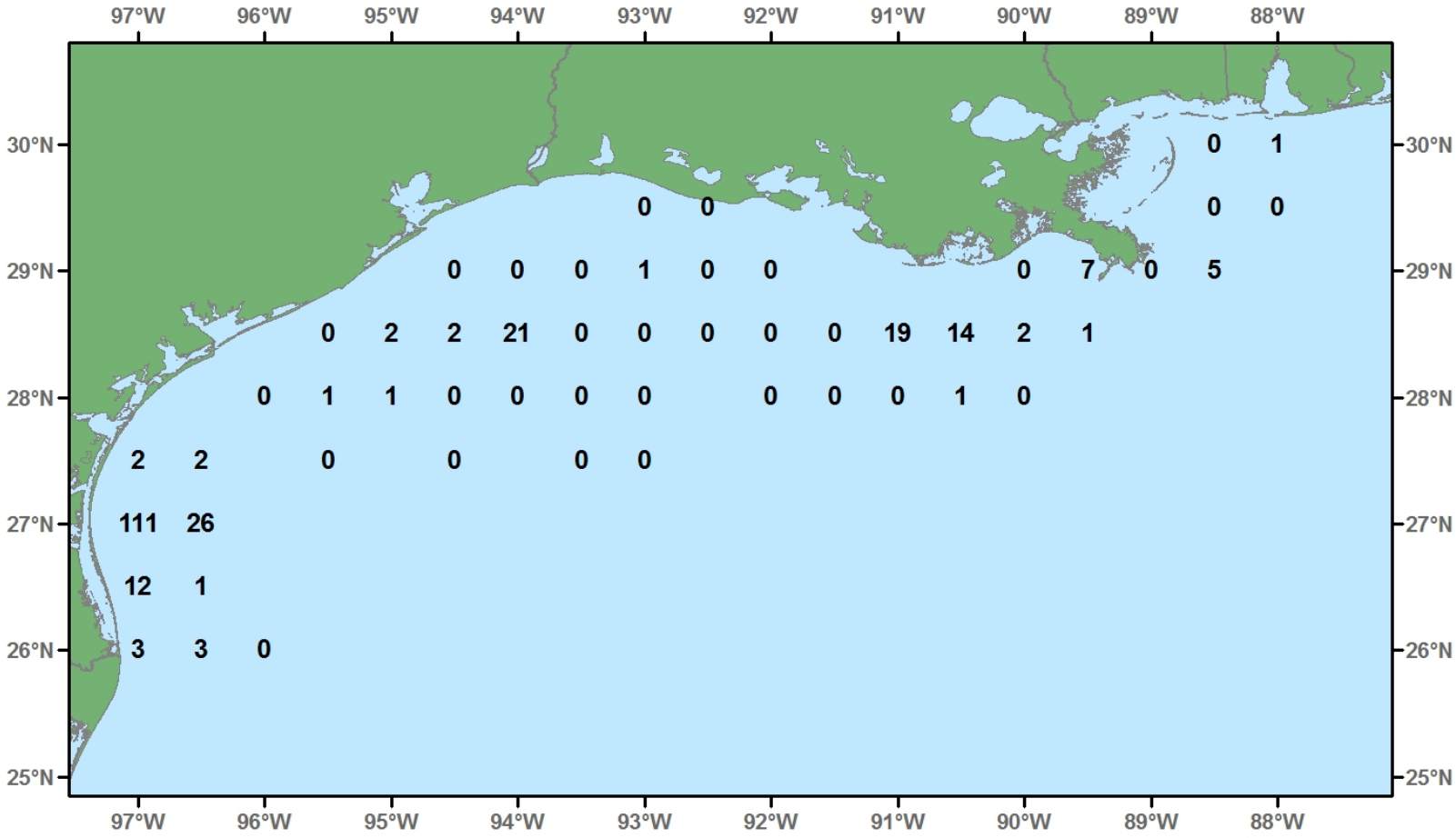

Figure 88. Blue crab, Callinectes sapidus, number/hour for October-December 2007.

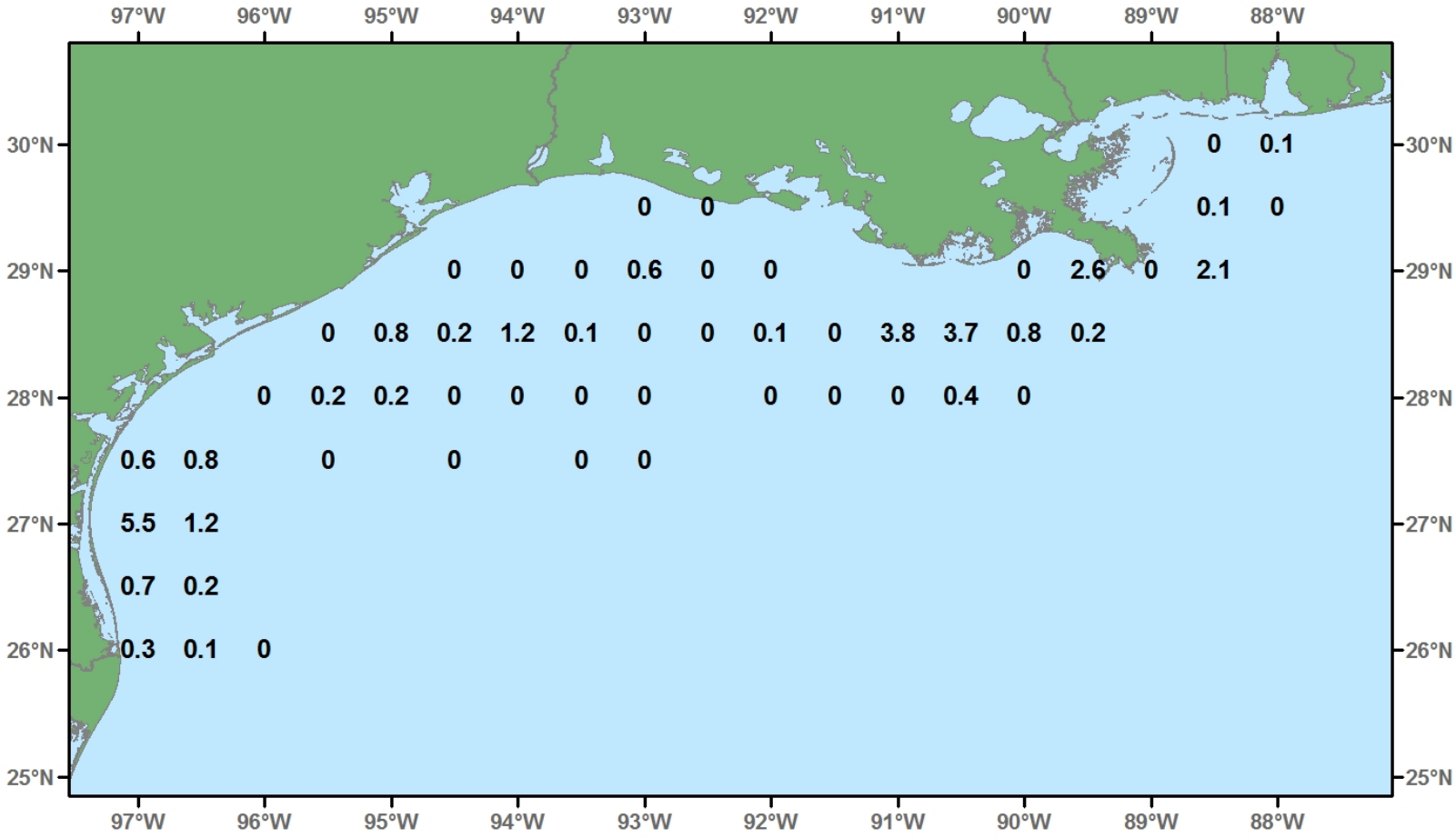

Figure 89. Blue crab, Callinectes sapidus, lb/hour for October-December 2007.

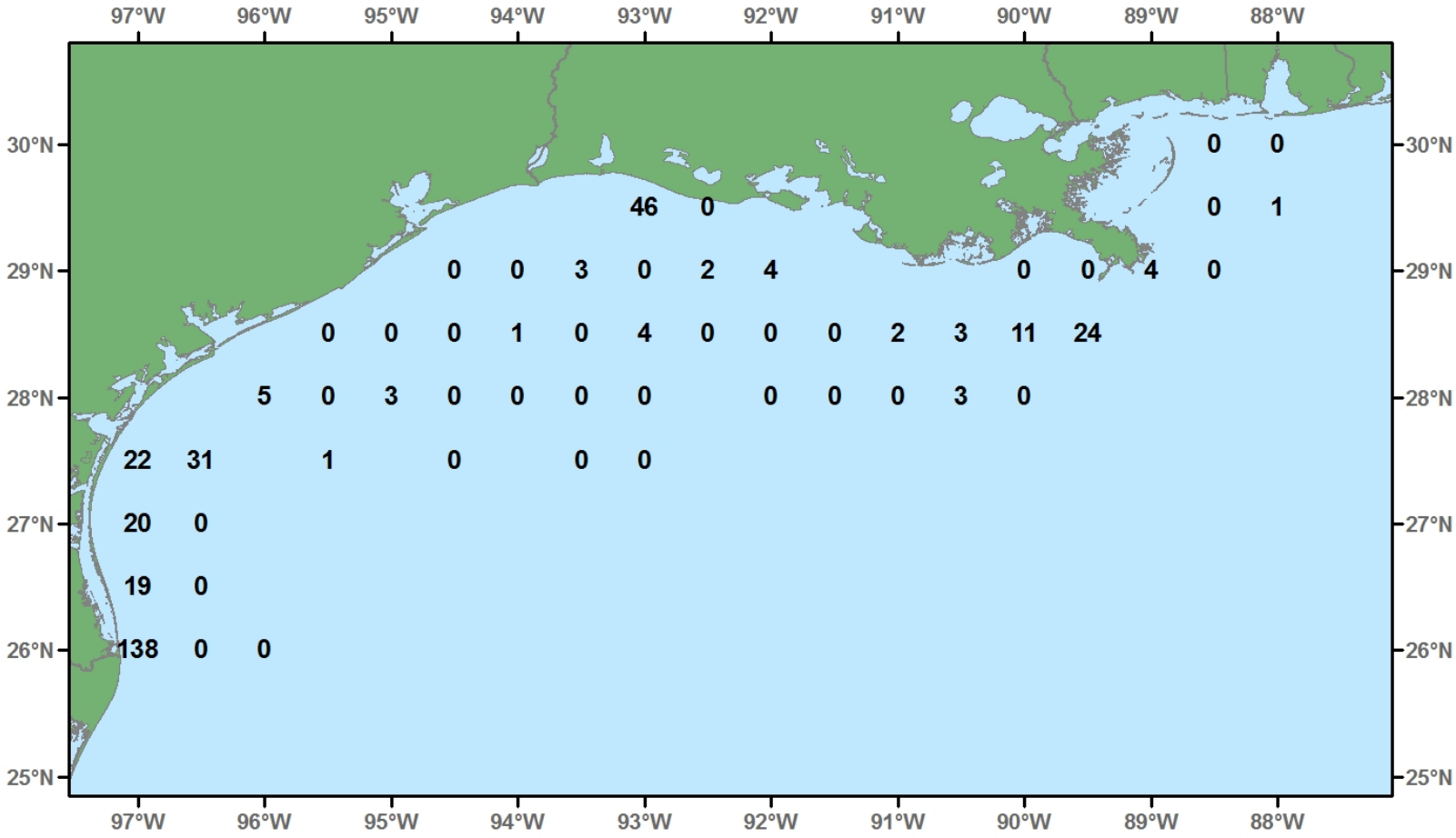

Figure 90. Arro w squid, Loligo pleii, number/hour for October-December 2007.

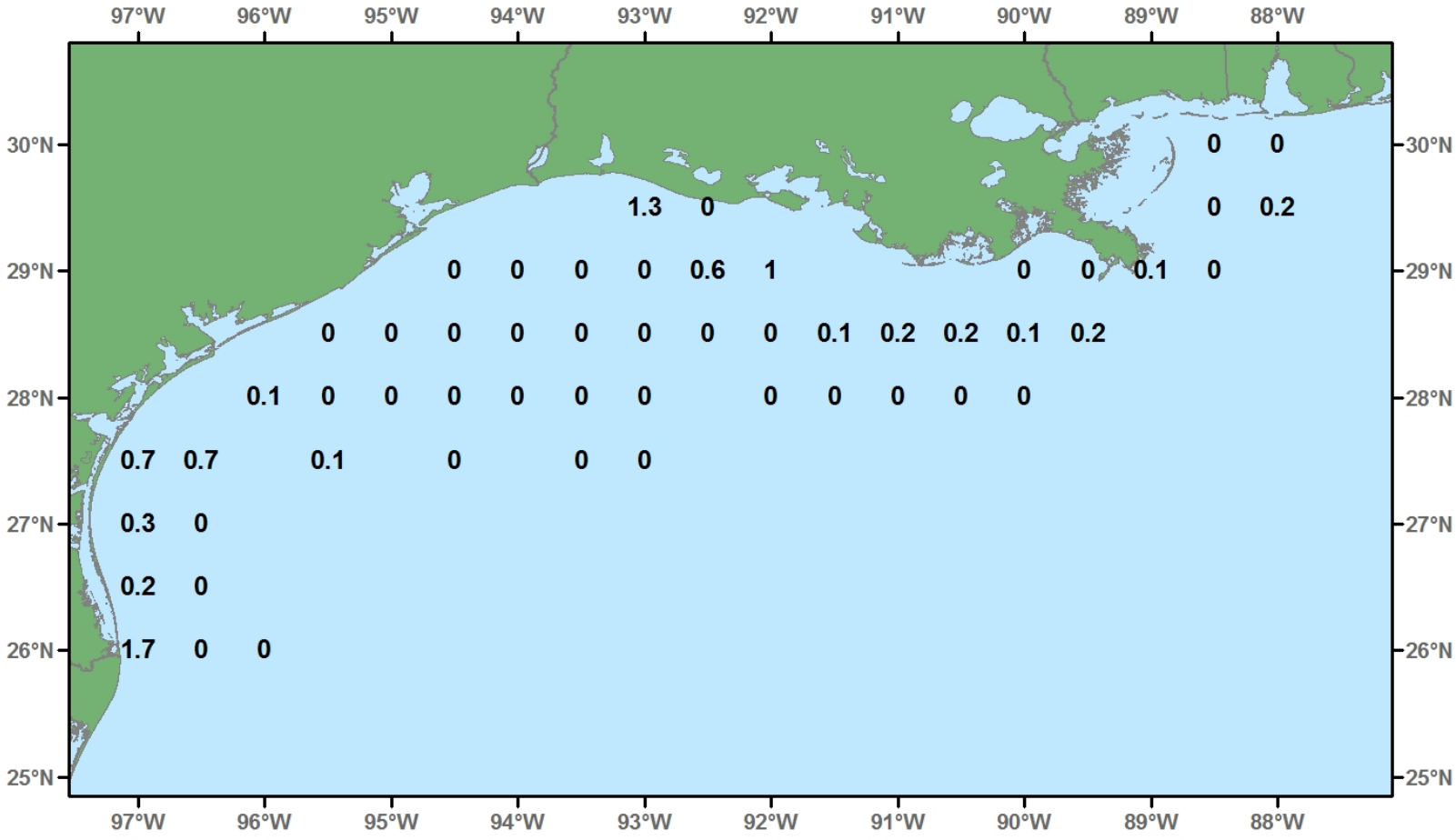

Figure 91. Arrow squid, Loligo pleii, lb/hour for October-December 2007.

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