

**Center for Fisheries Research & Development - Gulf Coast Research Laboratory**  
**University of Southern Mississippi**  
**SEAMAP Fall Shrimp/Groundfish Survey, R/V Tommy Munro - Cruise 1306**

**Introduction** - The Mississippi Fall Shrimp/Groundfish Survey was conducted from November 11 through 12, 2013. A total of seven trawl stations were sampled following the revised trawl protocol of a 30-minute (bottom) tow time and no day/night designations for stations. One plankton station was also sampled following standard SEAMAP protocols for neuston and bongo sampling.

**Objectives**

- Conduct fall shrimp and groundfish survey in the north-central Gulf of Mexico at randomly-selected stations (provided by NMFS) with standard SEAMAP 40-ft trawls to collect information on shrimp and groundfish abundance and distribution.
- Process all species (identified to the species level) collected by 40-ft trawl using the FSCS software for total number and total weight. Process individual lengths and weights, sampled (or sub-sampled) by species, using FSCS software according to the SEAMAP Operations Manual.
- Conduct offshore plankton sampling to assess larval recruitment dynamics in federal Gulf waters.
- Collect information on physical-chemical and environmental parameters in conjunction with trawl and plankton sampling and process those using SCS software.
- Submit data to the Gulf States Marine Fisheries Commission/NMFS Data Manager.

**Methods** - All samples were collected aboard the *R/V Tommy Munro*. A 40 ft. trawl with 1.58 inch stretched mesh was lowered into position at selected trawl stations, and the towline was set at a 3.5:1 cable length to water depth ratio. Trawling was conducted at or near 3 knots for a period of 30 minutes after lockdown. Sample and data processing were conducted in accordance with the SEAMAP Operations Manual. Data were entered using the Fisheries Scientific Computer System. Plankton samples were collected at grid stations in the north-central Gulf using bongo and neuston nets and following established SEAMAP protocols. Temperature, dissolved oxygen, and salinity values were measured with a Sea-Bird CTD, and meteorological conditions were recorded. Collection and processing of environmental data followed SEAMAP guidelines. Environmental data were collected in conjunction with each trawl and plankton station.

**Results** – An expanded total of 495 kg of biota was collected in seven trawl samples, and two plankton collections (one neuston and one bongo) were made during the cruise. All plankton samples were delivered to the NMFS Pascagoula Laboratory for shipment to the Polish Sorting Center. Time, location, and depth data are given in Table 1 for all stations sampled. All data will be provided to the Gulf States Marine Fisheries Commission.

**Deviations** - There were no deviations from standard SEAMAP protocol. However, due to vessel scheduling conflicts, the cruise was not able to depart during its normal early October sampling time frame, and weather conditions further delayed survey efforts once the vessel became available. Weather conditions also prohibited sampling of several of the stations assigned to Mississippi.

**Table 1. Time, location and depth data for 40-ft trawl and plankton samples collected aboard R/V Tommy Munro, SEAMAP Cruise Number 1306, November 11-12, 2013.**

Cruise	SEAMAP Station	Date	Bottom Time	Start Depth	Start Latitude	Start Longitude	Total Catch (kg)
1306	E1106	11/11/13	29.92	5.3	3003.16	8900.22	38.88
1306	E1107	11/11/13	30.03	8.7	2919.78	8904.61	165.99
1306	E1105	11/11/13	30.02	16.1	2917.05	8857.21	171.86
1306	E1102	11/12/13	30.07	31.9	2954.86	8821.00	32.90
1306	E1103	11/12/13	30.03	30.3	2954.51	8828.07	20.04
1306	B178	11/12/13	n/a	27.0	2959.81	8828.22	n/a
1306	E1104	11/12/13	30.22	24.9	2949.88	8835.04	38.72
1306	E1108	11/12/13	30.07	39.3	2937.51	8815.76	26.26

**Cruise Participants** - USM/GCRL/CFRD

Submitted By:



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