

Center for Fisheries Research & Development - Gulf Coast Research Laboratory
University of Southern Mississippi
SEAMAP Summer Shrimp/Groundfish Survey, R/V *Tommy Munro* - Cruise 1403

Introduction - The Mississippi Summer Shrimp/Groundfish Survey was conducted from July 11 through 13, 2014. 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 three plankton stations were sampled following 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 at each trawl and plankton station location.

Results – An expanded total of 521.9 kg of biota was collected in 15 trawl samples, and six plankton collections (three neuston and three 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. Copies of the station data forms are included as Appendix I.

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 1403, July 11-13, 2014.

Cruise	SEAMAP		Start	Start	Start	Tow	Catch
	Station	Start Date/Time	Latitude	Longitude	Depth	Time	Total (kg)
1403	E1108	7/11/2014 10:01	2934.19	8854.70	5.8	30.0	7.0
1403	E1109	7/11/2014 13:06	2928.10	8857.30	6.7	30.1	3.5
1403	E1110	7/11/2014 15:22	2921.14	8852.74	14.2	30.1	24.6
1403	E1118	7/11/2014 19:09	2921.77	8841.59	30.1	30.0	226.0
1403	E1117	7/11/2014 22:13	2927.24	8837.82	25.2	30.0	29.4
1403	B179	7/12/2014 1:42	2929.93	8830.39	51.0	3.5	n/a
1403	B179	7/12/2014 2:13	2929.96	8830.53	50.0	10.1	n/a
1403	E1116	7/12/2014 3:31	2932.90	8829.87	25.7	30.0	95.8
1403	E1114	7/12/2014 6:52	2940.60	8824.86	21.3	30.0	39.1
1403	E1115	7/12/2014 9:59	2939.63	8810.60	20.8	30.0	13.2
1403	B176	7/12/2014 13:56	2929.93	8759.83	25.2	3.9	n/a
1403	B176	7/12/2014 14:05	2930.03	8759.60	278.8	10.2	n/a
1403	E1113	7/12/2014 16:05	2941.40	8807.88	19.7	30.1	3.9
1403	E1112	7/12/2014 19:47	2946.47	8815.13	19.7	30.0	9.8
1403	E1107	7/12/2014 22:36	2950.26	8825.28	18.0	30.1	12.4
1403	E1106	7/13/2014 0:46	2950.59	8830.26	16.4	30.0	20.5
1403	E1105	7/13/2014 3:41	2955.34	8840.65	10.1	30.0	16.5
1403	B178	7/13/2014 6:49	3000.12	8829.90	278.8	2.9	n/a
1403	B178	7/13/2014 6:56	3000.24	8829.86	278.8	10.1	n/a
1403	E1103	7/13/2014 8:15	3003.53	8820.95	10.7	30.1	8.4
1403	E1101	7/13/2014 10:33	3011.51	8823.09	5.0	30.0	11.9

Cruise Participants - USM/GCRL/CFRD

Submitted By:



Read Hendon, Principal Investigator

APPENDIX I

Station Data Form Scans