

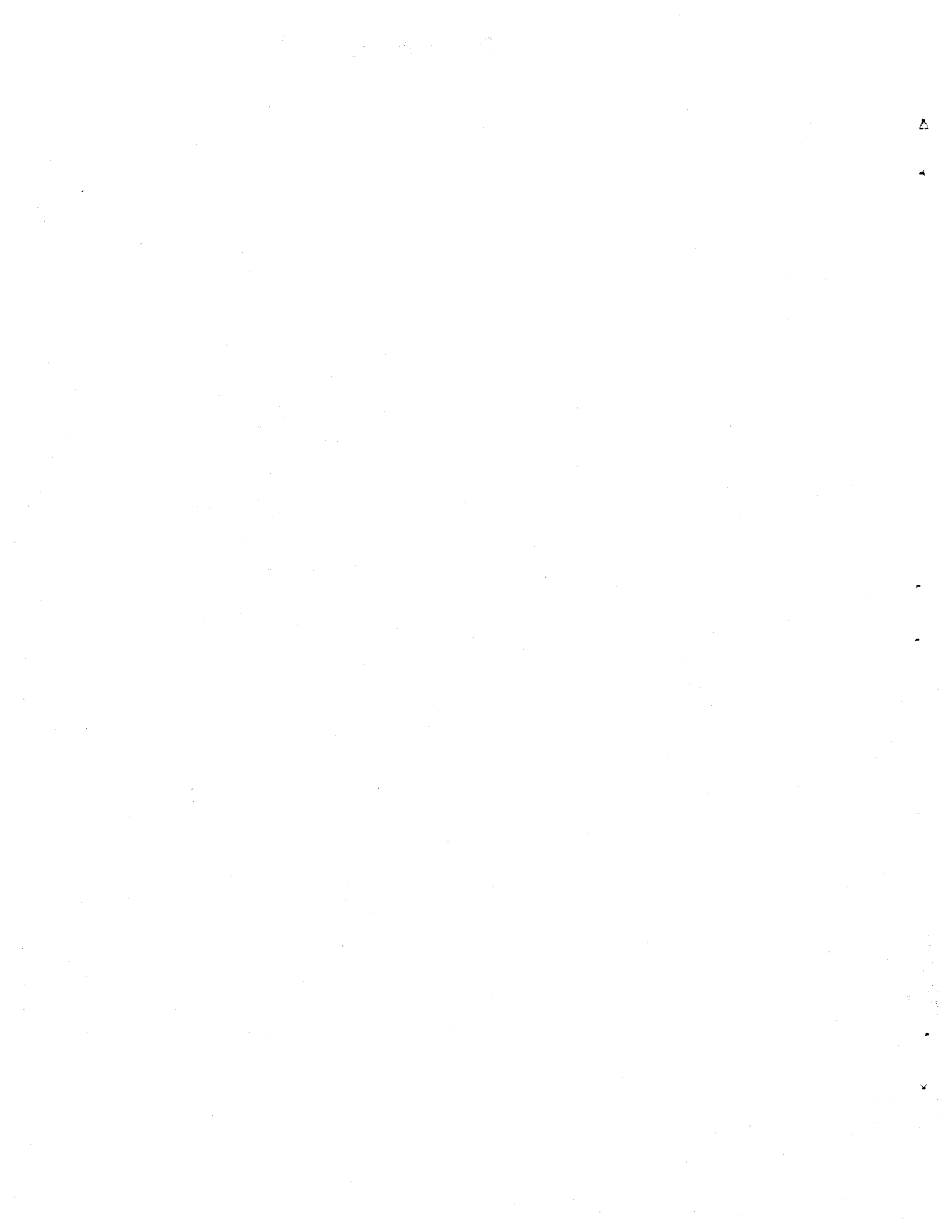
# **SEAMAP ANNUAL REPORT**

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

**October 1, 1989 to September 30, 1990**

**SEAMAP Subcommittee  
Walter Tatum, Chairman**

**September 30, 1990**



**OFFICE COPY ONLY**

**ANNUAL REPORT**

**TO THE**

**TECHNICAL COORDINATING COMMITTEE**

**GULF STATES MARINE FISHERIES COMMISSION**

**OCTOBER 1, 1989 TO SEPTEMBER 30, 1990**

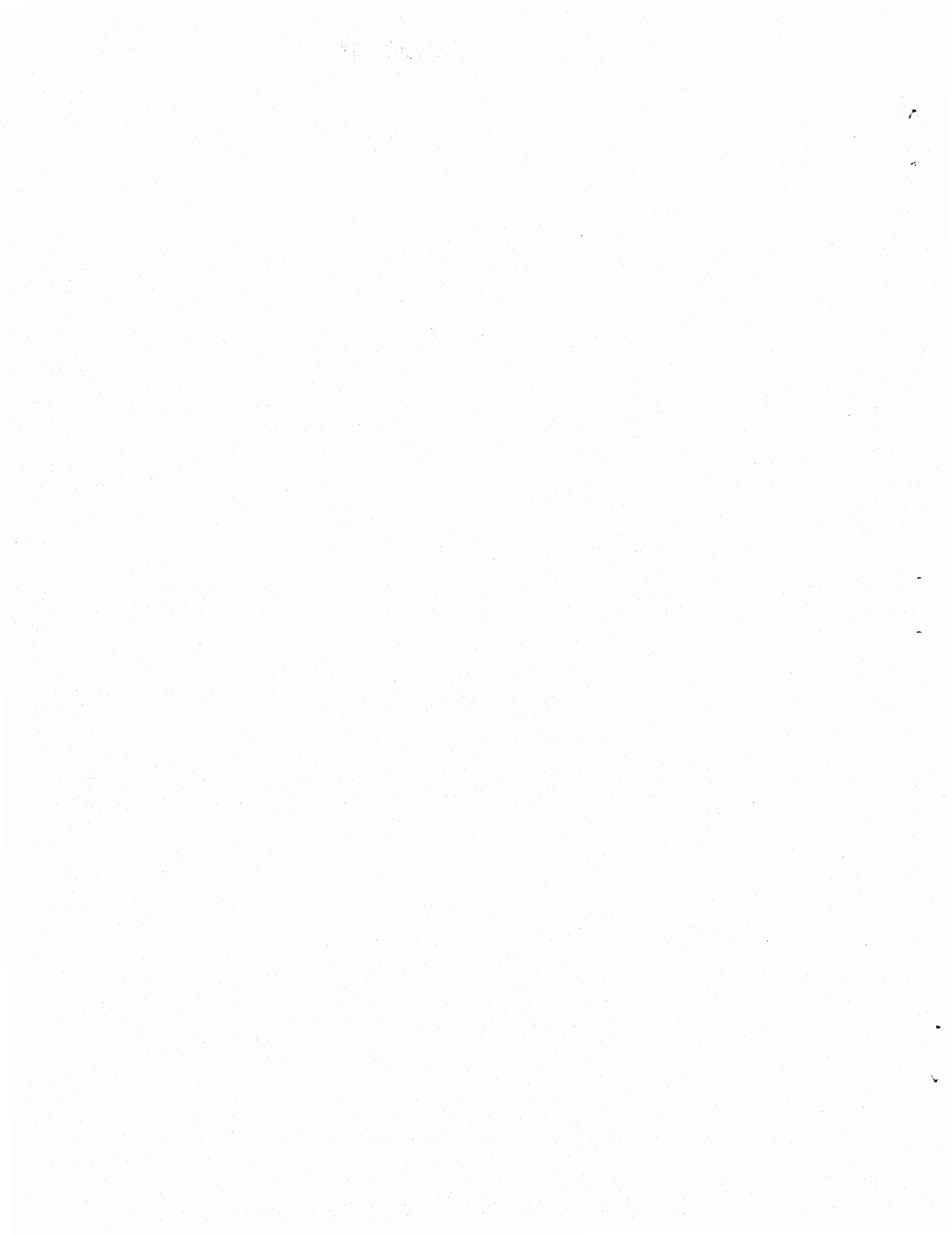
**SEAMAP SUBCOMMITTEE**

**WALTER M. TATUM, CHAIRMAN**

**DAVID DONALDSON**

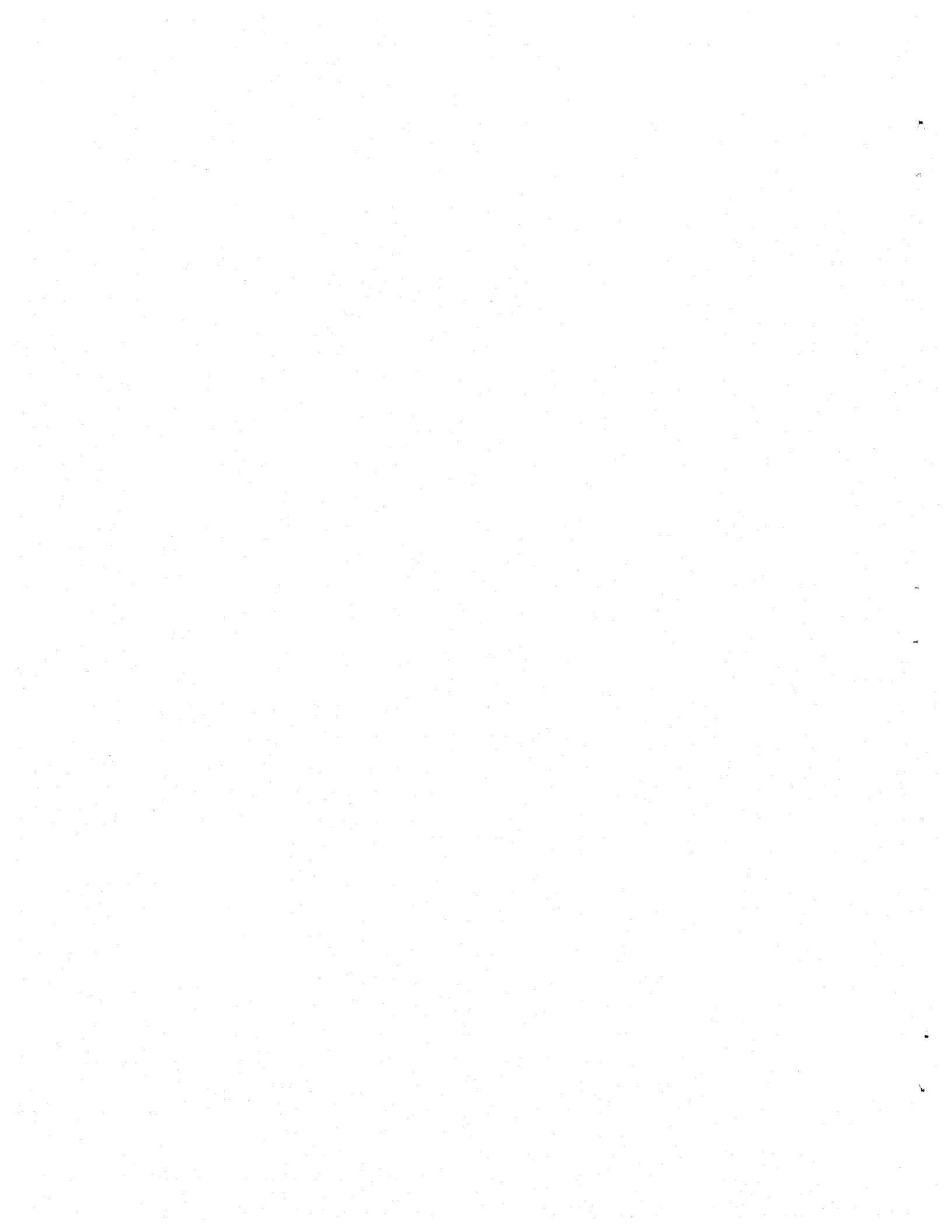
**SEAMAP COORDINATOR**

**SEPTEMBER 30, 1990**



## TABLE OF CONTENTS

Introduction . . . . .	1
1990 SEAMAP Resource Surveys . . . . .	3
Fall Shrimp/Groundfish Survey . . . . .	4
Louisiana Seasonal Trawl Surveys . . . . .	6
Spring Plankton Survey . . . . .	8
Summer Shrimp/Groundfish Trawl Survey . . . . .	10
Fall Plankton Survey . . . . .	16
Plankton and Environmental Data Surveys . . . . .	18
1990 SEAMAP Special Projects . . . . .	19
Status and Trends Benthic Surveillance Project . . . . .	20
Information Services . . . . .	22
SEAMAP Information System . . . . .	23
Data Management . . . . .	24
Real-Time Data . . . . .	26
SEAMAP Archiving Center . . . . .	35
SEAMAP Invertebrate Plankton Archiving Center . . . . .	36
Program Management . . . . .	37
Administration . . . . .	38
Proposed FY1991 Activities . . . . .	39
Publications . . . . .	44
FY1990 Financial Report . . . . .	45
Appendices . . . . .	47



## 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, 1989 and 1990 (October 1, 1989 through September 30, 1990). State and Commission funding allocations for FY1986, FY1987, FY1988, FY 1989 and FY1990 were handled through State-Federal cooperative agreements, administered by NMFS/SERO and NMFS/SEFC.

In FY1990, SEAMAP operations continued for the ninth 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 FY1990 consisted of the Status and Trends Benthic Surveillance Project. Other FY1990 activities included SEAMAP information services and program management. Resource survey areas in FY1990 are shown in Figure 1.

This report is the tenth 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 FY1990, from October 1, 1989 through September 30, 1990, and proposed SEAMAP activities for FY1991.

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.

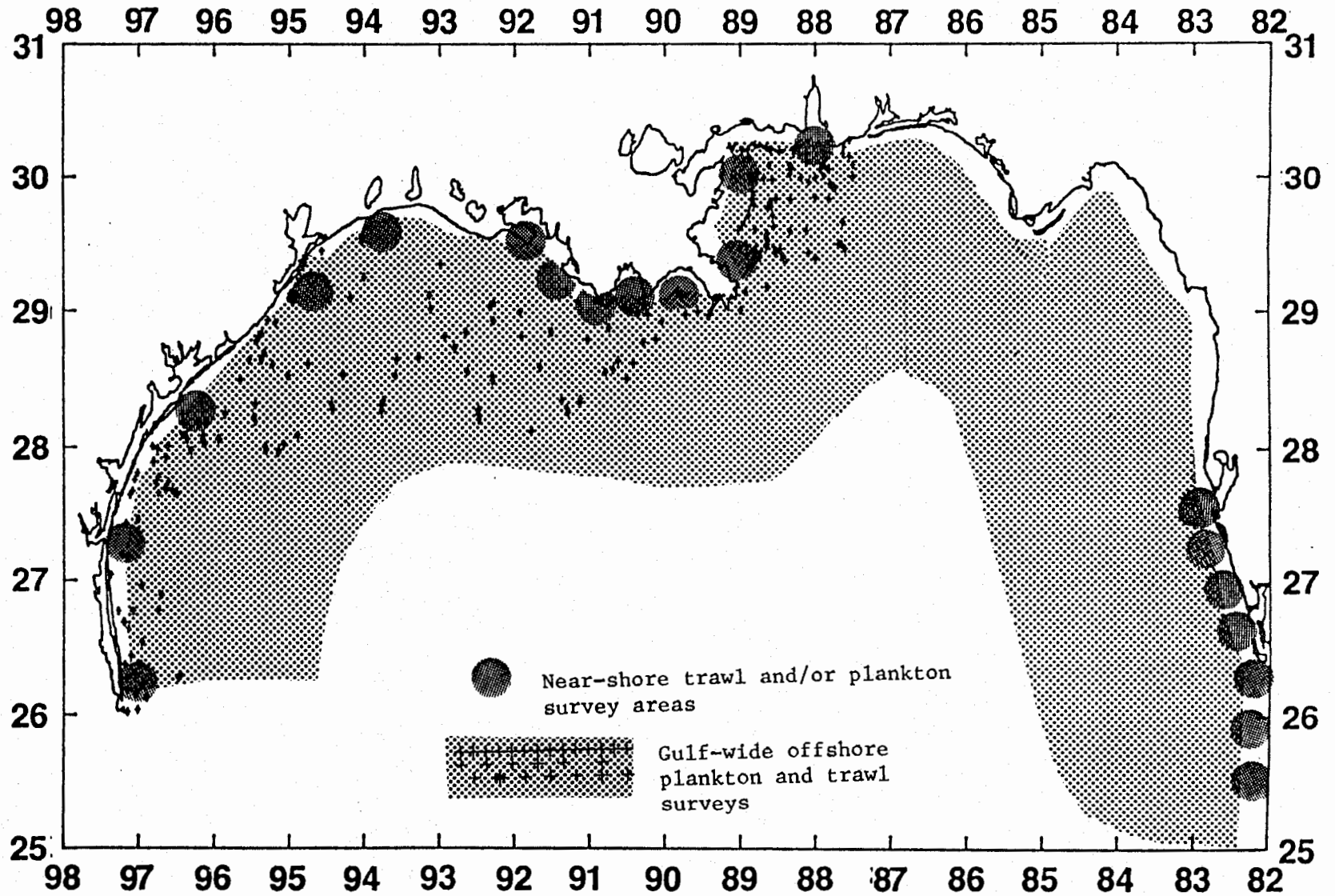


Figure 1. 1990 SEAMAP Survey Areas



**1990 SEAMAP RESOURCE SURVEYS**

## FALL SHRIMP/GROUNDFISH SURVEY

The 1989 Fall Shrimp/Groundfish Survey was conducted from October 16 - November 19, 1989, from off Mobile, Alabama to the U.S.-Mexican border. Vessels from NMFS, Alabama, Mississippi, Louisiana and Texas sampled inshore and offshore waters to 60 fm, covering a total of 351 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; and
- (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. The R/V VERRILL sampled Alabama territorial waters.

Of the total 351 trawl samples taken, NMFS completed 211 stations; Alabama 12; Mississippi 17; Louisiana 31; and Texas 80 trawl stations. Areas of trawl stations are indicated on Figure 2. All vessels took environmental data, including temperature, salinity and oxygen.

The greatest catch rates were encountered east of the Mississippi River Delta. Shrimp catch rates were highest in the 50-59 fm strata while the highest finfish catches were recorded in the 20-29 fm strata. Slightly higher catch rates were observed at night.

Ichthyoplankton data were collected by all, except Texas vessels, at sample sites occurring nearest to half-degree intervals of latitude/longitude. A total of 63 stations were sampled with bongo and/or neuston nets, as encountered along cruise tracks: NMFS completed 39 ichthyoplankton stations; Louisiana 21; 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.

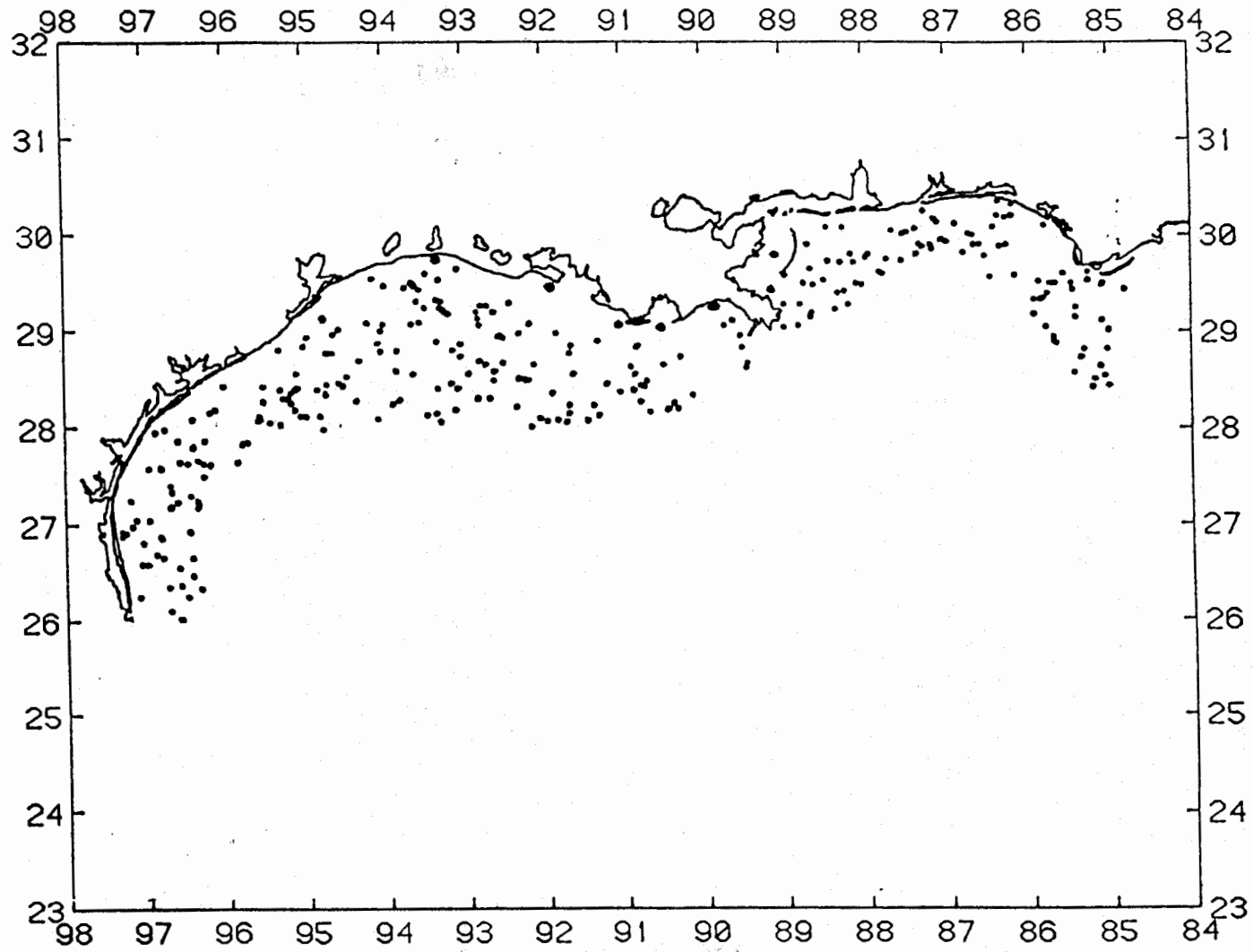


Figure 2. Fall 1989 SEAMAP Shrimp/Groundfish Survey

## LOUISIANA SEASONAL DAY/NIGHT TRAWL SURVEYS

The Louisiana Department of Wildlife and Fisheries (LDWF) 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 stages 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 1989 and April and July 1990 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 20 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 transshipped 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.

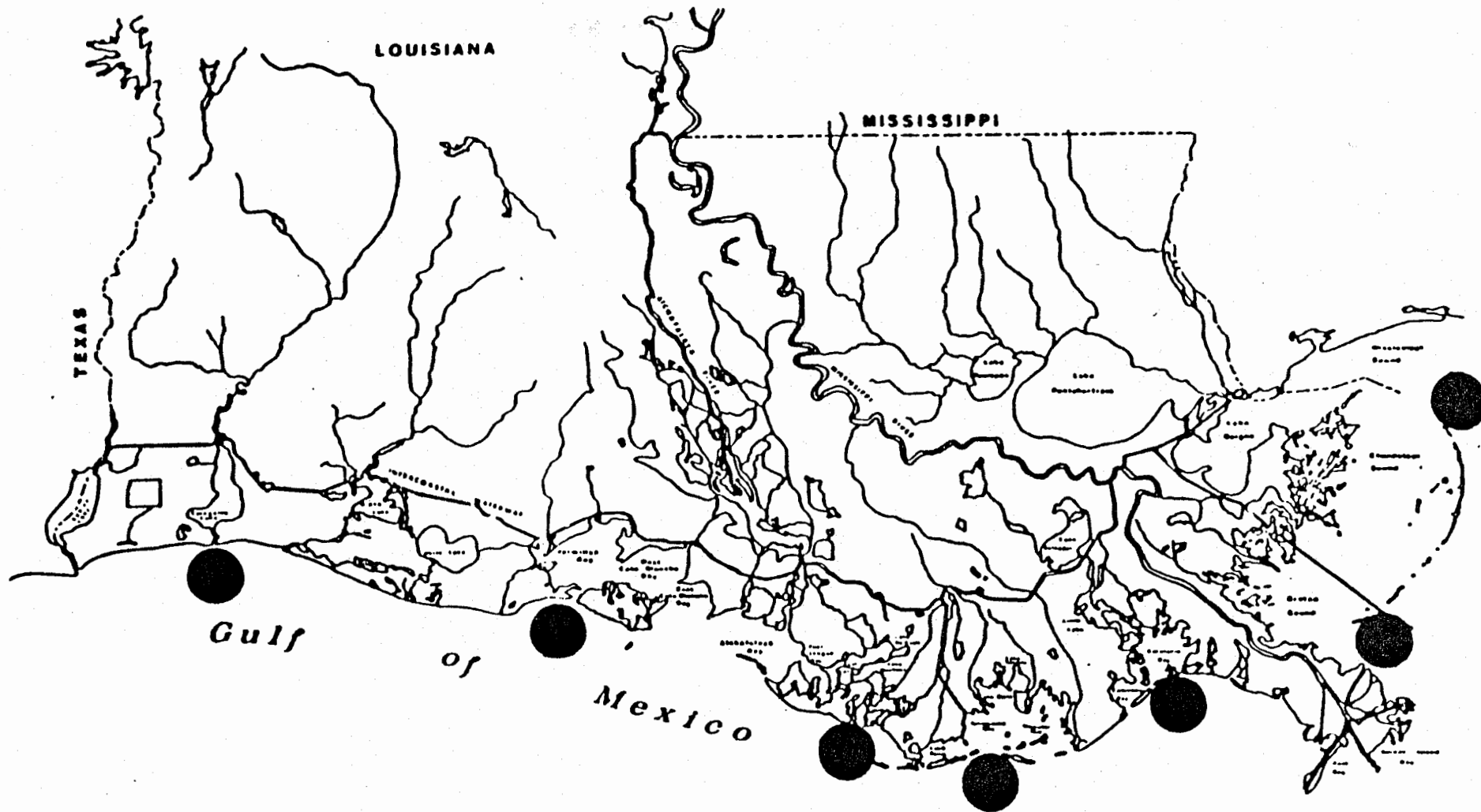


Figure 3. General Location of Territorial Sea Transects, 1990 Louisiana Seasonal Trawl Surveys.

## SPRING PLANKTON SURVEY

For the eighth season since 1982, plankton samples were collected during the spring in the northern Gulf of Mexico. The NOAA Ship OREGON II and Florida's R/V HERNAN CORTEZ II sampled offshore waters from 24°30' N. Lat. and 85°00' W. Long. from April 19 to May 30, 1990 (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 168 stations was sampled. The OREGON II occupied 147 stations and the R/V HERNAN CORTEZ II sampled 21 stations along the west Florida shelf. Time restraints and inclement weather prevented the OREGON II from occupying nine 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 transshipped 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.

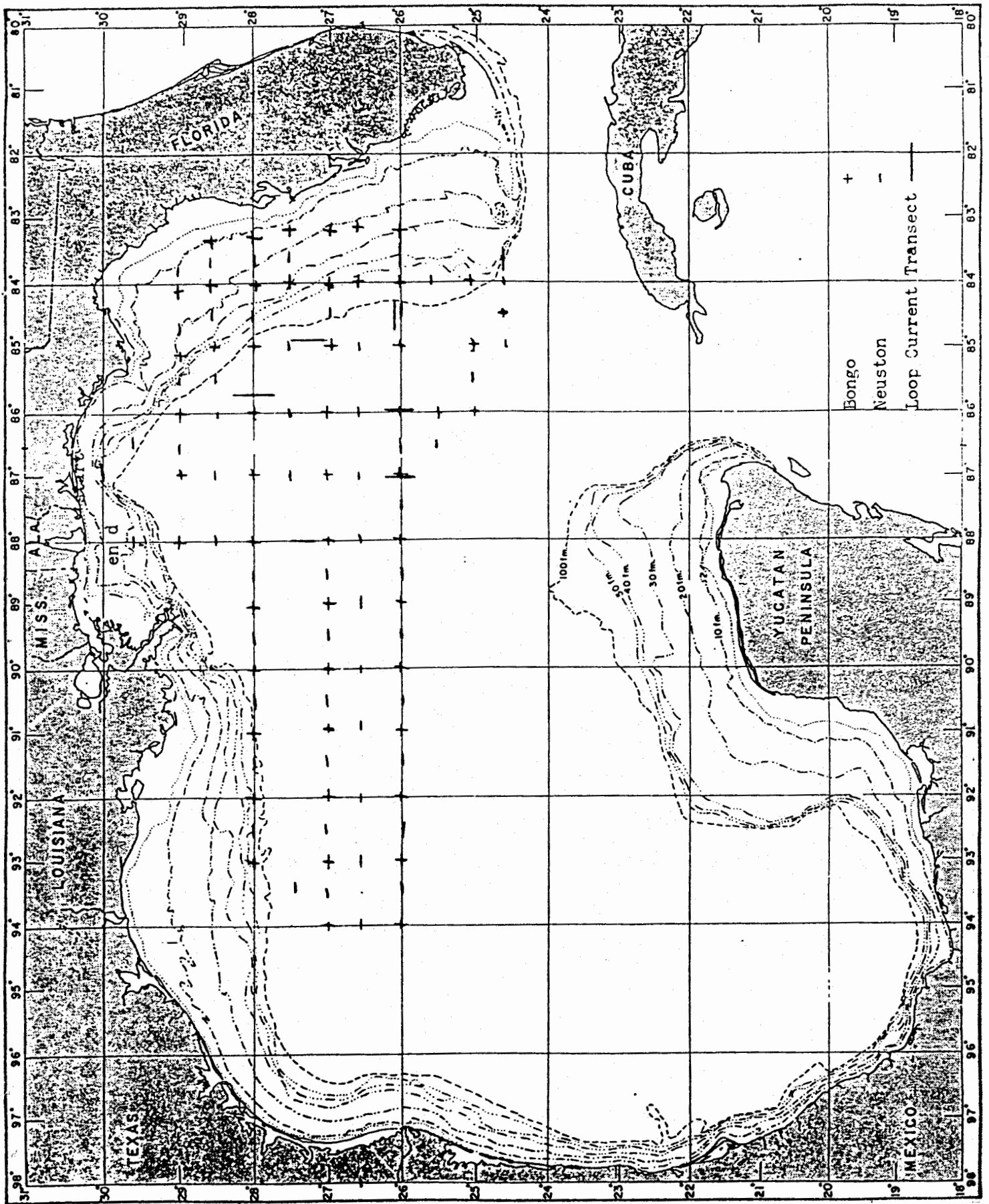


Figure 4. Survey Stations, 1989 Spring Plankton Survey

## SUMMER SHRIMP/GROUNDFISH TRAWL SURVEY

A planning meeting of the Shrimp/Bottomfish Work Group was held in April 1990 to examine the design for the 1990 Summer Shrimp/Groundfish Trawl Survey and determine the 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 1990 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 7 to July 13, 1990. SEAMAP sampling conducted east of the Mississippi River, from July 1 to July 13 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 13), Gulf waters off Texas (June 11 to July 2), and waters off Louisiana west of the River (July 1 to July 13).

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 341 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 15.1 lb/hr of 34-count shrimp. White shrimp catches east of the River were all less than 2 lb/hr. The largest pink shrimp catch rate east of the River was 8.8 lb/hr of 34-count shrimp taken in 11 fm of water off Mobile Bay, Alabama. The next largest pink shrimp catch rate east of the River in June was 7.9 lb/hr of 21-count



shrimp south of Petit Bois Island in 12 fm. Finfish catch rates east of the River were generally low, with the largest catch on June 7 of 172 lb/hr with Gulf butterfish predominating.

Moderate catches of brown shrimp were also made off Texas from June 10 to July 2. The largest catch rate occurred June 20 off Brownsville in 16 fm (284.4 lb/hr of 66-count shrimp). White shrimp catches off Texas were low with the largest catch, 39.7 lb/hr of 13-count shrimp, taken off Matagorda Bay in 5 fm. Catch rates for pink shrimp were generally low off Texas, though the largest catch was 11.8 lb/hr of 25-count shrimp south of Galveston Bay in 12 fm. Finfish catch rates were moderate to low in Texas inshore and offshore waters. The largest catch of finfish was 2,436 lb/hr off the entrance to Matagorda Bay with spot predominating.

In July's samples west of the river (Louisiana) brown shrimp catches were low with the largest catch rate of 41.8 lb/hr of 35-count shrimp occurring southeast of Vermilion Bay in 16 fm. White shrimp catches were low, with a maximum catch rate of 2.9 lb/hr of 16-count shrimp taken in 6 fm south of Calcasieu Lake. Catches of pink shrimp were very low off the Louisiana coast with a maximum catch rate of 2.4 lb/hr of 23-count shrimp. Finfish catch rates were moderate with the largest catch rate of 1,181 lb/hr taken on July 1 with trout predominating.

In July sampling east of the Mississippi River, brown shrimp catches were low with the highest rate of 6.3 lb/hr of 85-count shrimp taken south of Horn Island, Mississippi in 8 fm on July 13. Highest catch rate of white shrimp east of the River was 0.2 lb/hr of 14-count shrimp taken west of Chandeleur Islands in 22 fm. The highest pink shrimp catch rate east of the River was 13.2 lb/hr of 30-count shrimp taken east of Chandeleur Islands in 11 fm. Finfish catches rates east of the River in July were low with a maximum catch rate of 709 lb/hr reported in 45 fm east of the mouth of the Mississippi River with croaker 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°37.8' and 91°21.1' W. Long. in 7-17 fm (Figure 8).

Figure 5

1990 Summer Shrimp/Groundfish Survey Stations

June 7 - July 13

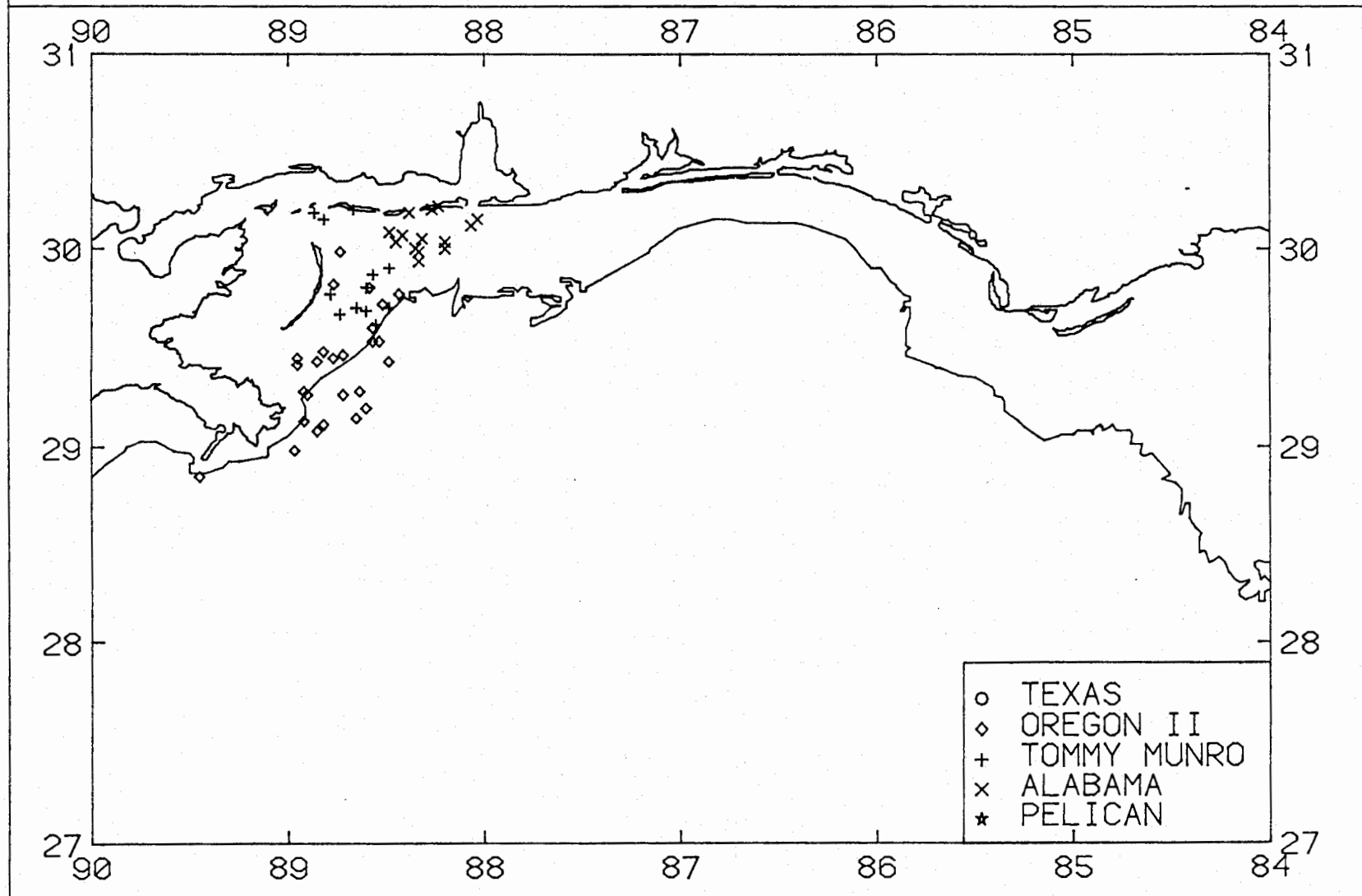


Figure 6

1990 Summer Shrimp/Groundfish Survey Stations

June 11 - July 2

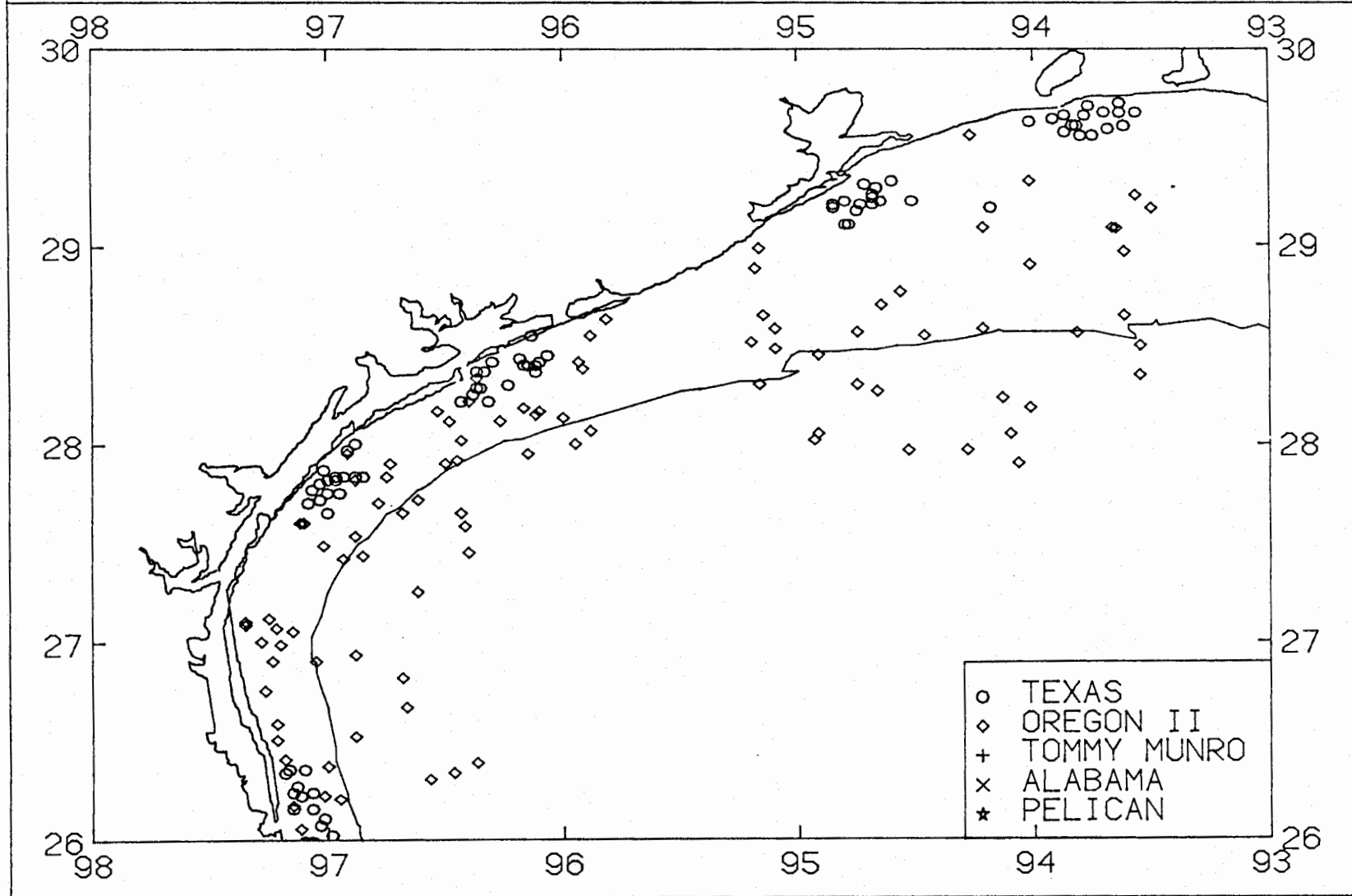


Figure 7  
1990 Summer Shrimp/Groundfish Survey Stations  
July 1 - July 13

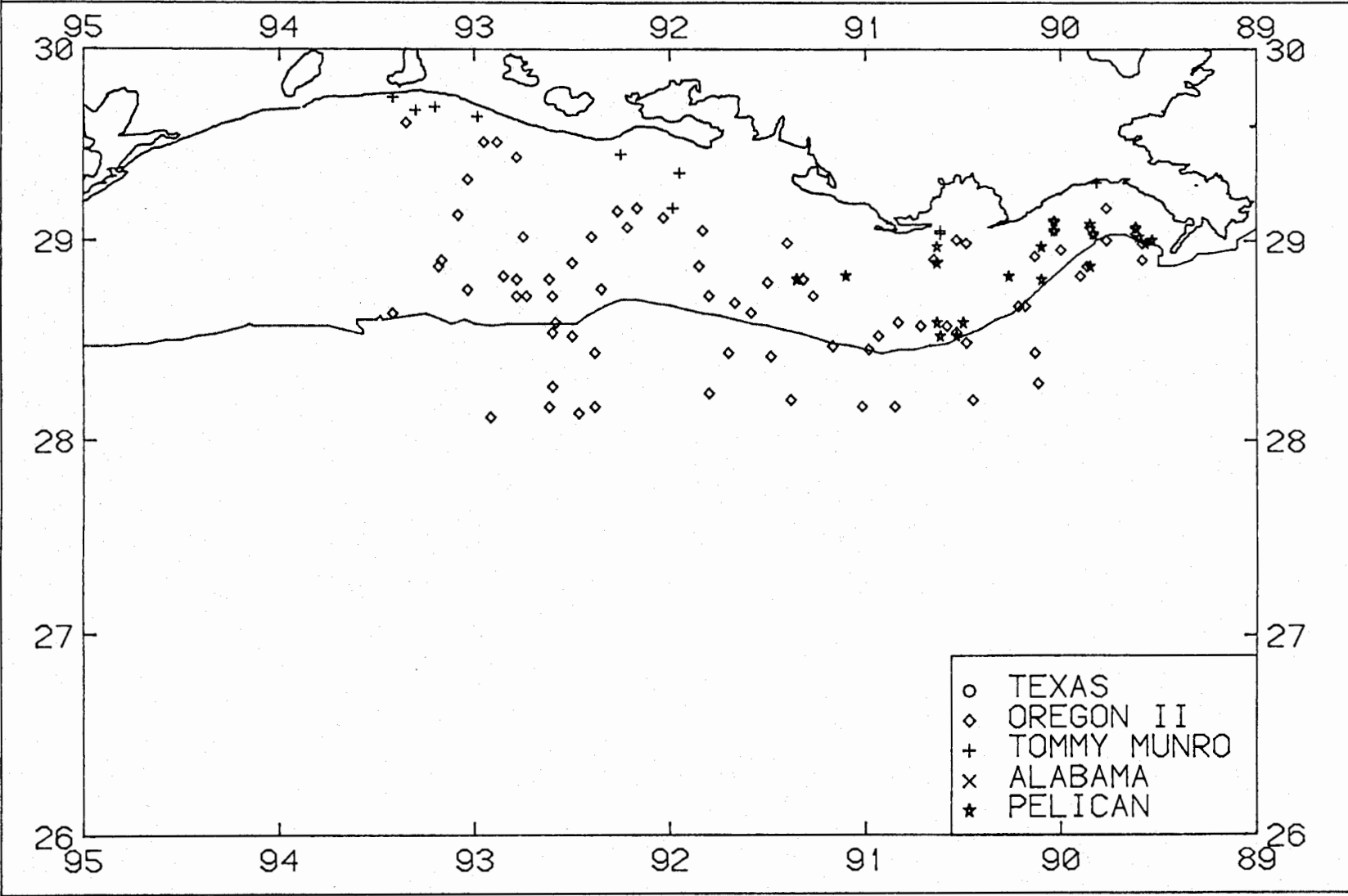
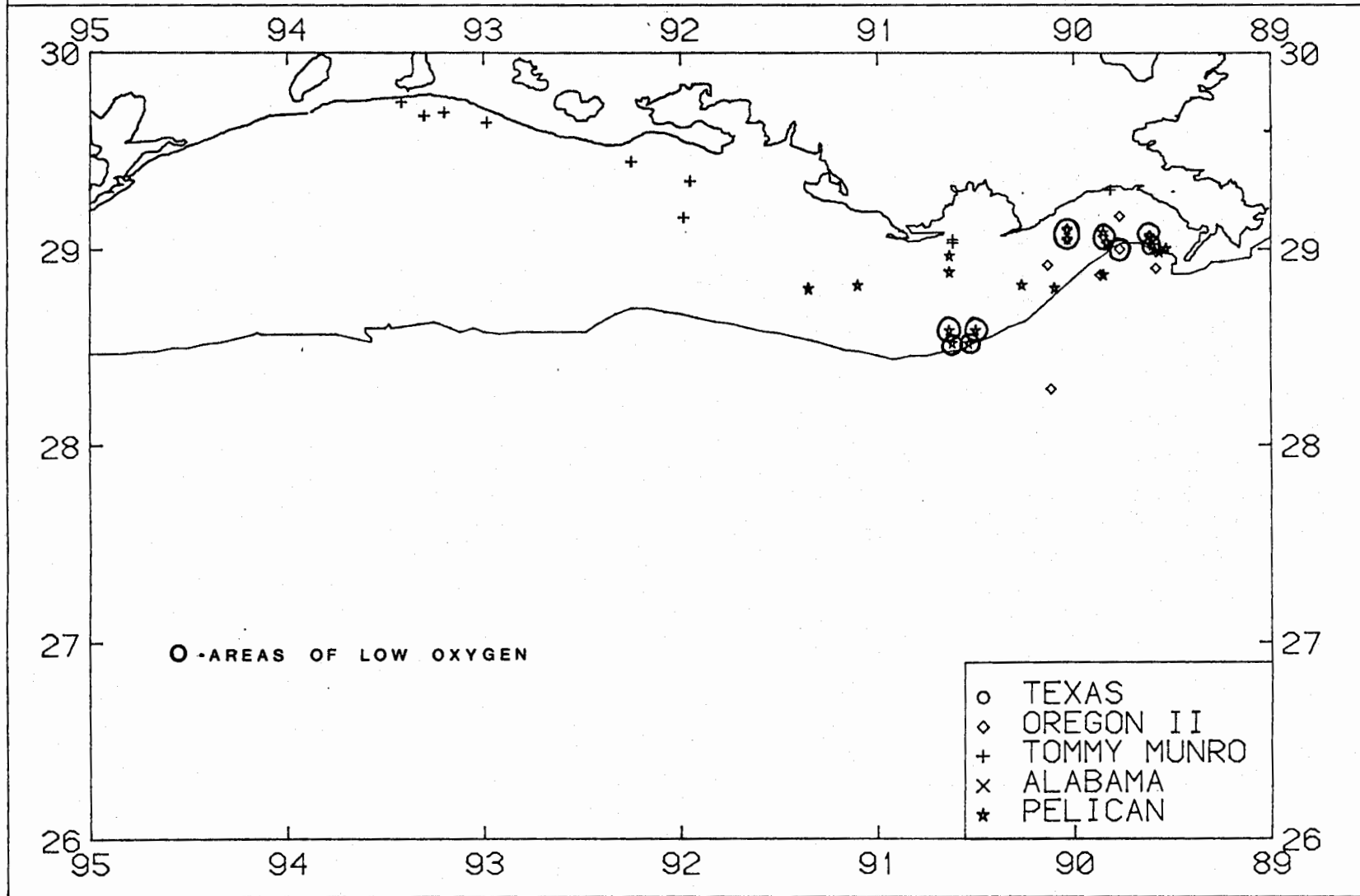


Figure 8  
1990 Summer Shrimp/Groundfish Survey Hypoxic Stations  
July 9 - July 13



## 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, 1989 and in the current year covered Gulf waters from Florida Bay to Brownsville, Texas. Vessels from Alabama, Mississippi and from NMFS surveyed from September 1 through September 16, 1990 for a total of 67 stations (Figure 9). Florida and Louisiana are scheduled to begin sampling in early October.

The NOAA Ship OREGON II sampled 55 stations from Tampa Bay, Florida to Terrebonne Bay, Louisiana at depths from 5 to 100 fm. Chlorophyll samples were filtered at each station. An Alabama vessel sampled 10 stations at the mouth and outside Mobile Bay. The R/V TOMMY MUNRO sampled 2 stations south of Mississippi Sound along a 30-minute grid.

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 transshipped by the NMFS Miami Laboratory to the PSC; 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.

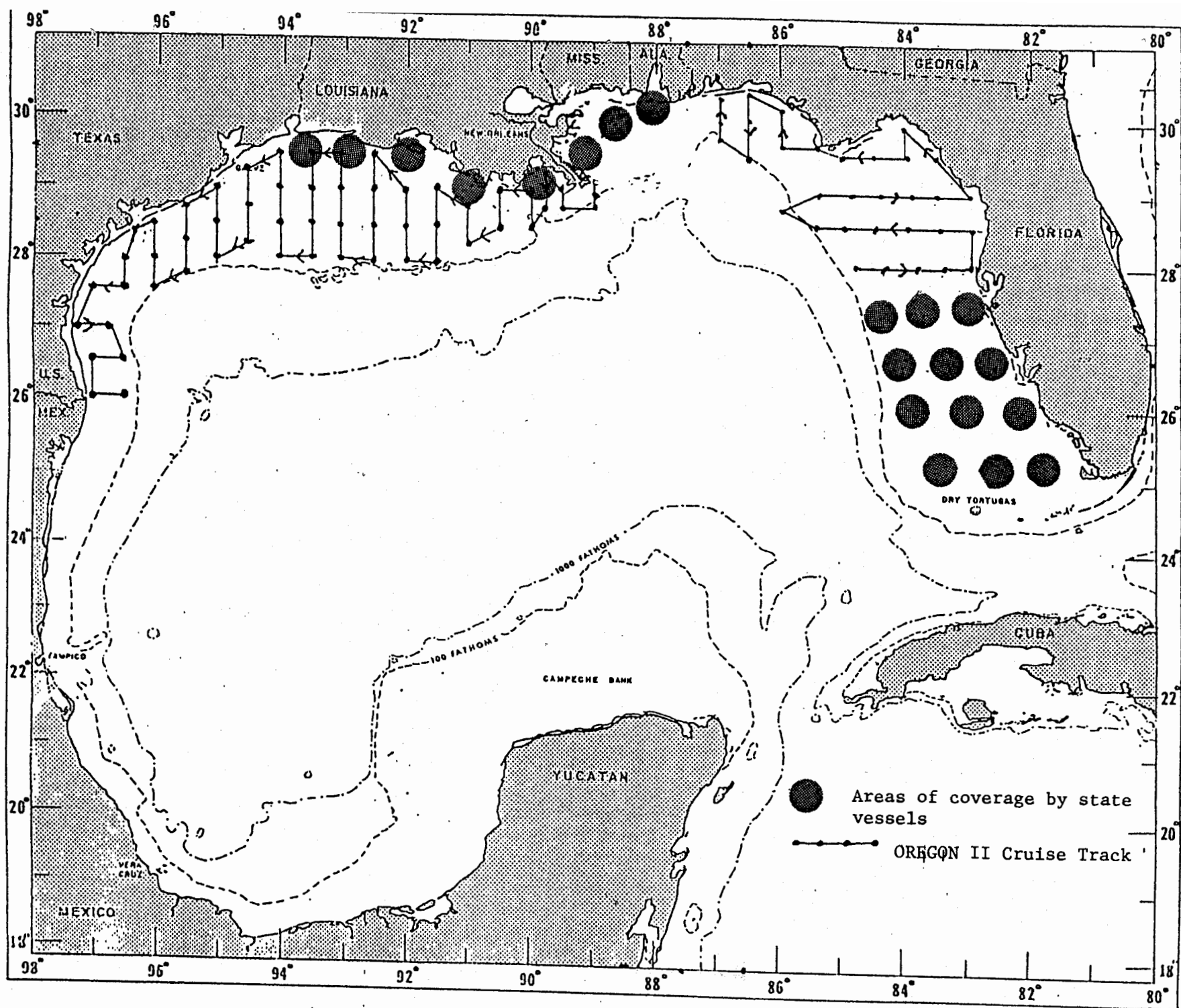


Figure 9. Fall Plankton Survey

## 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, 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, mid-depth 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 1990, detailed earlier.



**1990 SEAMAP SPECIAL PROJECTS**

## STATUS AND TRENDS BENTHIC SURVEILLANCE PROJECT

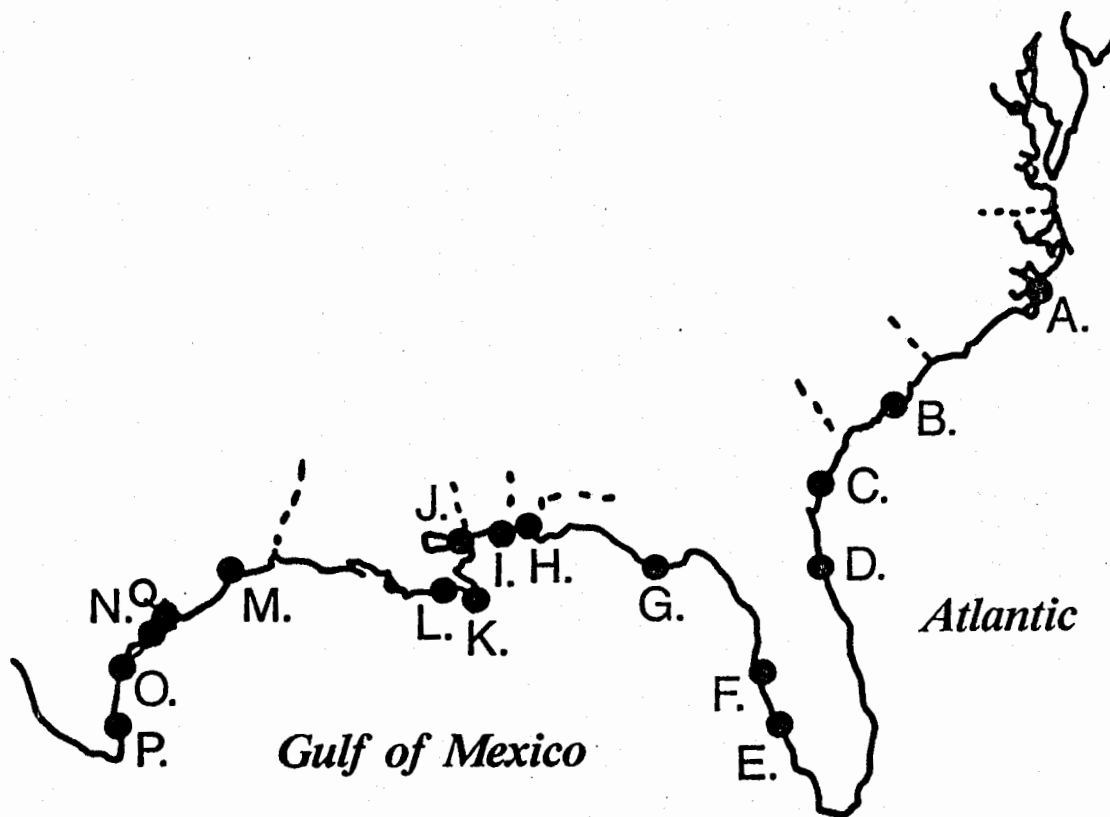
For the seventh year, the SEAMAP Program actively participated in the nationwide sampling for contaminants in coastal fishes and sediments, as part of the NOAA National Status and Trends Benthic Surveillance Project. Both SEAMAP Gulf of Mexico and South Atlantic supplied personnel from state fishery 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 1990 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 15 to October 12, 1990 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 1990 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, 1989 and 1990 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 was selected in the Galveston Bay system with fish and sediment samples collected at each subsite.



	<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 1988, all SEAMAP surveys in 1982 through 1988 have been entered into the system. Data from 1989 surveys are in the process of being verified, while data entry and edit continues for 1990 surveys. Verified, non-confidential SEAMAP data are available conditionally to all requestors, although the highest priority is assigned to SEAMAP participants. A total of 95 SEAMAP data requests has 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, 91 requests have been completed and work is being performed on those remaining.

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, 1986, 1987 and 1988 SEAMAP Biological and Environmental Atlases.
- Comparing catches of shrimp and groundfish captured by 40-ft versus 20-ft trawl nets.
- Compiling the 1987 SEAMAP Ichthyoplankton Atlas.

## DATA MANAGEMENT

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 versions are now located at six SEAMAP field sites. Approximately 61% of the total system estimated cost of \$536,500 has been committed to contracts or \$328,744. Approximately 98% of the committed contract money or \$321,390 has been utilized as of June 24, 1990. Delivery of the remaining PS/2's has been completed. All Gulf States are now equipped with the necessary computer hardware and software.

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 listings 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 1990 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.



SEAMAP90 DATA, OREGON II

PLAT	STATION	DATE	LAT	LONG	TIME	FMS	SUR	BOT	MG/M3	CHLOR	DEP	GEAR	MIN	FISH	TOWS	SHRIMP	FINFISH	CRK	SPT	TRT	CAT	OTHER	LBS
1	WN19	7/ 3/90	28-16.5	92-36.8	06	35	29.3	21.7	6.3	ST	60	1	4.2	299.4	0	2	0	0	0	109	147		

SPECIES: BROWN WEIGHT: 4.2 NUMBER: 39 MODE: 0/ 0  
 LEN(MM)/FREQ. 140/ 1 150/ 6 160/ 10 170/ 4 180/ 1 190/ 5 200/ 7 220/ 1 230/ 1

PLAT	STATION	DATE	LAT	LONG	TIME	FMS	SUR	BOT	MG/M3	CHLOR	DEP	GEAR	MIN	FISH	TOWS	SHRIMP	FINFISH	CRK	SPT	TRT	CAT	OTHER	LBS
1	WD22	7/ 3/90	28-08.1	92-28.4	10	45	29.4	19.9	5.7	ST	36	1	0.7	46.5	0	0	0	0	0	109	33		

SPECIES: BROWN WEIGHT: 0.7 NUMBER: 6 MODE: 0/ 0  
 LEN(MM)/FREQ. 170/ 4 210/ 1

PLAT	STATION	DATE	LAT	LONG	TIME	FMS	SUR	BOT	MG/M3	CHLOR	DEP	GEAR	MIN	FISH	TOWS	SHRIMP	FINFISH	CRK	SPT	TRT	CAT	OTHER	LBS
1	WD20	7/ 3/90	28-10.6	92-23.2	12	40	29.1	20.1	5.9	ST	103	2	1.9	84.4	0	0	0	0	0	109	23		

SPECIES: BROWN WEIGHT: 1.9 NUMBER: 19 MODE: 166/ 3  
 LEN(MM)/FREQ. 140/ 1 150/ 3 160/ 6 170/ 2 180/ 1 190/ 2 200/ 1 210/ 1

PLAT	STATION	DATE	LAT	LONG	TIME	FMS	SUR	BOT	MG/M3	CHLOR	DEP	GEAR	MIN	FISH	TOWS	SHRIMP	FINFISH	CRK	SPT	TRT	CAT	OTHER	LBS
1	WD18	7/ 3/90	28-26.7	92-23.1	16	30	29.3	22.1	8.0	ST	106	2	0.9	54.2	0	0	0	0	0	24	10		

SPECIES: BROWN WEIGHT: 0.9 NUMBER: 15 MODE: 0/ 0  
 LEN(MM)/FREQ. 120/ 2 130/ 4 140/ 2 150/ 4 170/ 2

PLAT	STATION	DATE	LAT	LONG	TIME	FMS	SUR	BOT	MG/M3	CHLOR	DEP	GEAR	MIN	FISH	TOWS	SHRIMP	FINFISH	CRK	SPT	TRT	CAT	OTHER	LBS
1	WN18	7/ 3/90	28-31.9	92-30.4	20	25	29.5	22.4	6.0	ST	110	2	15.4	82.5	0	0	0	0	0	22	23		

SPECIES: BROWN WEIGHT: 15.4 NUMBER: 216 MODE: 136/ 12  
 LEN(MM)/FREQ. 120/ 15 130/ 70 140/ 24 150/ 47 160/ 19 170/ 10 180/ 15 190/ 5 200/ 2

PLAT	STATION	DATE	LAT	LONG	TIME	FMS	SUR	BOT	MG/M3	CHLOR	DEP	GEAR	MIN	FISH	TOWS	SHRIMP	FINFISH	CRK	SPT	TRT	CAT	OTHER	LBS
1	WN17	7/ 4/90	28-32.7	92-36.2	01	22	29.2	23.7	7.2	ST	23	1	0.9	45.6	1	1	0	0	0	22	14		

SPECIES: BROWN WEIGHT: 0.9 NUMBER: 14 MODE: 166/ 2  
 LEN(MM)/FREQ. 100/ 1 110/ 2 120/ 1 130/ 3 140/ 1 150/ 3 160/ 2 180/ 1

Figure 11 Real-Time Data Listing, 1990 Shrimp/Bottomfish Survey

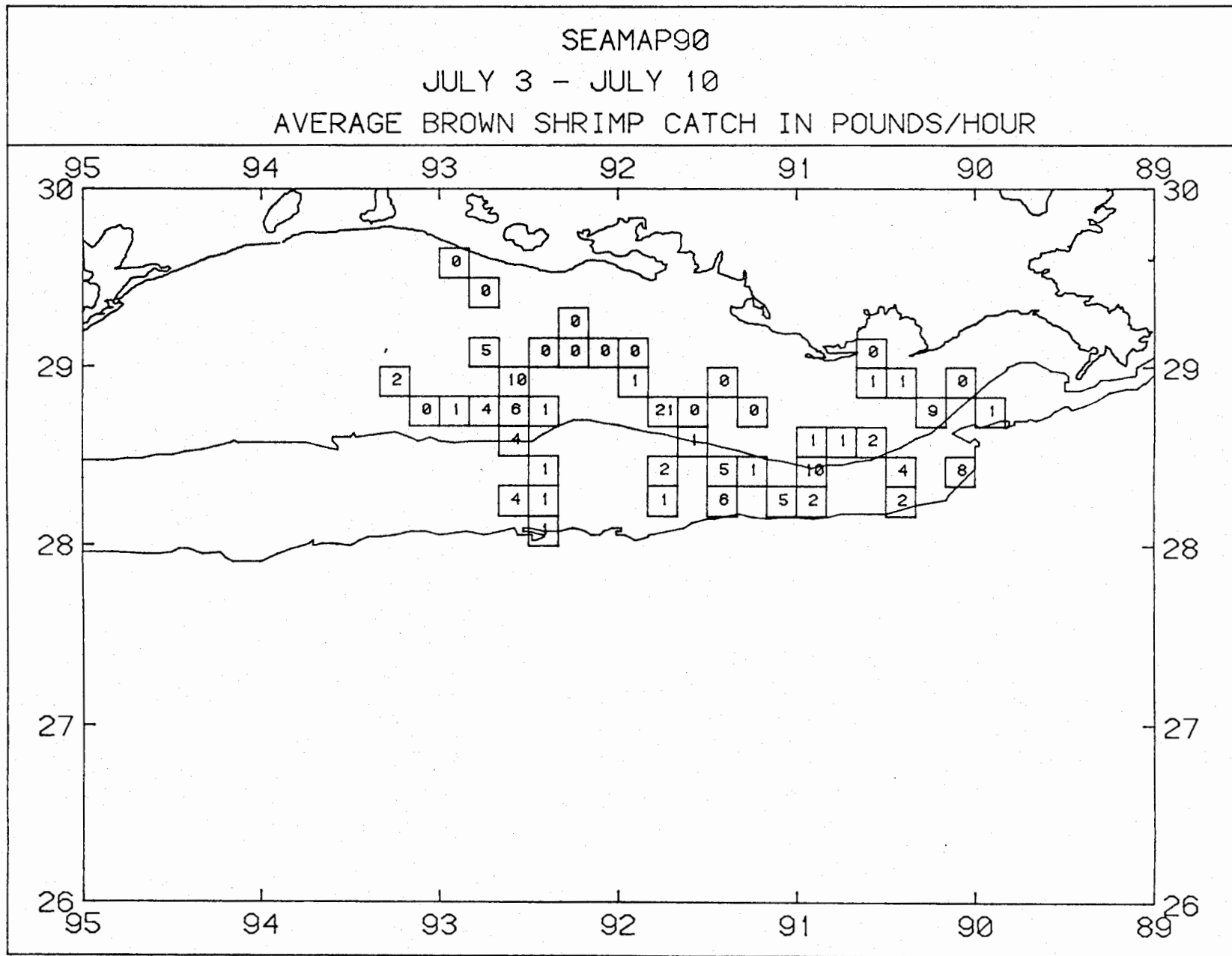
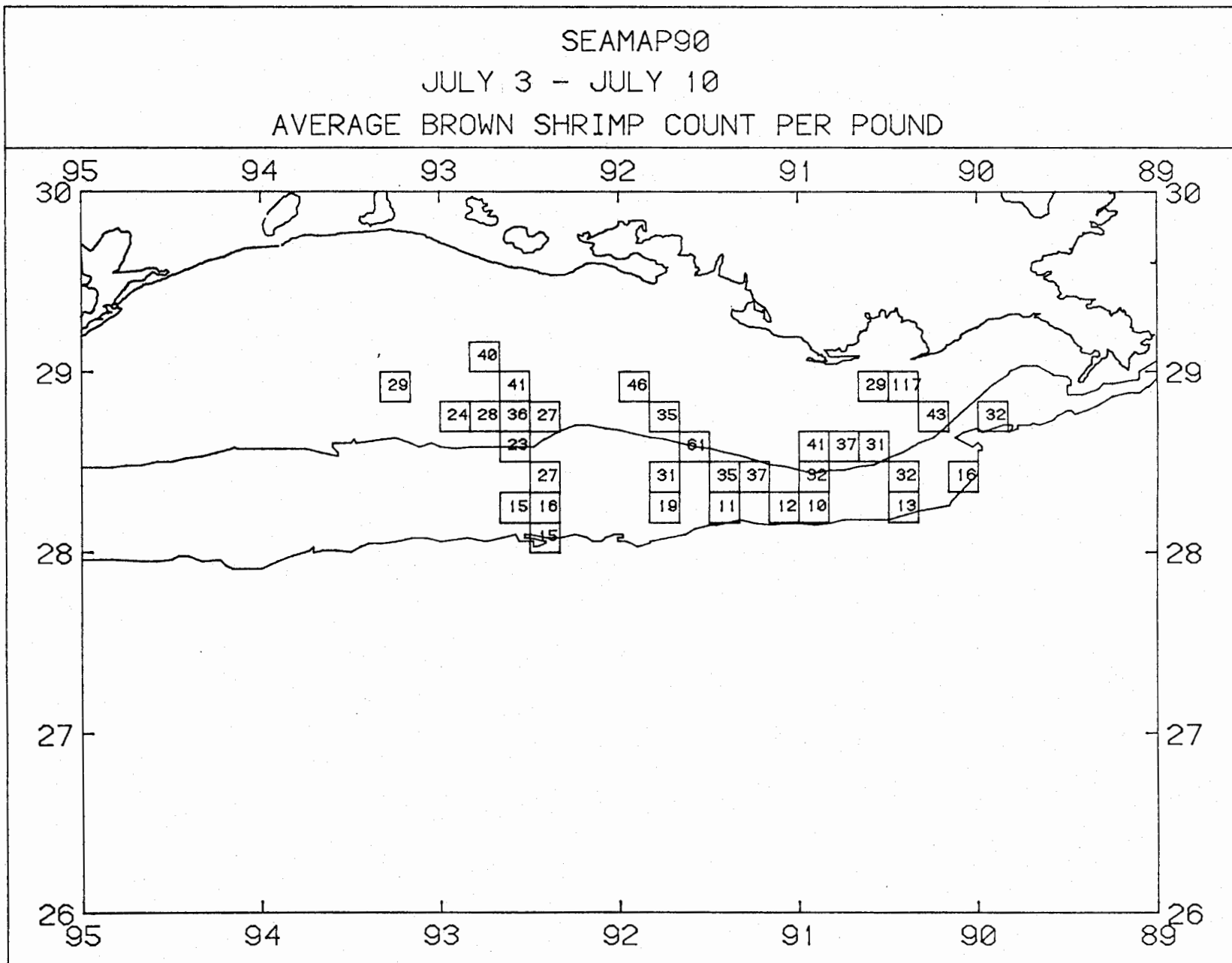
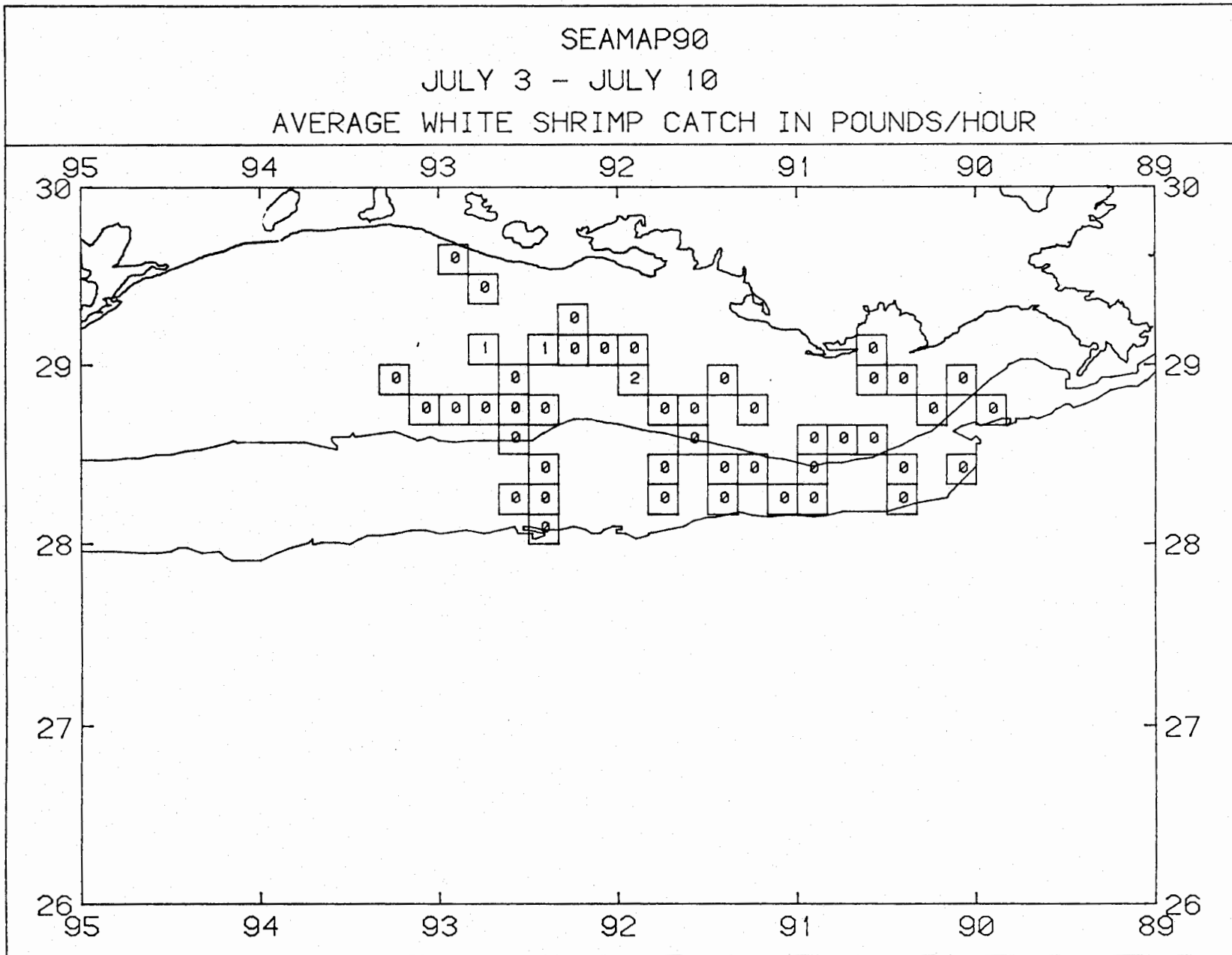


Figure 12 Real-Time Catch Plots, 1990



29

Figure 13 Real-Time Data Catch Plots, 1990



30

Figure 14 Real-Time Data Catch Plots, 1990

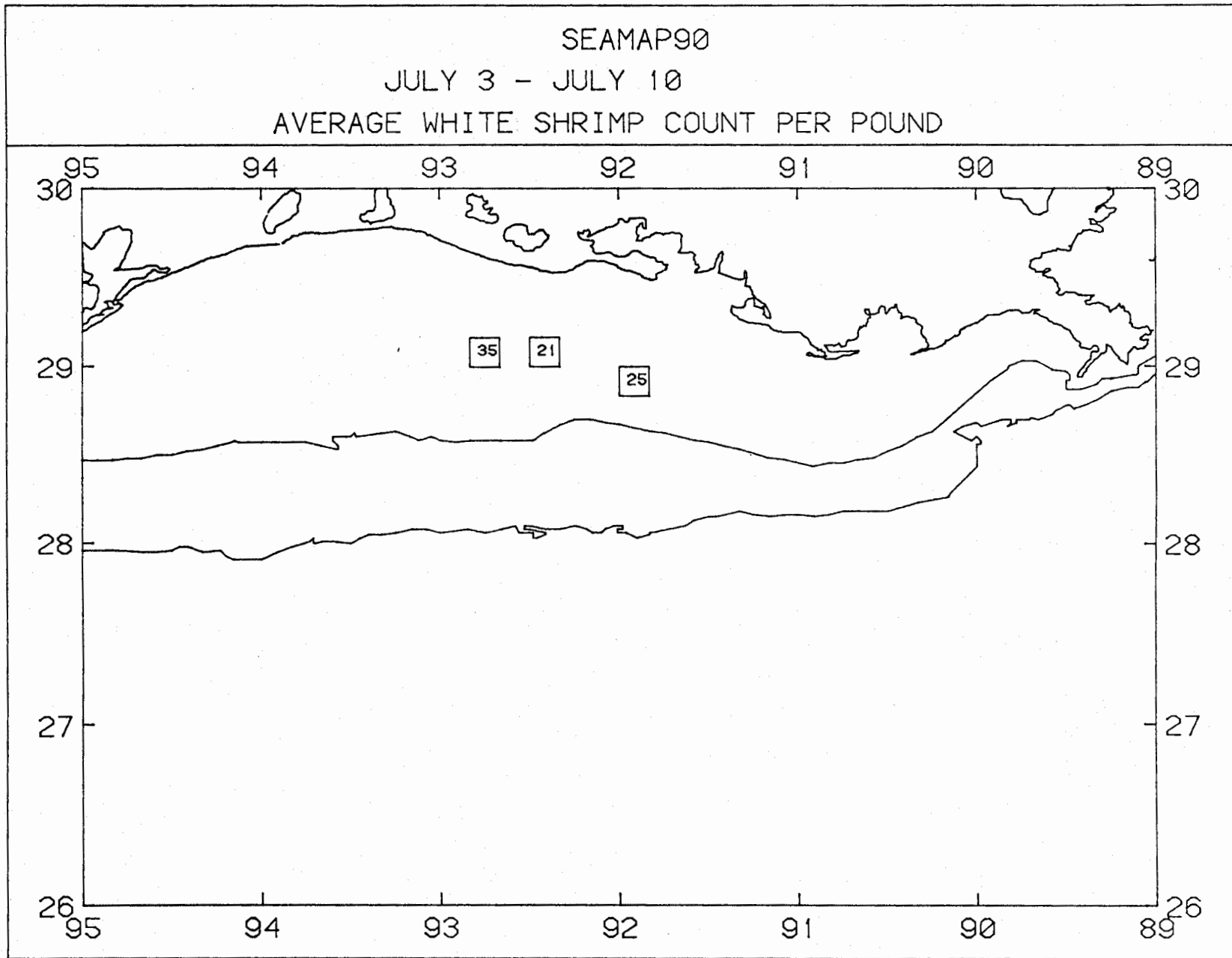
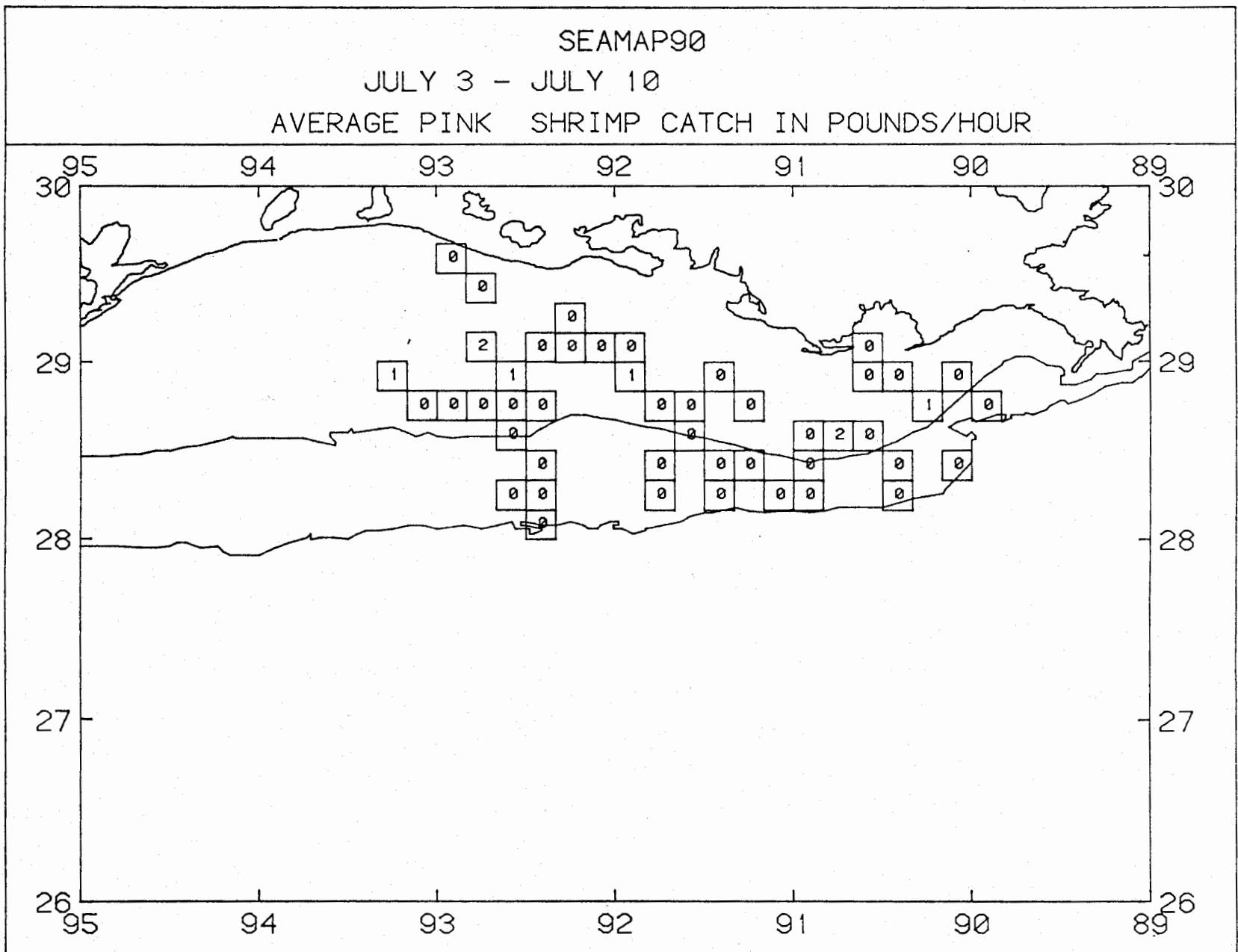


Figure 15 Real-Time Data Catch Plots, 1990



32

Figure 16 Real-Time Data Catch Plots, 1990

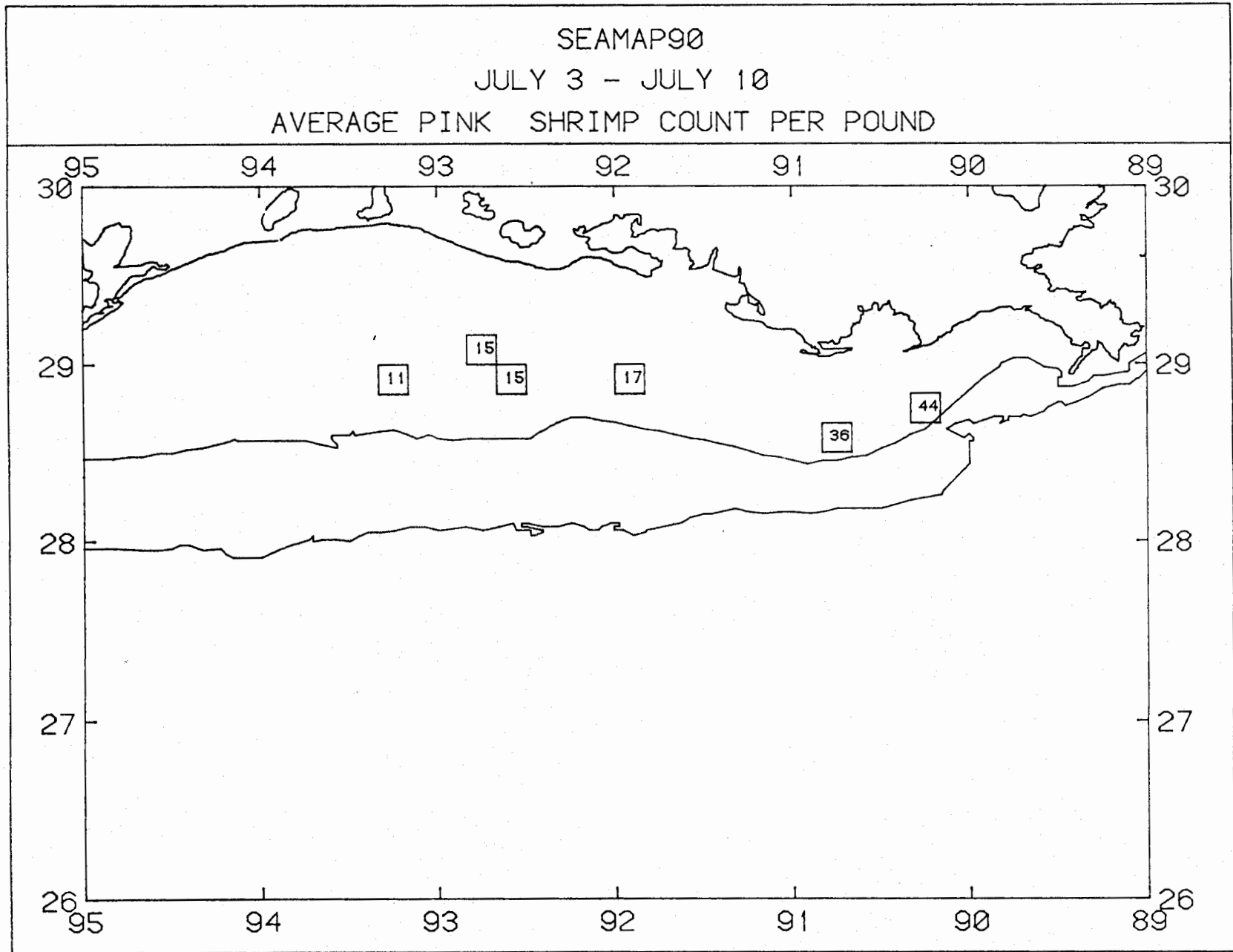


Figure 17 Real-Time Data Catch Plots, 1990

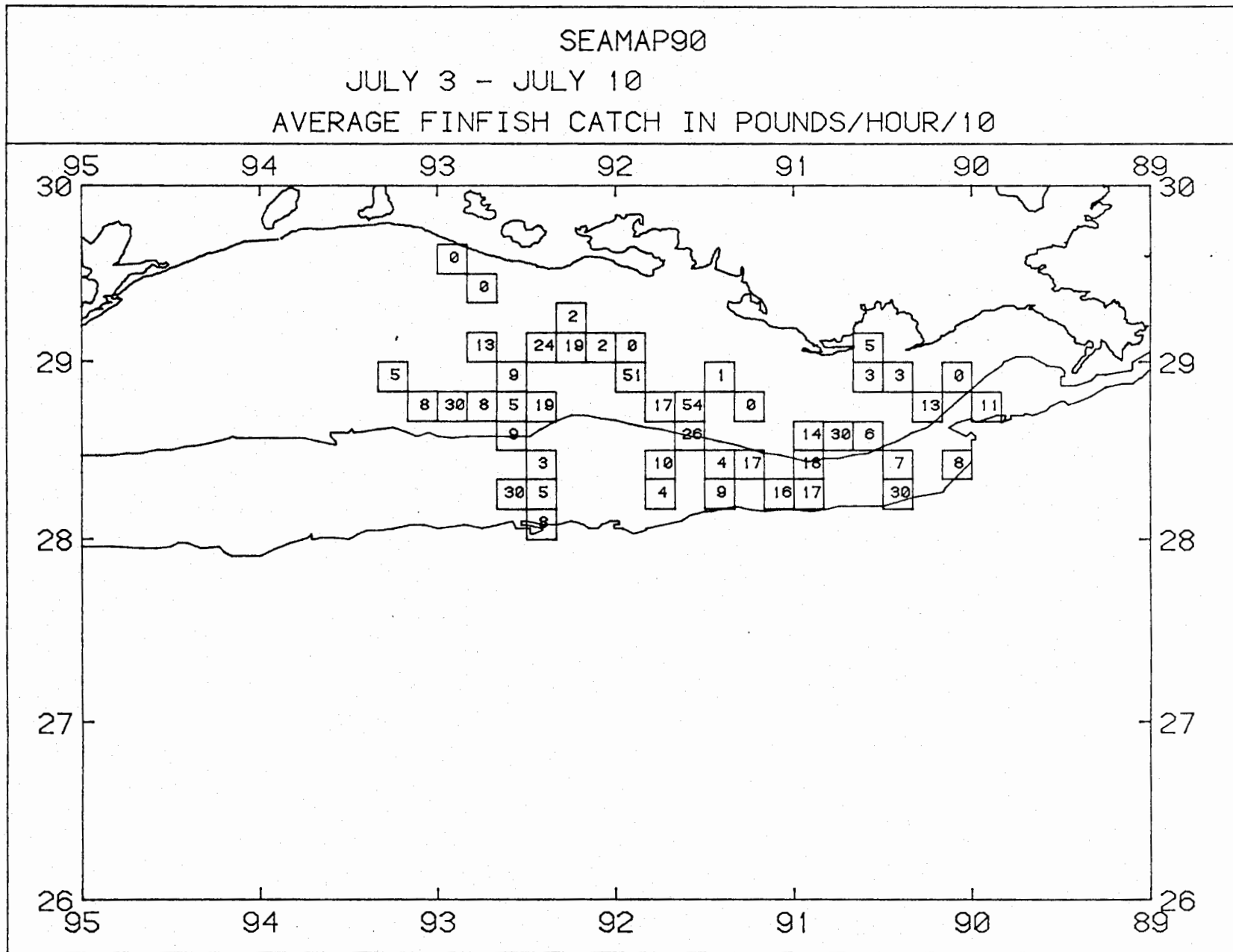


Figure 18 Real-Time Data Catch Plots, 1990



## SEAMAP ARCHIVING CENTER

Larval fish and fish egg samples sorted to the family level by the PSC are returned to the 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, 234 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 SEAMAP samples (+ 25% quality control) to be sorted for ichthyoplankton during the PSC contract period of September 1989 through August 1990. 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 1989-1990 samples. All specimens and data will be provided to the SAC.

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. With the complete accessioning of 1986 samples, the catalogue is expected to contain approximately 43,200 lots, a collection of significant size. Due to space constraints and logistical problems with the PSC, the SAC has been hampered which has slowed the increase of the number of samples sorted and cataloged.

## 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 SIPAC was established, managed in conjunction with Gulf Coast Research Laboratory in Biloxi, Mississippi.

During the fiscal year 1989-90, 719 unsorted SEAMAP samples were received and catalogued at SIPAC. As of September 30, 1990, a total of 4,018 unsorted fish larvae samples are held at SIPAC. A total of 354 samples were transferred from the SIPAC collections to NMFS for transshipment to the PSC.

A total of 892 SEAMAP samples have been sorted for selected invertebrate taxa by the SIPAC (518 samples) and the PSC (374 samples) following established protocol. A total of 3,747 lots were obtained from these samples. Portunid megalopae and penaeid postlarvae from the sorted samples have been further identified to the lowest possible taxonomic level. The portunid megalopal data are currently being used by the GSMFC Crab Subcommittee and Dr. James Powers to develop an atlas of portunid megalopal distribution in the northern Gulf of Mexico.

During the next fiscal year, additional samples will be sorted for invertebrates. Particular emphasis will be placed on providing data on the megalopae of Callinectes sapidus and postlarval Penaeus spp.

**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 1989 and March 1990, 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 July 1990; 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.

Representatives from the Gulf program also met with the South Atlantic and Caribbean representatives at the annual joint meeting held in July to discuss respective program needs and priorities for FY1991. Minutes from all SEAMAP-Gulf meetings are shown in Appendix I.

SEAMAP-Gulf work groups met this past year to provide recommendations to the Subcommittee for survey and data management needs. The Shrimp/Bottomfish Work Group met in April 1990. 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 FY1990. 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 FY1991 ACTIVITIES

Preliminary FY1991 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 FY1991 activities for all Gulf participants are shown in Table 4. The approved FY91 Operations Plan for SEAMAP-Gulf is contained in Appendix II. It should be noted that the SEAMAP fiscal year begins on January 1 thus, fall activities for FY1991 will be conducted from October-December, 1991.

**TABLE 1.**

**SEAMAP REPRESENTATIVES 1990**

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

Richard Waller, Vice Chairman  
Mississippi Department of Wildlife, Fisheries and Parks  
Gulf Coast Research Laboratory

Barney Barrett  
Louisiana Department of Wildlife and Fisheries

Terry Cody\*  
Texas Parks and Wildlife Department

Jim Hanifen\*  
Louisiana Department of Wildlife and Fisheries

Stevens Heath\*  
Alabama Department of Conservation and Natural Resources

Joe Kimmel  
Florida Department of Natural Resources

Mark Leiby\*  
Florida Department of Natural Resources

Gary Matlock  
Texas Parks and Wildlife Department

Thomas McIlwain\*  
Mississippi Department of Wildlife, Fisheries and Parks  
Gulf Coast Research Laboratory

Walter Nelson\*  
National Marine Fisheries Service  
Southeast Fisheries Center

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, 1990**

PLANKTON WORK GROUP

Joanne Shultz, Leader  
Mississippi Department of Wildlife, Fisheries and Parks  
Gulf Coast Research Laboratory

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

Harriet Perry  
Mississippi Department of Wildlife,  
Fisheries and Parks  
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, Fisheries and Parks  
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,  
Fisheries and Parks  
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,  
Fisheries and Parks  
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, Fisheries and Parks  
Gulf Coast Research Laboratory

Richard Condrey  
Louisiana State University

Phil Goodyear  
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,  
Fisheries and Parks  
Gulf Coast Research Laboratory  
Red Drum Work Group

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

Joanne Shultz  
Mississippi Department of Wildlife,  
Fisheries and Parks  
Gulf Coast Research Laboratory  
Plankton Work Group

### ADULT FINFISH WORK GROUP

Scott Nichols  
National Marine Fisheries Service  
Pascagoula Laboratory

Joe Kimmel  
Florida Department of Natural Resources

Tom McIlwain  
Gulf Coast Research Laboratory

Billy Fuls  
Texas Parks and Wildlife  
Department

John Rousel  
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 FY1991 PROGRAMMATIC BUDGET**

GSMFC	\$ 93,476
TPWD	45,744
LDWF	116,547
MDWFP/GCRL	95,573
ADCNR	65,780
FDNR	74,453
<b>TOTAL</b>	<b>\$491,573</b>
<b>NMFS</b>	<b>\$233,000</b>

**TABLE 4.**  
**PROPOSED SEAMAP-GULF ACTIVITIES, FY1991**

Activity	Fall	Winter	Spring	Summer
<b>Resource Surveys:</b>				
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
<b>Information Operations:</b>				
1988 Biological and Environmental Atlas		X		
1989 Biological and Environmental Atlas		X		
1991 Marine Directory			X	
1991 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
<b>Program Administration</b>	X	X	X	X

## PUBLICATIONS

The following publications were published and distributed in FY1990:

- 1990 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.
- 1990 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.
- 1989 Annual Report of the SEAMAP Program - October 1, 1988 to September 30, 1989; a summary of 1989 activities and proposed 1990 events for both SEAMAP programs.
- 1986 SEAMAP Environmental and Biological Atlas. March 1990; a compilation of information obtained from the 1986 SEAMAP surveys, including catch rates of shrimp and finfish, a squid/butterfish survey across the Gulf, an ichthyoplankton cruise and environmental data.

## FY1990 FINANCIAL REPORT

Total allocations for FY90 program administration were \$93,476. As of September 30, total expenditures and encumbrances were: \$74,459.18. The remaining balance of \$19,016.82 will be used to provide administration through December 31, 1990.



**APPENDICES**

Appendix I

APPROVED BY:

  
COMMITTEE CHAIRMAN

TCC SEAMAP SUBCOMMITTEE

Monday, October 16, 1989  
Biloxi, Mississippi

TCC SEAMAP SUBCOMMITTEE  
MINUTES  
Monday, October 16, 1989  
Biloxi, Mississippi

Chairman Walter Tatum called the meeting to order at 1:05 p.m. The following members and others were present:

Members

Scott Nichols, NMFS, Pascagoula, MS  
Barney Barrett, LDWF, Baton Rouge, LA  
Dick Waller, GCRL, Ocean Springs, MS  
Walter Tatum, ADCNR, Gulf Shores, AL  
Alan Huff, FDNR, St. Petersburg, FL  
Terry Cody (proxy for G. Matlock), TPWD, Rockport, TX

Staff

Tom Van Devender, SEAMAP Coordinator, Ocean Springs, MS

Others

Andrew Kemmerer, NMFS, Pascagoula, MS  
Jack Gartner, FDNR, St. Petersburg, FL  
Karen Foote, LDWF, Baton Rouge, LA  
Ken Savastano, NMFS, Stennis Space Center, MS  
Skip Lazauski, ADCNR, Gulf Shores, AL  
Tom McIlwain, GCRL, Ocean Springs, MS  
Ron Schmied, NMFS, St. Petersburg, FL  
Thomas F. LaPointe, NOAA, Rockville, MD  
Quang V. Vo, NOAA, Rockville, MD  
Jim Nance, NMFS, Galveston, TX  
Ed Klima, NMFS, Galveston, TX

Adoption of Agenda

The agenda was amended to place item #7, Demonstration of CMAS for Analyzing Shrimp Harvest Data, after the Work Group reports and to add S. Nichol's Sargassum Survey report to the Shrimp/Bottomfish Work Group Report. The agenda was adopted as amended.

Adoption of Minutes

The minutes of the July 26 and July 28, 1989 meetings held in Savannah, Georgia, were approved as written.

Administrative Report

T. Van Devender distributed copies of the 1989 SEAMAP Annual Report to the TCC and the recently printed FY88 Joint Annual Report. He noted that the Joint Annual Report would be distributed to the Congressional

delegations of the five states, members of the House Merchant Marine and Fisheries Committee, the Senate's Commerce, Science and Transportation Committee, staff members of these committees and GSMFC Commissioners, which would include state fishery agency heads and the South Atlantic and Caribbean components.

As reported in the TCC Annual Report, the administrative budget as of September 30, 1989 totaled \$70,050.85 in expenditures and encumbrances with an available balance of \$23,425.15 to provide for administration through December 31, 1989. A. Kemmerer requested a more detailed budget breakdown. The Coordinator noted that such a line item accounting could be provided at the end of the grant period.

The Coordinator informed the Subcommittee on progress of the Fall Plankton Survey currently underway, and plans for the Fall Shrimp/ Groundfish Survey in October and November, including comparison tows between the OREGON II and PELICAN and the OREGON II and TOMMY MUNRO.

#### Status of FY90 Funds

A. Kemmerer reported that the NOAA/NMFS budget, like most federal agencies would be affected by Gramm-Rudman-Hollings reductions, however the final figures were not known. A handout (attached to minutes) of FY90 SEAMAP Budget Plans, from the July 27, 1989 Joint Meeting, was reviewed with no changes.

#### Five-Year Management Plan

The Coordinator reported that the second draft of the Five-Year Plan would be distributed to members by D. Stephan the week following the GSMFC meeting. The Chairman noted that in previous drafts, the interstate commissions were referred to as management agencies and urged Subcommittee members to review the draft carefully and completely.

#### Work Group Reports

##### Shrimp/Bottomfish

T. Van Devender reported for leader P. Bowman that the work group met May 19, 1989 in Biloxi to plan the summer survey and discuss station locations. An area of concern to work group members was the catch rate



differences between the OREGON II and the vessels PELICAN and TOMMY MUNRO, all pulling standard SEAMAP 42-ft trawls. Vessel speed was identified as a possible factor. By consensus the work group recommended that: 1) a target vessel speed of 3 knots be set for participants in the summer and fall surveys, with actual vessel speed -- to tenths of a knot -- be recorded in the appropriate blocks on the data forms; and 2) continue vessel and gear comparisons whenever feasible.

The Chairman expressed problems that the R/V VERRILL had in handling large SEAMAP trawl doors and suggested that gear specialists from the NMFS Pascagoula Laboratory might examine the problem. During discussion there was consensus that if non-standard trawl doors are utilized, future gear comparisons would be necessary to develop calibration factors.

S. Nichols presented preliminary results of the work conducted aboard the TOMMY MUNRO from July 18-24, 1989, immediately following the summer survey. Though designed to examine the problem of sargassum clogging TED-equipped trawls, an unexpected result of interest to SEAMAP was the CPUE analysis of catches in 2-5 fm vs 5-15 fm. A number of species, white shrimp, Spanish mackerel and others, appeared much more abundant inside 5 fm. With most survey activity currently concentrated outside 5 fm, SEAMAP may improve sampling effectiveness for certain species by including more stations in these shallow strata. The data will be presented to the Shrimp/Bottomfish Work Group for discussion and recommendations.

#### Environmental Data

S. Nichols reported for leader W. Stuntz that no work group meeting had occurred, however processing of environmental samples -- salinity and chlorophyll -- was on schedule.

Discussion was held on the extensive SEAMAP environmental data set, particularly hypoxic stations, and the need for information transfer and dissemination to other government and university researchers. A. Kemmerer reminded members that one area brought to light during the program review was information dissemination and the possible inclusion

of Sea Grant in the process. The subject should be treated in the Five-Year Management Plan.

\* B. Barrett moved that the Subcommittee look at the Five-Year Management Plan, with emphasis on that section dealing with dissemination of data and examine ways to encourage full use of SEAMAP data. D. Waller seconded and the motion passed.

\* B. Barrett also moved that the Environmental Data Work Group meet to review the hypoxia data and associated biological catches and explore ways to disseminate this information. D. Waller seconded and the motion passed.

\* Following discussions of the EPA's Gulf Initiative, NOAA's Coastal Zone Initiative, Minerals Management Service and others conducting oceanographic studies in the Gulf, and ways to increase their awareness of SEAMAP, D. Waller moved that A. Kemmerer contact and invite an appropriate official to address the Subcommittee at a future meeting. A. Huff seconded and the motion passed.

#### Red Drum

T. Van Devender reported for leader T. McIlwain that the work group met April 17, 1989 in Mobile. Phil Goodyear presented his stock assessment work up to that date and reported on his Length-Based Simulation Model Program. He reported preliminary no change in his recommendation of 0 take in the EEZ. A need for random samples of inshore red drum to find fish from Ages II½ to III½ or 30"-35" TL was stressed to work group members. Recommendations from the work group include:

- states should continue or increase protection of inshore red drum populations.
- states might investigate the use of 6" stretch gill nets to take the "missing" 30"-35" fish.
- offshore population's age structure needs to be continually examined.
- mark/recapture experiments inshore need to be continued.
- these concerns should be presented to MARFIN PMB prior to its examination of new proposals.

A letter to the MARFIN PMB was drafted containing these recommendations, and two red drum proposals involving inshore tagging and offshore age structure were subsequently approved for funding.

#### Data Coordinating

Work group leader K. Savastano reported that data entry, edit and verification continues on the 1988 and 1989 survey data (work group reported attached to minutes). Computer plots for the 1986 Atlas should be completed in the next two weeks and processing for all summary tables has been completed.

Computer hardware for the Data Management System has been supplied to all those participants originally targeted to receive PC/2's with the exception of North Carolina and Florida. Following the South Atlantic Data Management Training Session, scheduled for October 25 and 26, 1989, these machines would become available for shipment. The Gulf Training Session was held on August 1, 1989 at the Stennis Space Center, where hands-on use of the software was demonstrated.

Due to slower computer speed and some incompatibilities, K. Savastano recommended that Louisiana receive an IBM PS/2 as other participants now have, rather than the IBM/AT they now use.

\* B. Barrett moved that Louisiana receive an IBM PS/2 based on K. Savastano's recommendation. A. Huff seconded and the motion carried.

#### Plankton

T. Van Devender reported for leader J. Lyczkowski-Shultz on recent developments concerning SEAMAP plankton samples. A handout was distributed to members listing the sorting priorities of 1988/1989 samples, developed by the work group leader, archivists, D. Hoss and B. Richards. This priority list was taken by D. Hoss, representing SEFC, to the annual Joint Advisory Committee meeting held in Szczecin, Poland, during the first week of October. Tabulations on number of SEAMAP samples worked during this past year, proposed work and the status of other samples will be determined once the results of the Joint Advisory meeting are known. It was the consensus of the Subcommittee to invite D. Hoss to the January 1990 SEAMAP meeting for an update on events at the Polish Sorting Center. A SEAMAP Invertebrate Archiving Center

(SIPAC) activity report (attached to minutes) was distributed. The Coordinator noted that K. Stuck, SIPAC Curator, is on sabbatical from GCRL through August 1990 and in his absence H. Perry will serve.

J. Gartner, SAC Curator, reported that to date no new bongo samples had been received to be archived this year. Updates on material loaned to researchers and identified to lower taxa are presently being conducted. Several boxes of 1984 and 1985 backlogged neuston material was recently returned from the PSC and will allow work on the delayed 1984 and 1985 Ichthyoplankton Atlases to proceed while the first draft of the 1986 Ichthyoplankton Atlas is nearing completion.

#### Adult Finfish

T. Van Devender reported on the work group meeting held September 6, 7, and 8, 1989 in Mobile (report attached to minutes). After investigating summary information, two sampling methodologies were found to have the greatest potential in meeting long-term reef fish data collection needs: longlines and traps. In FY90 operations, two participants have plans to utilize these sampling methods -- NMFS will conduct a trap and video camera sampling regime on hardbottom habitats and Texas Parks and Wildlife will conduct a pilot bottom longline survey off Port Aransas in territorial waters. The work group recommended that these two projects be examined to determine their value in meeting SEAMAP's goal of a long-term, fishery-independent monitoring program of adult finfish.

S. Lazauski reported on the work group's efforts to develop a computer-based matrix of sampling programs and species of adult finfish taken by various sampling gear.

T. Cody named Steve Marwitz to replace P. Hammerschmidt as work group member from Texas.

#### Demonstration of Computer Mapping and Analysis System (CMAS) for Analyzing Shrimp Harvest Data

Thomas LaPointe and Quang Vo of the Ocean Assessments Division, NOAA, opened the demonstration with a slide program on the development of desk-top information systems for handling large data bases. E. Klima and J. Nance, NMFS, Galveston Laboratory, followed with an extensive

presentation of the system's capabilities for graphic display of Gulf shrimp harvest data. Following the program, A. Kemmerer noted that SEAMAP data could be put into the CMAS format (Apple) to take advantage of the graphics abilities. He suggested that S. Lazauski and K. Savastano examine this possibility and report at the next meeting.

Other Business

By consensus, the Subcommittee planned the January 1990 SEAMAP-Gulf meeting during the week of January 22-26, 1990 in New Orleans.

There being no further business, the meeting was adjourned at 5:30 p.m.



FY 1990 SEAMAP BUDGET PLANS (JULY 27, 1989)

Program	Planned	
Component	Allocation	Comments
<u>NMFS</u>		
Polish Center	25,000	
SA Coord.	20,000	
Data Mgt.	65,000	Plus \$15,000 from SEFC (non-SEAMAP)
Vessels	123,000	
Subtotal	233,000	
<u>Gulf</u>		
Commission	93,476	Reduce travel costs
Texas	45,744	
Louisiana	116,547	
Mississippi	95,573	
Alabama	65,780	
Florida	74,453	
Subtotal	491,573	
<u>South Atlantic</u>		
Commission	15,000	One joint meeting
Florida	16,285	
Georgia	0	
S. Carolina	156,142	Support shallow water trawl survey
N. Carolina	0	
Subtotal	187,427	
<u>Caribbean</u>	30,000	\$20,000 to be sought from non-SEAMAP funds; sorting help from Beaufort
TOTAL	942,000	

10-11-89

SEAMAP Data Management Report

- A. SEAMAP data entry, edit, and verification continues on the 1988 and 1989 data. The status for the 1988 data is shown in Attachment 1.
- B. Work continues on the 1986 Atlas. Computer processing for all summary tables is complete. Atlas computer plots are currently in progress and should be completed in the next two weeks.
- C. A total of 86 SEAMAP data requests have been received to date. Eighty-four have been completed and work is being performed on the remaining requests.
- D. A personal computer (IBM PS/2 Model 8580-071) has been transferred to Texas. Operational SEAMAP software has been shipped to Louisiana, Mississippi, Texas, Alabama, NMFS (SCC), and NMFS (Pascagoula). OREGON II Cruise 180 is currently being processed through the new SEAMAP DATA MANAGEMENT SYSTEM.
- E. A Gulf SEAMAP Data Management System User Training Meeting was held at NMFS, Stennis Space Center, Mississippi on August 1, 1989. The South Atlantic SEAMAP Data Management Training Meeting is scheduled for October 25-26, 1989. A SEAMAP Data Management System Users Manual has been developed and implemented.
- F. 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. Attachment 2 and 3 provide the status of each of the system modules. Delivery of the remaining PS/2's has been rescheduled for the last week in October, 1989.

  
Kenneth J. Savastano



10/11/8

## SEAMAP 1988

BIOLOGICALENVIRONMENTAL

Data					Completion			Completion		
Source	Stations	Species	Total	Status	Date	Stations	Records	Status	Date	
AL	881	7	136	143	7	04/11/89	7	21	7	04/11/89
AL	882	4		4	3		4	12	3	
AL	883				1		10	30	3	
FL	881				1		17	51	7	07/21/89
FL	882				1		36	108	7	07/21/89
LA	29	24	556	580	7	05/18/89	24	72	7	05/18/89
LA	30	24	567	591	6		24	72	6	
LA	31	21	192	213	6		21	63	7	09/12/89
LA	32	20	488	508	6		20	60	6	
LA	33				3				3	
LA	34	23		23	3		24	72	3	
MS	881	41	922	963	7	09/20/89	47	141	7	09/12/89
MS	882				1		33	99	7	09/12/89
MS	883	23	644	667	7	09/12/89	26	78	7	09/12/89
OII	173				1		164	492	4	
OII	174	390	7355	7745	7	05/15/89	195	585	7	05/15/89
OII	176				1		98	294	4	
OII	177	435	9287	9722	7	05/04/89	320	960	4	
TX	881	80	1143	1223	7	06/26/89	80	240	7	06/26/89
TX	882	80	882	962	7	09/05/89	80	240	7	06/26/89
TOTAL	1172		22172	23344			1230	3690		27034

## Status Codes:

- 1 - not taken
- 2 - taken, not received
- 3 - being processed at Pascagoula
- 4 - waiting for local verification
- 5 - at states for verification
- 6 - initial verification complete
- 7 - final verification complete

- chlorophyll and/or salinities not complete
- \* record status incomplete at this time

EARNED VALUE SUMMARY REPORT  
 BASED ON CURRENT FUNDING  
 SEAMAP DMS IMPLEMENTATION  
 30 SEPTEMBER 1989

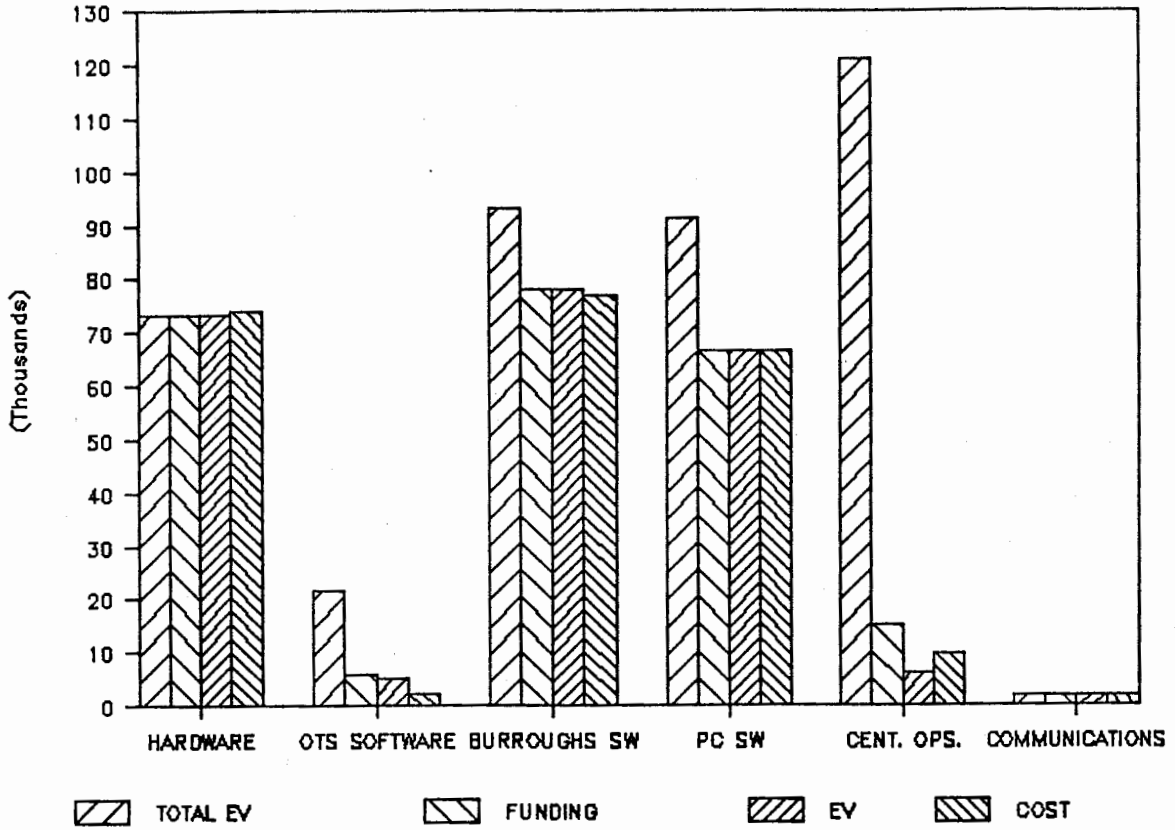
UNIT NAME	TWR#	EV TO DATE	%EV	ACTUAL COST	%SPENT	VAR (A-E)	%VAR (VAR/EV)	EIC	NVAR	%NVAR	CURRENT MODULE EV	CURRENT FUNDS REMAINING
TOTAL DMS IMP.	--	\$284,751	95.0%	\$282,534	94.3%	(\$2,217)	-0.8%	\$4,800	(\$7,017)	-2.4%	\$299,697	\$17,163
TOTAL LABOR	--	\$173,751	91.2%	\$175,437	92.1%	\$1,686	1.0%	\$4,800	(\$3,114)	-1.7%	\$190,503	\$15,066
TOTAL PROC.	--	\$111,000	101.7%	\$107,097	96.1%	(\$3,903)	-3.5%	\$0	(\$3,903)	-3.5%	\$109,194	\$2,097
Total HW Cost	--	\$73,251	100.0%	\$73,935	100.9%	\$684	0.9%	\$0	\$684	0.9%	\$73,251	(\$684)
HW Proc Labor	MF4A34	\$3,251	100.0%	\$3,251	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$3,251	\$0
HW Proc	(NHFS)	\$70,000	100.0%	\$70,684	101.0%	\$684	1.0%	\$0	\$684	1.0%	\$70,000	(\$684)
Total SW Cost	--	\$5,000	86.9%	\$2,321	40.4%	(\$2,679)	-53.6%	\$0	(\$2,679)	-53.6%	\$5,752	\$3,431
SW Proc Labor	MF4A37	\$0	0.0%	\$102	13.6%	\$102	0.0%	\$0	\$102	0.0%	\$752	\$650
SW Proc	(NHFS)	\$5,000	100.0%	\$2,219	44.4%	(\$2,781)	-55.6%	\$0	(\$2,781)	-55.6%	\$5,000	\$2,781
Burroughs SW	--	\$78,000	100.0%	\$77,031	98.8%	(\$969)	-1.2%	\$0	(\$969)	-1.2%	\$78,000	\$969
Data Handler	MF4A33	\$42,500	100.0%	\$42,486	100.0%	(\$14)	0.0%	\$0	(\$14)	0.0%	\$42,500	\$14
Data Handler	UUPL0301	\$2,000	100.0%	\$2,008	100.4%	\$8	0.4%	\$0	\$8	0.4%	\$2,000	(\$8)
Data Handler	UM001203	\$1,000	100.0%	\$86	8.6%	(\$914)	-91.4%	\$0	(\$914)	-91.4%	\$1,000	\$914
Reformat	MF4A01	\$20,000	100.0%	\$19,995	100.0%	(\$5)	0.0%	\$0	(\$5)	0.0%	\$20,000	\$5
On-line Doc	MF4A38	\$7,500	100.0%	\$7,488	99.8%	(\$12)	-0.2%	\$0	(\$12)	-0.2%	\$7,500	\$12
Mbox/Board	UM001204	\$5,000	100.0%	\$4,968	99.4%	(\$32)	-0.6%	\$0	(\$32)	-0.6%	\$5,000	\$32
RD Software	--	\$66,500	100.0%	\$66,623	100.2%	\$123	0.2%	\$0	\$123	0.2%	\$66,500	(\$123)
Upload	MF4A32	\$32,000	100.0%	\$32,135	100.4%	\$135	0.4%	\$0	\$135	0.4%	\$32,000	(\$135)
Upload	UM001102	\$5,000	100.0%	\$5,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$5,000	\$0
Upload	UM001103	\$2,000	100.0%	\$2,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$2,000	\$0
Upload	UUPL0302	\$6,000	100.0%	\$6,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$6,000	\$0
Download	MF4A31	\$17,500	100.0%	\$17,488	99.9%	(\$12)	-0.1%	\$0	(\$12)	-0.1%	\$17,500	\$12
Download	UM001201	\$3,000	100.0%	\$3,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$3,000	\$0
Download	UM001202	\$1,000	100.0%	\$1,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$1,000	\$0
Analysis/Disp	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Central Ops	--	\$6,000	40.0%	\$9,869	65.8%	\$3,869	64.5%	\$4,800	(\$931)	-8.6%	\$15,000	\$5,131
Sys Mgmt	MF4A40	\$4,000	60.0%	\$3,616	72.3%	(\$384)	-9.6%	\$0	(\$384)	-9.6%	\$5,000	\$1,384
Data Process	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
RD SW Maint	MF4A44	\$0	0.0%	\$3,575	71.5%	\$3,575	0.0%	\$4,000	(\$425)	-10.6%	\$5,000	\$1,425
Burr SW Maint	MF4A45	\$2,000	40.0%	\$2,678	53.6%	\$678	33.9%	\$800	(\$122)	-4.4%	\$5,000	\$2,322
Special Reqs	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Archival	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Communications	MF4A36	\$2,000	100.0%	\$1,697	84.9%	(\$303)	-15.2%	\$0	(\$303)	-15.2%	\$2,000	\$303

EARNED VALUE SUMMARY REPORT  
 BASED ON CURRENT FUNDING  
 SEAMAP DMS IMPLEMENTATION  
 30 SEPTEMBER 1989

UNIT NAME	TWR#	EV TO DATE	%EV	ACTUAL COST	%SPENT	VAR (A-E)	%VAR (VAR/EV)	EIC	%VAR	%NVAR	CURRENT MODULE EV	CURRENT FUNDS REMAINING
Training	--	\$18,000	90.0%	\$15,856	79.3%	(\$2,144)	-11.9%	\$0	(\$2,144)	-11.9%	\$20,000	\$4,144
Site Users	MF4A39	\$5,000	100.0%	\$4,887	97.7%	(\$113)	-2.3%	\$0	(\$113)	-2.3%	\$5,000	\$113
Training Prep	UM001205	\$3,000	100.0%	\$3,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$3,000	\$0
Gulf Train	UM001206	\$4,000	100.0%	\$4,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$4,000	\$0
S Atl Train	MF4A43	\$0	0.0%	\$172	8.6%	\$172	0.0%	\$0	\$172	0.0%	\$2,000	\$1,828
Sys Maint	UM001207	\$3,000	100.0%	\$2,200	73.3%	(\$800)	-26.7%	\$0	(\$800)	-26.7%	\$3,000	\$800
Sys S/W Train	MF4A42	\$3,000	100.0%	\$1,597	53.2%	(\$1,403)	-46.8%	\$0	(\$1,403)	-46.8%	\$3,000	\$1,403
Near Real Time	--	\$36,000	105.3%	\$34,194	100.0%	(\$1,806)	-5.0%	\$0	(\$1,806)	-5.0%	\$34,194	\$0
Data Ent SW	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Comm I'face	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
NRT Burr SW	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Port PC SW	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Antenna Proc	(NMFS)	\$30,000	100.0%	\$30,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$30,000	\$0
PC HW Proc	(NMFS)	\$6,000	143.1%	\$4,194	100.0%	(\$1,806)	-30.1%	\$0	(\$1,806)	-30.1%	\$4,194	\$0
Plotting	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Atlas	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Blankton	--	\$0	0.0%	\$1,000	20.2%	\$1,000	0.0%	\$0	\$1,000	0.0%	\$5,000	\$3,992
Cethyo DB	UM001101	\$0	0.0%	\$1,000	20.2%	\$1,000	0.0%	\$0	\$1,000	0.0%	\$5,000	\$3,992
Isa DB	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0

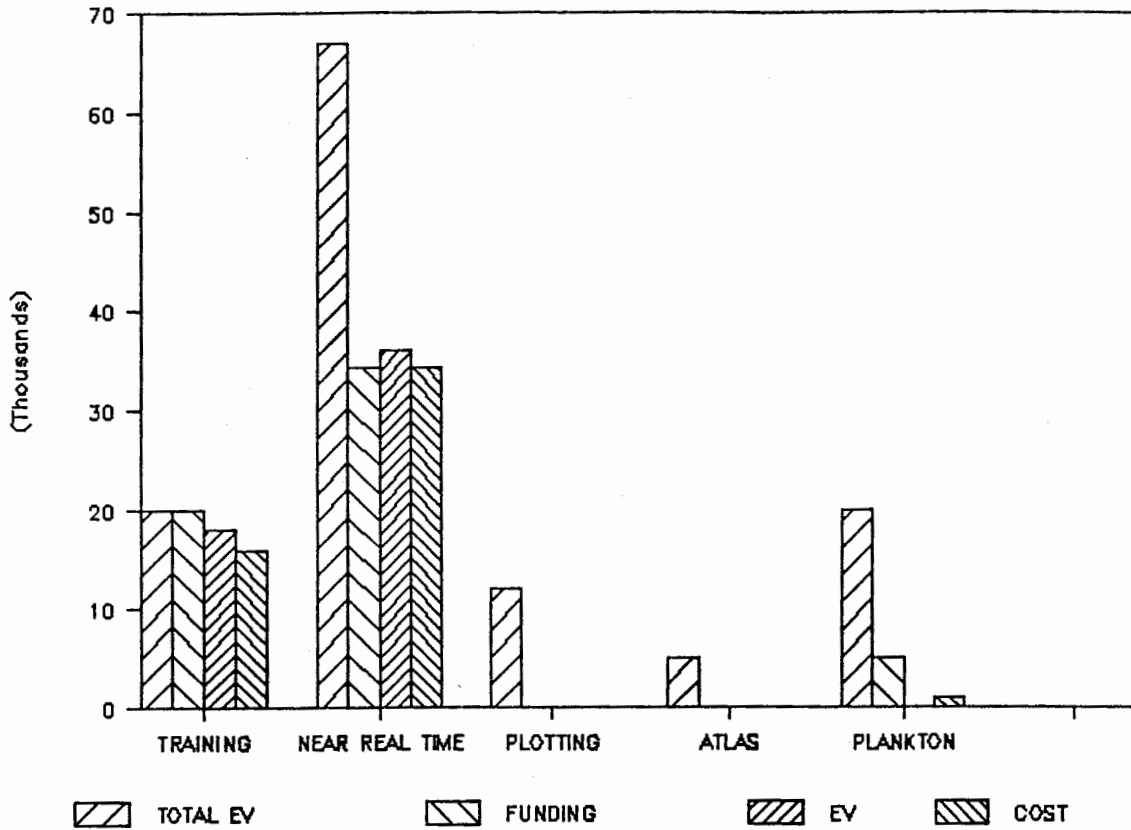
# EARNED VALUE SUMMARY REPORT

30 SEPTEMBER 1989



# EARNED VALUE SUMMARY REPORT

30 SEPTEMBER 1989



SEAMAP Invertebrate Plankton Archiving Center

Activity Report: 1 October, 1988 - 30 September, 1989

PRESENT STATUS

SIPAC curator Ken Stuck is on sabbatical leave from GCRL for a period of one year (September 1, 1989 - August 31, 1990). During his absence Mr. Dick Waller has appointed Mrs. Harriet Perry (GCRL) to serve as SIPAC curator.

Unsorted samples

To date, 3,801 unsorted SEAMAP plankton samples have been received and catalogued at SIPAC. A listing by year, vessel, cruise, and gear is presented in Appendix 1. Because of the growing size of the collection, additional space was acquired in the old Marine Education Center facility at Point Cadet, Biloxi. Additional shelving has also been acquired.

The following samples are presently on loan:

Requestor	Samples Requested	Activity	Status
J. Shultz GCRL	Tommy Munro, Cr. 863 Left bongo, 8 samples	Sorted all larval fish and egg	out

Additional 1988 neuston samples catalogued at SIPAC await shipment to the Polish Sorting Center.

Invertebrate sorting

Six hundred and twenty samples have been sorted for selected invertebrate taxa at GCRL and the Polish Sorting Center, following established protocol. A list of these samples is presented in Appendix 2.

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. Mr. Stuck was notified in July 1989 that the remaining 54 samples would be completed as soon as possible.

As of 31 September 1984, 1890, lots of selected invertebrate taxa have been sorted and catalogued at SIPAC. Of that total, 1,037 lots were provided by the Polish Sorting Center, and 853 lots were provided by GCRL personnel. Portunid megalopae have been identified from most of the samples. There are currently 1,282 lots of identified portunid megalopae catalogued at SIPAC. Data from these samples have been provided to Harriet Perry (GSMFC Blue Crab Subcommittee) and Mr. Gus Zeiski of Louisiana Wildlife and Fisheries.

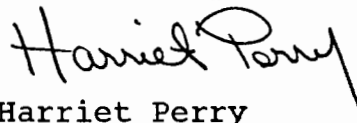
Penaeid postlarvae have also been identified from the sorted material. All available data on penaeid postlarvae were provided to Mr. Gus Zeiski of Louisiana Wildlife and Fisheries.

Mrs. Talot Faroogi (LSU) has returned the 144 lots of cephalopod larvae borrowed from SIPAC in 1987. They have all been identified and are in good condition.

#### FUTURE STATUS

During the next fiscal year, work will continue on identifying sorted material catalogued at SIPAC to lower taxonomic levels. Particular emphasis will be placed on providing data on the larval distribution of Callinectes sapidus as requested by several researchers. The future success of SIPAC to provide specimens and data on invertebrate species will depend in large part on the reinstatement of funds to support invertebrate sorting either at the Polish Sorting Center or another laboratory.

Submitted by:



Harriet Perry  
SIPAC Curator  
10 October 1989

Appendix 1. UNSORTED SEAMAP PLANKTON SAMPLES CATALOGUED AT SIPAC

-- 1982 --

Vessel	Cruise	Gear	No. samples
OR II	126	Bongo-R	129
OR II	127	Bongo-R	67
H. Cortez	01	Bongo-R	6
H. Cortez	02	Bongo-R	22
H. Cortez	03	Bongo-R	16
Jeff & Tina	03	Bongo-R	10
Western Gulf	15	Bongo-R	2
Bellows	S482	Bongo-R	6
		Total	258

-- 1983 --

Delaware II	37	Neuston	1
OR II	135	Neuston	2
OR II	138	Neuston	1
OR II	134	Bongo-R	101
OR II	135	Bongo-L	55
OR II	138	Bongo-L	4
OR II	138	Bongo-R	18
OR II	140	Bongo-R	22
Louisiana 25	4	Bongo-L	3
Louisiana 25	5	Bongo-L	21
Tommy Munro	135	Bongo-L	14
Tommy Munro	RD 83	Bongo-L	3
Suncoaster	1	Bongo-L	3
Alabama 23	135	Bongo-R	6
Delaware	37	Bongo-R	16
		Total	270

-- 1984 --

Louisiana 25	6	Bongo-R	9
Louisiana 25	7	Bongo-R	18
Louisiana 25	9	Bongo-R	21
OR II	146	Bongo-R	174
OR II	145	Bongo-R	61
OR II	142	Bongo-R	23
OR II	148	Bongo-R	29
OR II	149	Bongo-R	36
OR II	143	Bongo-R	94
Bellows	84	Bongo-R	19
Tommy Munro	1	Bongo-R	10
		Total	494



Vessel	Cruise	Gear	No. Samples
--------	--------	------	-------------

-- 1985 --

Tommy Munro	85	Bongo-L	5
Pelican	12	Bongo-L	22
Pelican	85	Bongo-L	20
Louisiana 25	10	Bongo-L	18
Louisiana 25	10	Bongo-R	3
Pelican	15	Bongo-L	24
Pelican	13	Bongo-L	25
Tommy Munro	185	Bongo-L	2
Louisiana 25	14	Bongo-L	18
Tommy Munro	85-2	Bongo-L	18
Bellows	8516	Bongo-R	35
OR II	154	Bongo-L	47
OR II	153	Bongo-L	36
OR II	151	Bongo-R	28
Pelican	12	Neuston	18
Pelican	13	Neuston	9
Pelican	085	Neuston	1
Tommy Munro	85	Neuston	5
Tommy Munro	85-4	Neuston	3
Tommy Munro	85-2	Neuston	17
OR II	154	Neuston	4
OR II	156	Neuston	1
Tommy Munro	85-4	Bongo-L	5

Total 364

-- 1986 --

Pelican	16	Bongo (?)	24
Pelican	18	Bongo-L	24
Pelican	21	Bongo-R	23
Pelican	19	Bongo-R	23
Louisiana 25	20	Bongo-R	15
Louisiana 25	17	Bongo-L	21
Chapman	14	Bongo-L	65
OR II	163	Bongo-L	62
OR II	163	Bongo-R	1
OR II	161	Bongo-L	91
OR II	160	Bongo-L	44
Tommy Munro	86	Bongo-L	14
Tommy Munro	862	Bongo-L	6
Tommy Munro	863	Bongo-L	9
H. Cortez II	8602	Bongo-L	29
H. Cortez II	8601	Bongo-L	6
Alabama 23	961	Bongo-L	8
H. Cortez	86-04	Bongo-L	28
Alabama 23	861	Bongo-L	1

Vessel	Cruise	Gear	No. Samples
OR II	159	Neuston	147
Pelican	21	Neuston	5
H. Cortez	86-04	Neuston	28
Pelican	19	Neuston	24
Tommy Munro	862	Neuston	9
Chapman	14	Neuston	65
OR II	163	Neuston	64
OR II	161	Neuston	90
OR II	160	Neuston	43
Tommy Munro	86	Neuston	14
Tommy Munro	863	Neuston	9
H. Cortez II	8602	Neuston	29
H. Cortez II	8601	Neuston	5
Alabama 23	961	Neuston	16
Alabama 23	861	Neuston	1

Total 1043

-- 1987 --

OR II	166	Bongo-L	71
OR II	167	Bongo-L	45
Tommy Munro	871	Bongo-L	2
Tommy Munro	872	Bongo-L	6
OR II	169	Bongo-L	91
Pelican	25	Bongo-R	11
Pelican	25	Bongo-L	12
Pelican	23	Bongo (?)	23
Pelican	22	Bongo (?)	14
H. Cortez II	875	Bongo-L	36
H. Cortez II	8703	Bongo-L	18
OR II	171	Bongo-L	24
Louisiana 25	24	Bongo (?)	21
Louisiana 25	26	Bongo-L	21
Louisiana 25	26	Bongo-R	2
Pelican	28	Bongo-R	12
Pelican	28	Bongo-L	12
Tommy Munro	874	Bongo-L	3
Tommy Munro	873	Bongo-L	19
OR II	166	Neuston	159
OR II	167	Neuston	44
Tommy Munro	871	Neuston	2
Tommy Munro	872	Neuston	6
OR II	169	Neuston	91
Pelican	25	Neuston	4
Pelican	23	Neuston	12
Pelican	22	Neuston	4
H. Cortez II	875	Neuston	36
H. Cortez II	8703	Neuston	16
OR II	171	Neuston	23

Vessel	Cruise	Gear	No. Samples
Pelican	28	Neuston	10
Tommy Munro	874	Neuston	3
Alabama	873	Neuston	14
		Total	886

-- 1988 --

H. Cortez II	8801	Bongo-L	17
OR II	173	Bongo-L	69
Pelican	29	Bongo-R	11
OR II	174	Bongo-L	19
H. Cortez II	8802	Bongo-L	35
OR II	176	Bongo-L	39
H. Cortez II	8801	Neuston	13
H. Cortez II	8802	Neuston	36
Louisiana 25	31	1/2 m Ring	21
Louisiana 25	33	1/2 m Ring	21
Pelican	30	Bongo-R	12
Pelican	30	Bongo-L	12
Pelican	30	Neuston	12
Pelican	32	Bongo-R	10
Pelican	32	Bongo-L	10
Pelican	32	Neuston	7
Pelican	34	Bongo-R	8
Pelican	34	Bongo-L	8
Pelican	34	Neuston	8
Pelican	29	Bongo-L	11
Pelican	29	Neuston	5
OR II	177	Bongo-L	37
Tommy Munro	881	Bongo-L	6
Tommy Munro	882	Bongo-L	33
Tommy Munro	883	Bongo-L	3
		Total	463

-- 1989 --

H. Cortez II	8901	Bongo-L	25
		Total	25

## ADULT FINFISH WORK GROUP REPORT

The adult finfish work group was initially charged with the development of a matrix that would be filled with information obtained from past experience or ongoing work by member agencies or others.

A subsequent charge to the work group was to develop a preliminary sampling regime for adult finfish in the Gulf with emphasis on reef fish. This regime was to adhere to the objectives of SEAMAP to conduct long-term fishery independent monitoring of fisheries resources.

Many gear and sampling methods can be used to sample adult finfish in the Gulf. However, after investigating fishery research summary information, two sampling methodologies were determined to have the greatest potential in meeting the requirements for a long-term sampling program.

Regime 1: Traps, Video Camera, Handline in combination on hardbottom habitats.

Traps have been used successfully by the National Marine Fisheries Service to monitor the snapper/grouper complex on hardbottom areas in the eastern Gulf. Handlines were used to verify species composition in traps. Video cameras will be useful for additional verification and qualitative evaluation of abundance. Traps directly sample adult finfish that can be used to obtain life history information such as age, maturity, fecundity, sexual development, and positive identification. Catch per unit of effort can also be determined.

The trap regime should be stratified so that traps would be placed directly on or within hardbottom/reef habitats. Because of the scattered nature of these habitats throughout the Gulf, this stratification would ensure that obligatory hardbottom species would be sampled.

Before a long-term sampling regime is developed using traps, further information is needed. First, the sampling universe must be adequately identified. Second, an ideal sampling protocol has not been developed. Third, the use of video is new, and accurate identification of species via video tape is currently being developed. The quantitative capabilities of video monitoring are not fully known. Fourth, many reef species inhabit the submerged portion of oil rigs. But because of the difficulty and danger of placing any sampling gear on or near these artificial structures, special sampling protocol must be developed.

Species potentially susceptible to a trap survey regime include fishes of the families: Lutjanidae (snappers), serranidae (groupers) and sparidae (porgies).

## Regime 2: Bottom longlines.

Bottom longlines have been used successfully by the Texas Parks and Wildlife Department to sample adult finfish in the Gulf off Texas. This regime would be a stratified random sampling program where baited longlines would be set on the bottom in randomly selected areas of the Gulf. Longlines directly sample adult fish that can be used to obtain life history information such as age, maturity, fecundity, sexual development, and positive identification. Catch per unit of effort can be determined.

Any sampling protocol developed for longlines should be designed to accommodate the possibility of infrequent catch rates of some important finfishes in the same strata.

Species potentially susceptible to a bottom longline survey include fishes of the families: sea catfishes, tilefishes, jacks and pompanos, requiem sharks, stingrays, codfishes, mackerel sharks, snappers, moray eels, snake and worm eels, drums, sea basses, hammerhead sharks, and smooth dogfishes.

These two regimes sample different aspects of adult finfish in the Gulf with some overlap between the two with respect to species and habitat. They can also complement the ongoing plankton and groundfish projects in the SEAMAP program.


Specific details of sampling protocol (i.e. number of samples, gear configuration, soak times, sampling periods, participants, etc.) will have to be developed as goals and objectives of SEAMAP, the Gulf Council, the various states, and NMFS are defined.

Currently TPWD will be conducting a pilot bottom longline survey off Port Aransas, TX during 1989-90 to assess the feasibility of a coastwide project within state territorial waters. NMFS will conduct, a trap/video survey of hardbottom/reef habitats in the northern Gulf and experiment with techniques for sampling oil structures. This survey will address the limitations of trap surveying discussed above.

Recommendations of the adult finfish work group are:

1. To continue to assemble the information matrix developed by the work group. This will increase the information data base on finfish research in the Gulf and keep it current.
2. Results of the projects that will be conducted by NMFS and TPWD this year should be examined to determine their value in meeting SEAMAP's goals and objectives of a long-term fishery independent monitoring program of adult finfish in the Gulf.

APPROVED BY:

  
COMMITTEE CHAIRMAN

TCC SEAMAP SUBCOMMITTEE  
MINUTES  
January 29-30, 1990  
New Orleans, LA

Vice-Chairman Dick Waller called the meeting to order at 1:10 p.m.

The following members and others were present:

Members

Barney Barrett, LDWF, Baton Rouge, LA  
Scott Nichols, NMFS, Pascagoula, MS  
Dick Waller, GCRL, Ocean Springs, MS  
Alan Huff/Mark Leiby, FDNR, St. Petersburg, FL  
Terry Cody (proxy for G. Matlock), TPWD, Rockport, TX

Staff

Larry Simpson, Executive Director  
Tom Van Devender, SEAMAP Coordinator  
Eileen Benton, Administrative Assistant

Others

Phil Bowman, LDWF, Baton Rouge, LA  
Joanne Shultz, GCRL, Ocean Springs, MS  
Jim Hanifen, LDWF, Baton Rouge, LA  
Ken Savastano, NMFS, Stennis Space Center, MS  
John Kern, LDWF, Baton Rouge, LA  
T. McIlwain, GCRL, Ocean Springs, MS

Adoption of Agenda

The agenda was amended to include a discussion on the coordinator position after the Administrative Report and to move the Shrimp Groundfish Work Group Report to Item #6. The agenda was adopted as amended.

\* The Subcommittee concurred that Don Hoss be invited to the March meeting to discuss latest events at the Polish Sorting Center.

Adoption of Minutes

\* It was noted that in the October 1989 minutes, a motion was passed that the Environmental Data Work Group meet to review the hypoxia data and associated biological catches and explore ways to disseminate this information. As of yet the work group has not met and the Subcommittee again expressed the need for the work group to have a conference call/meeting to review procedures.

The minutes of the meeting held October 16, 1989 in Biloxi, MS were approved as written.

### Administrative Report

T. Van Devender distributed the SEAMAP 1990 cruise plans for the NMFS vessels' OREGON II and CHAPMAN. He noted that NMFS has a reef fish survey scheduled for March-April.

S. Nichols noted that the Spring Ichthyoplankton Survey would probably be moved back to April 20-May 26 and that the CHAPMAN would participate in another leg of that survey.

Also distributed were additions to the 1989 Cruise Log. T. Van Devender noted that the 1989 log will be complete as soon as he receives Louisiana Cruise #895.

T. Van Devender also reported that work is currently be done on the 1986 Atlas. The Subcommittee addressed ways to reduce the size of the Atlas. A proposed change would be to eliminate catch tables by statistical zone which is 70% of the Atlas. The Atlas would then consist of the description of surveys, description of stations, species list for each survey, and environmental data. T. Van Devender encouraged the Subcommittee to review the Atlas and bring suggested changes to the March Subcommittee meeting.

### Cooperative Agreements

T. Van Devender reported that cooperative agreements have not yet been received from NCASC. A conversation with J. Martin-West in early January noted that the documents were received and currently "in legal". After legal they are reviewed by FARB and then awarded. He noted that she also stated that she anticipated no problems and grants would begin on the requested January 1 start-up date.

### Coordinator Position

L. Simpson noted the resignation of Tom Van Devender, current SEAMAP Coordinator, who will assume the position of Chief of Saltwater Fisheries for the Mississippi Department of Wildlife, Fisheries and Parks beginning February 1, 1990.

L. Simpson reported that he had contacted Chairman Tatum in regard to advertising for the SEAMAP Coordinator Position and advertised the position with a January 29 closing date. Distributed were resumes

received from the announcement which Chairman Tatum wanted to discuss during the Subcommittee meeting.

A discussion was held regarding the SEAMAP job description, time frame of advertisement and the Subcommittee not reviewing the information prior to distribution.

Due to the Subcommittee not having a chance to review the job description, discussion was postponed until the following day. L. Simpson was asked to return for the discussion on January 30.

\* B. Barrett moved to hold a conference call the week of February 5 to discuss the job description and procedures for advertising the position. The motion was seconded and passed with Florida and NMFS opposing.

#### Shrimp/Groundfish Work Group Report

P. Bowman reported that since the last Subcommittee meeting in October, the work group has not met. The work group plans to meet prior to the Summer Shrimp/Groundfish Survey to work out details or changes in the cruise. He noted that the work group continually examines the standardization of survey design. The work group will also discuss differences in catches between the 40' trawls of the various research vessels and the possibility of additional inshore sampling.

#### Status of Five-Year Management Plan

The latest version of the Five-Year Plan was distributed. The Subcommittee reviewed the Plan and the following change was noted:

Page ii - SEAMAP-Caribbean Committee membership -- add Walter Nelson, NMFS-SEFC.

(See discussion on 1/30/90-Coordinator Position for an additional change to the Five-Year Plan)

The Subcommittee concurred that the Five-Year Plan will again be reviewed and voted on at the Subcommittee's March meeting.

The meeting adjourned at 5:00 p.m. and will reconvene at 9:00 a.m. on 1/30/90.



January 30, 1990

Vice-Chairman Dick Waller called the meeting to order at 9:10 a.m.

Environmental Data Work Group

S. Nichols reported for work group leader W. Stuntz that a conference call will be scheduled in the near future. He also noted that processing of environmental samples was on schedule.

Data Coordinating Work Group

Work group leader K. Savastano distributed and reviewed the SEAMAP Data Management Report (attached). Items noted included:

- Entering of editing of 1988-89 data is currently being processed.
- Plots are completed on the 1986 Atlas.
- 85 of 88 SEAMAP requests have been processed and work is being performed on the remaining requests.
- IBM-PC for Louisiana will be delivered as soon as funding is received for FY90.

K. Savastano also reviewed and distributed a CMAS handout (attached). He reported that members of the steering committee had met in October and November 1989 and established the following data base specifications for the system:

- Study area will be the Gulf SEAMAP survey area.
- Initial data set will encompass NMFS summer cruises for 1981-1989.
- Data base will include catch weight and number of animals caught by station for about 150-200 principal species.
- Data base will also include environmental data with the exception of climate conditions.

Plans are to complete the pre-prototype system in May and he anticipates the completing the final version by the end of 1990.

S. Nichols moved to request the Commission provide travel funds to S. Lazauski to attend CMAS steering committee meetings. Seconded and passed.

K. Savastano noted that travel would probably involve a February meeting in Washington, DC and a final May/June meeting in Galveston, TX.

### Coordinator Position

L. Simpson reviewed coordinator position hiring policies and procedures from the SEAMAP Operations Plan: 1985-1990. He noted that the position announcement was sent to Placement Bureaus for university systems, trade associations, sea grant offices and advisory services, Sport Fishing Institute, International Association of Fish and Wildlife Agencies, state agencies and laboratories, American Fisheries Society, and the Pacific and Atlantic States Marine Fisheries Commissions.

He apologized to the Subcommittee for the office oversight of not mailing a copy of the position announcement to the members. He noted the memorandum to the Commissioners and Subcommittee was sent at the same time indicating he was working with Chairman Tatum to seek applicants for the vacancy.

\* After discussion A. Huff moved to insert the following paragraph (extracted from the SEAMAP Operations Plan: 1985-1990) into the new Five-Year Management Plan (page 23). Seconded and passed.

Administrative supervision of the Coordinator shall be performed by the GSMFC Executive Director, with authority to recruit, employ and discharge the Coordinator, in concurrence with the SEAMAP Subcommittee. The Coordinator shall be retained on a yearly basis, subject to review by the Subcommittee, Subcommittee Chairman, and Executive Director.

\* The Subcommittee discussed the time frame in which the position was advertised. S. Nichols moved to readvertise the position with a new closing date of 2/28/90. Seconded and passed.

It was also noted that the position description would list the salary for the position as "Annual Starting Salary \$23,000".

### Plankton Work Group Report

Work Group Leader J. Shultz reported that a conference call was held on January 12, 1990 (report attached). Main discussion of the call was a request by LDWF to revise the SEAMAP sorting protocol. Agreement

was reached that smaller aliquots could be sorted for fish eggs, using 200 eggs as the target number on which to base the decision on final aliquot size.

J. Shultz also noted that the OREGON II had collected 11 plankton samples in the central northern Gulf January 6-9, 1990. It was hoped that this represents the beginning of more extensive wintertime plankton sampling for SEAMAP.

J. Shultz reported that the Polish Sorting Center is experiencing a work slowdown and would affect the sorting schedule for this year. However, officials with the Sea Fisheries Institute are planning to open another sorting identification center to work on backlog. Other problems with the Sorting Center include the resignation of 12 staff members with plans to form their own plankton sorting and identification lab. The work group recommends that the Subcommittee consider the possibility of SEAMAP samples being sent to this new center.

\* After discussion, J. Shultz stated that the work group would find out more regarding this new Center (price, condition of existing treaty, etc.)

\* A. Huff moved to endorse the recommendation from the Plankton Work Group to incorporate the January plankton samples as a SEAMAP activity. Motion was seconded and passed with Texas opposing.

M. Leiby distributed the SAC report (attached). He noted that the Center is currently out of storage space and until FY90 funds are released, SAC operations are at a standstill.

T. Van Devender distributed the SIPAC report (attached). He noted that H. Perry is acting curator while K. Stuck is on sabbatical leave. He also noted that all of the 400 samples to be sorted for invertebrates by the PSC have been received as of 1/2/90.

T. Van Devender also distributed a letter from H. Perry as Chairman of the TCC Crab Subcommittee requesting that there be continued invertebrate sorting effort by the SEAMAP Plankton Work Group (letter attached).

\* The Subcommittee concurred that sorting will continue at the SIPAC.

#### Red Drum Work Group Report

Work Group Leader T. McIlwain polled members and reviewed activities of the various states:

Texas. Expressed concern with the freeze in December resulting in an estimated loss of 62 million fish. Of these, 62,000 were red drum. Texas is currently emphasizing work on escapement and trying to determine status of red drum stocks in Texas. They are completing a joint project with Texas A&M on MTDNA and currently looking at electrophoretic studies on hatchery-reared fish. Texas is continuing to evaluate the contribution of stock fish to the total population. Currently have stocked a total of 82 million red drum in Aransas Bay.

Louisiana. C. Wilson continues to examine offshore stocks, primarily for age.

Mississippi. Mississippi is currently hosting a series of hearing across the coast and will begin to look at changes in their red fish regulations.

Alabama. Alabama continues with their project of rearing, tagging and stocking of red drum. Currently 40,000 fish have been stocked and they are beginning to get returns on those fish. Also looking at further restricting regulations.

NMFS. P. Goodyear continuing stock assessment work.

Florida. Florida is seeing a lot of 1-2 year old fish and are getting pressure to lighten up regulations.

T. McIlwain also noted that black drum is continuing to be a problem in Mississippi, Louisiana, and Alabama. GSMFC is currently developing an interjurisdictional fisheries management plan for black drum.

#### Adult Finfish Work Group Report

S. Nichols reported that NMFS and Alabama met to coordinate efforts on reef fish surveys. NMFS will begin their survey on March 31. Work Group Leader P. Hammerschmidt can no longer participate as a member and S. Nichols was appointed interim work group leader.

#### Election of Chairman

Motion was made and approved that W. Tatum and D. Waller serve as Chairman and Vice-Chairman, respectively.

#### Other Business

The next meeting of the Subcommittee will be held in Orange Beach, Alabama on March 12, 1990.

The Subcommittee thanked T. Van Devender for excellent his work as SEAMAP Coordinator and wished him luck in his new position with the Bureau of Marine Resources.

There being no further business, the meeting adjourned at 1:10 p.m.

01-25-90

SEAMAP DATA MANAGEMENT REPORT

- A. SEAMAP data entry, edit, and verification continues on the 1988 and 1989 data. The status for the 1988 data is shown in attachment 1. Editing of the 1988 has been completed with the exception of three state cruises. The status of the 1989 data is shown in attachment 2. The 1989 data are being entered, edited, and uploaded on the new SEAMAP system from the individual SEAMAP field sites.
- B. Work continues on the 1986 Atlas. All 1986 Atlas computer plots have been completed.
- C. A total of 88 SEAMAP requests have been received to date. Eighty-five have been completed and work is being performed on the remaining requests.
- D. The last SEAMAP personal computer (IBM PS/2 Model 8580-071) has been shipped to North Carolina. A new version of the SEAMAP software has been shipped to each SEAMAP field site with an updated user manual. The new system version resolves several system problems and includes all software enhancements that have been identified to date. The new user manual documentation reflects all changes made to the system.
- E. A South Atlantic Data Management System User Training Meeting was held at NMFS, Stennis Space Center, Mississippi, on December 11-12, 1989. P.C. and Burroughs 7811 batch verification software has been completed and documented. This software provides another way to input data to the SEAMAP system in addition to the SEAMAP interactive data entry/edit software. It will also be used to enter all of the SEAMAP historical data. Approximately 58% of the total SEAMAP Data Management System's estimated cost of \$529,251 has been committed to contracts or \$304,697. Approximately 97% of the committed contract money or \$294,340 has been utilized as of December 17, 1989. Attachment 3 and 4 provide the status of each of the system modules.

  
Kenneth J. Savastano

24-Jan-90

SEAMAP 1988

## BIOLOGICAL

## ENVIRONMENTAL

DATA					COMPLETION		COMPLETION				
SOURCE	STATIONS	SPECIES	TOTAL	STATUS	DATE	STATIONS	RECORDS	STATUS	DATE		
AL	881	7	136	143	7	11-Apr-89	7	21	7	11-Apr-89	
AL	882	4		4	5		4	12	5		
AL	883			0	1		10	30	3		
FL	881			0	1		17	51	7	21-Jul-89	
FL	882			0	1		36	108	7	21-Jul-89	
LA	29	24	556	580	7	18-May-89	24	72	7	18-May-89	
LA	30	24	567	591	7	19-Oct-89	24	72	7	19-Oct-89	
LA	31	21	192	213	7	27-Nov-89	21	63	7	12-Sep-89	
LA	32	20	488	538	7	15-Oct-89	20	60	7	15-Oct-89	
LA	33	21	190	211	6		21	42	6		
LA	34	24	660	684	6		24	48	6		
MS	881	41	922	963	7	20-Sep-89	47	141	7	12-Sep-89	
MS	882			3	1		33	99	7	12-Sep-89	
MS	883	23	644	667	7	12-Sep-89	26	78	7	12-Sep-89	
OII	173			0	1		164	492	7	17-Jan-90	
OII	174	390	7355	7745	7	15-May-89	195	585	7	15-May-89	
OII	176			0	1		98	294	7	17-Jan-90	
OII	177	435	9287	9722	7	04-May-89	320	960	7	17-Jan-90	
TX	881	80	1143	1223	7	26-Jun-89	80	240	7	26-Jun-89	
TX	882	80	882	962	7	05-Sep-89	80	240	7	26-Jun-89	
-----											
TOTAL:	1194	23022				1251	3708				
-----											
GRAND TOTAL:			24216						27924		

## STATUS CODES:

- \*1 - NOT TAKEN
- \*2 - TAKEN, NOT RECEIVED
- \*3 - BEING PROCESSED AT PASCAGOULA
- \*4 - WAITING FOR LOCAL VERIFICATION
- \*5 - AT STATES FOR VERIFICATION
- \*6 - INITIAL VERIFICATION COMPLETE
- \*7 - FINAL VERIFICATION COMPLETE
  
- \*- CHLOROPHYLL AND/OR SALINITIES NOT COMPLETE
- \*\* RECORD STATUS INCOMPLETE AT THIS TIME

## SEAMAP 1989

Data Source	Status	Inventory	Biological Station	Species	Environmental	Shrimp Station	L/F L/F	General L/F	Ichthyoplankton Station	Sample	Total
AL 891	2	7	7	103	7	4	97	362			587
AL 892	2	10	10	198		7	166	991			1382
O II 179	2		527	933	37						1497
O II 180	3	245	243	4052	184	156	4822	6954			16656
O II 183	2	114	107		114						335
O II 184	2	512	491	11912	229			66969			80113
Total		888	1385	17198	571	167	5085	75276			100570

## Status Codes

- \*1 Not Taken
- 2 Entered in P.C.
- 3 Entered on Burroughs 7811 (verified and data based)



EARNED VALUE SUMMARY REPORT  
 BASED ON CURRENT FUNDING  
 SEAMAP DMS IMPLEMENTATION  
 17 DECEMBER 1989

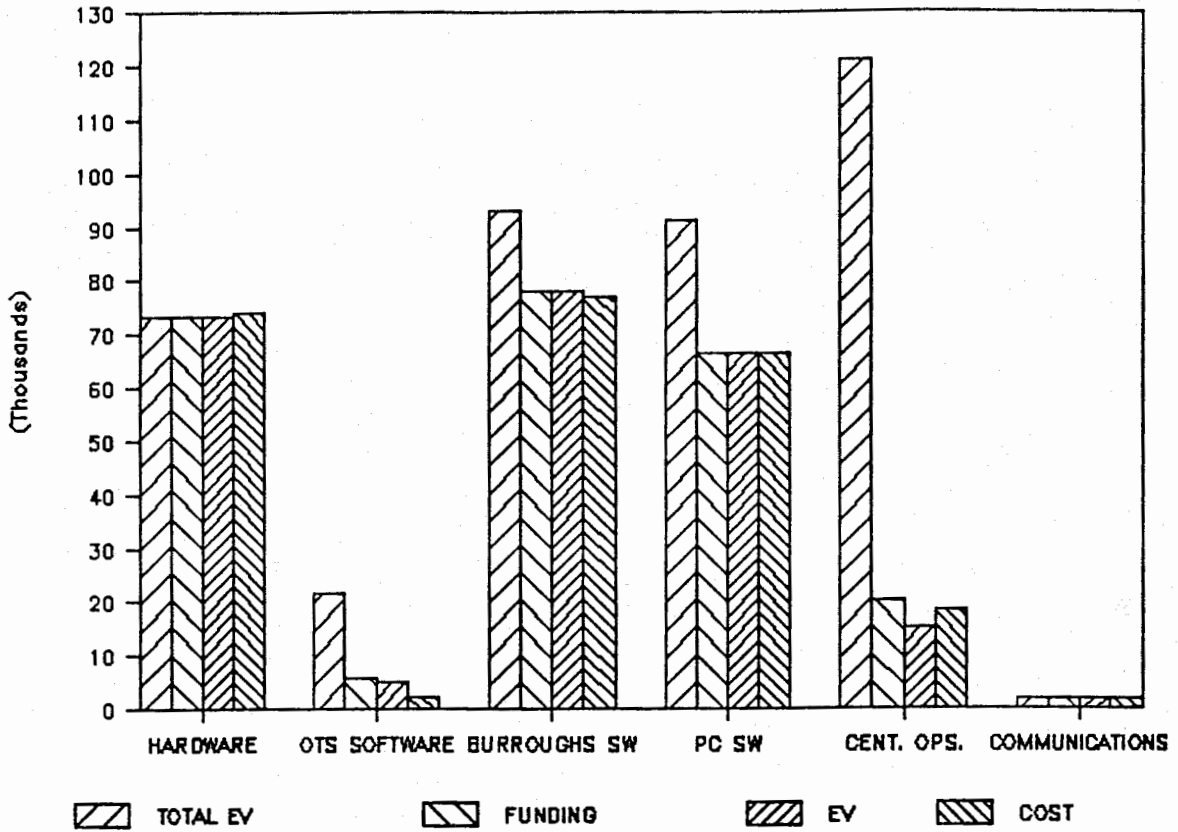
UNIT NAME	TWR#	EV TO DATE	%EV	ACTUAL COST	%SPENT	VAR (A-E)	%VAR (VAR/EV)	ETC	NVAR	%NVAR	CURRENT MODULE EV	CURRENT FUNDS REMAINING
TOTAL DMS IMP.	--	\$293,751	96.4%	\$294,340	96.6%	\$589	0.2%	\$4,000	(\$3,411)	-1.1%	\$304,697	\$10,357
TOTAL LABOR	--	\$182,751	93.5%	\$187,243	95.8%	\$4,492	2.5%	\$4,000	\$492	0.3%	\$195,503	\$8,260
TOTAL PROC.	--	\$111,000	101.7%	\$107,097	96.1%	(\$3,903)	-3.5%	\$0	(\$3,903)	-3.5%	\$109,194	\$2,097
Total HW Cost	--	\$73,251	100.0%	\$73,935	100.9%	\$684	0.9%	\$0	\$684	0.9%	\$73,251	(\$684)
HW Proc Labor	MF4A34	\$3,251	100.0%	\$3,251	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$3,251	\$0
HW Proc	(NMFS)	\$70,000	100.0%	\$70,684	101.0%	\$684	1.0%	0	\$684	1.0%	\$70,000	(\$684)
Total SW Cost	--	\$5,000	86.9%	\$2,357	41.0%	(\$2,643)	-52.9%	\$0	(\$2,643)	-52.9%	\$5,752	\$3,355
SW Proc Labor	MF4A37	\$0	0.0%	\$138	18.4%	\$138	0.0%	\$0	\$138	0.0%	\$752	\$614
SW Proc	(NMFS)	\$5,000	100.0%	\$2,219	44.4%	(\$2,781)	-55.6%	0	(\$2,781)	-55.6%	\$5,000	\$2,781
Burroughs SW	--	\$78,000	100.0%	\$77,084	98.8%	(\$916)	-1.2%	\$0	(\$916)	-1.2%	\$78,000	\$916
Data Handler	MF4A33	\$42,500	100.0%	\$42,486	100.0%	(\$14)	0.0%	\$0	(\$14)	0.0%	\$42,500	\$14
Data Handler	DUPL0301	\$2,000	100.0%	\$1,997	99.9%	(\$3)	-0.2%	\$0	(\$3)	-0.2%	\$2,000	\$3
Data Handler	UM001203	\$1,000	100.0%	\$152	15.2%	(\$848)	-84.8%	\$0	(\$848)	-84.8%	\$1,000	\$848
Reformat	MF4A01	\$20,000	100.0%	\$19,995	100.0%	(\$5)	0.0%	\$0	(\$5)	0.0%	\$20,000	\$5
On-line Doc	MF4A38	\$7,500	100.0%	\$7,488	99.8%	(\$12)	-0.2%	\$0	(\$12)	-0.2%	\$7,500	\$12
Xbox/Bboard	UM001204	\$5,000	100.0%	\$4,966	99.3%	(\$34)	-0.7%	\$0	(\$34)	-0.7%	\$5,000	\$34
PC Software	--	\$66,500	100.0%	\$66,485	100.0%	(\$15)	0.0%	\$0	(\$15)	0.0%	\$66,500	\$15
Upload	MF4A32	\$32,000	100.0%	\$31,997	100.0%	(\$3)	0.0%	\$0	(\$3)	0.0%	\$32,000	\$3
Upload	UM001102	\$5,000	100.0%	\$5,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$5,000	\$0
Upload	UM001103	\$2,000	100.0%	\$2,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$2,000	\$0
Upload	DUPL0302	\$6,000	100.0%	\$6,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$6,000	\$0
Download	MF4A31	\$17,500	100.0%	\$17,488	99.9%	(\$12)	-0.1%	\$0	(\$12)	-0.1%	\$17,500	\$12
Download	UM001201	\$3,000	100.0%	\$3,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$3,000	\$0
Download	UM001202	\$1,000	100.0%	\$1,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$1,000	\$0
Analysis/Diso	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Central Ops	--	\$15,000	75.0%	\$18,384	91.9%	\$3,384	22.6%	\$4,000	(\$616)	-3.2%	\$20,000	\$1,616
Sys Mgmt	MF4A40	\$5,000	100.0%	\$4,771	95.4%	(\$229)	-4.6%	\$0	(\$229)	-4.6%	\$5,000	\$229
Data Process	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
PC SW Maint	MF4A44	\$5,000	50.0%	\$8,724	67.2%	\$3,724	74.5%	\$4,000	(\$276)	-3.1%	\$10,000	\$1,276
Burr SW Maint	MF4A45	\$5,000	100.0%	\$4,889	97.8%	(\$111)	-2.2%	\$0	(\$111)	-2.2%	\$5,000	\$111
Special Recs	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Archival	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Communications	MF4A36	\$2,000	100.0%	\$2,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$2,000	\$0

EARNED VALUE SUMMARY REPORT  
 BASED ON CURRENT FUNDING  
 SEAMAP DMS IMPLEMENTATION  
 17 DECEMBER 1989

UNIT NAME	TWR#	EV TO DATE	%EV	ACTUAL COST	%SPENT	VAR (A-E)	%VAR (VAR/EV)	EID	%VAR	%VAR	CURRENT MODULE EV	CURRENT FUNDS REMAINING
Training	--	\$18,000	90.0%	\$18,783	93.9%	\$783	4.4%	\$0	\$783	4.4%	\$20,000	\$1,217
Site Users	MF4A39	\$5,000	100.0%	\$4,994	99.9%	(\$6)	-0.1%	\$0	(\$6)	-0.1%	\$5,000	\$6
Training Prep	UM001205	\$3,000	100.0%	\$3,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$3,000	\$0
Gulf Train	UM001206	\$4,000	100.0%	\$4,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$4,000	\$0
S Atl Train	MF4A43	\$0	0.0%	\$1,451	72.6%	\$1,451	0.0%	\$0	\$1,451	0.0%	\$2,000	\$549
Sys Maint	UM001207	\$3,000	100.0%	\$2,566	85.5%	(\$434)	-14.5%	\$0	(\$434)	-14.5%	\$3,000	\$434
Sys S/W Train	MF4A42	\$3,000	100.0%	\$2,772	92.4%	(\$228)	-7.6%	\$0	(\$228)	-7.6%	\$3,000	\$228
Year Real Time	--	\$36,000	105.3%	\$34,194	100.0%	(\$1,806)	-5.0%	\$0	(\$1,806)	-5.0%	\$34,194	\$0
Data Ent SW	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Comm I/face	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
NRT Burr SW	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Port PC SW	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Antenna Proc	(NMFS)	\$30,000	100.0%	\$30,000	100.0%	\$0	0.0%	\$0	\$0	0.0%	\$30,000	\$0
PC HW Proc	(NMFS)	\$6,000	143.1%	\$4,194	100.0%	(\$1,806)	-30.1%	\$0	(\$1,806)	-30.1%	\$4,194	\$0
Plotting	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Atlas	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0
Plankton	--	\$0	0.0%	\$1,118	22.4%	\$1,118	0.0%	\$0	\$1,118	0.0%	\$5,000	\$3,882
Isosyo DB	UM001101	\$0	0.0%	\$1,118	22.4%	\$1,118	0.0%	\$0	\$1,118	0.0%	\$5,000	\$3,882
Isos DB	NCF	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	\$0	0.0%	\$0	\$0

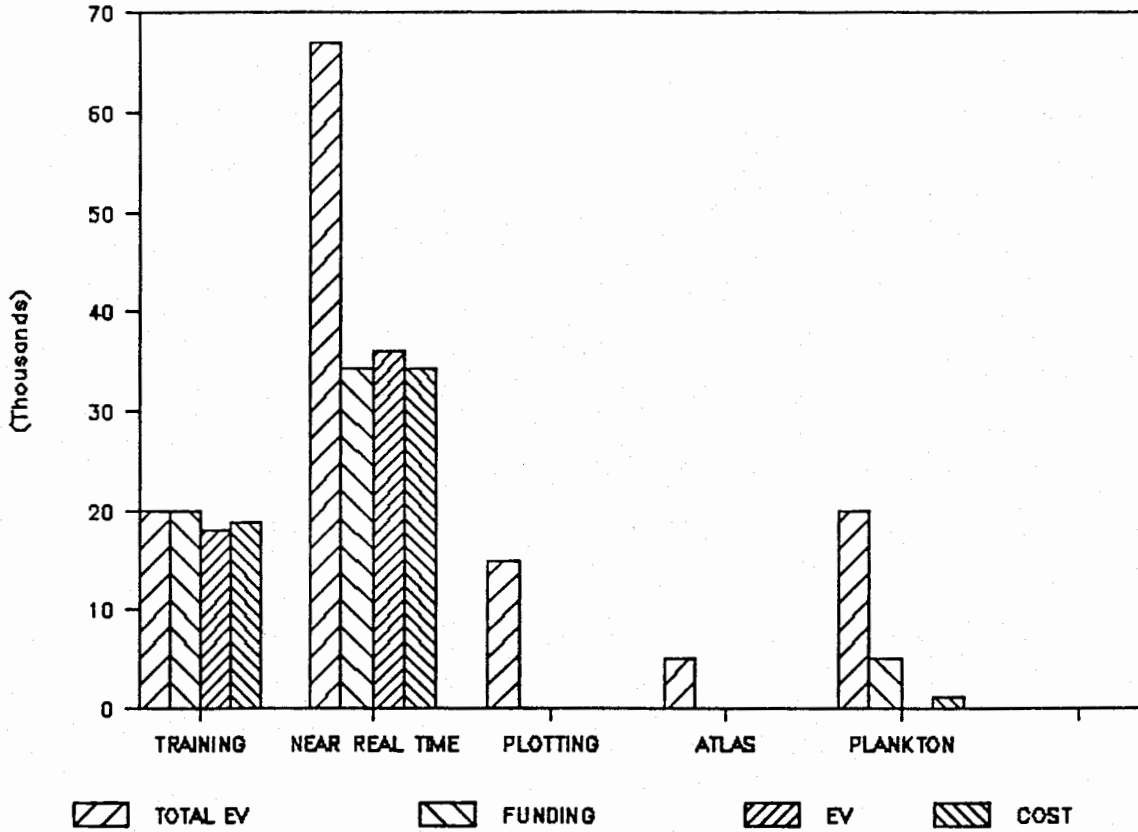
# EARNED VALUE SUMMARY REPORT

17 DECEMBER 1989



# EARNED VALUE SUMMARY REPORT

17 DECEMBER 1989





# Desk-Top Information System for SEAMAP Trawl Survey Data

## NOS/NMFS Cooperative Project

The rapidly evolving microcomputer capabilities of database management, data exchange, geo-referenced mapping, and data analysis are making direct access to large data sets available to a wide spectrum of users. The goal is to apply these new capabilities to develop a microcomputer based "desk-top information system" to improve significantly the access and use of the data compiled in the SEAMAP Trawl Survey Program.

### Introduction

At its annual fall meeting in Biloxi, MI, the SEAMAP Technical Committee previewed a recently completed desk-top information system for analyzing shrimp harvest data in the Gulf of Mexico. This desk-top system was the result of a year-long cooperative project between the Galveston Laboratory of the National Marine Fisheries Service (NMFS) and the Strategic Assessment Branch (SAB) of the National Ocean Service (NOS).

The SEAMAP SUBCOMMITTEE requested that members of its data management team meet with the *Cmas* Gulf of Mexico Shrimp Harvest Group to examine the possibility of developing a *Cmas* SEAMAP desk-top information system. A steering committee was established and met in late November at Stennis Space Center. It was agreed at this meeting that work should begin on a "pre-prototype" system, using available NMFS data, to assess the requirements of the desk-top system. The plan is to evolve the pre-prototype into a more complete prototype to distribute to selected academic researchers and state and federal resource managers by late summer (1990).

Discussion at the meeting focused on initial specifications of both the data base and components of the pre-prototype system. Both are summarized in this report.

### SEAMAP

The Southeast Area Monitoring and Assessment Program (SEAMAP) is a State/Federal/university program for collection and dissemination of fishery-independent data and information in the southeastern United States. The program presently consists of three operational

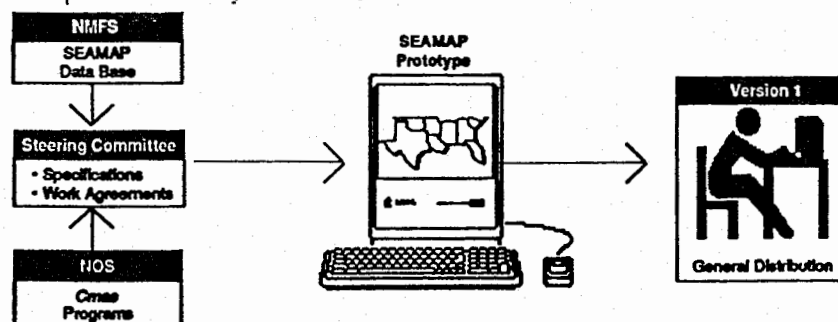
components: SEAMAP - Gulf of Mexico, which began in 1981; SEAMAP - South Atlantic, 1983; and SEAMAP - Caribbean, 1988.

The program emphasizes the collection of fishery-independent data for specific short and long-term management needs. Data are entered and disseminated through a regional, multipurpose database accessible to all participating management agencies. The database provides information necessary for managers and scientists to monitor and assess the condition of species or species groups subject to state, interstate, federal and international management programs. Environmental parameters and community structure are also monitored to provide insights on the dynamics of southeast area living marine resources. Data collection and management procedures are coordinated among participants to enhance the usefulness of the data, minimize costs, and increase the accessibility of information to fishery researchers, administrators, and managers.

### Computer Mapping and Analysis System

SAB's Computer Mapping and Analysis System (*Cmas*) has been developed to facilitate comparisons, analyses and mapping of information on the distribution, abundance, and life history of marine species throughout major regions of the U.S. Exclusive Economic Zone. Users can (1) define specific areas for analysis; (2) develop maps and simple summations by species, month, year, and area; (3) select combinations of species and attributes for maps, time series histograms or tabular summaries; and (4) compute ratios and other comparisons for specified subareas of previously stored analyses. *Cmas* is a compact information system that operates on an Apple Macintosh computer. The SEAMAP Survey data base

Development of a Desk-top Information System for SEAMAP



will join four other applications in the Cmas family: *Biogeography of Living Marine Resources in the Gulf of Mexico*; *Biogeography of Living Marine Resources in the Bering, Chukchi and Beaufort Seas Regions*; *Gulf of Mexico Shrimp Harvests and Seabird Colonies for the West Coast of North America*.

### The Pre-prototype Data Base

Two principal criteria defined the pre-prototype data base: 1) that it be representative both in time and space of the complete SEAMAP data set, and 2) that it be accessible within a few months. These criteria led to the following specifications:

- The Study Area will be the SEAMAP survey area which extends from Apalachicola Bay, FL to Brownsville, TX and from the coastline to about 100m depth.
- Data will encompass NMFS summer cruises for 1981-1989. This data set about 2,200 individual stations, is presently resident on the NMFS computers in Pascagoula, MS.
- The data base will include both total catch weight and total numbers of animals caught by station for about 150-200 of the principal species.
- The data base will include the full suite of environmental and other parameters, with the single exception of climate conditions (e.g., wind speed, air pressure, etc.).

### System Specifications

Specifications for the pre-prototype desk-top system are as follows.

The system will allow mapping of both SEAMAP data and other data entered by individual users on relatively high resolution base maps. Base maps will include the entire Gulf of Mexico, the Study Area, and individual states.

The system will have a full complement of sorting and selection capabilities easily allowing users to extract information across the entire set of parameters.

The system will produce a variety of summary outputs, including tables, maps and graphics, all closely linked to desk-top processing.

### Progress to Date and Project Schedule

Work to date has focused on two components of the system: 1) formatting and transferring the pre-prototype data base, and 2) developing high resolution base maps. Both of these efforts were completed in early January. Work is proceeding on developing the basic data base structure. Plans are to complete the pre-prototype in May and to proceed with the prototype and final version during the summer.

### The Steering Committee

For further information on this project contact.

Daniel J. Basta or Thomas F. LaPointe  
Strategic Assessment Branch  
National Ocean Service  
11400 Rockville Pike, #600  
Rockville, Md 20852  
(301) 443-0453

Edward F. Klima or James M. Nance  
Galveston Laboratory  
National Marine Fisheries Service  
4700 Avenue U  
Galveston, TX 77551  
(409) 766-3500

Kenneth J Savastano  
Mississippi Laboratories  
National Marine Fisheries Service  
Stennis Space Center, MS 39529  
(601) 688-3103

Scott Nichols  
Mississippi Laboratories  
National Marine Fisheries Service  
P.O. Drawer 1207  
Pascagoula, MS 39568-1207  
(601) 688-3103

Henry (Skip) Lazauski  
Alabama Marine Resources  
Drawer 458  
Gulf Shores, AL 36542  
(705) 968-1577



1989 SEAMAP Report  
SEAMAP Ichthyoplankton Archiving Center (SAC)  
Quarter IV 1989

Present Status

Florida participated in the fall SEAMAP ichthyoplankton survey in October. A total of 36 stations were occupied (see attached report and cruise track). During this cruise, we had major equipment damage for the first time. A neuston net was slashed by the boats propeller and a Niskin bottle was broken. Both of these have been sent off for repair and we expect them to be operational by the spring cruise in 1990. The chlorophyll samples and part of the salinities have been sent to appropriate agencies. We await the return of the shipping crates to send off the remaining salinity samples. Although the samples have been transferred from formalin to ethanol, we have not been able to send them to Miami and GCRL. My most experienced curatorial assistant, Kim Kainer, left in November for another job, and with the training for the new assistant, we have not had time to transport the samples. I hope to be able to get the field data and sample deliveries completed before the end of Quarter I, 1990.

Because of training, inventory procedures and a lack of space, we have only accessioned 82 samples from the shipment from the PSC. We have also received two large crates from NMFS, Miami which contain 1987 bluefin tuna cruise (Oregon II) samples. We will not be able to process these until we can purchase new storage cabinets.

We have completed the 1982 inventory and have sent out letters to loan users asking them to confirm samples from that year which are currently in their possession. So far, we have had a relatively poor response. During the inventory process, we discovered that a block of samples which had been sent to us by Poland and listed as being collected in 1983 were in fact collected during 1982. The data and specimens were transferred to 1982 files and storage cabinets and users of 1982 and 1983 samples were notified by mail of this discrepancy.

The new IBM PS/2 Model 80 computer system arrived and has been set up. Files are currently being transferred from the IBM PC-AT and the new communications and SEAMAP data base management software have been loaded. I expect to begin learning the SEAMAP system and begin transferring files in late Quarter I, 1990.

Requests

The following is a list of loans and data that have been requested and/or shipped between 1 October 1989 and 31 December 1989. Quarter III was particularly slow for requests because material from recent years is not yet available for our regular loan users.

<u>Requester</u>	<u>Priority</u>	<u>Shipped?</u>	<u>Taxon(-a)</u>	<u>No. Lots</u>	<u>Status</u>
Ditty(Shaw)	1	Yes	1982-86 Echeneididae Rachycentridae	8	Out
Drullinger (Shaw)	1	Yes	1982-86 Mugilidae	6	Out

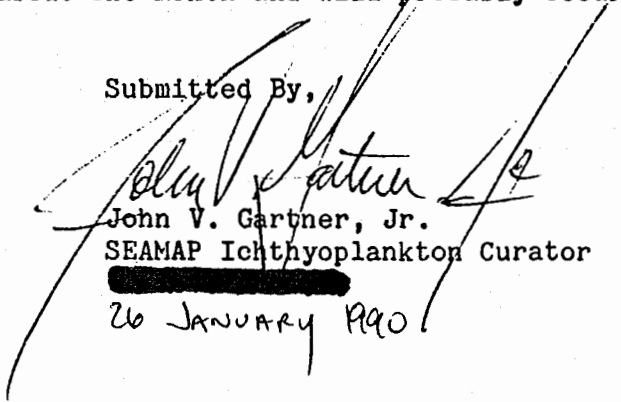


SEAMAP Archiving Center  
Quarter IV 1989  
Page 2

Future

We are completely out of storage space. Until SEAMAP funds for FY 1990-1991 are released, we cannot accession any additional material (except 1984 and 1985) even though some cruise samples have been received. Because of where we expect to place the new storage cabinets, once we do receive funds, order, and receive new storage cabinets, it will be necessary to suspend all SAC operations until the new cabinets are installed and the samples reshelfed. I expect this will take about one month and will probably occur sometime during Quarter II 1990.

Submitted By,

  
John V. Gartner, Jr.  
SEAMAP Ichthyoplankton Curator

26 JANUARY 1990

SEAMAP Invertebrate Archiving Center  
Activity Report, 9/30/89 - 1/22/90

SIPAC curator Ken Stuck remains on sabbatical leave from GCRL (September 1, 1989 - August 31, 1990). Harriet Perry (GCRL) continues to serve as SIPAC curator.

Unsorted samples

One hundred and twenty-four unsorted samples from 1989 and 1990 were received from Pascagoula. To date, 3,925 unsorted SEAMAP plankton samples have been received and catalogued at SIPAC. These samples are listed in Appendix 1.

Samples/Data on Loan

J. Shultz (GCRL)	Tommy Munro, Cruise 863, Left Bongo, 8 samples
J. Power (LSU)	Portunid megalopal data
H. Perry (GCRL)	Portunid megalopal data
G. Zeiski (LDWF)	Portunid megalopal and penaeid postlarval data

Invertebrate sorting

Seven hundred and seventy-one samples have been sorted for selected invertebrate taxa at GCRL and the Polish Sorting Center, following established protocol. These samples are listed in Appendix 2.

All of the 400 samples to be sorted for invertebrates by the PSC (1986 agreement) have been received as of 1/2/90.

As of 31 September 1984, 3,533 lots of selected invertebrate taxa have been sorted and catalogued at SIPAC. Of that total, 1,129 lots were provided by the Polish Sorting Center, and 955 lots were provided by GCRL personnel. Gulf Coast Research Laboratory has currently identified 1,449 lots of portunid megalopae from those samples. These have been catalogued at SIPAC.

Future Status

During the next fiscal year, work will continue on identifying sorted material catalogued at SIPAC to lower taxonomic levels. Particular emphasis will be placed on providing data on the larval distribution of Callinectes sapidus. The future success of SIPAC to provide specimens and data on invertebrate species will depend in large part on the reinstatement of past funds or the generation of new monies to support invertebrate sorting.

Submitted by:

*Harriet*

Harriet M. Perry

Appendix 1. UNSORTED SEAMAP PLANKTON SAMPLES CATALOGUED AT SIPAC

-- 1982 --

Vessel	Cruise	Gear	No. samples
OR II	126	Bongo-R	129
OR II	127	Bongo-R	67
H. Cortez	01	Bongo-R	6
H. Cortez	02	Bongo-R	22
H. Cortez	03	Bongo-R	16
Jeff & Tina	03	Bongo-R	10
Western Gulf	15	Bongo-R	2
Bellows	S482	Bongo-R	6
Total			258

-- 1983 --

Delaware II	37	Neuston	1
OR II	135	Neuston	2
OR II	138	Neuston	1
OR II	134	Bongo-R	101
OR II	135	Bongo-L	55
OR II	138	Bongo-L	4
OR II	138	Bongo-R	18
OR II	140	Bongo-R	22
Louisiana 25	4	Bongo-L	3
Louisiana 25	5	Bongo-L	21
Tommy Munro	135	Bongo-L	14
Tommy Munro	RD 83	Bongo-L	3
Suncoaster	1	Bongo-L	3
Alabama 23	135	Bongo-R	6
Delaware	37	Bongo-R	16
Total			270

-- 1984 --

Louisiana 25	6	Bongo-R	9
Louisiana 25	7	Bongo-R	18
Louisiana 25	9	Bongo-R	21
OR II	146	Bongo-R	174
OR II	145	Bongo-R	61
OR II	142	Bongo-R	23
OR II	148	Bongo-R	29
OR II	149	Bongo-R	36
OR II	143	Bongo-R	94
Bellows	84	Bongo-R	19
Tommy Munro	1	Bongo-R	10
Total			494

Vessel	Cruise	Gear	No. Samples
--------	--------	------	-------------

-- 1985 --

Tommy Munro	85	Bongo-L	5
Pelican	12	Bongo-L	22
Pelican	85	Bongo-L	20
Louisiana 25	10	Bongo-L	18
Louisiana 25	10	Bongo-R	3
Pelican	15	Bongo-L	24
Pelican	13	Bongo-L	25
Tommy Munro	185	Bongo-L	2
Louisiana 25	14	Bongo-L	18
Tommy Munro	85-2	Bongo-L	18
Bellows	8516	Bongo-R	35
OR II	154	Bongo-L	47
OR II	153	Bongo-L	36
OR II	151	Bongo-R	28
Pelican	12	Neuston	18
Pelican	13	Neuston	9
Pelican	085	Neuston	1
Tommy Munro	85	Neuston	5
Tommy Munro	85-4	Neuston	3
Tommy Munro	85-2	Neuston	17
OR II	154	Neuston	4
OR II	156	Neuston	1
Tommy Munro	85-4	Bongo-L	5

Total 364

-- 1986 --

Pelican	16	Bongo (?)	24
Pelican	18	Bongo-L	24
Pelican	21	Bongo-R	23
Pelican	19	Bongo-R	23
Louisiana 25	20	Bongo-R	15
Louisiana 25	17	Bongo-L	21
Chapman	14	Bongo-L	65
OR II	163	Bongo-L	62
OR II	163	Bongo-R	1
OR II	161	Bongo-L	91
OR II	160	Bongo-L	44
Tommy Munro	86	Bongo-L	14
Tommy Munro	862	Bongo-L	6
Tommy Munro	863	Bongo-L	9
H. Cortez II	8602	Bongo-L	29
H. Cortez II	8601	Bongo-L	6
Alabama 23	961	Bongo-L	8
H. Cortez	86-04	Bongo-L	28
Alabama 23	861	Bongo-L	1

Vessel	Cruise	Gear	No. Samples
OR II	159	Neuston	147
Pelican	21	Neuston	5
H. Cortez	86-04	Neuston	28
Pelican	19	Neuston	24
Tommy Munro	862	Neuston	9
Chapman	14	Neuston	65
OR II	163	Neuston	64
OR II	161	Neuston	90
OR II	160	Neuston	43
Tommy Munro	86	Neuston	14
Tommy Munro	863	Neuston	9
H. Cortez II	8602	Neuston	29
H. Cortez II	8601	Neuston	5
Alabama 23	961	Neuston	16
Alabama 23	861	Neuston	1

Total 1043

-- 1987 --

OR II	166	Bongo-L	71
OR II	167	Bongo-L	45
Tommy Munro	871	Bongo-L	2
Tommy Munro	872	Bongo-L	6
OR II	169	Bongo-L	91
Pelican	25	Bongo-R	11
Pelican	25	Bongo-L	12
Pelican	23	Bongo (?)	23
Pelican	22	Bongo (?)	14
H. Cortez II	875	Bongo-L	36
H. Cortez II	8703	Bongo-L	18
OR II	171	Bongo-L	24
Louisiana 25	24	Bongo (?)	21
Louisiana 25	26	Bongo-L	21
Louisiana 25	26	Bongo-R	2
Pelican	28	Bongo-R	12
Pelican	28	Bongo-L	12
Tommy Munro	874	Bongo-L	3
Tommy Munro	873	Bongo-L	19
OR II	166	Neuston	159
OR II	167	Neuston	44
Tommy Munro	871	Neuston	2
Tommy Munro	872	Neuston	6
OR II	169	Neuston	91
Pelican	25	Neuston	4
Pelican	23	Neuston	12
Pelican	22	Neuston	4
H. Cortez II	875	Neuston	36
H. Cortez II	8703	Neuston	16
OR II	171	Neuston	23

Vessel	Cruise	Gear	No. Samples
Pelican	28	Neuston	10
Tommy Munro	874	Neuston	3
Alabama	873	Neuston	14
		Total	886

-- 1988 --

H. Cortez II	8801	Bongo-L	17
OR II	173	Bongo-L	69
Pelican	29	Bongo-R	11
OR II	174	Bongo-L	19
H. Cortez II	8802	Bongo-L	35
OR II	176	Bongo-L	39
H. Cortez II	8801	Neuston	13
H. Cortez II	8802	Neuston	36
Louisiana 25	31	1/2 m Ring	21
Louisiana 25	33	1/2 m Ring	21
Pelican	30	Bongo-R	12
Pelican	30	Bongo-L	12
Pelican	30	Neuston	12
Pelican	32	Bongo-R	10
Pelican	32	Bongo-L	10
Pelican	32	Neuston	7
Pelican	34	Bongo-R	8
Pelican	34	Bongo-L	8
Pelican	34	Neuston	8
Pelican	29	Bongo-L	11
Pelican	29	Neuston	5
OR II	177	Bongo-L	37
Tommy Munro	881	Bongo-L	6
Tommy Munro	882	Bongo-L	33
Tommy Munro	883	Bongo-L	3
		Total	463

-- 1989 --

H. Cortez II	8901	Bongo-L	25
OR II	180	Bongo-L	21
OR II	183	Bongo-L	36
OR II	184	Bongo-L	39
Tommy Munro	891	Bongo-L	7
Tommy Munro	893	Bongo-L	5
Tommy Munro	894	Bongo-L	3
Pelican	894	Bongo-L	2
		Total	138

--1990--

OR II	185	Bongo-L	11
-------	-----	---------	----

Appendix 2. SEAMAP samples sorted for invertebrate taxa.

Vessel	Cruise	Year	Gear	Where	Number
OR II	126	1982	BGO-L	GCRL	1
OR II	127	1982	BGO-R	GCRL	6
Bellows	84	1984	BGO-L	Poland	20
T. Munro	01	1984	BGO-L	Poland	11
OR II	145	1984	BGO-L	Poland	62
Lou. 25	7	1984	BGO-L	Poland	20
Lou. 25	6	1984	BGO-L	Poland	21
Lou. 25	6	1984	BGO-R	GCRL	9
Lou. 25	7	1984	BGO-R	GCRL	18
Lou. 25	9	1984	BGO-R	GCRL	21
OR II	146	1984	BGO-L	Poland	69
T. Munro	01	1984	Neuston	Poland	10
Bellows	84	1984	Neuston	Poland	20
Alabama	135	1984	Neuston	Poland	5
OR II	145	1984	Neuston	Poland	62
OR II	146	1984	Neuston	Poland	73
Pelican	085	1985	BGO-L	GCRL	20
Pelican	12	1985	BGO-L	GCRL	21
Pelican	13	1985	BGO-L	GCRL	24
T. Munro	85-4	1985	BGO-L	GCRL	4
Pelican	15	1985	BGO-L	GCRL	23
T. Munro	185	1985	BGO-L	GCRL	2
Lou. 25	10	1985	BGO-L	GCRL	21
T. Munro	85	1985	Neuston	GCRL	5
T. Munro	85-4	1985	Neuston	GCRL	3
T. Munro	85-2	1985	Neuston	GCRL	17
T. Munro	85-2	1985	BGO-L	GCRL	19
Lou. 25	14	1985	BGO-L	GCRL	18
T. Munro	85	1985	BGO-L	GCRL	5
Pelican	21	1986	Neuston	GCRL	1
Alabama 23	873	1987	Neuston	GCRL	6
Lou. 25	31	1988	1/2m Ring	GCRL	21
Pelican	29	1988	Neuston	GCRL	3
Pelican	30	1988	Neuston	GCRL	12
Pelican	32	1988	Neuston	GCRL	7
Pelican	34	1988	Neuston	GCRL	8
Pelican	29	1988	BGO-L	GCRL	10
Pelican	30	1988	BGO-L	GCRL	12
Pelican	32	1988	BGO-L	GCRL	10
Pelican	34	1988	BGO-L	GCRL	8
Lou. 25	33	1988	1/2m Ring	GCRL	21

Total 729



# Gulf Coast Research Laboratory

P. O. BOX 7000  
703 EAST BEACH DRIVE  
OCEAN SPRINGS, MISSISSIPPI 39564-7000

CONTROLLED BY THE BOARD  
INSTITUTIONS OF HIGHER  
STATE OF MISSISS

22 January 1990

Dr. Joanne Shultz  
Gulf Coast Research Laboratory  
P. O. Box 7000  
Ocean Springs, MS 39564

Dear Joanne:

On behalf of the TCC Crab Subcommittee, I request the continued support of the invertebrate sorting effort by the SEAMAP Plankton Workgroup. Through the efforts of Dr. Jim Power of LSU, the Crab Subcommittee has received the first of a series of plots charting the distribution of portunid megalopae based SEAMAP collections sorted at the PSC and GCRL. This is an ongoing process and one that we anticipate will result in the compilation of an atlas. This is the first regional data set and, as such, represents an initial step in understanding the seasonal and areal distribution of portunid megalopae in the Gulf. The Crab Subcommittee will work with the your group in any way possible to see that this effort is continued.

Sincerely,

*Harriet*

Harriet M. Perry  
Chairman, Crab Subcommittee

cc: Dr. Jim Power  
TCC Crab Subcommittee

EQUAL OPPORTUNITY EMPLOYER



APPROVED BY:

  
COMMITTEE CHAIRMAN

**TCC SEAMAP SUBCOMMITTEE**

**MINUTES**

**Monday, March 12, 1990  
Orange Beach, Alabama**

TCC SEAMAP SUBCOMMITTEE  
MINUTES  
Monday, March 12, 1990  
Orange Beach, AL

Chairman Walter Tatum called the meeting to order at 1:10 p.m. The following members and others were present:

Members

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

Staff

Larry B. Simpson, Executive Director  
V.K. Herring, Executive Assistant  
Eileen Benton, Administrative Assistant

Others

Jim Hanifen, LDWF, Baton Rouge, LA  
Henry Lazauski, ADCNR, Gulf Shores, AL  
Ron Schmied, NMFS, St. Petersburg, FL  
Walter Nelson, NMFS, Pascagoula, MS  
Joanne Shultz, GCRL, Ocean Springs, MS  
Don Hoss, NMFS, Beaufort, NC  
Perry Thompson, NMFS, Pascagoula, MS  
Ken Savastano, NMFS, Stennis Space Center, MS  
Eugene Nakamura, NMFS, Panama City, FL

Members Absent

Wayne Swingle, GMFMC, Tampa, FL

Adoption of Agenda

The agenda was approved as written.

Adoption of Minutes

The minutes of the meeting held January 29-30, 1990 in New Orleans, LA were approved as written.

Administrative Report/Status of Cooperative Agreements

L. Simpson reported that GSMFC has not yet received the administrative cooperative agreement for SEAMAP, however he was notified that the contract has cleared FARB and will be sent out shortly. He noted that the contract will have a February 1, 1990 start-up date,

however, pre-award costs will be negotiated to obtain funds expended in January.

A discussion was held concerning reducing the size of future atlases. P. Thompson noted that the 1985 and 1986 Atlases took approximately 1 3/4 years each to produce. The proposed changes discussed at the January meeting were that future atlases would include the introduction narrative, species listing and environmental listing for each survey, and station plots. The individual catch tables and species plots would not be included.

The Subcommittee discussed the time frame of producing atlases and the current backlog that exists. It was suggested that the Data Coordinating Work Group meet to address ways of streamlining production of future atlases.

\* D. Waller moved to continue producing the atlas in its present format pending a conference call of the Data Coordinating Work Group to examine aspects of the atlas (costs, reducing time of production, pros/cons of producing condensed atlases). Motion was seconded and passed with Texas abstaining.

#### Coordinator Position

The Subcommittee reviewed applications for the SEAMAP Coordinator position. Mr. David Donaldson and Mr. Michael Dodson were chosen as the top two candidates and will be interviewed by L. Simpson and W. Tatum. The Subcommittee will be notified as to the results of the interviews.

#### Adult Finfish Work Group Report

S. Lazauski reported that the work group is finalizing work on development of a matrix (database) on all the research that has been done on adult finfish by the States and NMFS in the Gulf of Mexico by family species. As soon as the database is completed, it will be distributed to the Adult Finfish Work Group to test.

The Subcommittee also suggested that the work group hold a meeting in September to review results of the preliminary reef fish cruises and make recommendations to the Subcommittee in regard to design, capability and costs. It was also suggested that a presentation of the newly-developed matrix be conducted at the October meeting.

Data Coordinating Work Group Report

Work group leader K. Savastano distributed and reviewed the SEAMAP Data Management Report (attached). Items noted included:

- entering and editing of 1988-89 data continues.
- specifications are currently being prepared to procure an IBM PS/2 for Louisiana.
- work on the 1986 Atlas has been completed and work has started on the request for computer processing of the 1987 Atlas.
- 87 of 90 SEAMAP requests have been processed and work is being performed on the remaining requests.

K. Savastano also presented a revised cruise log which added shrimp length/frequency, general length/frequency, and environmental information.

Plankton Work Group Report

J. Shultz introduced D. Hoss, NMFS-Beaufort Laboratory, to give an report on the Polish Sorting Center.

D. Hoss reported that the Plankton Sorting Identification Center (PSC) was established in 1974 to meet the needs of fishery research programs in obtaining relevant information on early life history stages of fish. His association with the PSC is the Southeast Fisheries Center member of the Advisory Committee. This committee presently consists of U.S. representatives from the Northeast Fisheries Center, the Northwest Fisheries Center, and the Southeast Fisheries Center. The Polish are represented by the Director of the Laboratory in Gdynia, the Administrative Officer from Gdynia, and the Director of the Sorting Center in Szczecin. This committee meets once per year to set the sampling sorting priorities. The total budget for the PSC for the contract period 1988-89 was approximately \$186,000 (salaries, benefits, etc. \$150,000, domestic travel \$1,000, international travel \$5,000, and materials and supplies \$30,000). The funding for 1989-90 was \$150,000. Although there have been a lot of problems, he noted that we are receiving good value and quality for the money. In 1986-87, 608 samples were processed (\$68 per sample), in 1987-88, 1,522 samples (\$36.00), and in 1988-89, 441 samples (\$102.00). The overall three year cost averages approximately \$67.00 per sample.

D. Hoss concluded that he feels that the PSC is doing a very good job at a cost lower than can be obtained from other sources. He also noted that if additional sorting centers open in Poland they should be evaluated. The next meeting of the advisory committee is scheduled for June 1990.

Final Review and Approval of Five-Year Management Plan

E. Benton noted that the changes discussed at the January meeting were incorporated into the latest draft of the Five-Year Plan. Due to information still unavailable for the Plan, approval was deferred until the Joint SEAMAP meeting scheduled for July.

Site of July 1990 Joint Meeting

The July meeting was scheduled for July 23-25, 1990 in Charleston, South Carolina.

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

TCC SEAMAP SUBCOMMITTEE  
CONFERENCE CALL  
MINUTES  
June 29, 1990

APPROVED BY:

  
COMMITTEE CHAIRMAN

Roll was called at 10:00 a.m. Those present on the call were:

Members

Barney Barrett, LDWF, Baton Rouge, LA  
Joe Kimmel, FDNR, St. Petersburg, FL  
Scott Nichols, NMFS, Pascagoula, MS  
Terry Cody, TPWD, Rockport, TX  
Walter Tatum, ADCNR, Gulf Shores, AL  
Dick Waller, GCRL, Ocean Springs, MS

Staff

David Donaldson, SEAMAP Coordinator

Others

Ken Savastano, NMFS, Stennis Space Center, MS  
Walter Nelson, NMFS, Pascagoula, MS

W. Tatum asked each participant to state any budgetary changes in their program for FY1991.

Florida - J. Kimmel asked for an additional \$4,000 for salary increases. Projects will stay the same as last year.

Mississippi - D. Waller stated no change in funding from last year's amount.

Commission - D. Donaldson requested an additional \$6,000 for added travel.

NMFS - W. Nelson stated last years funding of \$233,000 would be needed. K. Savastano stated that the data management program needed at least last year's funding of \$80,000 (\$15,000 from SEFC; \$65,000 from SEAMAP).

Louisiana - B. Barrett stated funding would remain the same as last years.

Texas - T. Cody stated no changes in SEAMAP plans and last year's funding would be adequate.

Alabama - W. Tatum requested an increase of \$15-20,000 for reef fish sampling project.

W. Tatum stated the need for a Gulf-wide survey of reef fish. Although it is tentative, there is a possibility of an additional

\$400,000 for SEAMAP in FY1991. SEAMAP members need to be prepared for this possibility and come up with estimates for a reef fish survey for their state.

B. Barrett stated that Louisiana samples only 1/3 of their coast due to financial limitations. Subcommittee may consider using extra money to increase sampling of Louisiana's coast.

\* S. Nichols suggested that the Adult Finfish Work Group meeting scheduled for July would be premature. He suggested that the meeting be held after the Joint SEAMAP meeting. S. Nichols moved that in lieu of the Adult Finfish Work Group meeting, he would produce a document concerning the reef fish survey and send it to the work group members for their comments and estimated costs. He would then present this information to the Subcommittee at the SEAMAP-Gulf meeting in July. Motion was seconded and passed unanimously.

There being no further business, the conference call was concluded at 10:35 a.m.

TCC SEAMAP SUBCOMMITTEE  
MINUTES  
Monday, July 23, 1990  
Wednesday, July 25, 1990  
Charleston, SC

**DRAFT**

Vice Chairman Dick Waller called the meeting to order at 1:55 p.m.

The following members and others were present:

Members

Joe Kimmel, FDNR, St. Petersburg, FL  
Terry Cody, (proxy for G. Matlock), TPWD, Rockport, TX  
Scott Nichols, NMFS, Pascagoula, MS  
Barney Barrett, LDWF, Baton Rouge, LA  
Dick Waller, GCRL, Ocean Springs, MS  
Walter Tatum, ADCNR, Gulf Shores, AL (7/25/90)

Staff

David Donaldson, SEAMAP Coordinator  
Larry Simpson, Executive Director  
Eileen Benton, Administrative Assistant

Others

K. Savastano, NMFS, Stennis Space Center, MS  
B. Brown, NMFS, Miami, FL (7/25/90)

Members Absent

Wayne Swingle, GMFMC, Tampa, FL

Adoption of Agenda

The agenda was approved as written.

Adoption of Minutes

The minutes of the meeting held March 12, 1990 in Orange Beach, AL and the conference call held on June 29, 1990 were approved as written.

Administrative Report

D. Donaldson reported that as of May 31, 1990, \$33,601.32 is available in the SEAMAP administrative budget.

The next subcommittee meeting will be held in conjunction with the Fall GSMFC meeting at the Marriott Bay Point, Panama City, FL. The SEAMAP meeting is tentatively scheduled for Monday, October 15 beginning at 1:00 p.m.

D. Donaldson distributed cruise logs for the Alabama Shrimp/ Groundfish, Mississippi Shrimp/Groundfish, Florida Ichthyoplankton and Louisiana day/night surveys.



He reported that the 1986 Atlas has been distributed. The 1987 Atlas is 1/3 complete and tables and plots should be received by GSMFC by September. This Atlas should be out for review by the end of September. He also reported that NMFS has initiated paperwork on the 1988 Atlas and optimistically will be out for review by December.

Publications produced since the last meeting included the 1990 Marine Directory, 1988-89 Joint Annual Report, 1986 Atlas and a revised SEAMAP Shipboard Manual.

\* B. Barrett moved to continue producing atlases in the same format and conduct a conference call by the Data Coordinating Work Group if necessary to review format changes in the future. Seconded and passed unanimously.

### Activities and Budget Needs

D. Waller noted that the SEAMAP-Five Year Proposal which was submitted in 1985 ends this year and discussed the need for resubmitting a five-year proposal. The Subcommittee agreed on the need to develop this proposal and will discuss this with the Program Officer at the joint meeting.

Participants stated their budgetary requirements for FY1991 as follows:

FY 90  
funding

- |           |   |
|-----------|---|
| \$74,453  | <u>Florida</u> - J. Kimmel stated that Florida requests an additional \$4,000 for salary increases. (FY91 funding request \$78,453)                                     |
| \$65,780  | <u>Alabama</u> - D. Waller stated that during the conference call W. Tatum requested an increase of \$15-20,000 for reef fish sampling. (FY91 funding request \$85,780) |
| \$95,573  | <u>Mississippi</u> - D. Waller stated that Mississippi will continue with same activities and requested no increases in FY91 funding. (FY91 funding request \$95,573)   |
| \$116,547 | <u>Louisiana</u> - B. Barrett requested an additional \$2,000 due to salary increases. (FY91 funding request \$118,547)   |
| \$45,744  | <u>Texas</u> - T. Cody stated no changes in their SEAMAP program and funding would remain the same. (FY91 funding request \$45,744)                                     |

\$233,000 NMFS - S. Nichols requested same funding level as FY90. (FY91 funding request \$233,000)

\$93,476 Commission - D. Donaldson requested an increase to \$110,340 which includes office equipment, administrative travel and increase in funding for committee travel (\$6,000 if joint meeting held in Caribbean). (FY91 funding request \$110,340)

491,573 SEAMAP-Gulf FY91 funding request - \$535,437

\$233,000 NMFS FY91 funding request - \$233,000

\* The Subcommittee discussed the Polish Sorting Center and alternatives. J. Kimmel moved that the Plankton Work Group consider alternative sources for plankton sorting. The motion was seconded and passed with Texas abstaining.

The Subcommittee discussed research needs if additional monies become available to the SEAMAP program. Items discussed included:

Reef survey survey	\$130,000
Winter plankton cruise	\$ 80,000
Bottom longlining sampling	\$130,000
2-5 fm trawling	\$ 10,000
Hydroacoustics	\$ 30,000
Louisiana coast-wide trawling	\$230,000
Reef fish reproductive biology	\$ 15,000
Upgrade hydrologic sampling gear	\$100,000
Reef fish module	\$ 25,000
Transmigration software	\$ 25,000

The committee agreed that these items would be brought to the Joint SEAMAP meeting for discussion with the other SEAMAP components.

There being no further business, the meeting adjourned at 4:10 p.m.

Wednesday, July 25, 1990

Chairman Walter Tatum called the meeting to order at 9:30 a.m.

SEAMAP-Gulf of Mexico Operations Plan

D. Donaldson reviewed the FY90 Operations Plan and requested changes from the members. He noted that he will work with NMFS and send members their information to incorporate in States cooperative agreements.

**DRAFT**

The following changes/additions were made to the Operations Plan for FY91.

- (1) Under each agency statements add: "Plan and coordinate a pilot study for sampling reef fish in the Gulf of Mexico."
- (2) With the exception of the Commission, change cooperative agreement start/end date to February 1, 1991 to January 31, 1992.
- (3) Under TPWD, Summer Shrimp/Bottomfish Survey, change survey period to June/July.
- (4) Under each agency statements add: "Data inventory, entry, edit and transmit to mainframe all SEAMAP cruise information."
- (5) Under Information Dissemination delete statement #9 (Draft Joint Programs Five-Year Management Plan . . . . .)
- (6) Under Administration change Florida designated member to Joe Kimmel.

Five-Year Proposal (Umbrella Program Narrative - 1990-1995)

D. Waller reported that this document will be an explanation of the whole program over five years and would include winter surveys, reef fish, bottom longlining, etc.

The Subcommittee concurred that this document will incorporate activities listed in the original Five-Year Plan. A conference call will be held in August to finalize this proposal. It was also noted that the Coordinator will develop a model document and submit to members.

A discussion was held regarding funding amounts that would be submitted with FY91 cooperative agreements. D. Donaldson will work with D. Pritchard to get his opinion after talking with NCASC.

The August Conference Call will also address the results of discussions with D. Pritchard on amounts that will be submitted with cooperative agreements.

Other Business

S. Nichols reported that the Adult Finfish Work Group will hold a meeting in September and report at the October Subcommittee meeting. There being no further business, the meeting adjourned at 11:00 a.m.

GULF, SOUTH ATLANTIC AND  
CARIBBEAN SEAMAP COMMITTEES  
JOINT MINUTES  
Tuesday, July 24, 1990  
Charleston, SC

**DRAFT**

SEAMAP-South Atlantic Chairman, David Cupka called the meeting to order at 8:40 a.m. The following members and others were present:

Members

Scott Nichols, NMFS, Pascagoula, MS  
Terry Cody (proxy for G. Matlock), TPWD, Rockport, TX  
Joe Kimmel, FDNR, St. Petersburg, FL  
Barney Barrett, LDWF, Baton Rouge, LA  
Dick Waller, GCRL, Ocean Springs, MS  
Walter Tatum, ADCNR, Gulf Shores, AL  
David Cupka, SCWMRD, Charleston, SC  
Mike Street, NCDMF, Morehead City, NC  
Alan Huff, FDNR, St. Petersburg, FL  
Laura C. Leach, ASMFC, Washington, DC  
Jane DiCosimo (proxy for R. Pugliese), SAFMC, Charleston, SC  
Denton R. Moore, VIFWS, St. Thomas, VI

Staff

David M. Donaldson, SEAMAP-Gulf Coordinator  
Carole Goodyear, SEAMAP-South Atlantic Coordinator  
Sandra H. Laureano, SEAMAP-Caribbean Coordinator  
Larry B. Simpson, GSMFC Executive Director  
Eileen M. Benton, GSMFC Administrative Assistant

Others

Kenneth Savastano, NMFS, Stennis Space Center, MS  
Walter Nelson, NMFS, Pascagoula, MS  
David L. Pritchard, NMFS, St. Petersburg, FL  
Dean W. Ahrenholz, NMFS, Beaufort, NC  
Daniel J. Basta, National Ocean Service  
Thomas F. LaPointe, National Ocean Service  
Jim Nance, NMFS, Galveston, TX  
Edward Klima, NMFS, Galveston, TX  
Brad Brown, NMFS, Miami, FL

Adoption of Agenda

The agenda was adopted with the addition of Adoption of Minutes.

Adoption of Minutes

The minutes from the Joint SEAMAP Meeting held on July 27, 1989 in Savannah, Georgia were adopted with minor editorial changes.

Overview of SEAMAP-Gulf

W. Tatum reported on the activities of the SEAMAP-Gulf Subcommittee as follows:

- Publications produced since the last joint meeting included:
  - 1986 Atlas
  - 1990 SEAMAP Marine Directory
  - Joint Annual Report (October 1988-September 1989)
  - Additional copies are available from David Donaldson, GSMFC.
- Surveys conducted since the last joint meeting included:
  - Fall 1989 Plankton Survey
    - Primary purpose - assess abundance and distribution of king mackerel eggs and larvae. Agencies participated: NMFS, Florida, Alabama, Mississippi, and Louisiana.
  - 1989 Fall Shrimp/Groundfish Survey
    - Conducted from off Mobile Bay to Brownsville, TX.
    - Additional gear comparison tows between Louisiana's PELICAN and NMFS OREGON II.
      - Mean catch rates for 40-ft trawls:
        - R/V PELICAN 18.1 kg/tow
        - OREGON II 8.3 kg/tow.
      - Major difference:
        - tickler chain was 7-ft shorter on R/V PELICAN.
      - Catch rate of R/V PELICAN more comparable to 65-ft net of OREGON II (20.3 kg/tow).
  - Louisiana Day/Night Surveys
    - Conducted four times per year
    - Provided comparative information in the abundance and distribution of major Gulf species.
  - 1990 Spring Ichthyoplankton Survey
    - Primary purpose to assess abundance and distribution of bluefin tuna eggs and larvae
    - Agencies participated: NMFS, Florida, Alabama, Mississippi, Louisiana.
  - 1990 Summer Shrimp/Groundfish Survey
    - Agencies participated: NMFS, Alabama, Mississippi, Louisiana, Texas.

**DRAFT**

- Real time mailing was distributed to 315 interested individuals and organizations.

The following Subcommittee and work group meetings were held since the last joint meeting:

- SEAMAP Subcommittee - October, 1989, January 1990 and March 1990
- Data Coordinating Work Group - August, 1989
- Adult Finfish Work Group - September 6-8, 1989
- Plankton Work Group - January 1990 (conference call)
- Environmental Data Work Group - March 1990 (conference call)
- Shrimp/Bottomfish Work Group - April 1990

#### Overview of SEAMAP-Caribbean

D. Moore and S. Laureano reported on the activities of the SEAMAP-Caribbean as follows:

- Development of a directory of interested parties of the SEAMAP program is nearing completion.
- A work group of fisheries resources is working on a proposal to look at resources, if money is available.
- CODREMAR is now under the Department of Natural Resources.

#### Overview of SEAMAP-South Atlantic

D. Cupka reported on the activities of SEAMAP-South Atlantic as follows:

- South Atlantic SEAMAP Committee met in April 1990 and discussed the Shallow-Water Trawl Survey, Five-Year Management Plan, work group budget and the 1991 Operations Plan for 1991.

Surveys conducted since the last joint meeting included:

- Shallow Water Trawl Survey
  - Completed first year of sampling under standardized method.
  - Samples were collected from random sites.
  - Will conduct three multi-legged cruises: spring, summer and fall.
  - Sampling strategy changed from night to day and resulted in collection of mackerel.

- The 1989 Shallow-Water Trawl Survey Report summarizing the 1988-89 work is available through South Carolina.

D. Cupka reported that North Carolina and Georgia put an emergency beach closure to shrimp due to severe winter impact on shrimp stocks. He also noted that the Bottom Mapping Project, a high priority for the South Atlantic, has been limited due to lack of funds. He also reported that to increase awareness of SEAMAP, an article has been written and included in the publication, Coastal Perspectives.

D. Cupka reported that several work groups were disbanded: plankton, stock identification and passive gear.

Elections from the April meeting resulted in D. Cupka as Chairman and Alan Huff as Vice-Chairman for the coming year.

#### Status of Five-Year Plan

M. Street opened discussion regarding the Five-Year Management Plan. Several editorial changes were made. Once changes are incorporated, document needs approval via mail ballot from the GSMFC Technical Coordinating Committee and the Caribbean Council. A total of 400 copies of the plan will be needed.

#### Grants Administration Report

D. Pritchard outlined the procedures for submission of cooperative agreements. The job of the grant administrative office is to help SEAMAP participants meet guidelines and facilitate the use of financial assistance funds in accordance with the SEFC.

D. Pritchard then outlined the Cooperative Agreement approval and performance cycle guidelines. D. Pritchard noted that the Agency has established a policy that will no longer allow preaward costs.

D. Pritchard outlined the two types of applications: project statement and application for federal assistance and the various aspects of each type of application.

A discussion was held regarding moving the start dates back to January 1 for FY91. D. Pritchard noted that with the current situation moving the starting dates may increase the chance of not having the funds available for the programs. M. Street suggested that SEAMAP members submit for a February 1 start date for FY91 but only for

an eleven month project to get back to a January 1 start date. D. Pritchard stated that he would provide some feedback to the questions raised about submission of the agreements. A decision to keep the starting date at February 1 was agreed upon.

C. Goodyear stated that there will be a Federal Aid Coordination Meeting on October 23-25 in Tampa, FL.

### Data Management Report

K. Savastano reviewed the Data Management Report (attached) as follows:

- SEAMAP data entry, edit and verification has been completed on Gulf 1988 data. The 1989 data is in the process of being entered, edited and verified.
- The 1986 Atlas has been published. Processing of the 1987 Atlas is approximately 20% complete.
- All participants of SEAMAP in the Gulf and South Atlantic have IBM PCs for data entry. An updated version of the SEAMAP software system was sent out in July.
- SEFC plans to be off the Burroughs mainframe in Seattle by September 30, 1990.

### Proposed Activities and Budget Needs

W. Nelson proposed three options:

#### Option I - Level funding

- \* D. Moore moved that if level funding is available, use the same allocations as in FY90 for all three components. A Huff seconded. Motion passed unanimously.

#### Option II - Reduced funding

- \* M. Street moved that if a reduction of funding is 10% or less, the reduction should be equally decreased among the three components based on the percent reduction. Motion passed with Caribbean abstaining.
- \* M. Street moved that if cuts exceed 10%, each component should meet to determine its priorities and the four component leaders meet with program manager to determine the allocation of the cuts with final authority residing with the Center Director. Motion was seconded and passed with Caribbean opposing.



**DRAFT**

Option III - Increased funding

D. Moore stated the Caribbean component would like to develop a sampling project for reef fish resources at a cost of \$25,000.

- \* M. Street moved that in the event of an increase in FY91 funding, the first \$25,000 be allocated to the Caribbean component to initiate a sampling program for reef fish. Motion was seconded and passed with Alabama and Texas opposing.

The meeting recessed so the components could discuss recommendations on how additional monies, if available, will be spent.

W. Nelson suggested if the additional \$400,000 was available, it be divided as follows:

Gulf	\$130,000
South Atlantic	\$100,000
Caribbean	\$ 70,000
NMFS	\$100,000

Shrimp Data System (CMAS)

E. Klima presented the Computer Mapping and Analysis System (CMAS). CMAS is a mechanism to analyze shrimp harvest data. Users can 1) define specific areas for analysis; 2) develop maps and sample summations by species, month, year and area; 3) select combinations of species and attributes for maps, time series histograms or tabular summaries; and 4) compute ratios and other comparisons for specified subareas of previously stored analyses. E. Klima and J. Nance demonstrated the capabilities of the CMAS system using a previously entered SEAMAP data set. The committee was impressed with the CMAS system and requested that the Data Coordinating Work Group look into the system.

Proposed Activities and Budget Needs (discussion continued)

After the CMAS presentation, W. Nelson reviewed his initial proposal for increased funding allocations.

\* D. Moore moved that if additional funds (\$400,000) become available, they be allocated as follows:

Gulf	\$130,000 (32.5%)
South Atlantic	\$100,000 (25%)
Caribbean	\$ 70,000 (17.5%)
NMFS	\$100,000 (25%)

\* W. Tatum amended the motion to include if the full \$400,000 is not awarded, that after the \$25,000 for the Caribbean is awarded, additional monies be split on percentile basis illustrated by the breakout. Motion was seconded and passed unanimously.

Next Joint Meeting

D. Cupka stated that if additional monies are available, the next joint meeting will be held in the Caribbean. The locations of St. Thomas, VI or San Juan, PR were discussed. D. Cupka asked S. Laureano to look into holding the joint meeting in the Caribbean.

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

# DRAFT

TCC SEAMAP SUBCOMMITTEE  
CONFERENCE CALL  
MINUTES  
August 17, 1990

Roll was called at 10:00 a.m. The following members and others were present:

Members

Jack Gartner (proxy for J. Kimmel), FDNR, St. Petersburg, FL  
Walter Tatum, ADCNR, Gulf Shores, AL  
Dick Waller, GCRL, Ocean Springs, MS  
Barney Barrett, LDWF, Baton Rouge, LA  
Terry Cody (proxy for G. Matlock), TPWD, Rockport, TX  
Scott Nichols, NMFS, Pascagoula, MS

Staff

David M. Donaldson, SEAMAP Coordinator  
Larry Simpson, Executive Director

W. Tatum outlined the memorandum that D. Pritchard sent to SEAMAP members regarding questions raised at the July meeting. W. Tatum suggested that SEAMAP members follow the recommendations from D. Pritchard and submit for level funding and amend the cooperative agreements if supplemental funds become available. It was agreed to submit the cooperative agreements as soon as possible, but no later than September 15, 1990 and submission of the amendment, if necessary, would be after the Adult Finfish Work Group meeting to discuss survey procedures.

The conference call was adjourned at 10:30 a.m.

Data Coordinating Work Group Membership List (continued)

Thomas McIlwain  
Gulf Coast Research Laboratory  
Red Drum Work Group

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

Joanne Shultz  
Gulf Coast Research Laboratory  
Plankton Work Group

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

SQUID/BUTTERFISH WORK GROUP (inactive)

Frederick "Buck" Sutter, Leader  
Florida Department of Natural Resources

Terry McBee  
Gulf Coast Research Laboratory

Mark Van Hoose  
Alabama Department of Conservation and  
Natural Resources

Chris Gledhill  
National Marine Fisheries Service  
Pascagoula Laboratories

ADULT FINFISH WORK GROUP

Billy Fuls  
Texas Parks and Wildlife Department

John Roussel  
Louisiana Dept. of Wildlife & Fisheries

Joe Kimmel  
Florida Department of Natural Resources

Bob Shipp  
University of South Alabama

James Warren  
Gulf Coast Research Laboratory

Joanne Shultz  
Gulf Coast Research Laboratory

Tom McIlwain  
Gulf Coast Research Laboratory

Wayne Swingle  
Gulf of Mexico Fishery Management  
Council

Scott Nichols  
National Marine Fisheries Service  
Pascagoula Laboratory

## Appendix II

### SEAMAP-GULF OF MEXICO

#### OPERATIONS PLAN

January 1, 1991 - December 31, 1991

#### 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 Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 1990-1995 was produced in 1990 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 Management Plan, along with the 1981 SEAMAP Strategic Plan and SEAMAP Operations Plan: 1985-1990 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.

Five major goals were outlined in the Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 1990-1995 and remain as key missions:

- (1) Collect long-term standardized fishery-independent data on the condition of regional living marine resources and their environment.

- (2) Cooperatively plan and evaluate SEAMAP-sponsored activities.
- (3) Identify and describe existing non-SEAMAP data bases and activities that are of value in fishery-independent assessments of regional living marine resources.
- (4) Operate the SEAMAP Information System for efficient management and timely availability of fishery-independent data and information.
- (5) Coordinate and document SEAMAP activities, and disseminate programmatic information.

Each of these goals is implemented by several objectives requiring specific tasks and events, e.g. a Summer Shrimp/Bottomfish Survey. By intent some specific tasks may fulfill more than one objective. Each of the participants in the Gulf program receives a portion of the annual Congressional allocation to perform tasks associated with the goals. Participants also contribute significant in-kind support for activities.

The SEAMAP-Gulf and South Atlantic committees, meeting jointly in January 1988, accepted the Program Review recommendation to develop separate annual operations plans. This third SEAMAP-Gulf Annual Operations Plan describes planned activities and events for the period January 1, 1991 through December 31, 1991. Detailed information on Gulf program objectives, activities, administrative procedures, data management protocols, information dissemination and funding requirements are found in the Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 1990-1995 (Atlantic States Marine Fisheries Commission 1990).

## SURVEYS

### Spring and Fall Plankton Surveys

The objectives of the spring and fall plankton surveys are to provide data on the distribution and abundance of eggs and larvae of commercial and recreational species such as bluefin tuna, mackerels, carangids, sciaenids and clupeids. Station locations are in a systematic grid across the northern Gulf in increments of 30 degrees latitude/longitude. Frontal satellite-determined boundary locations are also sampled during the Spring Survey.

Plankton samples will be taken with standard SEAMAP bongo and neuston samplers. The bongo sampler consists of two conical 61-cm nets 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 1990 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 50 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 50 fm;
- (2) obtain length frequency measurements for major finfish, shrimp and other important invertebrate 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 plankton samples to determine relative abundance and distribution of eggs and larvae of commercial and recreationally important species.

Trawl samples stations and plankton sampling will be conducted as described for the Summer Shrimp/Bottomfish Survey.

#### Louisiana Seasonal Day/Night Trawl Surveys

These surveys provide comparative information on the abundance and distribution of critical life stages of major Gulf species, especially shrimp, and associated environmental parameters.

Sampling will be conducted in March, July, October and December 1991. A stratified random station design with 48 planned locations will be sampled at day and night with 40-ft nets. Stations will be located along transects or randomly selected. The July sampling will be conducted as part of the SEAMAP Summer Shrimp/Bottomfish Survey.

Additionally, LDWF will conduct 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 are 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 will be done along 7 transects, to depths of 5 fm. All organisms are identified, weighed and measured. Transects correspond to seven coastal study areas sampled previously. Plankton and environmental sampling are conducted at all stations. Processing of environmental data including bottom sediments and top and bottom chlorophylls will be done at LDWF. Plankton samples will not be transhipped to the Polish Sorting Center, but sorted for ichthyoplankton at the LDWF Plankton Laboratory. Specimens and data will be shipped to the SEAMAP Archiving Center in St. Petersburg, FL.

#### OPERATIONS

The following activities and events by participant comprise the SEAMAP-Gulf of Mexico operations schedule for the period January 1, 1991 to December 31, 1991:

##### Texas Parks and Wildlife Department

- (1) Summer Shrimp/Bottomfish Survey: June/July, nearshore and offshore Texas waters.
- (2) Fall Shrimp/Groundfish Survey: November, nearshore and offshore Texas waters.
- (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.
- (5) Plan and coordinate a pilot study for sampling reef fish in the Gulf of Mexico.
- (6) Data inventory, entry, edit and transmit to mainframe all SEAMAP cruise information.



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.
- (8) Plan and coordinate a pilot study for sampling reef fish in the Gulf of Mexico.
- (9) Data inventory, entry, edit and transmit to mainframe all SEAMAP cruise information.

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.
- (8) Plan and coordinate a pilot study for sampling reef fish in the Gulf of Mexico.
- (9) Data inventory, entry, edit and transmit to mainframe all SEAMAP cruise information.

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.
- (4) Plankton sampling in conjunction with trawl surveys.
- (5) SEAMAP Subcommittee and work group meetings as scheduled.
- (6) Quarterly estuarine shrimp/groundfish sampling.
- (7) Plan and coordinate a pilot study for sampling adult finfish in the Gulf of Mexico.
- (8) Plan and coordinate a pilot study for sampling reef fish in the Gulf of Mexico.
- (9) Data inventory, entry, edit and transmit to mainframe all SEAMAP cruise information.

Florida Department of Natural Resources

- (1) Spring Plankton Survey: May, nearshore/offshore Gulf waters.
- (2) Fall Plankton Survey: September, nearshore/offshore Gulf waters.
- (3) SEAMAP Archiving Center operations.
- (4) SEAMAP Subcommittee and work group meetings as scheduled.
- (5) Plan and coordinate a pilot study for sampling adult finfish in the Gulf of Mexico.
- (6) Plan and coordinate a pilot study for sampling reef fish in the Gulf of Mexico.
- (7) Data inventory, entry, edit and transmit to mainframe all SEAMAP cruise information.

National Marine Fisheries Service, Southeast Fisheries Center

- (1) Spring Plankton Survey: April-May, offshore Gulf waters.
- (2) Summer Shrimp/Bottomfish Survey: June-July, offshore Gulf waters.
- (3) Fall Plankton Survey: September-October, offshore Gulf waters.

- (4) Fall Shrimp/Groundfish Survey: October-November, offshore Gulf waters.
- (5) Reef Fish Survey: March, offshore Gulf waters.
- (6) Plankton sampling in conjunction with trawl surveys.
- (7) Data Management System development, implementation and operations.
- (8) Processing and transshipment of plankton samples to Polish Sorting Center.
- (9) Environmental sample processing.
- (10) Real-time data processing.
- (11) SEAMAP Subcommittee and work group meetings as scheduled.

#### 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 Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 1990-1995. 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 Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan 1990-1995.

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) 1991 SEAMAP Marine Directory.
- (4) Minutes of Subcommittee meetings.
- (5) Summaries of work group meetings.
- (6) SEAMAP Environmental and Biological Atlas
- (7) Annual Operations Plan.
- (8) Real-time Data Summaries of the Summer Shrimp/Groundfish Cruise.
- (9) SEAMAP Cruise Logs/reports.

#### ADMINISTRATION

Program administration is achieved through coordination by the SEAMAP-Gulf Subcommittee and work groups, the SEAMAP Coordinator, and the Gulf States Marine Fisheries Commission. General responsibilities are described below.

#### SEAMAP-Gulf of Mexico Subcommittee

The Subcommittee will convene for four regularly-scheduled meetings during calendar year 1991:

- (1) Planning meeting: January/February.
- (2) Spring meeting (in conjunction with the GSMFC Annual Spring Meeting): April.
- (3) Joint Programs budget meeting (with SEAMAP-South Atlantic and SEAMAP-Caribbean): July.
- (4) Fall meeting (in conjunction with the GSMFC Annual Fall Meeting): October.

Other meetings may be called at the discretion of the Chairman.

Specific responsibilities of the Subcommittee and procedures of governance are described in the Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 1990-1995 (ASMFC 1990).

Designated members for calendar year 1991 are:

Texas Parks and Wildlife Department: Gary Matlock

Louisiana Department of Wildlife and Fisheries: Barney Barrett

Mississippi Department of Wildlife, Fisheries and Parks  
Gulf Coast Research Laboratory: Richard Waller

Alabama Department of Conservation and Natural Resources:  
Walter Tatum

Florida Department of Natural Resources: Joe Kimmel

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.

SEAMAP-Gulf work groups and membership, at present, include:

#### PLANKTON WORK GROUP

Joanne Shultz, Leader  
Gulf Coast Research Laboratory

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

Harriet Perry  
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  
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  
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  
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

RED DRUM WORK GROUP

Thomas McIlwain, Leader  
Gulf Coast Research Laboratory

Richard Condrey  
Louisiana State University

Walter Nelson  
National Marine Fisheries Service  
Pascagoula Laboratory

Larry McEachron  
Texas Parks and Wildlife Department

Joseph Shepard  
Louisiana Department of Wildlife and  
Fisheries

Mike Murphy  
Florida Department of Natural Resources

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

SEAMAP work groups will meet as determined by work group leaders. Specific responsibilities of the work groups are described in the Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 1990-1995 (ASMFC 1990).

#### Coordinator

The Coordinator's primary responsibility is to assist the Subcommittee in ensuring that the SEAMAP-Gulf system functions efficiently and satisfies user requirements. The Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 1990-1995 (ASMFC 1990), schedule of events, survey plans, and GSMFC directives constitute the basic documents by which the Coordinator monitors program status, coordinates Subcommittee meetings and operations, anticipates potential problems, and initiates corrective action.

Specific responsibilities of the Coordinator are described in the Southeast Area Monitoring and Assessment Program (SEAMAP) Management Plan: 1990-1995 (ASMFC 1990).

#### Gulf States Marine Fisheries Commission

Planning and funds disbursement for authorized SEAMAP-Gulf administrative activities (travel meetings, publications, information dissemination) are administered by the Gulf States Marine Fisheries Commission under a NMFS/GSMFC Cooperative Agreement, and in accordance with this Annual Operations Plan, GSMFC policies, and DOC/NOAA policies and procedures.





