

## SEAMAP Fall 2007 Fall Plankton Survey Cruise Report

### Introduction

USM/GCRL participated in the fall SEAMAP plankton survey in September 2007. Six standard grid stations were occupied.

### Objectives

1. To provide information on the distribution and abundance of critical life stages of major Gulf species and associated environmental parameters in waters nearshore and offshore Mississippi and eastern Louisiana.

2. USM/GCRL will collect plankton specimens to determine species composition, distribution and abundance with 60-cm bongo nets (333- $\mu$ m mesh), to depths of 50 fm, at fixed-grid stations to be determined by NMFS personnel prior to the summer and fall shrimp/groundfish surveys and for the fall mackerel survey, as feasible. Plankton nets will be deployed to the bottom and retrieved in an oblique manner. A 1 X 2m neuston net with .947- $\mu$ m mesh is also pulled at the surface for 10 minutes at each station. Total stations to be sampled will be determined by NMFS personnel prior to each survey, with additional stations to be added as feasible. Plankton samples will be fixed in formalin and transhipped to the Polish Sorting Center (PSC), with duplicate samples being maintained at the SEAMAP Invertebrate Plankton Archiving Center at USM/GCRL for use by researchers. All station information will be recorded on SEAMAP plankton data sheets and will be sent to the SEAMAP-NMFS Data Manager. Surveys will be made from a chartered USM/GCRL vessel.

USM/GCRL will collect information on environmental parameters (salinity, temperature, dissolved oxygen, water transparency, wind speed and direction, wave height, cloud cover) through hydrographic measurements taken in conjunction with shrimp/groundfish and plankton sampling (total stations to be determined by NMFS personnel prior to the surveys). All information will be recorded on SEAMAP environmental data sheets and sent to the SEAMAP Data Manager.

### Results

USM/GCRL conducted the fall plankton cruise (CR.0703) 9/28 – 29/07. Six stations were sampled in depths ranging from 13 to 720 fms. All sampling was conducted using SEAMAP protocols and standard gear. Samples collected were given to the NMFS for shipment to the polish sorting center. No deviations from standard methods were noted.

#### STATION DATA

Stations	Date	Time	Lat.	Long.	Depth
B180	9/28/07	0825	2859.80	8830.05	350
B1	9/28/07	1235	2900.00	8759.99	720

B176	9/28/07	1645	2930.00	8800.01	23
B179	9/29/07	0802	2929.99	8830.99	26
B177	9/29/07	1341	2959.50	8800.20	13
B178	9/28/07	1705	3000.00	8830.01	14