

**Center for Fisheries Research & Development - Gulf Coast Research Laboratory**  
**University of Southern Mississippi**  
**SEAMAP Summer Shrimp/Groundfish Survey, R/V *Tommy Munro* - Cruise 1303**

**Introduction** - The Mississippi Summer Shrimp/Groundfish Survey was conducted from July 12 through 14, 2013. A total of 15 trawl stations were sampled following the revised trawl protocol of a 30-minute (bottom) tow time and no day/night designations for stations. A total of four plankton stations were sampled following standard SEAMAP protocols for neuston and bongo sampling.

**Objectives**

- Conduct summer 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 712 kg of biota was collected in 15 trawl samples, and eight plankton collections (four neuston and four 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 have been provided the Gulf States Marine Fisheries Commission.

**Deviations** - There were no deviations from standard SEAMAP protocol.

**Table 1. Time, location and depth data for 40-ft trawl and plankton samples collected aboard R/V Tommy Munro, SEAMAP Cruise Number 1303, July 12-14, 2013.**

<b>Cruise</b>	<b>SEAMAP Station</b>	<b>Start Date - Time</b>	<b>Bottom Time</b>	<b>Start Depth</b>	<b>Start Latitude</b>	<b>Start Longitude</b>	<b>Total Catch (kg)</b>
1303	E1108	7/12/2013 10:40	30.03	12.9	2927.07	8856.70	18.62
1303	W1301	7/12/2013 14:38	30.12	7.8	2902.39	8904.53	4.34
1303	B183	7/12/2013 16:41	n/a	75.3	2859.75	8859.75	n/a
1303	E1114	7/12/2013 18:34	30.02	66.2	2901.56	8859.85	71.28
1303	E1111	7/13/2013 1:25	30.03	65.0	2914.49	8846.87	27.02
1303	E1113	7/13/2013 5:56	30.85	78.2	2911.20	8836.96	36.53
1303	E1112	7/13/2013 9:04	30.12	72.2	2912.84	8835.43	65.28
1303	B179	7/13/2013 11:50	n/a	49.6	2930.02	8829.97	n/a
1303	E1110	7/13/2013 13:12	30.32	41.8	2932.49	8833.45	57.98
1303	B176	7/13/2013 18:15	n/a	45.0	2929.67	8759.81	n/a
1303	E1007	7/13/2013 20:17	30.05	79.3	2923.27	8747.52	51.45
1303	E1006	7/14/2013 0:40	30.03	68.0	2927.02	8744.47	100.83
1303	B174	7/14/2013 4:25	n/a	69.3	2930.14	8730.03	n/a
1303	E1005	7/14/2013 6:57	30.10	39.5	2937.82	8738.72	31.81
1303	E1107	7/14/2013 10:57	30.00	35.6	2940.94	8810.13	58.42
1303	E1109	7/14/2013 13:37	30.02	38.4	2938.92	8820.27	91.94
1303	E1106	7/14/2013 15:53	29.97	34.5	2943.08	8828.79	36.59
1303	E1104	7/14/2013 18:23	30.05	26.8	2945.71	8834.36	30.04
1303	E1105	7/14/2013 21:16	30.00	18.9	2945.59	8839.10	29.37

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

Submitted By:



Read Hendon, Principal Investigator