

SEAMAP ANNUAL REPORT

*to the
Technical Coordinating Committee
Gulf States Marine Fisheries Commission*

October 1, 1988 to September 30, 1989

**SEAMAP Subcommittee
Walter M. Tatum, Chairman**

October 18, 1989

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TECHNICAL COORDINATING COMMITTEE

GULF STATES MARINE FISHERIES COMMISSION

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SEAMAP SUBCOMMITTEE

WALTER M. TATUM, CHAIRMAN

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TOM VAN DEVENDER
SEAMAP COORDINATOR
GULF STATES MARINE FISHERIES COMMISSION

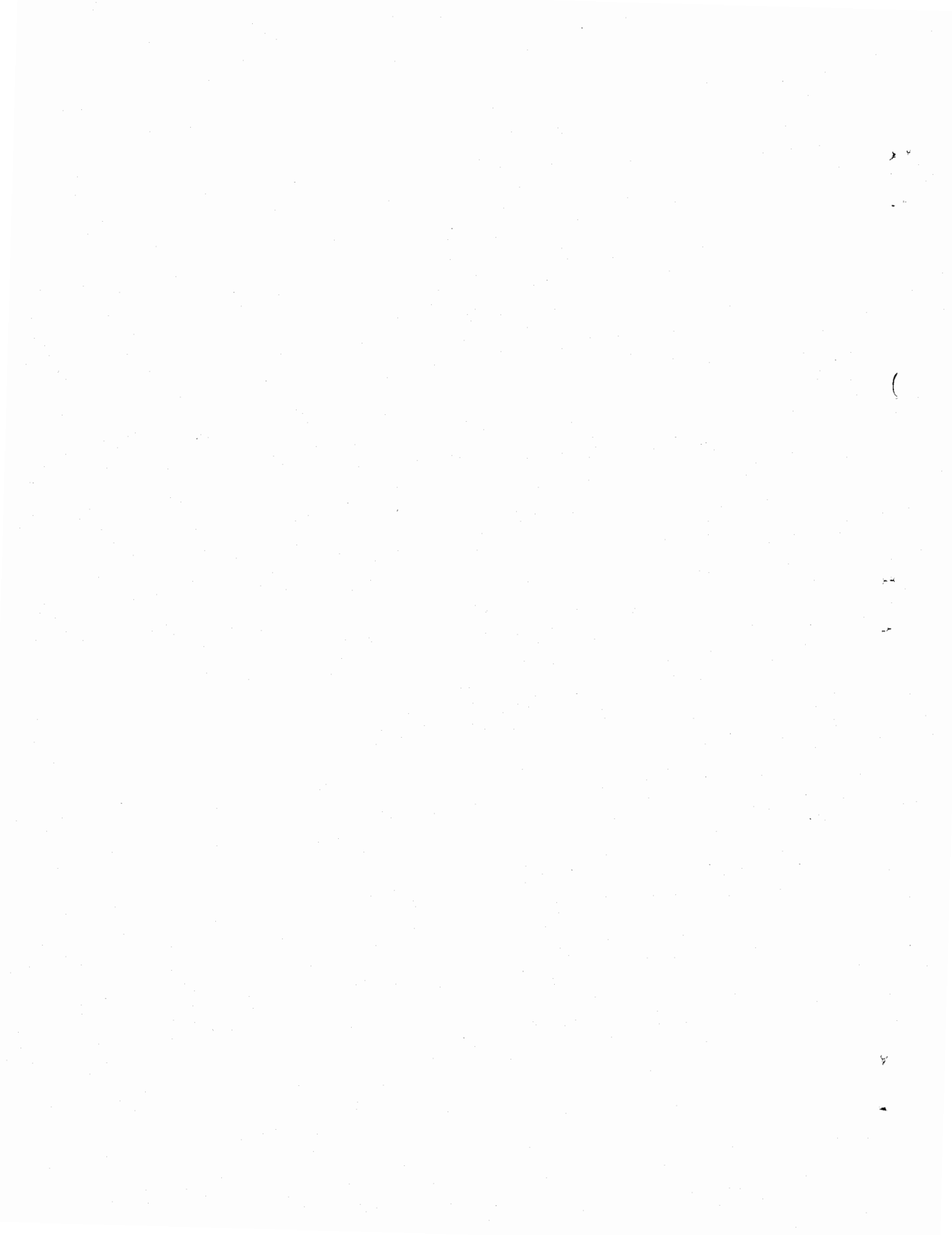


TABLE OF CONTENTS

| | |
|----------------------------------------------------------|----|
| Introduction | 1 |
| 1989 SEAMAP Resource Surveys | 3 |
| Fall Shrimp/Groundfish Survey | 5 |
| Louisiana Seasonal Trawl Surveys | 8 |
| Spring Plankton Survey | 10 |
| Summer Shrimp/Groundfish Trawl Survey | 12 |
| Fall Plankton Survey | 18 |
| Plankton and Environmental Data Surveys | 20 |
| 1989 SEAMAP Special Projects | 21 |
| Status and Trends Benthic Surveillance Project | 22 |
| Information Services | 25 |
| SEAMAP Information System | 26 |
| Data Management | 27 |
| Real-Time Data | 29 |
| Red Drum Studies | 38 |
| SEAMAP Archiving Center | 39 |
| SEAMAP Invertebrate Plankton Archiving Center | 40 |
| Program Management | 41 |
| Administration | 43 |
| Proposed FY1990 Activities | 44 |
| Publications | 49 |
| FY1989 Financial Report | 50 |
| Appendices | 51 |



INTRODUCTION

The Southeast Area Monitoring and Assessment Program (SEAMAP) is a State/Federal/university program for collection, management and dissemination of fishery-independent data and information in the southeastern United States. The program presently consists of three operational components, SEAMAP-Gulf of Mexico, which began in 1981, SEAMAP-South Atlantic, implemented in 1983, and SEAMAP-Caribbean, formed in mid-1988.

Each SEAMAP component operates independently, planning and conducting surveys and information dissemination in accordance with administrative policies and guidelines of the National Marine Fisheries Service's Southeast Regional Office (SERO).

Federal programmatic funding for SEAMAP activities and administration was appropriated in Fiscal Years 1985, 1986, 1987, 1988, and 1989 (October 1, 1988 through September 30, 1989). State and Commission funding allocations for FY1986, FY1987, FY1988, and FY1989 were handled through State-Federal cooperative agreements, administered by NMFS/SERO and NMFS/SEFC.

In FY1989, SEAMAP operations continued for the eighth consecutive year. SEAMAP resource surveys included the Fall Shrimp/Groundfish Survey, Louisiana seasonal trawl surveys, Spring Plankton Survey, Summer Shrimp/Groundfish Trawl Survey, September Plankton Survey and plankton and environmental data surveys. Special projects for FY1989 consisted of the Status and Trends Benthic Surveillance Project. Other FY1989 activities included SEAMAP information services and program management. Resource survey areas in FY1989 are shown in Figure 1.

This report is the ninth in a series of annual SEAMAP Subcommittee reports to the Technical Coordinating Committee (TCC) of the Gulf States Marine Fisheries Commission. It is intended to inform the TCC of SEAMAP-Gulf of Mexico activities and accomplishments during FY1989, from October 1, 1988 through September 30, 1989, and proposed SEAMAP activities for FY1990.

Appreciation is gratefully extended to the staff of the Gulf States Marine Fisheries Commission, and to the NMFS-Mississippi Laboratories, for their considerable assistance in the preparation of this document.

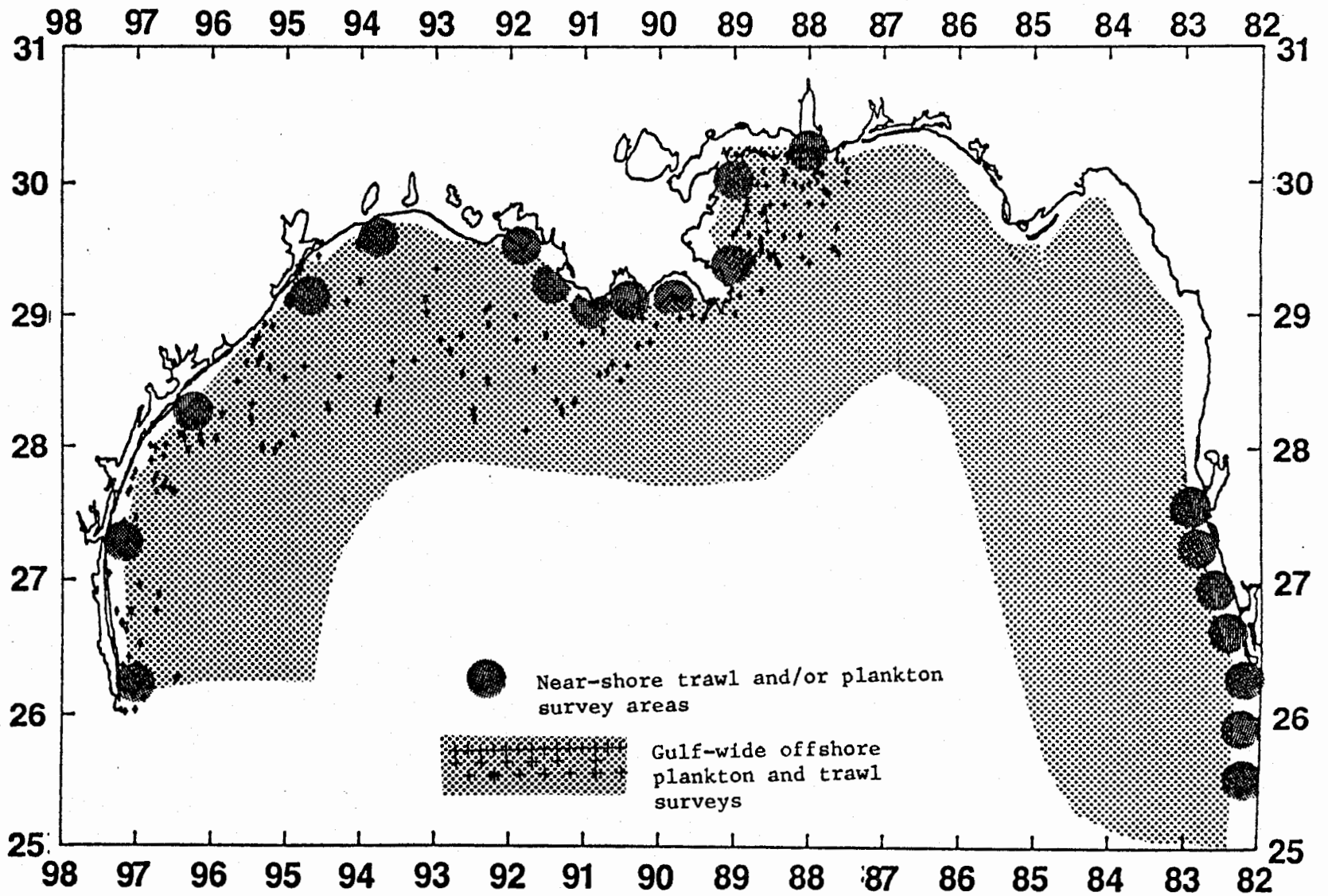


Figure 1. 1989 SEAMAP Survey Areas

1989 SEAMAP RESOURCE SURVEYS

FALL SHRIMP/GROUNDFISH SURVEY

The 1988 Fall Shrimp/Groundfish Survey was conducted from October 3 - December 6, 1988, from off Pensacola, Florida to the U.S.-Mexican border. Vessels from NMFS, Mississippi, Louisiana and Texas sampled inshore and offshore waters to 60 fm, covering a total of 328 trawl stations, in addition to plankton and environmental sampling.

Sampling design was modified from previous fall surveys to conform to the summer shrimp/groundfish cruise; objectives of the survey were:

- (1) sample the northern Gulf of Mexico to determine abundance and distribution of demersal organisms from inshore waters to 60 fm;
- (2) Obtain length frequency measurements for major finfish and shrimp species to determine population size structures;
- (3) Collect environmental data to investigate potential relationships between abundance and distribution of organisms and environmental parameters.
- (4) Collect ichthyoplankton samples to determine relative abundance and distribution of eggs and larvae of commercial and recreationally important fish species.

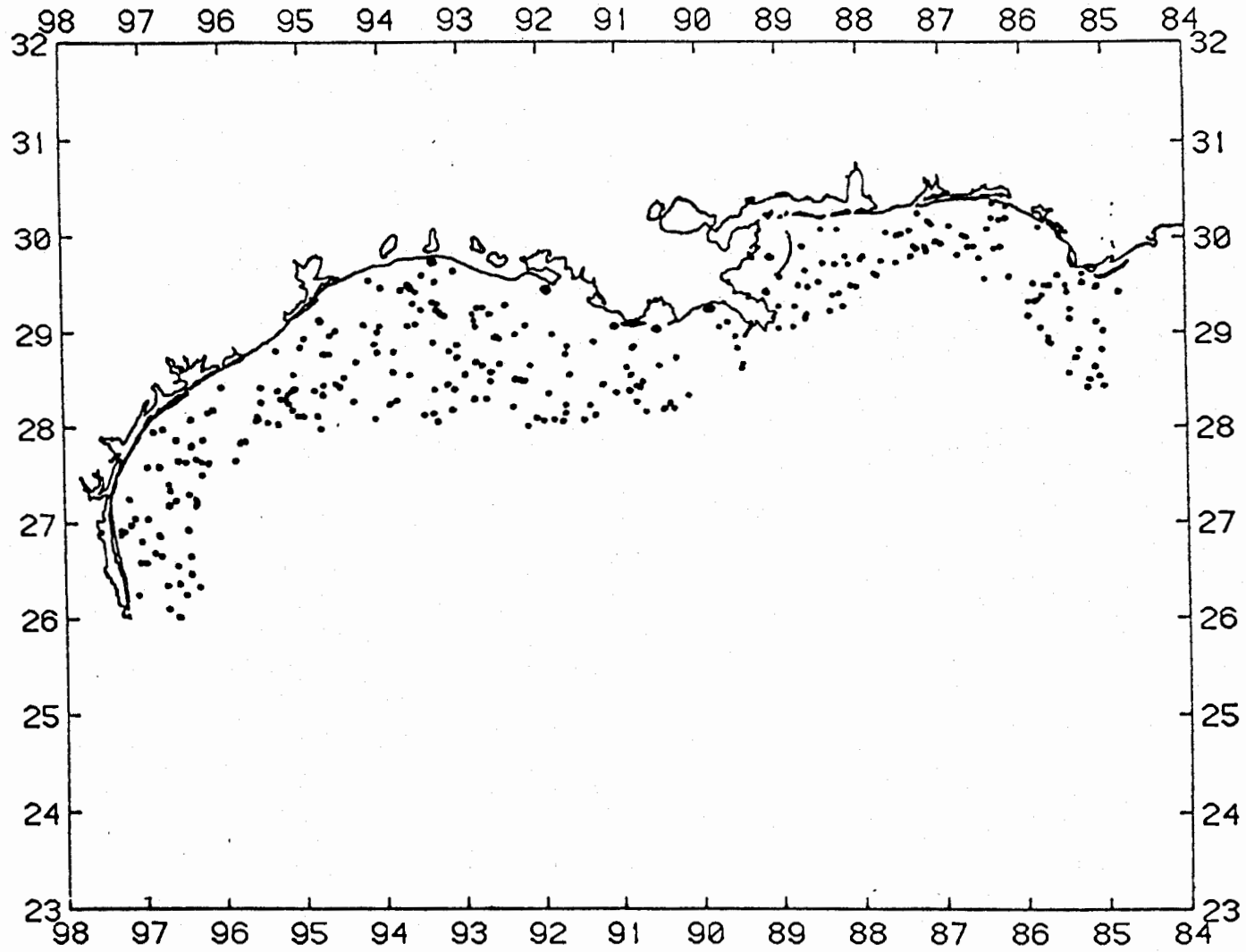
SURVEY SUMMARY

During the survey the NOAA Ship OREGON II sampled offshore waters and territorial Louisiana and Texas waters. The R/V TOMMY MUNRO sampled Mississippi territorial and offshore waters. The R/V PELICAN sampled Louisiana territorial and offshore waters. Texas vessels sampled within territorial waters. Planned trawling activities by an Alabama vessel were cancelled due to weather conditions.

Of the total 328 trawl samples taken, NMFS completed 206 stations; Mississippi 22, Louisiana 20 and Texas 80 trawl stations. Areas of trawl stations are indicated on Figure 2. All vessels took environmental data, including temperature, salinity and oxygen.

In the offshore samples catch rates were higher in the 40-49 fm strata with catches higher at night in the east delta stratum.

Ichthyoplankton data were collected by all, except Texas vessels, at sample sites occurring nearest to half-degree intervals of latitude/longitude. A total of 52 stations were sampled with bongo and/or neuston nets, as encountered along cruise tracks: NMFS completed 39 ichthyoplankton stations; Louisiana 10; and Mississippi 3. All samples, except those taken by Louisiana, will be sorted at the Polish Sorting Center with specimens and data archived at the SEAMAP Archiving Centers.



7

Figure 2. Fall 1988 SEAMAP Shrimp/Groundfish Survey

LOUISIANA SEASONAL DAY/NIGHT TRAWL SURVEYS

The Louisiana Department of Wildlife and Fisheries is conducting seasonal day and night surveys as part of its continuing effort to provide comparative information on the abundance and distribution of critical life states of major Gulf species, especially shrimp, and associated environmental parameters. The sampling design for these surveys has changed little from similar day/night surveys in past years.

SURVEY SUMMARY

Sampling was conducted in October and December 1988 and March and July 1989 aboard the R/V PELICAN. A stratified random station selection design was maintained, varying from the transects previously surveyed. A total of 48 stations was sampled day and night at depths to 19 fm. The July sampling was completed as part of the SEAMAP Summer Shrimp/Groundfish Survey.

All seasonal trawls were completed with the standard SEAMAP 40-ft net and doors. All organisms captured were identified, counted, measured and weighed; environmental data and plankton/neuston sampling were conducted at trawl stations. The area sampled covered Louisiana territorial and EEZ waters from 89°30' to 91°30' W. Long.

Additionally, LDWF conducted separate, territorial sea shrimp/groundfish surveys to provide coastwide monitoring and assessment information on the abundance and distribution of shrimp and groundfish in this area. These were conducted in conjunction with NMFS summer and fall shrimp/groundfish trawling surveys in the EEZ, using, however, a 16-ft otter trawl on state vessels. Sampling was done along 7 transects (Figure 3), to depths of 5 fm. All organisms were identified, weighed and measured. Transects corresponded to seven coastal study areas sampled previously. Plankton and environmental sampling was conducted at all stations. Plankton samples were not transhipped to the Polish Sorting Center, but archived and sorted at the LDWF Plankton Laboratory. Specimens and data will be shipped to the SEAMAP Archiving Center in St. Petersburg, FL.

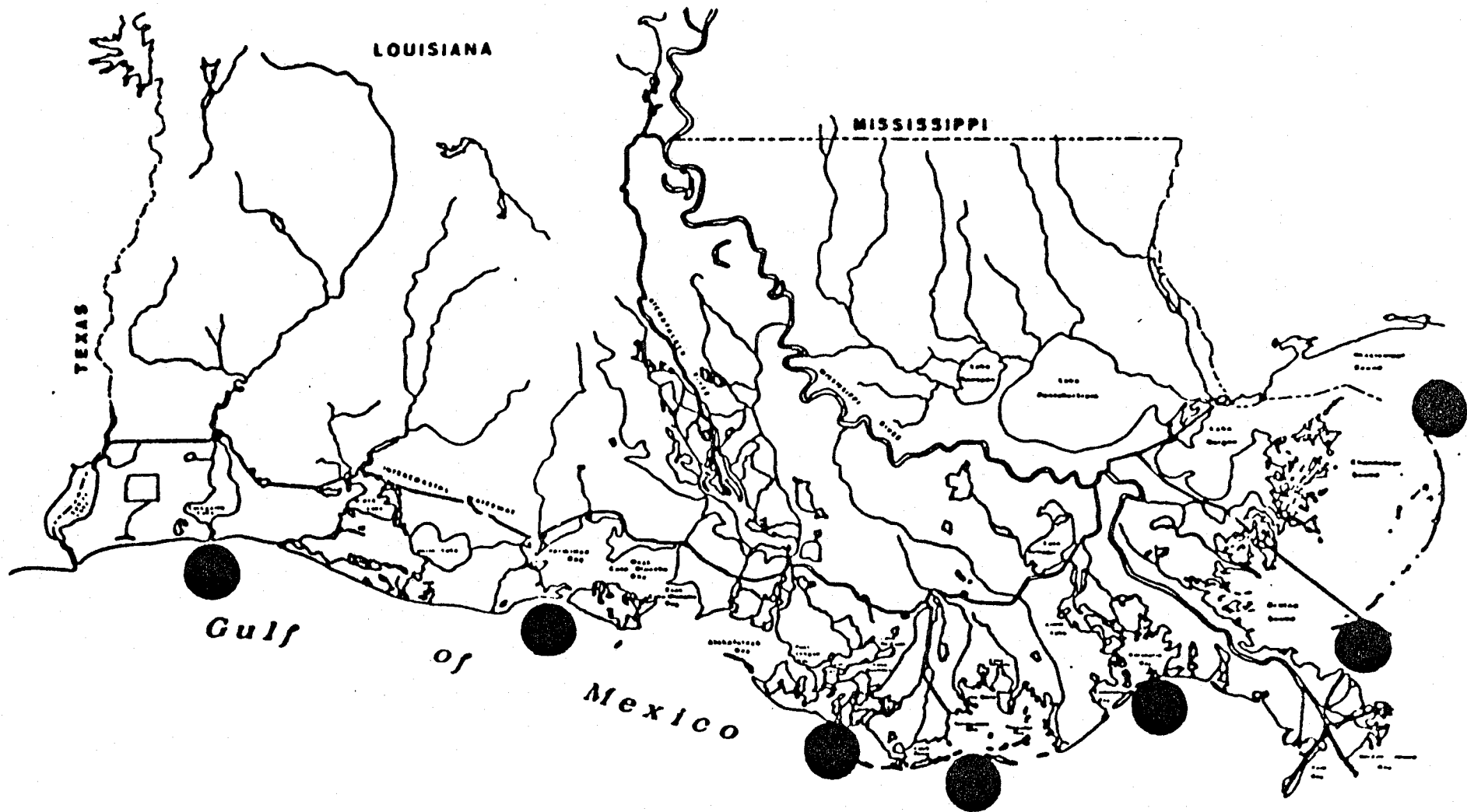


Figure 3. General Location of Territorial Sea Transects, 1989 Louisiana Seasonal Trawl Surveys.

SPRING PLANKTON SURVEY

For the seventh season since 1982, plankton samples were collected during the spring in the northern Gulf of Mexico. The NOAA Ship ALBATROSS IV and Florida's R/V HERNAN CORTEZ II sampled offshore waters from 24°-30° N. lat. and 84°-94° W. long. from April 24 to May 21, 1989. (Figure 4.) At irregular intervals during the survey, the NOAA vessel departed from the scheduled cruise track to run a series of stations across ocean fronts and other physical features. Time and location of these special stations were determined from satellite imagery processed by NMFS Mississippi Laboratories, NSTL facility. Samples taken at special frontal boundary stations consisted of bongo and neuston tows, chlorophyll and environmental data.

Plankton samples were taken with standard SEAMAP bongo and neuston samplers. The bongo sampler consisted of two conical 61-cm nets with 333 micron mesh. Tows were oblique, surface to near bottom (or 200 m) and back to surface. Wire angle was maintained at 45°. Neuston samples were taken with 947 micron mesh nets on 1 x 2 meter frames towed at the surface for ten minutes. Right bongo and neuston samples were initially preserved in 10% buffered formalin and after 48 hours were transferred to 95% ethyl alcohol for final preservation. Left bongo samples, only, were preserved via an ethanol/ethanol transfer to aid in preservation of larval otoliths.

A total of 150 stations was sampled. The ALBATROSS IV occupied 125 stations and the R/V HERNAN CORTEZ II sampled 25 stations along the west Florida shelf. Time restraints and inclement weather prevented the ALBATROSS IV from occupying twenty station sites.

Hydrographic data at all stations included surface chlorophylls, salinity, temperature and dissolved oxygen from surface, midwater and near bottom and forel-ule color.

Right bongo and neuston samples from SEAMAP stations will be transhipped by the NMFS Miami laboratory to the Polish Sorting Center (PSC) in Szczecin, Poland. Left bongo samples are currently archived at the Gulf Coast Research Laboratory in Ocean Springs, Mississippi. Samples from the special frontal boundary stations will be sorted at the Miami Laboratory. Salinity data from the Florida vessels were sent to the NMFS Pascagoula Laboratory for interpretation.

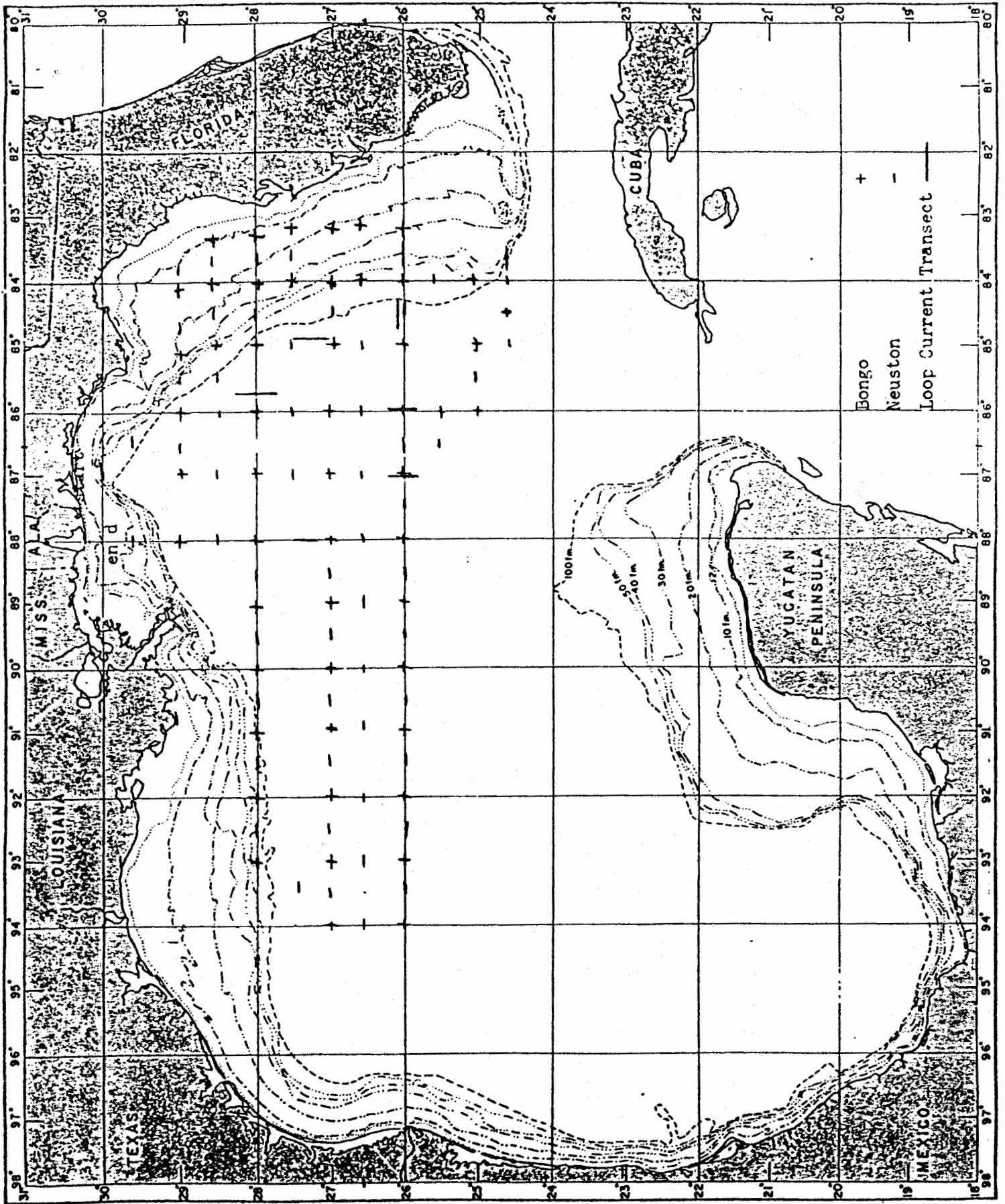


Figure 4. Survey Stations, 1989 Spring Plankton Survey

SUMMER SHRIMP/GROUNDFISH TRAWL SURVEY

Design of the 1989 Summer Shrimp/Groundfish Trawl Survey was recommended by the Shrimp/Bottomfish Work Group to the SEAMAP Subcommittee following a work group conference call in March 1988. A planning meeting of the work group was held in May 1989 to examine random station locations for each participant. Objectives of the survey were to:

- (1) monitor size and distribution of penaeid shrimp during or prior to migration of brown shrimp from bays to the open Gulf;
- (2) aid in evaluating the "Texas Closure" management measure of the Gulf Council's Shrimp FMP; and
- (3) provide information on shrimp and bottomfish stocks across the northern Gulf of Mexico from inshore waters to 50 fm.

SURVEY SUMMARY

The overall sampling strategy during the 1989 SEAMAP summary survey was to work from the eastern Gulf to the Texas/Mexico border, in order to sample during or prior to migration of brown shrimp from bays to the open Gulf area. The entire survey occurred from June 2 to July 16, 1989. SEAMAP sampling conducted east of the Mississippi River, from July 10 to July 14 re-surveyed eastern areas after emigration of brown shrimp from inshore waters. Sampling locations east and west of the Mississippi River Delta, by vessel, are shown in Figures 5-7 for the following dates: combined June and July sampling east of the river (June 7 to July 14), Gulf waters off Texas (June 6 to July 10), and waters off Louisiana west of the River (July 10 to July 16).

During the survey, the NOAA Ship OREGON II and R/V TOMMY MUNRO sampled offshore and inshore Gulf waters with 40-ft trawls. Alabama's R/V VERRILL sampled offshore Alabama waters with 16-ft trawls in waters less than 5 fm and 40-ft trawls in deeper waters. The R/V PELICAN sampled both Louisiana state waters and offshore waters with 40-ft nets, and Texas vessels sampled Texas state waters and offshore waters with 20-ft nets.

A total of 311 trawl samples was taken from coastal and offshore waters out to 50 fm from Perdido Bay, Alabama, to Brownsville, Texas. All vessels took environmental data, including temperature, salinity, oxygen, and chlorophyll at each station.

In June catch rates of brown shrimp east of the River were low, with a maximum catch of 37.5 lb/hr of 26-count shrimp. White shrimp catches east of the River were all less than 1.0 lb/hr. The largest pink shrimp catch rate east of the River was 10.2 lb/hr of 78-count shrimp taken in 2 fm of water off Gulf Shores, Alabama. The next largest pink shrimp catch rate east of the River in June was 4.2 lb/hr of 32-count shrimp south of Perdido Bay in 10 fm. Finfish

catch rates east of the River were generally low to moderate, with the largest catch on June 18 of 147 lb/hr with sea catfish predominating.

Moderate catches of brown shrimp were also made off Texas from June 2 to July 10. The largest catch rate occurred June 6 off Matagorda Bay in 10 fm (158.4 lb/hr of 64-count shrimp). White shrimp catches off Texas were low with the largest catch, 9.9 lb/hr of 15-count shrimp, taken southwest of Galveston Bay in 6 fm. Catch rates for pink shrimp were generally low off Texas, though the largest catch was 35.4 lb/hr of 62-count shrimp north of the mouth of the Rio Grande in 12 fm. Finfish catch rates were moderate to low in Texas's inshore and offshore waters. The largest catch of finfish was 945.0 lb/hr off the entrance to Galveston Bay with croaker predominating.

In July's samples west of the river (Louisiana) brown shrimp catches were low with the largest catch rate of 16.0 lb/hr of 42-count shrimp occurring southeast of Cameron Island in 10 fm. White shrimp catches were low, with a maximum catch rate of 6.9 lb/hr of 16-count shrimp taken in 12 fm southwest of Terrebonne Bay. Catches of pink shrimp were very low off the Louisiana coast with a maximum catch rate of 1.6 lb/hr of 20-count shrimp. Finfish catch rates were moderate with the largest catch rate of 1,408 lb/hr taken on July 13 with Gulf butterfish predominating.

In July sampling east of the Mississippi River, brown shrimp catches were low with the highest rate of 16.2 lb/hr of 44-count shrimp taken south of Dauphin Island, Alabama in 9 fm on July 13. Highest catch rate of white shrimp east of the River was 9.0 lb/hr of 17-count shrimp also taken south of Dauphin Island in 7 fm. The highest pink shrimp catch rate east of the River was 12.9 lb/hr of 24-count shrimp taken south of Mobile Bay in 8 fm. Finfish catches rates east of the River in July were low with a maximum catch rate of 294 lb/hr reported in 14 fm east of the Chandeleur Islands with sand seatrout predominant in the sample.

West of the Mississippi River Delta, hypoxic bottom waters (less than 2.0 parts per million) were noted in several areas between 89°41.4' and 93°11.6' W. Long. in 7-14 fm (Figure 8).

Figure 5

1989 Summer Shrimp/Groundfish Survey Stations

June 7 - July 14

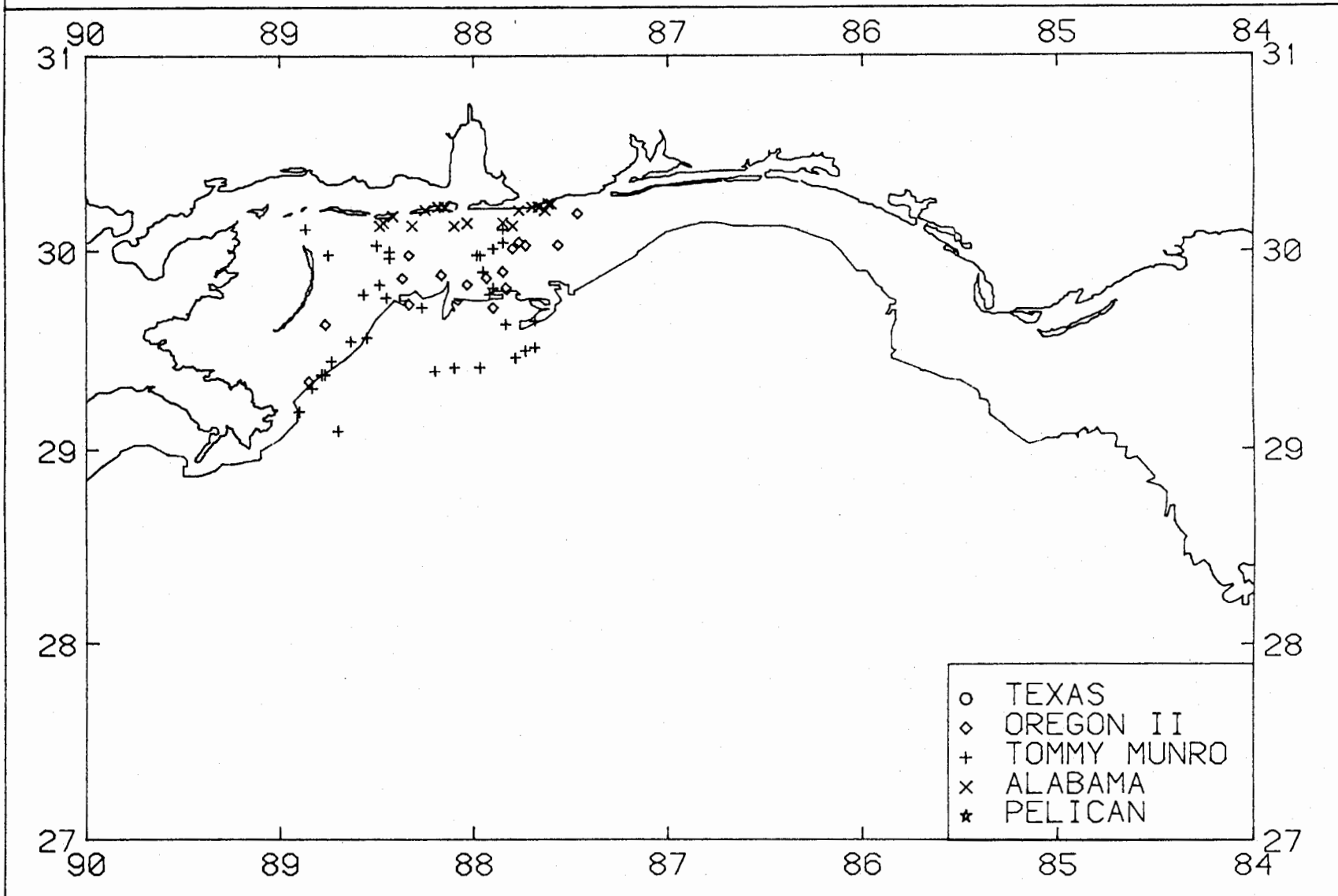


Figure 7

1989 Summer Shrimp/Groundfish Survey Stations

July 10 - July 16

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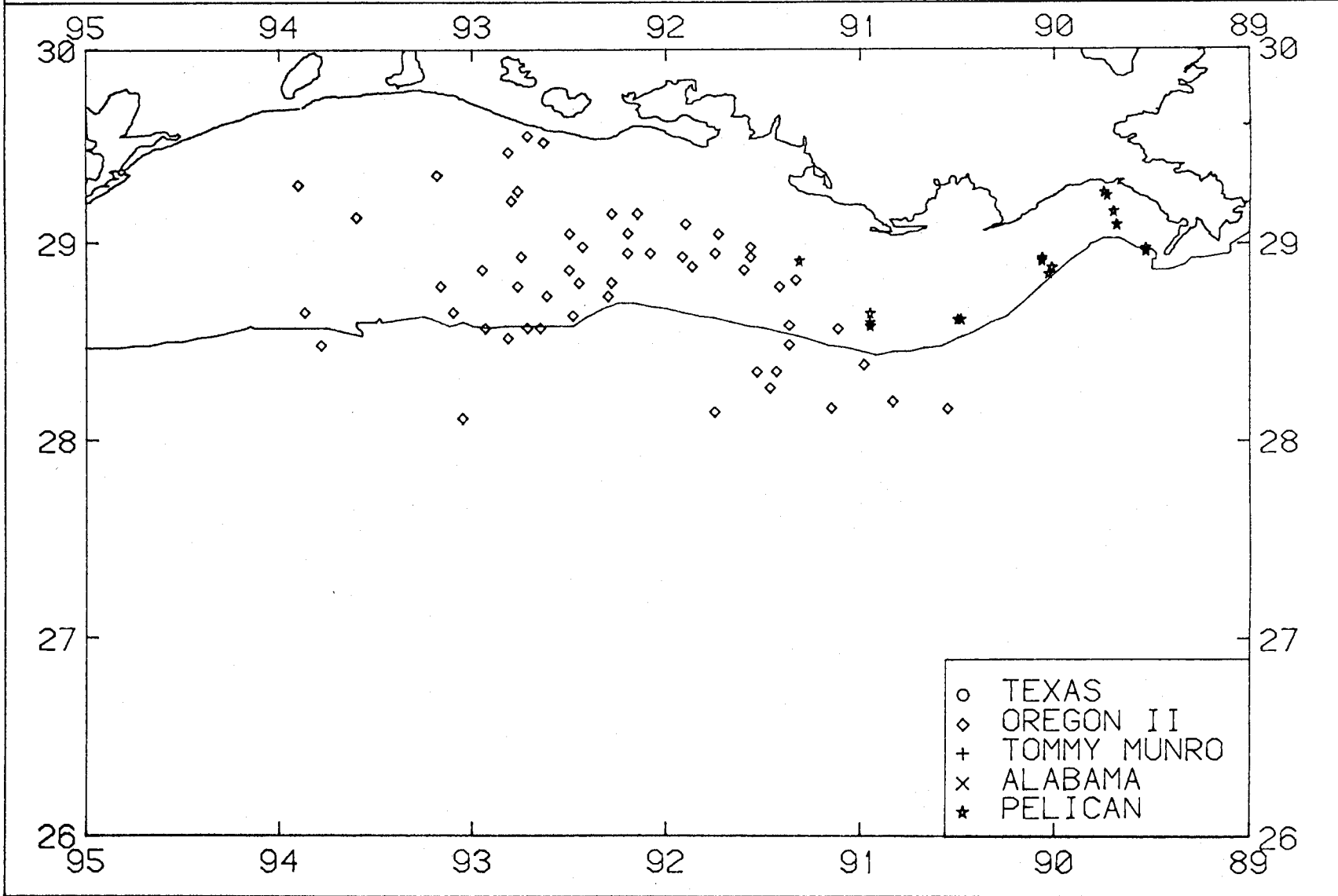
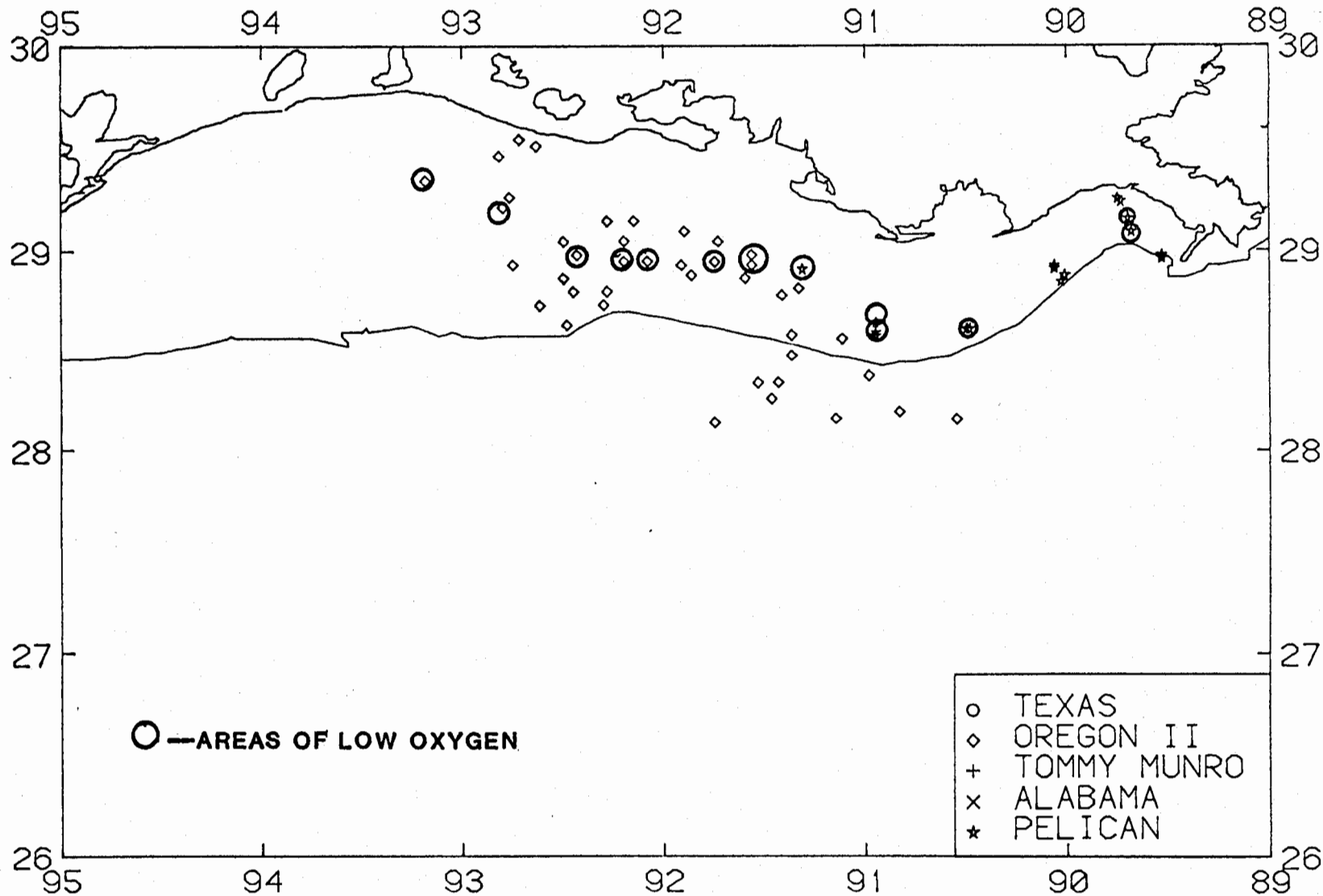


Figure 8

1989 Summer Shrimp/Groundfish Survey Hypoxic Stations

July 10 - July 16



FALL PLANKTON SURVEY

The first fall ichthyoplankton survey to assess abundance and distribution of king mackerel eggs and larvae occurred in August 1984. No sampling survey was conducted in 1985; however expanded surveys in 1986, 1987, 1988 and in the current year covered Gulf waters from Florida Bay to Brownsville, Texas. Vessels from Florida, Alabama, Mississippi, Louisiana and from NMFS surveyed from September 11 through October 12, 1989 for a total of 154 stations (Figure 9).

The NOAA Ship OREGON II sampled 77 stations from 83°00' to 97°00' W. long. and 26°00' to 30°30' N. lat., at depths from 5 to 100 fm. Weather and seas in the Gulf curtailed sampling at 19 scheduled stations. Chlorophyll samples were filtered at each station. Florida's R/V HERNAN CORTEZ II sampled 36 stations from off Tampa Bay southward to the Florida Straits. Stations were located along a 30-minute latitude/longitude grid from inshore waters to the shelf edge. An Alabama vessel sampled 10 stations at the mouth and outside Mobile Bay. The R/V TOMMY MUNRO sampled 5 stations south of Mississippi Sound along a 30-minute grid, and the R/V PELICAN sampled 12 locations off Louisiana, taking 26 samples with a 60 cm bongo net and 2 x 1 m neuston net.

Stations were sampled with standard SEAMAP bongo nets with 333 micron mesh and/or 1 x 2 meter neuston nets fitted with 947 micron mesh. Hydrographic sampling included chlorophylls, salinity, temperature and dissolved oxygen from surface, mid-water, and bottom, water transparency and water color. Right bongo samples will be transhipped by the NMFS Miami Laboratory to the Polish Sorting Center; left bongo and neuston samples will be stored at the SEAMAP Invertebrate Archiving Center at the Gulf Coast Research Laboratory for possible future sorting. Louisiana plankton samples will be sorted by LDWF according to SEAMAP protocols and specimens and data provided to the SEAMAP Archiving Center.

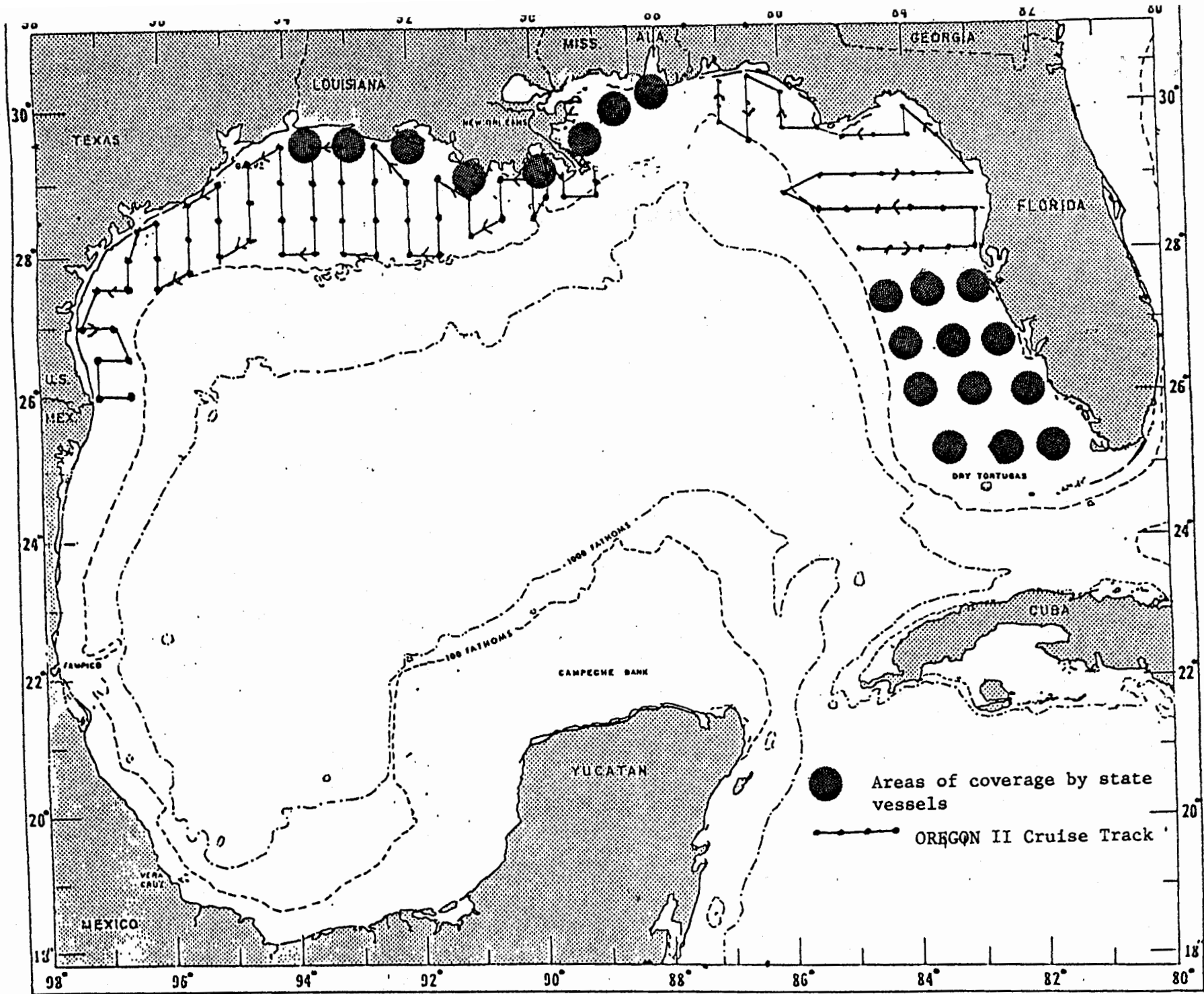


Figure 9. Fall Plankton Survey

PLANKTON AND ENVIRONMENTAL DATA SURVEYS

As in previous years, plankton samples and environmental data were collected routinely during most SEAMAP trawling surveys. During the Summer Shrimp/Groundfish Survey, 50 plankton tows were piggybacked on the NMFS and state vessels, sampling randomly-generated trawl stations within the standard 30-min SEAMAP grids. Plankton and environmental data were also taken by Louisiana at all of its Seasonal Day/Night Survey stations. Samples were taken by participants with a 60-cm bongo net and a standard NMFS neuston net. Louisiana sampled with a 0.5 m ring net and a 20.0 cm bongo net.

Objectives of these piggybacked surveys were: (1) to collect plankton samples throughout the survey area; and (2) to collect associated hydrographic and environmental data at each plankton station. Additionally, environmental data (salinity, temperature, and oxygen from surface, mid-depth and bottom waters, and chlorophyll from surface and bottom waters) were collected during the shrimp/groundfish surveys; salinity, temperature, and oxygen were taken at the surface, middepth and bottom. Wind direction and speed and wave height were taken at all trawl stations.

Samples from the right side of the bongo nets and neuston samples were shipped to the NMFS-Miami Laboratory for transshipment to Poland, where they will be sorted to the family level (both ichthyoplankton and selected crustacean and molluscan species). The left bongo sample from each station is retained as a back-up in the event of damage or loss of the specimens sent to Poland, and maintained at the Gulf Coast Research Laboratory.

Chlorophyll samples were filtered at each station using GF/C filters. All filters were put in petri disks and wrapped in foil for onboard storage in the freezer. Chlorophyll analysis will be completed ashore. Preservation of plankton samples was in buffered Formalin prior to transfer to ethanol.

In addition to these piggybacked surveys, two major SEAMAP plankton surveys were conducted in 1989, detailed earlier.

1989 SEAMAP SPECIAL PROJECTS

STATUS AND TRENDS BENTHIC SURVEILLANCE PROJECT

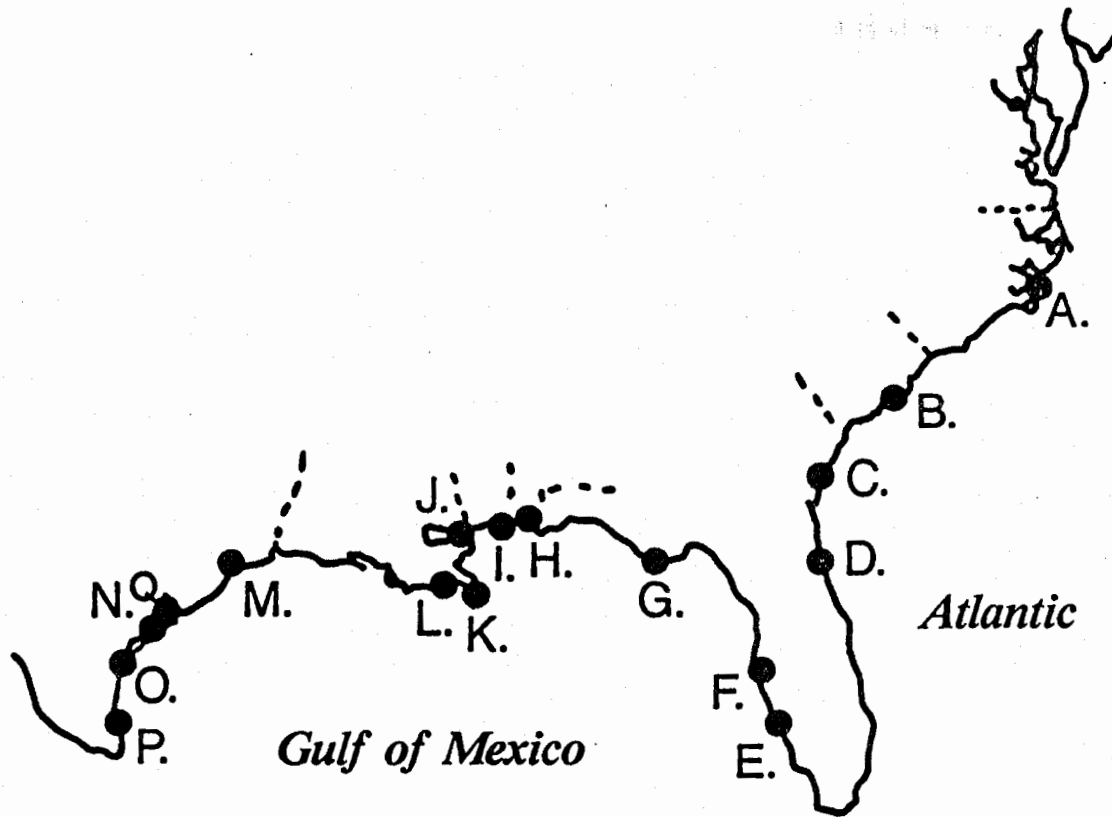
For the sixth year, the SEAMAP Program actively participated in the nationwide sampling for contaminants in coastal fishes and sediments, as part of the NOAA National Status and Trends Benthic Surveillance Project. Both SEAMAP Gulf of Mexico and South Atlantic supplied personnel from state fishery management agencies to provide guidance in locating concentrations of the target species, Atlantic croaker and spot. Sampling sites for the Gulf are shown in Figure 10.

SURVEY SUMMARY

Sampling methodologies in the 1989 Benthic Surveillance Project were identical to those of the four previous surveys; Gulf sites included: Tampa Bay, St. Andrews Bay, Pensacola Bay, Pascagoula River, Mississippi River Delta, Galveston Bay, San Antonio Bay, Barataria Bay, and Choctawhatchee Bay.

Sampling in the Gulf of Mexico was conducted from August 28 to October 10, 1989 with the NOAA Ship FERREL serving as the primary platform. Analyses of trace metals, aromatic and chlorinated hydrocarbons and other contaminants in fish tissues and sediments are coordinated by the NMFS Beaufort Laboratory. While in previous surveys the Oxford Laboratory and Charleston Laboratory performed histopathological studies on collected spot and croaker from the Gulf, samples from the 1988 survey will be analyzed at the NMFS Northwest Fisheries Center in Seattle.

Many of the sites are large, complex estuarine systems with a variety of microenvironments which may vary from relatively pristine to heavily impacted. This within-site variability led to an intensive examination in Galveston Bay during the 1988 and 1989 surveys. Galveston Bay was selected for (1) an abundance of target fish, Atlantic croaker and spot; (2) a complex bay system with a number of sites with man-made impacts; (3) a site where relatively strong metal and organic signals were obtained from 1984 samples; and (4) a major maritime population center with industrial, shipping and fishing activities. A total of five subsites were selected in the Galveston Bay system with fish and sediment samples collected at each.



| | <u>SITES</u> |
|---------------------------------------|--------------|
| A. Pamlico Sound | 1 |
| B. Charleston Harbor | 1 |
| C. Sapelo Sound | 1 |
| D. St. Johns Riv. Estuary | 1 |
| E. Charlotte Harbor | 1 |
| F. Tampa Bay | 1 |
| G. Apalachicola Bay | 1 |
| H. Mobile Bay | 2 |
| I. Mississippi Sound— Round Island | 1 |
| J. Mississippi Sound— Heron Bay | 1 |
| K. Mississippi Riv. Delta | 1 |
| L. Barataria Bay | 1 |
| M. Galveston Bay | 1 |
| N. San Antonio Bay | 1 |
| O. Corpus Christi Bay | 1 |
| P. Lower Laguna Madre | 1 |
| Q. Lavaca Bay | 1 |

Figure 10. Status and Trends Benthic Surveillance Project Sampling Sites



INFORMATION SERVICES

INFORMATION SERVICES

Information from SEAMAP activities is provided to user groups through the program administration and three complementary systems: the SEAMAP Information System (SIS), SEAMAP Archiving Center, for ichthyoplankton (SAC), and SEAMAP Invertebrate Plankton Archiving Center (SIPAC). Products resulting from SEAMAP activities can be grouped into two major categories, data sets (including, broadly, digital data and collected specimens) managed by SIS, SAC and SIPAC, and program information. Program information is discussed in the Program Management section of this report.

SEAMAP INFORMATION SYSTEM

Biological and environmental data from all SEAMAP surveys are included in the SEAMAP Information System, managed in conjunction with NMFS/SEFC. Raw data are edited by the collecting agency and verified by the SEAMAP Data Manager prior to entry into the system. With final verification of environmental data complete for 1986, all SEAMAP surveys in 1982 through 1985 have been entered into the system. Data from 1986 and 1987 surveys are in the process of being verified, while data entry and edit continues for 1989 surveys. Verified, non-confidential SEAMAP data are available conditionally to all requestors, although the highest priority is assigned to SEAMAP participants. A total of 73 requests have been received to date. Seventy-one have been completed and work is being performed on the remaining requests.

Requested SEAMAP data were used for a multitude of purposes:

- Evaluating the abundance and size distribution of penaeid shrimp in Federal and state waters to assist in determining opening and closing dates for commercial fisheries.
- Assessing shrimp and groundfish abundance and distribution and their relationship to such environmental parameters as temperature, salinity and oxygen.
- Identifying environmental parameters associated with concentrations of larval finfish.
- Compiling the 1983, 1984, 1985, and 1986 SEAMAP Biological and Environmental atlases.
- Comparing catches of shrimp and groundfish captured by 40-ft versus 20-ft trawl nets.
- Compiling the 1986 SEAMAP Ichthyoplankton Atlas.

DATA MANAGEMENT

Biological and environmental data from all SEAMAP surveys are included in the SEAMAP Information System, managed in conjunction with NMFS-SEFC. Raw data are edited by the collecting agency and verified by the SEAMAP Data Manager prior to entry into the system. Data from all SEAMAP surveys in 1982 through 1987 have been entered into the system and data from 1988 and 1989 surveys are in the process of being verified, edited and entered for storage and retrieval.

Verified, non-confidential SEAMAP data are available conditionally to all requestors, although the highest priority is assigned to SEAMAP participants. A total of 86 SEAMAP data requests have been received and processed. In some instances, requests were filled promptly; in many cases, however, a substantial lag occurred because of the extremely large amount of data being collected on an increased number of surveys over those of past years. To date, 84 requests have been completed and work is being performed on those remaining.

The requirements report for an integrated data system, Data Management System Design Study for Gulf and South Atlantic, 1987, was completed in March 1987. The document identifies the high-level design specifications and recommended implementation plan for a module-based SEAMAP Data Management System (DMS). The design is based on information contained in the SEAMAP Gulf and South Atlantic DMS Requirements Document developed through a cooperative effort between NMFS and other SEAMAP participants. The document has five sections: (1) background, and brief descriptions of current centralized and proposed distributed systems; (2) summary of the Requirements Survey; (3) overview of the system's architecture; (4) description of developmental modules constituting the DMS design; and (5) modular implementation plan which includes costs and schedule.

The distributive processing SEAMAP Data Management System development for data entry, edit, upload, data base, data query, and download has been completed. Operational version are now located at six SEAMAP field sites. Approximately 57% of the total system estimated cost of \$529,251 has been committed to contracts or \$299,697. Approximately 94% of the committed contract money or \$282,534 has been utilized as of September 30, 1989. Delivery of the remaining PS/2's has been rescheduled for the last week in October 1989.

A centralized data management system is presently being used by NMFS for SEAMAP-Gulf Program. This system operates on a Burroughs 7811 computer located in Seattle, Washington, and depends on skilled programmers and computer operators for data entry, retrieval and display. SEAMAP participants submit their data to the SEAMAP Data Manager for system entry, who then assures the entry of data to the Burroughs. To verify the data, printed listings of newly entered data are produced and returned to the SEAMAP participant. Entry errors are corrected on the listing and the data are resubmitted. This mail-oriented loop iterates until all data are verified.

To retrieve data, SEAMAP participants must submit a Data Request and Use Agreement Form to the Data Manager. The Data Manager approves the request, and ensures the data are retrieved from the system by skilled programmers.

Outside users (e.g., Minerals Management Service, U.S. Army Corps of Engineers, etc.) may request listing of particular data sets. The information provided is used for efforts such as environmental impact statements, life histories studies, oceanographic process research, and long-term ecological trends strategy evaluation. Outside users, like the SEAMAP participants, submit the request to the SEAMAP Subcommittee through the SEAMAP-Gulf Coordinator for approval to proceed. Once the request is approved, information is provided by the Data Manager and staff members through a priority based, mail-oriented system.

The proposed system is decentralized, i.e., distributed. Thus, the SEAMAP users will be able to locally, and directly, enter and retrieve data. Software for the proposed system has been distributed to participants for trial runs of data input.

This proposed system will overcome the deficiencies of the current system (i.e., the time necessary to enter and retrieve data) and will provide powerful and flexible local data analysis and display capabilities. Under the proposed system, each SEAMAP site will enter, verify and edit their data, eliminating the mail-oriented loop necessary to enter/edit/verify data under the current system. Secondly, each site will have the capability of locally accessing SEAMAP data, utilizing a user-friendly system. Local data retrieval will allow the data to be accessed in a timely manner with a minimum amount of effort and programming skills.

Under the proposed system, outside users may continue to request special data sets for research or study. Also, SEAMAP participants may use the Special Request mechanism for data sets too large for economical downloading by telephone. These requests will be handled by a Central Operations staff in the same priority based, mail-oriented manner as noted above.

REAL-TIME DATA

A major function of the SEAMAP Information System in 1989 was the processing of catch data from the Summer Shrimp/Groundfish Survey as near-real-time data. Data were transmitted three times weekly via cellular phone to the NMFS Pascagoula Laboratory from the NOAA vessel, while the states' data were entered into the system weekly. Plots of station locations and catch rates of shrimp, squid and dominant finfish species were prepared and edited at the NMFS Pascagoula Laboratory, and processed by GSMFC for weekly distribution to management agencies, fishermen, processors and researchers. Management agencies also received comprehensive data listings showing penaeid shrimp length-frequencies, sampling parameters and environmental conditions. Representative listings are shown in Figures 11-18.

SEAMAP89 DATA, OREGON II

| T STATION | DATE | LAT | LONG | TIME | DEP TEMPS.C | | | GEAR MIN | | FISH | TOWS | SHRIMP | FINFISH | CRK | SPT | TRT | CAT | OTHER | LBS |
|-----------|---------|---------|---------|------|-------------|------|------|----------|------|------|------|--------|---------|-----|-----|-----|-----|-------|-----|
| | | | | | FMS | SUR | BOT | BDO | TYPE | | | | | | | | | | |
| WD13 | 7/10/89 | 28-29.2 | 93-47.1 | 16 | 17 | 28.6 | 23.2 | 5.5 | ST | 10 | 1 | 0.2 | 185.2 | 0 | 31 | 4 | 0 | 109 | 46 |

CIES:BROWN WEIGHT: 0.2 NUMBER: 2 MODE: 0/ 0
(MM)/FREQ. 120/ 1 130/ 1

| T STATION | DATE | LAT | LONG | TIME | DEP TEMPS.C | | | GEAR MIN | | FISH | TOWS | SHRIMP | FINFISH | CRK | SPT | TRT | CAT | OTHER | LBS |
|-----------|---------|---------|---------|------|-------------|------|------|----------|------|------|------|--------|---------|-----|-----|-----|-----|-------|-----|
| | | | | | FMS | SUR | BOT | BDO | TYPE | | | | | | | | | | |
| WD11 | 7/10/89 | 28-39.9 | 93-52.8 | 17 | 15 | 28.4 | 26.7 | 6.5 | ST | 38 | 1 | 0.0 | 91.5 | 0 | 0 | 2 | 0 | 5 | 49 |

| T STATION | DATE | LAT | LONG | TIME | DEP TEMPS.C | | | GEAR MIN | | FISH | TOWS | SHRIMP | FINFISH | CRK | SPT | TRT | CAT | OTHER | LBS |
|-----------|---------|---------|---------|------|-------------|------|------|----------|------|------|------|--------|---------|-----|-----|-----|-----|-------|-----|
| | | | | | FMS | SUR | BOT | BDO | TYPE | | | | | | | | | | |
| WN04 | 7/10/89 | 29-18.9 | 93-54.0 | 22 | 8 | 28.9 | 26.8 | 2.7 | ST | 35 | 1 | 2.9 | 430.6 | 381 | 9 | 2 | 9 | 0 | 0 |

CIES:BROWN WEIGHT: 2.0 NUMBER: 62 MODE: 0/ 0
(MM)/FREQ. 90/ 3 100/ 10 110/ 21 120/ 13 130/ 4 140/ 2

CIES:WHITE WEIGHT: 0.7 NUMBER: 8 MODE: 0/ 0
(MM)/FREQ. 150/ 1 160/ 3 170/ 2 180/ 1

CIES:PINK WEIGHT: 0.2 NUMBER: 1 MODE: 0/ 0
(MM)/FREQ.

| T STATION | DATE | LAT | LONG | TIME | DEP TEMPS.C | | | GEAR MIN | | FISH | TOWS | SHRIMP | FINFISH | CRK | SPT | TRT | CAT | OTHER | LBS |
|-----------|---------|---------|---------|------|-------------|------|------|----------|------|------|------|--------|---------|-----|-----|-----|-----|-------|-----|
| | | | | | FMS | SUR | BOT | BDO | TYPE | | | | | | | | | | |
| WN07 | 7/11/89 | 29-08.2 | 93-36.0 | 00 | 11 | 28.3 | 26.8 | 5.8 | ST | 39 | 1 | 0.6 | 59.1 | 2 | 0 | 20 | 0 | 71 | 51 |

CIES:BROWN WEIGHT: 0.4 NUMBER: 18 MODE:130/ 2
(MM)/FREQ. 110/ 2 120/ 5 130/ 6 140/ 4 150/ 1

CIES:PINK WEIGHT: 0.2 NUMBER: 2 MODE: 0/ 0
(MM)/FREQ. 140/ 1 150/ 1

| T STATION | DATE | LAT | LONG | TIME | DEP TEMPS.C | | | GEAR MIN | | FISH | TOWS | SHRIMP | FINFISH | CRK | SPT | TRT | CAT | OTHER | LBS |
|-----------|---------|---------|---------|------|-------------|------|------|----------|------|------|------|--------|---------|-----|-----|-----|-----|-------|-----|
| | | | | | FMS | SUR | BOT | BDO | TYPE | | | | | | | | | | |
| WN11 | 7/11/89 | 28-47.1 | 93-10.7 | 05 | 15 | 28.3 | 23.7 | 5.2 | ST | 27 | 1 | 3.7 | 15.2 | 0 | 0 | 0 | 0 | 46 | 9 |

CIES:BROWN WEIGHT: 3.5 NUMBER: 75 MODE: 0/ 0
(MM)/FREQ. 110/ 11 120/ 21 130/ 13 140/ 18 150/ 11

CIES:PINK WEIGHT: 0.2 NUMBER: 1 MODE:154/ 1
(MM)/FREQ. 150/ 1

Figure 11 Real-Time Data Listing, 1989 Shrimp/Bottomfish Survey

SEAMAP89

SAMPLING DATES FROM 7/11/89 TO 7/14/89

AVERAGE BROWN SHRIMP CATCH IN POUNDS/HOUR

31

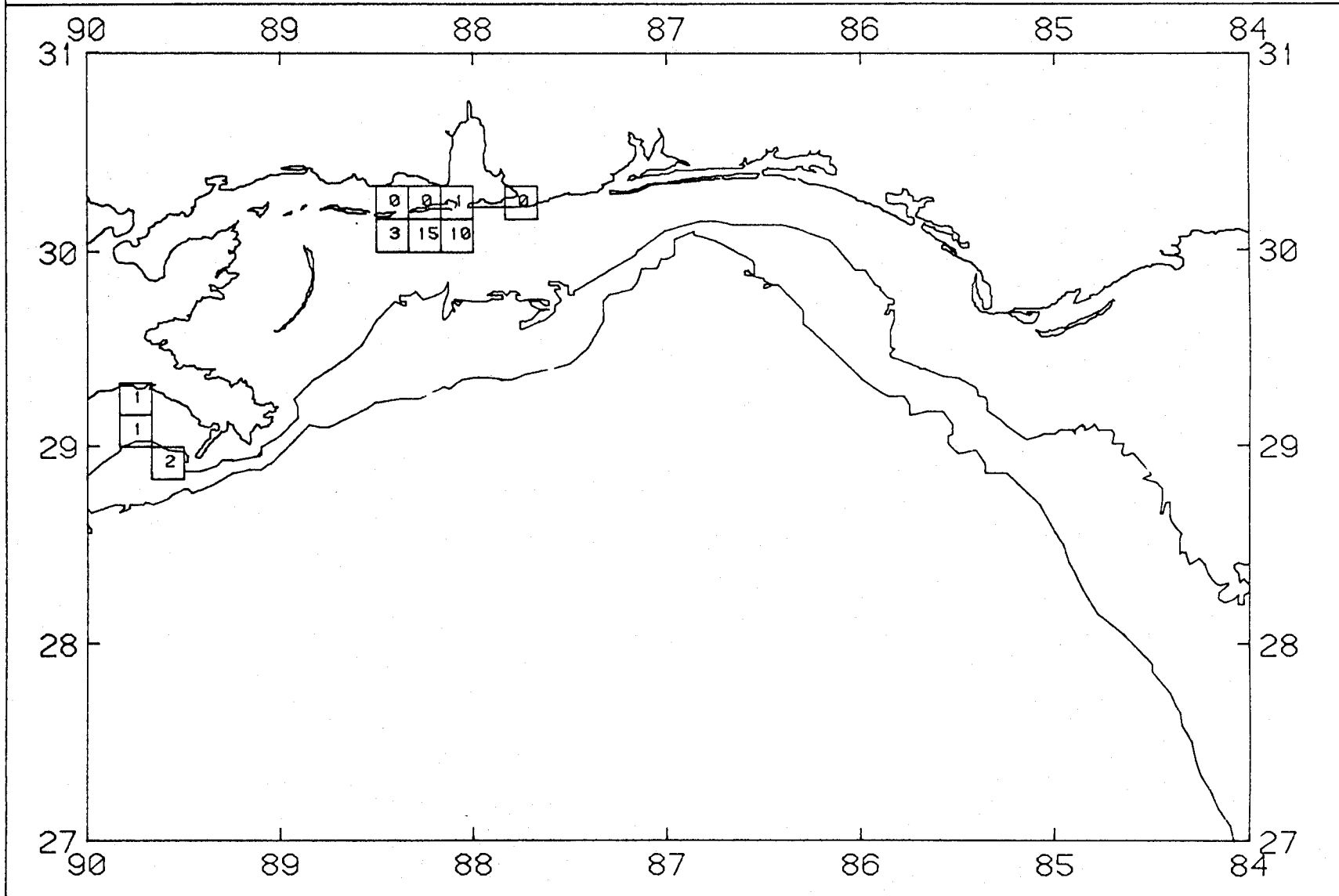
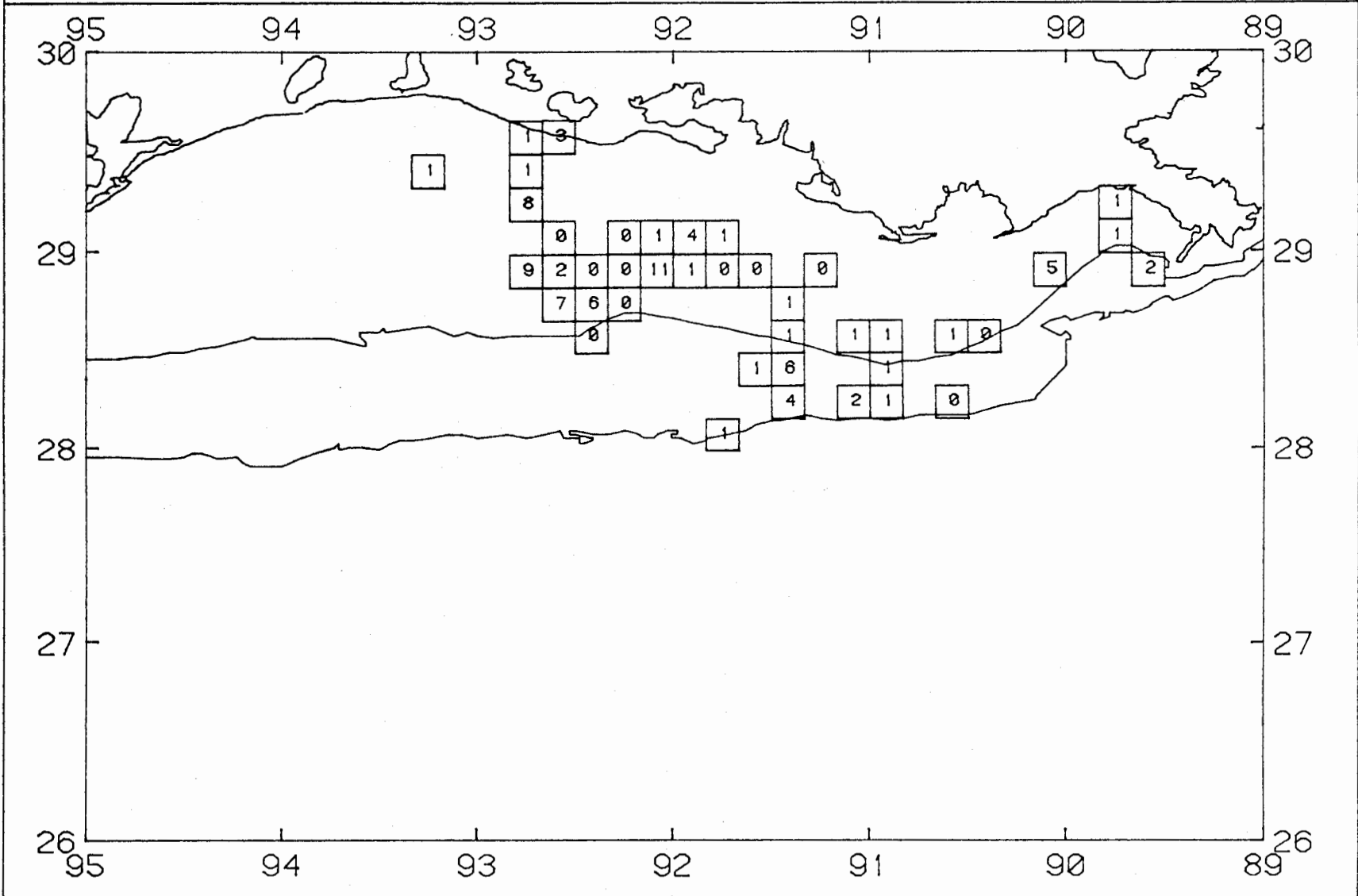


Figure 12 Real-Time Catch Plots, 1989

SEAMAP89

SAMPLING DATES FROM 7/10/89 TO 7/16/89

AVERAGE BROWN SHRIMP CATCH IN POUNDS/HOUR



SEAMAP89

SAMPLING DATES FROM 7/10/89 TO 7/16/89

AVERAGE WHITE SHRIMP CATCH IN POUNDS/HOUR

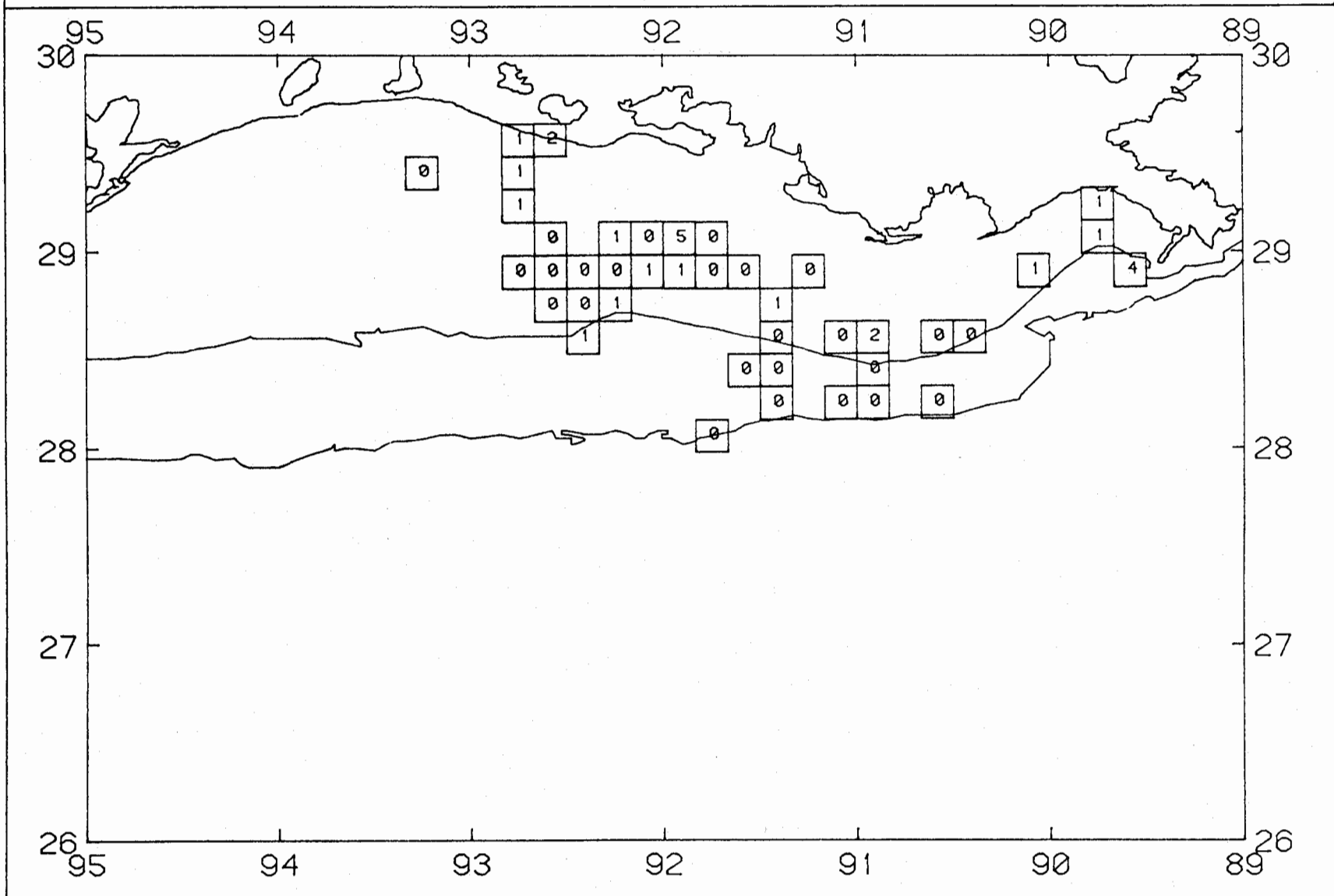


Figure 14 Real-Time Data Catch Plots, 1989

SEAMAP89
 SAMPLING DATES FROM 7/10/89 TO 7/16/89
 AVERAGE WHITE SHRIMP COUNT PER POUND

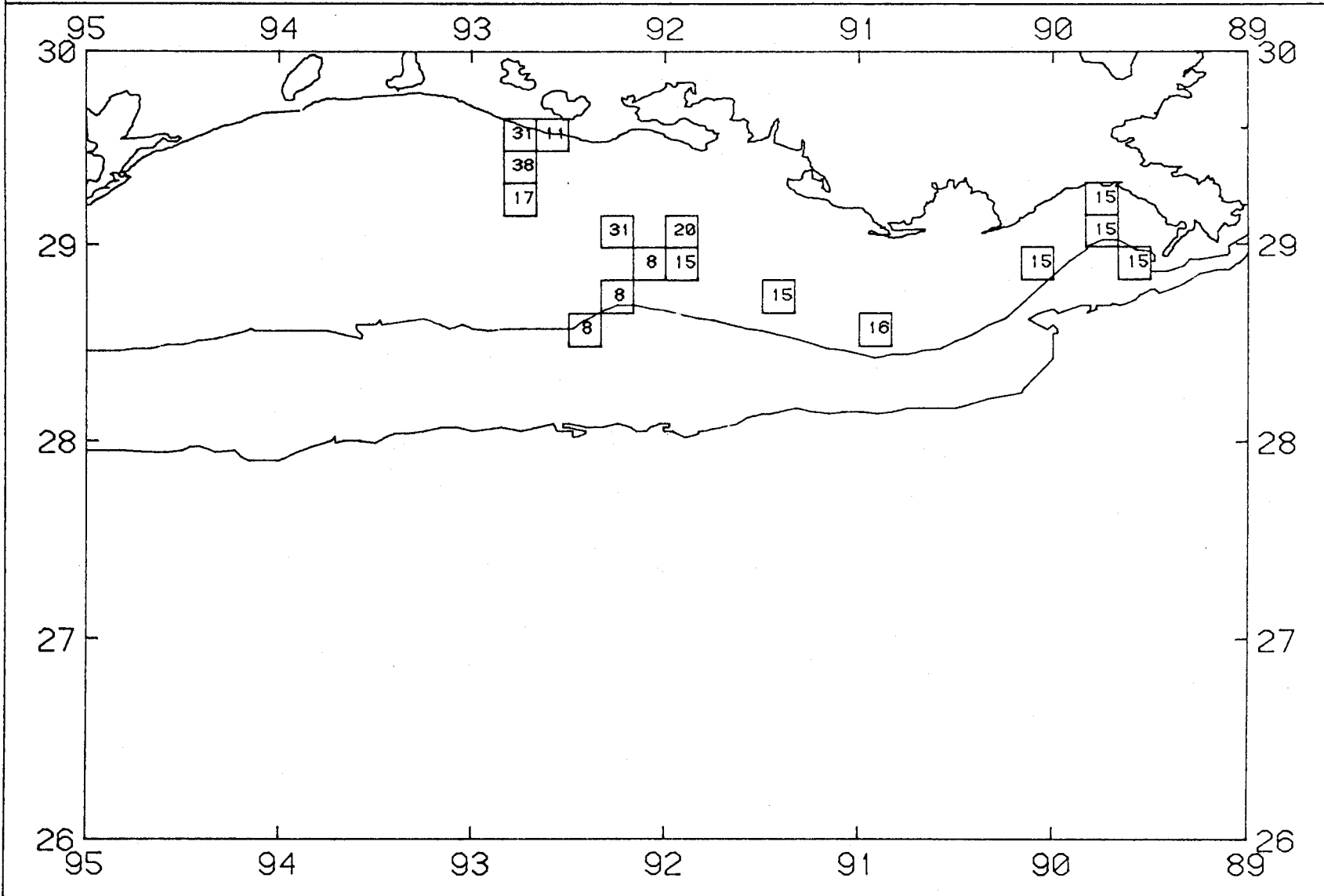


Figure 15 Real-Time Data Catch Plots, 1989

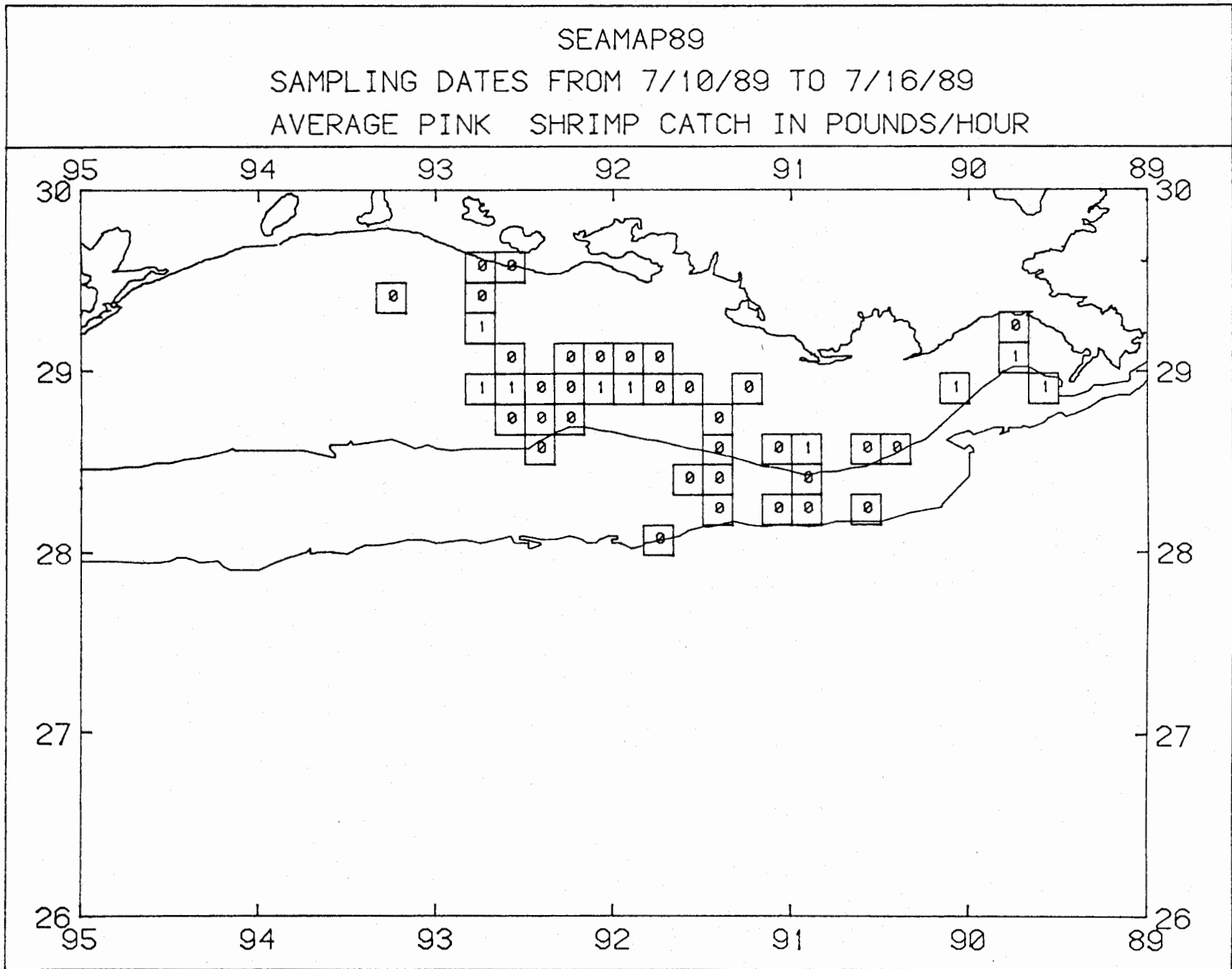


Figure 16 Real-Time Data Catch Plots, 1989

SEAMAP89

SAMPLING DATES FROM 7/10/89 TO 7/16/89

AVERAGE PINK SHRIMP COUNT PER POUND

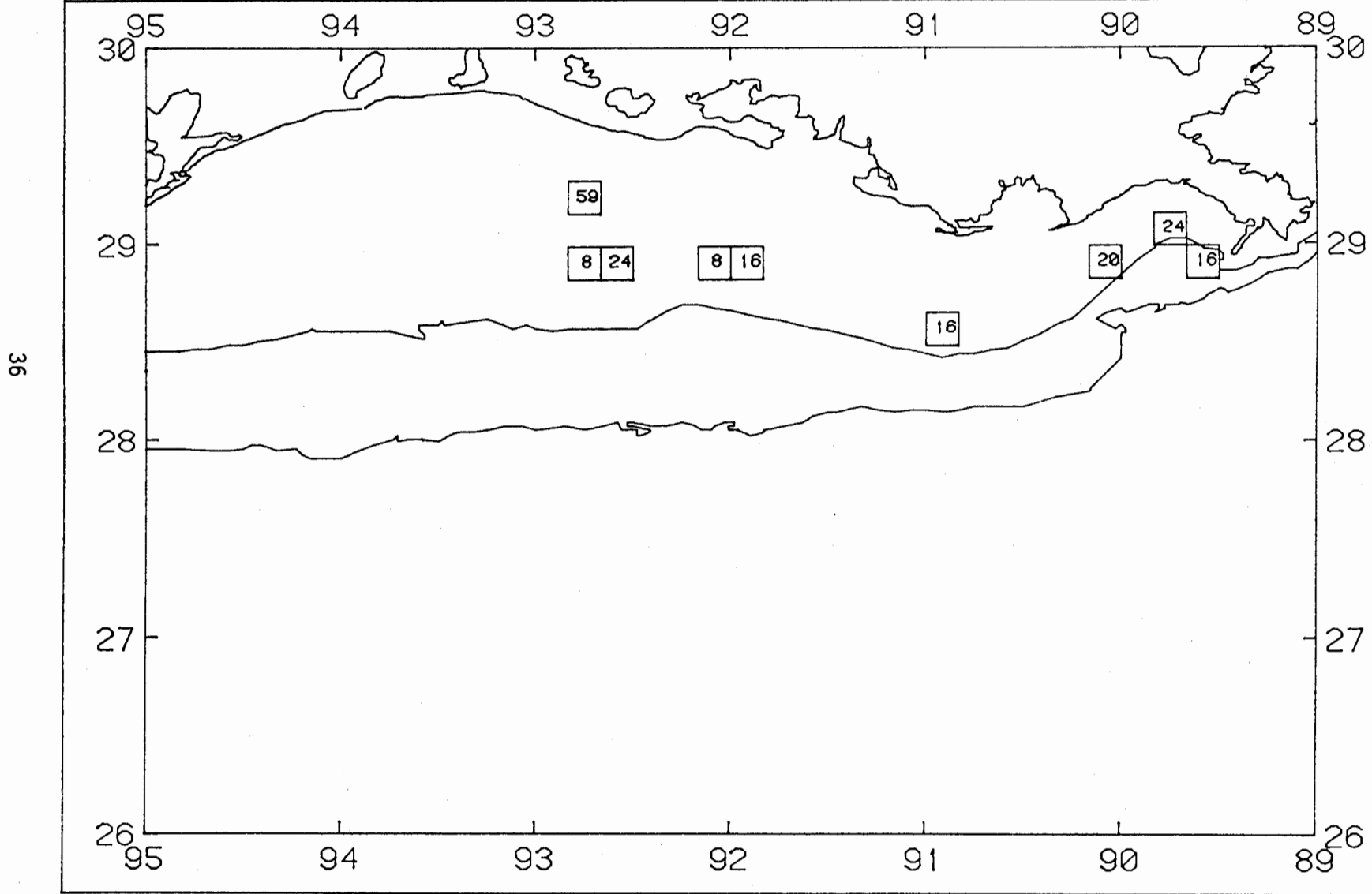


Figure 17 Real-Time Data Catch Plots, 1989

SEAMAP89

SAMPLING DATES 7/10/89 TO 7/16/89

AVERAGE FINFISH CATCH IN POUNDS/HOUR/10

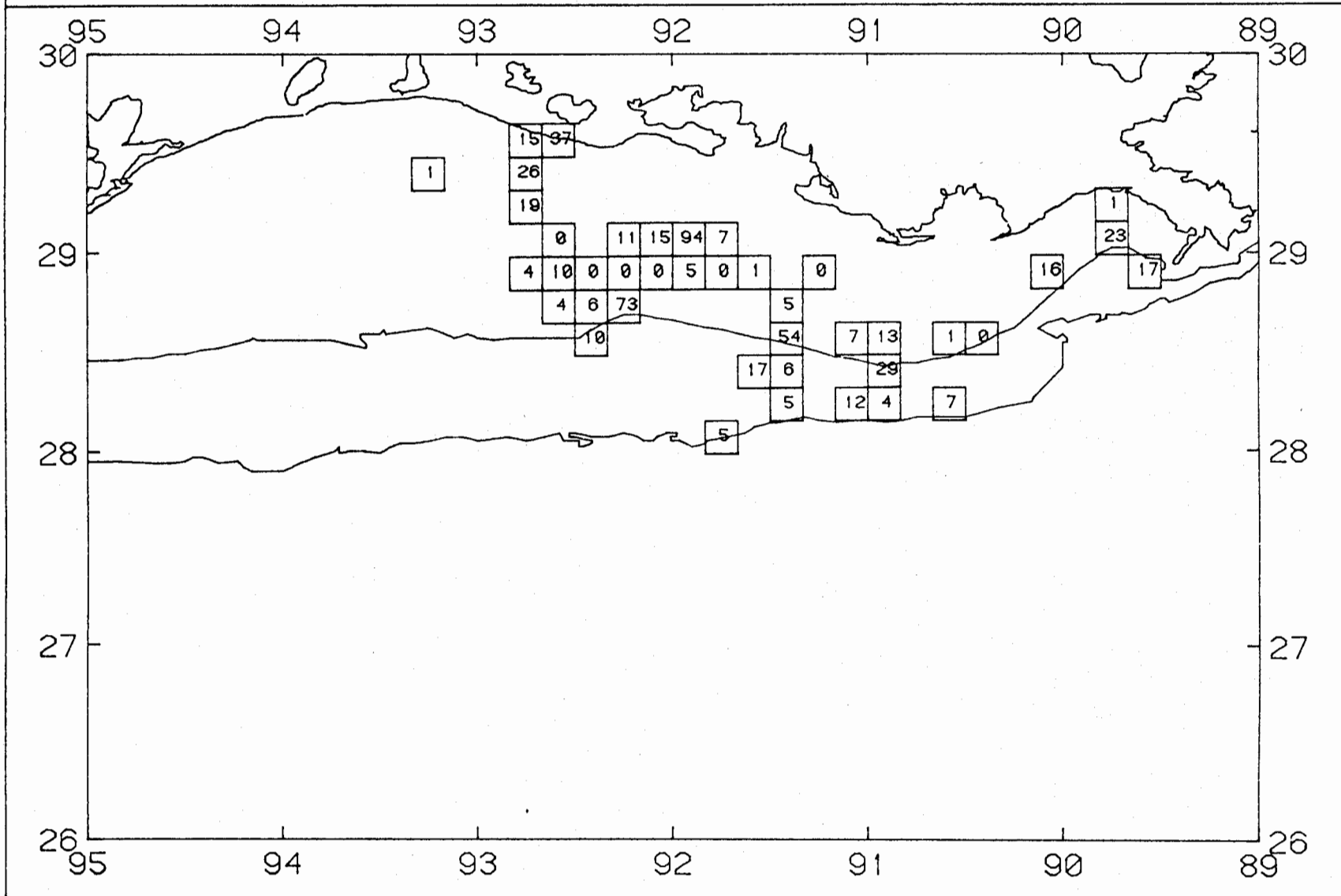


Figure 18 Real-Time Data Catch Plots, 1989

RED DRUM STUDIES

In response to the rapidly growing red drum fishery, and the urgent need for scientific information on the size and identification of the offshore Gulf red drum resource, as well as the species' age/growth and migration patterns, the Gulf Subcommittee in May 1986 charged the Red Drum Work Group with developing a plan to provide this information. Scientists from the entire region collaborated to produce in June the State-Federal Cooperative Program for Red Drum Research in the Gulf of Mexico: A Three-Year Plan, a cost-effective program designed specifically to address these questions. Many of the projects in the plan, funded through the cooperative, State-Federal Marine Fisheries Initiative (MARFIN), were implemented immediately, and have yielded valuable data on age and growth, and stock size. Overall reporting of the cooperative program's results and progress, and program planning and evaluation are being managed through the SEAMAP-Gulf Program.

The first program review was planned to coincide with formal implementation of the cooperative program. A Fall Conference in October 1986 at the Fall GSMFC Meeting in New Orleans, featured presentation on project objectives and preliminary research results by all participants in the Cooperative program. SCIAENOPS, the newsletter of the cooperative program, was developed and sent to more than 550 interested persons. Subsequent issues of SCIAENOPS have been mailed to approximately 360 individuals. Conferences on Status Reports of Red Drum Research Projects were held during the Spring GSMFC meeting in March 1987, 1988 and 1989. Participants from state agencies, universities and NMFS presented updates on their research projects, reviewing areas of stock identification, age and growth, stock assessment and fishery-independent assessment techniques.

Cooperators in the State-Federal Research Program also presented preliminary results their research efforts at the MARFIN Principal Investigators Forum, held September 20-21, 1989 in New Orleans, LA.

SEAMAP ARCHIVING CENTER

Larval fish and fish egg samples sorted to the family level by the Polish Sorting Center (PSC) are returned to the SEAMAP Archiving Center (SAC) for archiving and loan to researchers. Data entry for most of the returned sorted samples is completed in an improved and simplified information management system. All data are now managed by a dual microcomputer/mainframe program which eliminates coding errors and facilitates faster data entry. Samples cataloged to date represent 18 orders, 125 families, 295 genera and 244 species.

The Center is managed in conjunction with FDNR in St. Petersburg, and processes both specimen loans and requests for associated plankton survey environmental data; merging of these files within the SEAMAP Information System will greatly facilitate managing the environmental data, presently a cumbersome manual procedure. Plans call for 700 SEAMAP samples (+ 25% quality control) to be sorted for ichthyoplankton during the PSC contract period of September 1988 through August 1989. Priorities for sorting these samples from the backlog at PSC have been determined. Beginning in the fall of 1987 plankton samples taken by Louisiana vessels were sorted by LDWF and sorting has continued for 1988-1989 samples. All specimens and data will be provided to the SEAMAP Archiving Center.

Loan of SEAMAP specimens, and development of the system and its protocols, are supervised by SAC's curator, following policies outlined in the SEAMAP-Gulf Operations Plan. More than 3,100 specimen lots of fish larvae have been loaned, most of them species of commercial and recreational importance: mackerels, snappers, tunas, butterfish, bluefish, red drum, jacks, herrings, grunts and others. With the complete accessioning of 1986 samples, the catalogue is expected to contain approximately 42,000 lots, a collection of significant size. A poster entitled "SEAMAP Ichthyoplankton Collections from the U.S. Gulf of Mexico" was presented at the meeting of the American Society of Ichthyologists and Herpetologists held in June 1989 to increase awareness of the SEAMAP collection and facilities.

SEAMAP INVERTEBRATE PLANKTON ARCHIVING CENTER

With the determination in 1985 by SEAMAP-Gulf that the retained "back-up" bongo collections also contain valuable research materials, the SEAMAP Invertebrate Plankton Archiving Center (SIPAC) was established, managed in conjunction with Gulf Coast Research Laboratory in Biloxi, Mississippi.

Through September 30, 1989 a total of 3,801 unsorted SEAMAP bongo and neuston samples have been catalogued and archived at the SIPAC. Additional 1988 neuston samples catalogued at SIPAC await shipment to the Polish Sorting Center. A total of 620 samples has been sorted at Gulf Coast Research Laboratory and the Polish Sorting Center for selected invertebrate taxa following established protocol. Sorted specimens from 346 of the 400 samples that the Polish Sorting Center has agreed to sort in 1986, have now been received and catalogued at SIPAC. SIPAC was notified in July 1989 that the remaining 54 samples would be completed as soon as possible.

As of September 31, 1989 a total of 1890 lots of selected invertebrate taxa have been sorted and catalogued at SIPAC, of that total, 1037 lots were provided the Polish Sorting Center, and 853 lots were provided by Gulf Coast Research Laboratory personnel. Portunid megalope have been identified from most of the samples. There are currently 1282 lots of identified Portunid megalope catalogued at SIPAC. Data from these samples have been provided to Harriet Perry (GSMFC Crab Subcommittee) and Mr. Gus Zieske of Louisiana Wildlife and Fisheries.

PROGRAM MANAGEMENT

PROGRAM MANAGEMENT

The SEAMAP Program is administered by the SEAMAP Subcommittee of the Technical Coordinating Committee through the SEAMAP Coordinator, who is under the technical direction of the Subcommittee Chairman and administrative supervision of the Gulf States Marine Fisheries Commission's Executive Director.

Personnel associated with program management include the Coordinator, SEAMAP Data Manager, SEAMAP Archiving Center Curator, SEAMAP Invertebrate Plankton Archiving Center Curator, and the NMFS-SEFC Mississippi Laboratories Director, serving as Contracting Office Technical Representative.

SEAMAP management activities are designated in this report as either Administration or Information Dissemination.

ADMINISTRATION

PLANNING

Major SEAMAP-Gulf Subcommittee meetings were held in October 1988 and March 1989, in conjunction with the Annual Fall and Spring Meetings of the Gulf States Marine Fisheries Commission (GSMFC). Resource survey planning meetings of the Subcommittee were held in January and August 1989; all meetings included participation by the several work group leaders, Coordinator, Data Manager, curators, and the GSMFC Executive Director. Subcommittee members and proxies are listed in Table 1.

An annual joint meeting of the two programs was held in January 1989, in New Orleans, Louisiana with representatives from all participating agencies attending. Representatives from the Gulf program also met with the South Atlantic and Caribbean representatives in July 1989 to discuss respective program needs and priorities for FY1990. Minutes from all SEAMAP-Gulf meetings are shown in Appendix II.

SEAMAP-Gulf work groups met this past year to provide recommendations to the Subcommittee for survey and data management needs. The Red Drum Work Group participated in the State-Federal Red Drum Conference in March 1989 and met in April 1989; the Plankton Work Group met in February 1989; and the Shrimp/Bottomfish Work Group met at a May 1989 meeting in Biloxi. The Adult Finfish Work Group met in February and September 1989; and the Data Management Work Group met in August 1989. Where additional discussion was needed, the Subcommittee and work groups also deliberated plans and needs via telephone conference calls. Work group members are listed in Table 2.

Coordinating program surveys and distributing quick-report summaries of a Gulf-wide survey to management agencies and industry were major functions of SEAMAP management in FY1989. Other important

management activities included coordinating data provision and specimen loans, preparing publications and documents, and assisting in the preparation of State-Federal cooperative agreements, including amendments to permit extension of activities previously not detailed in the agreements.

PROPOSED FY1990 ACTIVITIES

Preliminary FY1990 SEAMAP-Gulf budget allocations are shown on Table 3. Total program allocations for both SEAMAP programs, Gulf, South Atlantic and Caribbean, total \$942,000. However, anticipated reductions may affect the available funds. Of this, the share to be allocated for all NMFS and Gulf State activities (including GSMFC) is \$724,573.

Proposed FY1990 activities for all Gulf participants are shown in Table 4. The approved FY90 Operations Plan for SEAMAP-Gulf is contained in Appendix I. It should be noted that the SEAMAP fiscal year begins on January 1, unlike the GSMFC/TCC fiscal years; thus, fall activities for FY1990 will be conducted from October-December, 1990.

TABLE 1.

SEAMAP REPRESENTATIVES 1989

Walter M. Tatum, Chairman
Alabama Department of Conservation and Natural Resources

Richard Waller, Vice Chairman
Mississippi Department of Wildlife Conservation
Gulf Coast Research Laboratory

Barney Barrett
Louisiana Department of Wildlife and Fisheries

Karen Jo Foote*
Louisiana Department of Wildlife and Fisheries

Paul Hammerschmidt*
Texas Parks and Wildlife Department

Stevens Heath*
Alabama Department of Conservation and Natural Resources

J. Alan Huff
Florida Department of Natural Resources

Andrew J. Kemmerer*
National Marine Fisheries Service
Southeast Fisheries Center

Mark Leiby*
Florida Department of Natural Resources

Gary Matlock
Texas Parks and Wildlife Department

Thomas McIlwain*
Mississippi Department of Wildlife Conservation
Gulf Coast Research Laboratory

Scott Nichols
National Marine Fisheries Service
Southeast Fisheries Center

Wayne Swingle
Gulf of Mexico Fishery Management Council

*Designated proxy

TABLE 2.

SEAMAP WORK GROUPS MEMBERS, 1989

PLANKTON WORK GROUP

Joanne Shultz, Leader
Mississippi Department of Wildlife Conservation
Gulf Coast Research Laboratory

Jack Gartner
Curator, SEAMAP Archiving Center
Florida Department of Natural Resources

Harriet Perry
Mississippi Department of Wildlife
Conservation
Gulf Coast Research Laboratory

Churchill Grimes
National Marine Fisheries Service
Panama City Laboratory

Richard Shaw
Louisiana State University

Don Hoss
National Marine Fisheries Service
Beaufort Laboratory

Ken Stuck
Curator, SEAMAP Invertebrate Plankton
Archiving Center
Mississippi Department of Wildlife Cons.
Gulf Coast Research Laboratory

Mark Leiby
Florida Department of Natural Resources

John Kern
Louisiana Dept. of Wildlife
and Fisheries

SHRIMP/BOTTOMFISH WORK GROUP

Philip Bowman, Leader
Louisiana Department of Wildlife and Fisheries

C.E. Bryan
Texas Parks and Wildlife Dept.

Terry McBee
Mississippi Department of Wildlife
Conservation
Gulf Coast Research Laboratory

Stevens Heath
Alabama Department of Conservation and
Natural Resources

Scott Nichols
National Marine Fisheries Service
Pascagoula Laboratory

Edward Klima
National Marine Fisheries Service
Galveston Laboratory

Butch Pellegrin
National Marine Fisheries Service
Pascagoula Laboratory

ENVIRONMENTAL DATA WORK GROUP

Warren Stuntz, Leader
National Marine Fisheries Service
Pascagoula Laboratory

Charles Eleuterius
Mississippi Department of Wildlife
Conservation
Gulf Coast Research Laboratory

Ken Haddad
Florida Department of Natural Resources

Ron Gouguet
Louisiana Department of Wildlife and
Fisheries

Thomas Leming
National Marine Fisheries Service
Mississippi Laboratories

TABLE 2 (CONT'D.)

RED DRUM WORK GROUP

Thomas McIlwain, Leader
Mississippi Department of Wildlife Conservation
Gulf Coast Research Laboratory

Richard Condrey
Louisiana State University

Walter Nelson
National Marine Fisheries Service
Miami Laboratory

Larry McEachron
Texas Parks and Wildlife Department

Mike Murphy
Florida Department of Natural Resources

Joseph Shepard
Louisiana Department of Wildlife and
Fisheries

Mark Van Hoose
Alabama Department of Conservation and Natural Resources

DATA COORDINATING WORK GROUP

Kenneth Savastano, Leader
National Marine Fisheries Service
Mississippi Laboratories
SEAMAP Data Manager

Philip Bowman
Louisiana Dept. of Wildlife & Fisheries
Shrimp/Groundfish Work Group

Warren Stuntz
National Marine Fisheries Service
Pascagoula Laboratory
Environmental Data Work Group

Thomas McIlwain
Mississippi Department of Wildlife
Conservation
Gulf Coast Research Laboratory
Red Drum Work Group

Frederick "Buck" Sutter
Florida Department of Natural
Resources
Squid/Butterfish Work Group

Joanne Shultz
Mississippi Department of Wildlife
Conservation
Gulf Coast Research Laboratory
Plankton Work Group

Walter M. Tatum
Alabama Department of Conservation and
Natural Resources
Chairman, SEAMAP Subcommittee

ADULT FINFISH WORK GROUP

Paul Hammerschmidt, Leader
Texas Parks and Wildlife Department

Joe Kimmel
Florida Department of Natural Resources

Tom McIlwain
Gulf Coast Research Laboratory

Scott Nichols
National Marine Fisheries Service
Pascagoula Laboratory

John Roussel
Louisiana Department of Wildlife
and Fisheries

Robert Shipp
University of South Alabama

Joanne Shultz
Gulf Coast Research Laboratory

Wayne Swingle
Gulf of Mexico Fishery Management Council

James Warren
Gulf Coast Research Laboratory

TABLE 3.

PRELIMINARY FY1990 PROGRAMMATIC BUDGET

| | |
|-----------|-----------|
| GSMFC | \$ 93,476 |
| TPWD | 45,744 |
| LDWF | 116,547 |
| MDWC/GCRL | 95,573 |
| ADCNR | 65,780 |
| FDNR | 74,453 |
| TOTAL | \$491,573 |
| NMFS | \$233,000 |

TABLE 4.

PROPOSED SEAMAP-GULF ACTIVITIES, FY1990

| Activity | Fall | Winter | Spring | Summer |
|-----------------------------------------|------|--------|--------|--------|
| Resource Surveys: | | | | |
| Spring Plankton Survey | | | X | |
| Shrimp/Groundfish Trawling Surveys | X | | | X |
| Louisiana Seasonal Surveys | X | X | X | X |
| Plankton Survey | X | | X | |
| Plankton and Environmental Data Surveys | X | X | X | X |
| Information Operations: | | | | |
| 1986 Biological and Environmental Atlas | | | X | |
| 1987 Biological and Environmental Atlas | | X | | |
| 1990 Marine Directory | | | X | |
| 1990 Annual Report | X | | | |
| Data Management System Implementation | X | X | X | X |
| Data Input and Request Processing | X | X | X | X |
| Specimen Archiving and Loan | X | X | X | X |
| Real-time Data Summaries | | | | X |
| Program Administration | X | X | X | X |

PUBLICATIONS

The following publications were published and distributed in FY1989:

- 1989 SEAMAP Marine Directory. Inventories of marine agency contacts (State, Federal and university) concerned with fishery research in the Gulf, and summaries of information provided by these organizations: target species, types of fishery-independent sampling gear and platforms, annual sampling effort and other material.
- 1989 SEAMAP Subcommittee Report to the GSMFC Technical Coordinating Committee; a detailed summary of program accomplishments, emphasizing survey design, materials collected, data dissemination, budget information and future survey activities.
- Sciaenops, Newsletter of the State-Federal Cooperative Program for Red Drum Research in The Gulf of Mexico. Vol. 3, No. 1-2. 1989-90 program updates to be published and distributed to program participants and others interested in red drum research.
- 1988 Annual Report of the SEAMAP Program - October 1, 1987 to September 30, 1988; a summary of 1988 activities and proposed 1988 events for both SEAMAP programs.

FY1989 FINANCIAL REPORT

Total allocations for FY89 program administration were \$93,476. As of September 30, total expenditures and encumbrances were: \$70,050.85. The remaining balance of \$23,425.15 will be used to provide administration through December 31, 1989.

APPENDICES

Appendix I

SEAMAP-GULF OF MEXICO OPERATIONS PLAN

January 1 - December 31, 1990

INTRODUCTION

The Southeast Area Monitoring and Assessment Program (SEAMAP) is a State/Federal/university program for collection, management and dissemination of fishery-independent data and information in the southeastern United States. The program presently consists of three operational components, SEAMAP-Gulf of Mexico, which began in 1981, SEAMAP-South Atlantic, implemented in 1983, and SEAMAP-Caribbean, formed in mid-1988.

Each SEAMAP component operates independently, planning and conducting surveys and information dissemination in accordance with administrative policies and guidelines of the National Marine Fisheries Service's Southeast Regional Office (SERO).

Organizations directly involved in planning and managing the Gulf's program are the marine fishery management agencies of Florida, Alabama, Mississippi, Louisiana, Texas, the National Marine Fisheries Service, Gulf of Mexico Fishery Management Council and the Gulf States Marine Fisheries Commission which administers the Gulf program. Sea Grant Directors are also asked to attend and participate in SEAMAP-Gulf Subcommittee meetings.

A five year SEAMAP Operations Plan: 1985-1990 was produced in 1984 for SEAMAP-Gulf outlining goals and objectives; management structure and responsibilities; data collection activities along with management and dissemination of the data; and financial and personnel resources necessary for successful operation of the program. This Operations Plan, along with the 1981 SEAMAP Strategic Plan, should be considered as charter documents defining and guiding operations of the Gulf program. An external review of SEAMAP-Gulf and South Atlantic was performed in 1987, and endorsement of specific recommendations was by consensus of the joint SEAMAP-Gulf Subcommittee and SEAMAP-South Atlantic Committee. These recommendations, as implemented, will guide activities and operations of SEAMAP-Gulf, as well as the South Atlantic and Caribbean components.

Six major goals were outlined in the Operations Plan: 1985-1990 and remain as key missions:

- (1) Identify existing computer data banks and ongoing local, state, federal, university and public research activities accessible for entry into a single, multi-use data bank of value in assessing and monitoring living marine resources in the Gulf.

with 333 micron mesh. Tows are oblique, surface to near bottom (or 200 m) and back to surface. Wire angle is maintained at 45°. Neuston samples are taken with 947 micron mesh nets on 1 x 2 meter frames towed at the surface for ten minutes. All plankton samples are initially preserved in 10% buffered formalin and after 48 hours transferred to 95% ethyl alcohol for final preservation.

Hydrographic data at all stations will include at a minimum surface chlorophylls, salinity, temperature and dissolved oxygen from surface, midwater and near bottom and forel-ule color.

Right bongo samples and neuston samples in 1989 from SEAMAP stations will be transhipped by the NMFS Miami laboratory to the Polish Sorting Center (PSC) in Szczecin, Poland. Left bongo and neuston samples from previous surveys are currently archived at the Gulf Coast Research Laboratory in Ocean Springs, Mississippi.

Summer Shrimp/Bottomfish Survey

Objectives of this survey are to:

- (1) monitor size distribution of penaeid shrimp during or prior to migration of brown shrimp from bays to the open Gulf;
- (2) aid in evaluating the "Texas Closure" management measure of the Gulf Council's Shrimp FMP;
- (3) provide information on shrimp and bottomfish stocks across the northern Gulf from inshore waters to 60 fm;
- (4) obtain length frequency measurements for major finfish, shrimp and other important invertebrate species to determine population size structures;
- (5) collect ichthyoplankton samples to determine abundance and distribution of eggs and larvae of commercial and recreationally important species.

The sampling strategy will include sites chosen randomly in three areas (east of the Mississippi River, west of the River to the Texas-Louisiana border and off Texas) stratified by depth and statistical area. Trawls will be towed perpendicular to the depth contours and cover a 1-fm depth stratum at each station. Plankton samples will be taken along a 1/2 degree grid system. Louisiana will take plankton samples at each trawl station.

Fall Shrimp/Groundfish Survey

Objectives of this survey will be to:

- (1) sample the northern Gulf of Mexico to determine abundance and distribution of white shrimp and other demersal organisms from inshore waters to 60 fm;

- (3) SEAMAP Subcommittee and work group meetings as scheduled.
- (4) Plan and coordinate a pilot study for sampling adult finfish in the Gulf of Mexico.

Louisiana Department of Wildlife and Fisheries

- (1) Seasonal Trawl Surveys: March, July, October and December (July in conjunction with Summer Shrimp/Groundfish Survey).
- (2) Territorial Sea Survey: July and November (in conjunction with Summer and Fall Shrimp/Groundfish Surveys).
- (3) Plankton sampling in conjunction with trawl surveys.
- (4) Plankton sample sorting.
- (5) SEAMAP Subcommittee and work group meetings as scheduled and provide assistance to SEAMAP Subcommittee.
- (6) Process sediment and chlorophyll samples.
- (7) Plan and coordinate a pilot study for sampling adult finfish in the Gulf of Mexico.

Mississippi Department of Wildlife Conservation
Gulf Coast Research Laboratory

- (1) Summer Shrimp/Bottomfish Survey: June and July, Gulf waters.
- (2) Fall Plankton Survey: September, nearshore and offshore Gulf waters.
- (3) Fall Shrimp/Groundfish Survey: November, Gulf waters.
- (4) Plankton sampling in conjunction with trawl surveys.
- (5) SEAMAP Invertebrate Archiving Center operations.
- (6) SEAMAP Subcommittee and work group meetings as scheduled.
- (7) Plan and coordinate a pilot study for sampling adult finfish in the Gulf of Mexico.

Alabama Department of Conservation and Natural Resources

- (1) Summer Shrimp/Bottomfish Survey: June and July, nearshore Gulf waters.
- (2) Fall Plankton Survey: September, nearshore Gulf waters.
- (3) Fall Shrimp/Groundfish Survey: November, nearshore Gulf waters.

Gulf of Mexico Fishery Management Council

- (1) SEAMAP Subcommittee and work group meetings as scheduled.
- (2) Annual review of fisheries-independent data needs.

Gulf States Marine Fisheries Commission

- (1) Coordination of meetings for Subcommittee and work groups.
- (2) Provision of SEAMAP-Gulf Coordinator, clerical and office support.
- (3) Publication and distribution of SEAMAP Environmental and Biological Atlas, SEAMAP Marine Directory, SEAMAP Subcommittee Report to the GSMFC Technical Coordinating Committee, Real-time data summaries, minutes of Subcommittee meetings and co-production of the SEAMAP Joint Annual Report.
- (4) SEAMAP Subcommittee and work group meetings, as scheduled.
- (5) Annual Operations Plan development.

INFORMATION DISSEMINATION

Data produced from SEAMAP-Gulf of Mexico surveys and studies will be entered into the SEAMAP Data System, in accordance with procedures and protocols stated in the SEAMAP Operations Plan: 1985-1990. User policies and procedures are also defined in this document.

The SEAMAP Archiving Center (SAC) and Invertebrate Plankton Archiving Center (SIPAC) have the responsibility of maintaining SEAMAP specimens and samples, processing specimen requests and insuring that archiving and loans are carried out in accordance with guidelines and policies established by the SEAMAP Subcommittee. Specific duties and responsibilities of the curators are found in the SEAMAP Operations Plan 1985-1990.

Documents to be produced in the period covered by this Annual Operations Plan are:

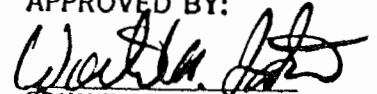
- (1) SEAMAP Joint Annual Report, in conjunction with SEAMAP-South Atlantic and SEAMAP-Caribbean.
- (2) SEAMAP Subcommittee Report to the GSMFC Technical Coordinating Committee.
- (3) 1990 SEAMAP Marine Directory.
- (4) Minutes of Subcommittee meetings.
- (5) Summaries of work group meetings.

National Marine Fisheries Service: Scott Nichols

Gulf of Mexico Fishery Management Council: Wayne Swingle
(non-voting)

Work Groups

SEAMAP work groups are formed to assist in planning, coordinating and evaluating program activities. Members of work groups are invited to serve by the Subcommittee and do not have to be members of the Subcommittee.


COMMITTEE CHAIRMAN

TCC SEAMAP SUBCOMMITTEE

MINUTES

Tuesday, October 18, 1988
San Antonio, Texas

before December 31 include two work group meetings, the present Subcommittee meeting and publication expenses of the 1988 SEAMAP Joint Annual Report and 1986 Atlas. He noted that delays in data processing for the various plots and tables utilized in the Atlas would most probably result in rescheduling its publication until 1989.

Publications produced and distributed to date include:

- 1985 SEAMAP Biological and Environmental Atlas
- 1988 SEAMAP Marine Directory
- 1988 Annual Report to the T.C.C.
- Sciaenops - the newsletter on red drum research activities.

Status of FY89 Funds

A. Kemmerer presented revised SEAMAP budget figures, reducing the initial estimates of FY89 funding agreed to at the August "budget-split" meeting. He explained that although Congress appropriated \$942K to the program, a NOAA holdback reduced that amount by \$5K. Total FY89 funds for the Gulf program now are \$491.5K with the following breakdown:

- Texas - \$45,744
- Louisiana - \$116,547
- Mississippi - \$95,573
- Alabama - \$65,780
- Florida (Gulf) - \$74,453
- Commission - \$93,476

* A. Huff moved to accept the revised level of FY89 funding. The motion was seconded and passed.

Status of FY89 Cooperative Agreements

N. Bane reported that all SEAMAP cooperators are in the process of completing their Cooperative Agreements for FY89 funding; however, reductions in the funding amounts available in addition to new, unpublished 424 Forms (Federal Assistance) have caused delays. All participants with the exception of Texas indicated a desire to request pre-award costs back to January 1, 1989.

Status of SEAMAP Budget Initiative

The Chairman reported that the Budget Initiative ad hoc group would meet immediately following the Subcommittee's adjournment. All members and guests were invited to attend.

Work Group Reports

- Adult Finfish

The Chairman reported that the ad hoc group formed at the August Subcommittee meeting to develop a charge to the Adult Finfish Work Group had met the previous day. S. Nichols presented the report (Attachment B to minutes) outlining an objective of long-term monitoring of spawning stocks of finfish species. Initial responsibility of the work group will be to conduct a fact finding mission on the types of gear and sampling designs that are successful in stockwide assessments. Information will be obtained from past work or on-going programs conducted by state and federal agencies, universities and private organizations.

* A. Huff moved that the Adult Finfish Work Group consist of one representative from each Gulf state, two from NMFS, one from the Gulf Council and the work group leaders of the Red Drum and Plankton Work Groups to serve as ex-officio members. S. Nichols seconded and the motion carried.

The Chair polled Subcommittee members for their membership recommendations to serve on the Adult Finfish Work Group: Joe Kimmel was named for Florida; Bob Shipp for Alabama; Richard Leard for Mississippi; Paul Hammerschmidt will represent Texas; Louisiana deferred in naming a representative until later; Scott Nichols will serve as one NMFS representative with another to to be named at a later date; and the Gulf Council to be represented by W. Swingle.

(Note: John Roussel was named as the Louisiana member.)

- Shrimp/Bottomfish

Work group leader P. Bowman reported that over 700 trawl samples had been taken during the past year in support of surveys to determine

An IBM PS/2 has been installed on the OREGON II as part of the near-real-time data system, and other components of the system will be completed prior to the 1989 Summer Shrimp/Groundfish cruise.

Development of the Data Management System is progressing on schedule. Approximately 42% of the total system estimated cost of \$508.5K has been committed to contracts. New field data sheets and computer file formats have been developed for trawl, environmental, shrimp length-frequency, general length-frequency and ichthyoplankton data, and have been sent out for review by Gulf and South Atlantic data management members. A joint Data Management meeting between the Gulf and South Atlantic work groups is scheduled for November 15 and 16, 1988 at the Stennis Space Center, Mississippi.

- Plankton Work Group

Leader J. Lyczkowski-Shultz presented reports on the work group's April 27 and 28 meeting in St. Petersburg, Florida and conference call on August 18, 1988 (Attachments D and E to minutes). A slide presentation was also given on the work group leader's September 1988 inspection of the Polish Sorting Center and its activities. She noted that output from the PSC on SEAMAP samples has risen dramatically during the past year, due to increased understanding of SEAMAP's needs by PSC personnel.

The work group recommended to continue and accomplish the original mandate of Gulf-wide seasonal coverage with a target of a minimum of five years data for any specific survey. Once seasonal coverage has been accomplished, reallocations of SEAMAP plankton sampling effort to more specifically defined problems should be considered.

SEAMAP Archiving Center Curator, J. Gartner, reported on Florida's recently completed segment of the Fall Plankton cruise and current activities at the SAC, including preparation of a listing of publications, technical reports, presentations, papers in press and works in progress utilizing SEAMAP plankton material. He reported approximately 189 samples of 1984 and 1985 neuston collections remain at the Polish Sorting Center, however all 1986 samples have been sorted and returned to the Archiving Center for processing. Accordingly permission

Other Business

Cost breakdowns were presented by A. Kemmerer for holding the January 1989 Joint SEAMAP meeting in San Juan (\$19,000), St. Thomas (\$21,000 - \$25,000) and New Orleans (\$15,000). By consensus the Chair announced New Orleans as the next meeting site. Savannah, Georgia was tentatively scheduled for the August 1989 Joint meeting site.

J. Martin-West distributed packages of the new 424 Federal Assistance Forms to members.

Chairman Tatum reminded everyone of the ad hoc Budget Initiative group meeting immediately following.

There being no further business, the meeting was adjourned at 4:45 p.m.

GULF, SOUTH ATLANTIC AND CARIBBEAN
SEAMAP COMMITTEES
JOINT MINUTES
January 12-13, 1989
New Orleans, LA

SEAMAP-Gulf Chairman, Walter Tatum called the meeting to order at
1:30 p.m. The following members and guests were present:

Members

Dick Waller, GCRL, Ocean Springs, MS
Paul Hammerschmidt, (proxy for G. Matlock), Port O'Connor, TX
Scott Nichols, NMFS, Pascagoula, MS
Barney Barrett, LDWF, Baton Rouge, LA
Walter Tatum, ADCNR, Gulf Shores, AL
Alan Huff, FDNR, St. Petersburg, FL
Mike Street, NCDMF, Morehead City, NC
Dave Cupka, SCWMRD, Charleston, SC
Denton Moore, VIFWS, St. Thomas, VI
Sandra Laureano, CFMC, San Juan, PR
Ana Olivencia, CODREMAR, San Juan, PR
J.Y. Christmas, TCC Chairman, Ocean Springs, MS

Staff

Tom Van Devender, SEAMAP-Gulf Coordinator
Nikki Bane, SEAMAP-South Atlantic Coordinator
Miguel Rolon, SEAMAP-Caribbean Coordinator
Larry B. Simpson, GSMFC Executive Director
Eileen Benton, GSMFC Administrative Assistant
Dianne Stephan, NCDMR, Morehead City, NC
Jan Simpson, NMFS, Pascagoula, MS

Others

Karen Jo Foote, LDWF, Baton Rouge, LA
Perry Thompson, NMFS, Pascagoula, MS
Jim Jones, MS-AL Sea Grant, Ocean Springs, MS
Ken Savastano, NMFS, NSTL Station, MS
Andy Kemmerer, NMFS, Pascagoula, MS
Brad Brown, NMFS, Miami, FL

Adoption of Agenda

The agenda was adopted with the task forces identified as follows:

- 1) Administration
- 2) Review and Evaluation
- 3) Budget
- 4) Data Management, Specimen Archiving and Information
Dissemination
- 5) Survey Operations and Special Studies

He noted that there are several people who have volunteered to take this document forward and testify to the Appropriations Subcommittee on behalf of SEAMAP.

He also reported that N. Bane is writing the budget needs package of the data collection package. The package shows rationale for the increased data collection action. He noted that they are behind schedule, however they will circulate this brochure to the ad hoc group which was formed to address the initiative.

This group consists of T. Van Devender, W. Tatum, A. Huff/D.Cupka, D. Moore, L. Simpson, N. Bane, A. Kemmerer and B. Brown. (Taken from August 24, 1988 Joint SEAMAP Minutes.)

Charge to the Management Task Group and Plan Framework Explanation

A. Kemmerer reported that one of the major items identified in the external review was the development of a Five-Year Management Plan for SEAMAP. This included setting up common data management policy and common budget allocation policy for all three components. He noted that North Carolina, through efforts in the South Atlantic program, has agreed to provide a systems planner, Dianne Stephan to work with the groups in the development of this Plan. (Six-month time frame) He reported that he, N. Bane, T. Van Devender and D. Stephan met in Atlanta in December to develop an outline for this plan.

A. Kemmerer suggested that the SEAMAP meeting participants divide into tasks groups and review these administrative policies. Each task group should either reject or accept, modify or add to the statements. This action should complete the rest of the allocated SEAMAP meeting time. He noted that on January 13 the three components will address each policy statement. The task groups were as follows:

Function and Administration of the program

- P. Thompson
- T. Van Devender
- N. Bane
- S. Laureano

Review and Evaluations

- D. Cupka
- B. Barrett
- A. Olivencia
- J.Y. Christmas
- J. Jones

POLICIES: SEAMAP SURVEYS AND SPECIAL SURVEYS

Collect standardized, fishery-independent data over the long-term on the condition of living marine resources and their environment in the Southeastern U.S. and Caribbean.

1. Survey activities in the territorial seas and EEZ will provide long-term fishery-independent data necessary for stock assessment, and evaluation of the effects of both fishing and environmental factors on fisheries resources.
2. Surveys within each component area will be initiated, approved, and directed by each respective committee.
3. Sampling methodologies may be recommended to each committee by work groups established for such purposes.
4. Surveys should be conducted using standardized procedures and standardized, calibrated gear.
5. The standardized sampling procedures will be collected and distributed as a "SEAMAP Shipboard Operations Manual." At the request of any committee, the appropriate working group will draft or modify documentation of operating procedures, and submit this documentation to the joint committee for approval and incorporation as part of the "SEAMAP Shipboard Operations Manual."
6. Surveys will be documented. Cruise Reports will be submitted to the Coordinators for timely distribution. Formats and reporting requirements will be included in the "SEAMAP Shipboard Operations Manual."
7. As directed by the (sub)committee pre- and post-survey research and analysis will be conducted to evaluate methodologies to insure compatibility of data between surveys and areas.
8. Survey dates and participating agencies will be publicized well in advance to encourage awareness and participation in SEAMAP among interested persons and organizations.
9. Long-term time series data are the foundation of the SEAMAP program. Short-term data requests will be considered by SEAMAP, but will be implemented only if collections do not detract from the long-term programs. SEAMAP has and will continue to take on coordination of broad-scale, short-term research programs (using funding external to SEAMAP) as the need arises.

11. Data requestors will be advised to treat all received data in a professional manner, and should not redistribute the data to other parties without prior notification of the Subcommittee (Committee). (G 40, SA 3-24)
 12. Data requests will be directed to the Data Manager. (G 40, SA 3-23)
 13. Data requests will normally be handled on a first-come, first-serve, time-available basis. (G 38, SA 3-21) In the event of personnel and funding limitations, priorities to data requests will be assigned as follows: SEAMAP Participant, SEAMAP Cooperator, SEAMAP Investigator and Non-SEAMAP Investigator. (G 38, SA 3-21)
 14. Questions relating to adjustments in priorities, costs, and use of data will be forwarded to the SEAMAP Coordinators and the Subcommittees (Committee) for resolution. (G-38)
 15. SEAMAP Participants and Cooperators will submit their data recording forms to the Data Manager prior to field activities for assurance that data will be presented in a form compatible with the SEAMAP Information System and applicable NOAA data management policies and procedures. (G 38 & 66, SA 3-21 & 22)
 16. SEAMAP Participants will provide the Data Manager with information on data collection methods and systems as required. (G 38, SA 3-23) The Data Manager will maintain all data in accordance with the protocols and procedures outlined in the SEAMAP Information System Manual. (G 38)
 17. The Data Manager will satisfy data requests in the most efficient manner, and must insure that data management and dissemination activities are within programmatic budget guidelines as well as state and federal regulations.
(SA 3-20 & 21)
 18. Unverified data will be controlled by the agency or organization responsible for collecting the data. (G 36, SA 3-18) Unverified data will only be released with authorization from the agency or organization controlling the data. (G-36)
 19. Within guidelines of Operations Manual, data will be verified at participant's field sites and entered into the SEAMAP Data Management System as a verified data set. Timelines for verifications and data input will follow specifications of Operations Manual.
- (should 18 and 19 be reversed?)
20. Data not collected during approved SEAMAP activities, but meeting SEAMAP goals and objectives may be added to the SEAMAP data base with the approval of the Subcommittee (Committee).

12. All data generated from SEAMAP archived specimens is considered SEAMAP data and should be returned to Curators to be included in SEAMAP Data Management System.

13. All specimen requests will be directed to the SEAMAP Curators.

(end)

SEAMAP BUDGET POLICIES

1. SEAMAP is a budget augmentation program; that is, Federal funds provided through SEAMAP will be used primarily to augment or expand existing State and Federal survey programs. The purpose of this augmentation is to insure temporally and spatially consistent data collection with standardized or calibrated gear, equipment, and methods.
2. Funding for SEAMAP is dependent on Congressional and State legislature allocations.
3. There is no matching requirement for receipt of SEAMAP funds.
4. With the exception of NMFS, budget allocations to SEAMAP participants normally will be done through individual cooperative agreements. This method, however, does not explicitly exclude the use of contracts by NMFS when cost effective and appropriate.
5. SEAMAP is a zero-based budget program. Funds will be allocated annually in accordance with approved annual operations plans. Allocations will be made to maximize participation and operating efficiencies.
6. It is recognized that internal state and Federal budget allocations for specific surveys and survey related functions can vary significantly between participants and fiscal years. Thus, the individual State or Federal share of the SEAMAP appropriation also may vary significantly depending on budget needs to meet program objectives.
7. The cost of all program support activities will be minimized. The SEAMAP management (sub)committees have a special responsibility to continually review the need for and funding of support functions.
8. SEAMAP budget priorities follow:
 - (1) Long-term fishery-independent surveys (includes any special laboratory-type analyses such as plankton sorting, and salinity and chlorophyll measurements)
 - (2) Data management
 - (3) Coordination (coordinator salaries, meeting costs and coordination administration)
 - (4) Calibration trials
 - (5) Sorted plankton archives
 - (6) Special surveys
 - (7) Unsorted plankton archives
 - (8) Workshops, symposia, and special meetings

f. Individual component operations plans will be revised in accordance with the budget plan and submitted to the respective oversight management body for review and approval.

g. Individual cooperative agreements will be developed based on the budget allocation plan and appropriate operations plan for submission to the SEFC SEAMAP Program Officer. These agreements normally will be submitted on or about the start of the new Federal fiscal year.

h. If the budget allocation plan has to be changed such as due to a change in the appropriated amount or in the amount made available to SEAMAP by NMFS, the SEFC SEAMAP Program Manager will immediately notify the SEAMAP management (sub)committees and work with the (sub)committees in developing a modified allocation plan.

15. Every effort will be made to ensure full and effective utilization of SEAMAP funds. If for any reason allocated funds are determined excess to the planned needs of a participant, the participant will immediately notify the SEAMAP Program Officer and Manager of the projected excess. An attempt will be made to reallocate the excess funds to satisfy other program needs.

16. SEAMAP meeting, workshop, and symposia locations will be selected to minimize meeting and travel expenses. The only exception to this policy would be when a specific location or circumstance exists which would justify having a meeting in a higher cost area.

17. SEAMAP, as a program, may accept supplemental and reimbursable funds for specific activities and functions. Administration of these funds can be through a number of mechanisms such as through NMFS or the administrative bodies (i.e. Commissions or Council), or the states.

18. The cost of any specialized analysis, summarization, listing, display, or handling of SEAMAP data or specimens will be borne by the requestor, but only in an amount equivalent to the cost required to satisfy the special request. (redundant to data management policy)

PROGRAM REVIEW POLICIES

1. Purpose of program reviews and evaluations is to evaluate program effectiveness in meeting defined objectives and to improve data collection and standardization, data management (includes specimen archives), and information dissemination.
2. Annual program evaluations will be conducted primarily through internal procedures. They will be submitted in report form to the oversight management bodies (Technical Coordinating Committee, South Atlantic Management Board, and Caribbean Fishery Management Council).
3. Responsibility for the evaluations resides with the SEAMAP management (sub)committees. Portions of the evaluations may be delegated to coordinators, work groups, data manager and curators.
4. Coordinators will prepare yearly reports of program administration, data management, and information dissemination in accordance with approved policies and procedures, for review by the appropriate (sub)committee.
5. External reviews may be done at the request of any oversight management body (TCC, South Atlantic Management Board and Caribbean Fishery Management Council) in accordance with their (collective) direction.
6. The SEFC SEAMAP Program Manager may request an external review of any aspect of program activities at any time. These requests will be coordinated with the appropriate (sub) committee and oversight bodies.
7. All elements of the program shall be evaluated annually e.g., program administration, expenditures, survey operations, data management (includes specimen archives), and information dissemination, (redundant to #2).
8. Reviews directed at administration will be done primarily by the coordinators, working closely with the appropriate oversight body officials and (sub)committee. Elements to be reviewed include:

Facilities and staff

Reports and Publications

Budget planning

Work Groups

Separate reviews will be done for each program component

DEFINITIONS:

Oversight body -- TCC, South Atlantic Board, Caribbean Council

Oversight Agency -- GSMFC, ASMFC, and the Caribbean Council

17. External reviews will be written and documented. No such review will be released publicly without review and comment by affected SEAMAP (sub)committees, oversight bodies (and oversight agencies?) and the SEFC SEAMAP Program Manager.

18. External and internal reviews which recommend specific actions, when accepted by the affected SEAMAP management (sub)committees and oversight bodies (and oversight agency?), (actions) will be acted upon within a reasonable time frame.

19. Reviews and evaluations will be conducted within the context of approved goals, objectives, policies, procedures, and plans contained in SEAMAP 5-year management plan, annual operations plans, and cooperative agreements.

20. Prior to public release, technical publications produced by the SEAMAP program will be subjected to peer review. Explicitly excluded from this requirement are data summary documents (e.g., atlases), reports to oversight bodies (e.g., annual program reports), and reports from workshops and symposia which represent collections of individual papers and abstracts.

POLICIES: PROGRAM ORGANIZATION (COMMITTEES)

1. Each SEAMAP Committee is placed organizationally within the oversight group (Gulf - GSMFC TCC; South Atlantic - ASMFC SAB; Caribbean - CFMC). (Needs consistency in the terms groups, bodies, and agencies).
2. Each SEAMAP Coordinator implements the program directives of the respective (sub)Committee.
3. External communications from the program may be issued by each Committee chair, Coordinators, Program Manager, Program Officer, and when authorized Data Manager, Curators and work group leaders.
4. Each (sub)committee will be composed of members of state marine fisheries agencies, NMFS, and other organizations as determined by the respective oversight agency with voting rights to be determined by that oversight agency.

(Agency equals commissions and council)

6. An authorized representative from the oversight body to each (sub)committee can serve as an ex-officio member of the (sub)committee.
7. Meetings of the (sub)committees are open to all interested persons except during discussions of personnel matters and other actions appropriate to closed sessions.

DETERMINE OPEN MEETING REGULATIONS.

8. Obligatory members and designated alternates to the (sub)committees will be selected by member organizations and affirmed in accordance with procedures of the oversight agency.
9. A member may designate a proxy in accordance with that member's agency guidelines to serve at a given SEAMAP meeting.
10. Each (sub)committee will meet as necessary to accomplish stated goals and objectives.
11. Authorized travel on programmatic funds shall be defined by each (sub)committee.
12. The (sub)committee chair and vice chair will be elected annually by the respective (sub)committee.
13. The (sub)committee chair and vice chair may serve an unlimited number of one-year terms.
14. (Sub)committee and work group meetings will be held as cost effectively as possible.

(Redundant to Budget Policy)

(10) Submit an annual report to its oversight body, summarizing SEAMAP activities, accomplishments, needs, and plans.

(Need provision for minutes (or reports) of meetings including (sub)committees, work groups and joint (sub)committees.)

- 1) Minutes for (Sub)committee meetings
- 2) Minutes for Joint Subcommittee meetings
- 3) Reports for work group meetings

POLICIES: SEAMAP COORDINATORS

1. Each Coordinator will:

- (1) Implement plans approved by the (sub)committee.
 - (2) Coordinate Committee meetings and recommend appropriate agendas.
 - (3) Serve as information liaison between the (sub)committee and the oversight agency, participants and organizations interested in SEAMAP activities.
 - (4) Submit preliminary administrative budget recommendations and assist the (sub)committee with preparation of the budget.
 - (5) Supervises or prepares selected SEAMAP publications and data summaries.
 - (6) Distribute approved SEAMAP information in accordance with Committee policies and procedures, and assist in representing the program to the community through public relations activities.
 - (7) Assist in the identification of regional needs that can be satisfied by SEAMAP activities.
 - (8) Maintain a file of all reports and publications which relied on SEAMAP data or SEAMAP specimens, and provide the (sub)committee with an annual report and listing of these.
 - (9) Prepare the Annual Report to the oversight body.
 - (10) Works closely with (sub)committee chair in all aspects of program coordination, administration and operation. (needs to be #1)
- (Needs something about Joint Annual Reports and joint meetings)

POLICIES: SEAMAP CURATORS

1. The SEAMAP curators have the responsibility of maintaining selected collections of ichthyoplankton, invertebrate organisms, and duplicate plankton samples collected during SEAMAP survey operations.

(Check and make sure that ichthyoplankton includes eggs and larvae)

2. Specimens archived in SEAMAP collections are the property of the SEAMAP program and are maintained or disposed of in accordance with SEAMAP and NOAA policies and procedures.

3. SEAMAP curators will:

(1) Receive authorized specimens and their accompanying information, and catalog these materials.

(2) Maintain collections in a manner consistent with approved policies and procedures.

(3) Process user requests and provide specimens and/or information in accordance with the approved policies and procedures.

(4) Determine handling charges for satisfying specimen requests.

(needs to be in accordance with Data Manager section)

(5) Maintain information on specimen requests.

(6) Advise users of proper acknowledgement for use of SEAMAP specimens/information and request that users provide coordinators with copies of each report and publication which relied on SEAMAP specimens or information.

(7) Assist the coordinators in the preparation of the Annual Report.

information is received he will compile by cruise and distribute to the Subcommittee.

T. Van Devender reported that the next Subcommittee meeting will be held in conjunction with the Spring GSMFC meeting. The dates of the Commission meeting will be March 13-17 and the SEAMAP meeting will probably be held on the 13 or 14. The Red Drum Work Group will also present another meeting of status reports on red drum. He noted that GSMFC is currently scheduling meeting times and the red drum meeting may be held in conjunction with the Subcommittee meeting.

W. Tatum noted that he felt the GSMFC Commissioners would be interested in the status reports and felt the Commissioners should attend.

W. Tatum also noted that the Subcommittee consider changing the original charges to the Red Drum Work Group (e.g. what research areas would be explored, and charge them to layout and look at progress toward achieving those goals).

T. Van Devender completed his report by noting that GSMFC is developing a quarterly Commission newsletter with the first copy being distributed in the next two weeks. He requested that if anyone has items for the newsletter to contact him.

SEAMAP Budget Initiative and FY90 Funding

The Subcommittee briefly discussed the FY90 budget initiative and the request by Virginia Van Sickle for time to testify before the House Appropriations Subcommittee. No action was taken.

Election of Chairman and Vice Chairman

W. Tatum and D. Waller were elected Chairman and Vice Chairman respectively.

Adult Finfish Work Group

T. Van Devender suggested that the Adult Finfish Work Group conduct a meeting prior to the Subcommittee meeting. He will schedule this meeting in late February or early March.

and the Regional Director in their efforts to secure these payback funds for SEAMAP.

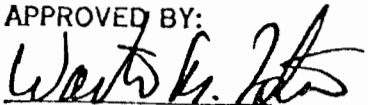
W. Tatum suggested that the states contact their legislators to inform them of this action.

Meeting was adjourned at 12:15 p.m.

It was noted that the Joint SEAMAP Meeting would begin at 1:00 p.m.

TCC SEAMAP SUBCOMMITTEE
MINUTES
Monday, March 13, 1989
New Orleans, Louisiana

APPROVED BY:


COMMITTEE CHAIRMAN

Chairman Walter Tatum declared a quorum present and called the meeting to order at 8:10 a.m. He introduced Mr. Jeff A. Ballweber with Senator Breaux's Washington staff to the Subcommittee. The following members and guests were present:

Members

Barney Barrett, LDWF, Baton Rouge, LA
Walter Tatum, ADCNR, Gulf Shores, AL
Paul Hammerschmidt, (proxy for G. Matlock) TPWD, Palacios, TX
Dick Waller, GCRL, Ocean Springs, MS
Alan Huff, FDNR, St. Petersburg, FL
Nikki Bane, (proxy for S. Nichols) NMFS, Miami, FL
J.Y. Christmas, TCC Chairman, Ocean Springs, MS

Staff

Larry Simpson, Executive Director
Tom Van Devender, SEAMAP Coordinator

Others

Karen Jo Foote, LDWF, Baton Rouge, LA
Jack Gartner, FDNR, St. Petersburg, FL
Joanne Lyczkowski-Shultz, GCRL, Ocean Springs, MS
Dianne Stephan, NCDNRCD, Morehead City, NC
I.B. Byrd, NMFS, St. Petersburg, FL
Jim Hannifen, LDWF, Baton Rouge, LA
Jeff Ballweber, Washington, DC

Adoption of Agenda

The agenda was modified to place item #5, Status of Budget Initiative, after the Work Group Reports and adopted.

Adoption of Minutes

The minutes of the SEAMAP-Gulf Subcommittee meeting held in New Orleans on January 12, 1989 were approved as written.

Administrative Report

T. Van Devender reported that expenditures from the administrative grant of \$93,476 for FY89, through the end of February totaled \$14,130. He reported the three Coordinators continue to work on the 1988 Joint Annual Report and publication of the 1986 Atlas is planned for June, if catch tables and plots are produced by NMFS as presently scheduled.

Red Drum

Work group leader T. McIlwain was unable to attend the meeting. T. Van Devender reminded members that the Cooperative State-Federal Red Drum Research Conference was scheduled immediately following SEAMAP. He noted that with the absence of several work group members for the conference, a separate Red Drum Work Group meeting would be held at a later date.

Data Coordinating

Work group leader K. Savastano was unable to attend, however a report of recent data management activities was distributed to the Subcommittee (attachment). It was noted that NMFS can not provide software packages such as WordPerfect with the SIS hardware, but individual participants may purchase these if desired.

Plankton

Work group leader J. Lyczkowski-Shultz distributed to the Subcommittee 1) a revised list of SEFC/SEAMAP samples to be sorted at ZSIOP (September 1988-August 1989); 2) revised SEAMAP Ichthyoplankton Sorting Protocols; 3) letters supporting continued invertebrate sorting; 4) cost-per-sample estimates for plankton sorting by LDWF; and 5) a report on the work group meeting held February 22 and 23, 1989 in Mobile (all attached to minutes). By consensus the work group recommended to the Subcommittee 1) that Louisiana continue to sort and identify its own ichthyoplankton samples in accordance with SEAMAP protocols and continue to provide specimens and data to the SAC; 2) that the means be found to continue support of and commitment to the sorting of the invertebrate portion of plankton samples and that SIPAC be funded to sort 300 samples per year; and 3) a request for a winter (December-March) plankton cruise and to take whatever means necessary to implement it.

* A. Huff moved to accept recommendation #1. D. Waller seconded. During discussion it was noted that the inclusion of egg sorting by Louisiana could increase price-per-sample costs from the present \$63 to approximately \$80. Motion passed with one abstention by the NMFS representative.

TED Exemption

N. Bane reported that for the past six months a request for TED exemptions to the Protected Species Program has gone unanswered. As a next step, S. Nichols will work with C. Oravetz to come up with an answer within the next thirty days.

Budget Initiative

N. Bane reported that she, B. Brown and A. Kemmerer had developed a brochure for laymen outlining data needs in the Southeast. Copies of the brochure would be made available for distribution in the near future. In addition four issue papers addressing fishery topics are to be produced and distributed. A slide presentation on the importance of Cooperative Programs -- SEAMAP, Cooperative Statistics and the MRFSS -- was presented. Extra slide program sets will be available to loan SEAMAP participants for local presentations.

[The Chairman recessed the meeting for lunch at 12:15; meeting resumed at 1:05 p.m.]

Five-Year Management Plan: Goals and Objectives

T. Van Devender, D. Stephen and N. Bane distributed a draft set of SEAMAP Goals and Objectives that they had drawn from the individual Operations Plans of the Gulf and South Atlantic, with additional input by M. Rolon for the Caribbean program.

The Subcommittee reviewed each Goal and its associated Objectives and adopted, by consensus, the package as modified (attached to minutes). The approved Goals and Objectives will be presented to the South Atlantic and Caribbean committees for their approval and/or modification at a later date.

Other Business

N. Bane distributed to Subcommittee members a Resource Data Needs matrix developed by the Joint SEAMAP Planning Work Group (attached to minutes.). She explained that the completed forms will be tabulated by the Coordinators and utilized in developing activities for the three components annual operations plan.

There being no further business, the meeting was adjourned at 2:10 p.m.

DRAFT

TCC SEAMAP SUBCOMMITTEE
MINUTES
Wednesday, July 26, 1989
Savannah, Georgia

Chairman W. Tatum called the meeting to order at 1:30 p.m. The following members and others were present:

Members

Barney Barrett, LDWF, Baton Rouge, LA
Joe Kimmel (proxy for A. Huff), FDNR, St. Petersburg, FL
Paul Hammerschmidt (proxy for G. Matlock), TPWD, Palacios, TX
Dick Waller, GCRL, Ocean Springs, MS
Scott Nichols, NMFS, Pascagoula, MS
Walter Tatum, ADCNR, Gulf Shores, AL

Staff

Tom Van Devender, SEAMAP Coordinator
Eileen Benton, Administrative Assistant

Others

Andy Kemmerer, NMFS, Pascagoula, MS

Adoption of Agenda

The Agenda was adopted with the inclusion of an update on the TED issue.

Adoption of Minutes

The minutes of the meeting held in New Orleans, Louisiana, March 13, 1989 were approved as written.

Administrative Report

T. Van Devender reported that as of June 30, available funds in the administrative budget totaled \$20,282.10. He stated that the next Subcommittee meeting will be held in conjunction with the Fall GSMFC meeting in Biloxi, MS. The SEAMAP meeting is tentatively scheduled for Monday, October 16, from 1:00-5:00 p.m.

T. Van Devender distributed the latest cruise logs which included information on Louisiana's current Shrimp/Groundfish cruise, Florida's Spring Ichthyoplankton Cruise and the Alabama portion of the Summer Shrimp/Groundfish Cruise.

He reported that the SEAMAP Marine Directory is currently at the printers and publication of the 1986 Atlas is still delayed.

T. Van Devender also noted that all cooperative agreements now have to be reviewed by NCASC in Washington. Cooperative agreements should be sent to N. Bane no later than September 1, due to the long turnaround time (120 days) required by NCASC to process.

TED Update

A. Kemmerer reported that the Secretary of Commerce had suspended the TED requirement in lieu of limited tow times. Due to this action, the National Wildlife Federation and possibly other environmental groups may file suit for an injunction against his ruling.

Activities and Budget Needs

A. Kemmerer stated that for FY90 funding, the House version of the authorization bill increased SEAMAP funding to \$1 million and also added an additional \$250,000. The Appropriations Committee however eliminated all increases for NMFS and only approved restorations. From the standpoint of the House, the funding level for SEAMAP is \$942,000. He also stated that the Senate is still marking up the budget and their version may include additional funds for SEAMAP.

He suggested that SEAMAP participants base their funding requests on last year's funding -- \$942,000.

States reviewed their activities and budget requests as follows:

Florida

J. Kimmel distributed and reviewed a request by Jack Gartner, SEAMAP Archivist, to attend the Early Life History Section of the American Fisheries Society (ELH) and the American Society of Ichthyologists and Herpetologists meetings. He noted that he will present an updated version of the poster session detailing SEAMAP ichthyoplankton collections at the ELH meeting.

J. Kimmel stated Florida will continue the same activities and requested level funding of \$67,100.

The Subcommittee approved J. Gartner's request for travel to the above meetings.

A discussion was held regarding the formation of some type of adult finfish survey in the Gulf. S. Nichols reviewed the sampling efforts of NMFS in regard to reef fish sampling (longlining, traps, etc.).

After discussion, it was noted that Texas is planning a State adult finfish survey next year using bottom longlines in their territorial waters. Mississippi and Alabama would also like to participate in an adult finfish survey and NMFS is planning a spring reef fish survey.

Alabama

W. Tatum stated that Alabama will participate at the same level of activity as last year and add to it some effort toward an adult finfish sampling study off Alabama. Request level funding of \$67,100.

Mississippi

D. Waller stated that Mississippi will conduct the same level of operation at level funding -- \$97,500. He noted that he will explore the possibility of obtaining additional funds from GCRL in order to participate in a finfish survey.

Louisiana

B. Barrett stated that Louisiana will continue the same effort at level funding -- \$117,200.

Texas

P. Hammerschmidt stated that Texas will continue the same effort at level funding -- \$46,000. He also noted that Texas will implement a territorial sea, low-scale adult finfish survey using bottom longlines.

NMFS

S. Nichols stated that NMFS plans to conduct the summer and fall trawling surveys, spring and late summer plankton surveys and continue data management functions. In addition, a reef fish cruise is scheduled for spring. NMFS requests funding of \$255,100 (includes Polish Sorting Center, South Atlantic Coordinator and data management funding).

Commission

T. Van Devender requested level funding (\$94,000), however due to increases in travel (airfare) money would be tight.

* D. Waller moved that the adult finfish work group meet in August to develop an initial reef fish sampling design for 1990. Seconded and passed unanimously.

Other Business

* B. Barrett moved to replace Gus Zieske with John Kern on the Plankton Work Group. Seconded and passed unanimously.

There being no further business, the meeting adjourned at 5:00 p.m.

DRAFT

SEAMAP-GULF SUBCOMMITTEE
MINUTES
Friday, July 28, 1989
Savannah, Georgia

Chairman W. Tatum called the meeting to order at 8:55 a.m. The following members and others were present:

Members

Walter Tatum, ADCNR, Gulf Shores, AL
Joe Kimmel (proxy for A. Huff), FDNR, St. Petersburg, FL
Paul Hammerschmidt (proxy for G. Matlock), TPWD, Palacios, TX
Barney Barrett, LDWF, Baton Rouge, LA
Dick Waller, GCRL, Ocean Springs, MS
Scott Nichols, NMFS, Pascagoula, MS

Staff

Tom Van Devender, SEAMAP Coordinator
Eileen Benton, Administrative Assistant

Operations Plan

A discussion was held regarding incorporating proposed adult finfish sampling efforts into the Annual Operations Plan. Texas, Alabama, NMFS and possibly Mississippi plan to participate in some survey activity; in addition, Louisiana and Florida will help with the planning of the survey.

The Subcommittee agreed that each state would add the following activity under the Operations section of the Annual Operations Plan:

- Plan and coordinate a pilot study for sampling adult finfish in the Gulf.

T. Van Devender also reminded members to incorporate this language into their cooperative agreements. He noted that he will contact NMFS regarding their effort to also be included under the NMFS section in their cooperative agreements.

* P. Hammerschmidt moved to accept the above language and that it be incorporated in each State's cooperative agreement and Annual Operations Plan. Seconded and passed unanimously.

The Subcommittee also updated the membership list in the Operations Plan as follows:

- Replace Gus Zieske with John Kern on the Plankton Work Group.
- Replace Richard Leard with James Warren on the Adult Finfish Work Group.

- Remove the second NMFS-SEFC representative (to be named) on the Adult Finfish Work Group.
- Removed Gilbert Bane from the Squid/Butterfish Work Group.

FY90 Budget

W. Tatum reviewed the revised FY90 budget for the Gulf as developed following negotiations at the Joint SEAMAP meeting held on Thursday, July 27. The revised figures were:

| | |
|-------------|---------------|
| Commission | \$93,476 |
| Texas | 45,744 |
| Louisiana | 116,547 |
| Mississippi | 95,573 |
| Alabama | 65,780 |
| Florida | <u>74,453</u> |
| TOTAL | \$491,573 |
| NMFS | 233,000 |

* P. Hammerschmidt moved to accept the final budget allocations for FY90. Seconded and passed unanimously.

T. Van Devender reminded members that the next meeting would be October 16 in Biloxi, MS. He also reminded members to mail in their cooperative agreements by September 1, 1989.

There being no further business, the meeting adjourned at 10:00 a.m.

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