

**Center for Fisheries Research & Development - Gulf Coast Research Laboratory**  
**University of Southern Mississippi**  
**SEAMAP Fall Shrimp/Groundfish Survey, R/V Tommy Munro**  
**Cruise 1105 – East Delta Stations**

**Introduction** - The East Delta Fall Shrimp/Groundfish Survey cruise was conducted from October 21 through October 25, 2011. A total of 17 trawl stations were sampled following the revised trawl protocol of a 30-minute (bottom) tow time and no day/night designations for stations. Station E1114 was not sampled due to its proximity to the Alabama Alps.

**Objectives**

- Conduct fall shrimp and groundfish survey in East Delta region at randomly-selected stations (locations of which are 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.
- Collect information on physical-chemical and environmental parameters in conjunction with trawl sampling and process those using SCS software.
- Submit data to the Gulf States Marine Fisheries commission/NMFS Data Manager.

**Methods** - All trawl 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 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 was conducted in accordance with the SEAMAP Operations Manual. Data were entered using the Fisheries Scientific Computer System. Environmental data were collected in conjunction with each trawl. Temperature, dissolved oxygen, and salinity values were measured and recorded, along with meteorological conditions.

**Results** – An expanded total of 1,662 kg of biota was collected in 16 trawl samples; the trawl was damaged at station E1108, resulting in no catch. Time, location and depth are presented in Table 1 and overall catch data are given in Tables 2 and 3. All data will be submitted to the Gulf States Marine Fisheries Commission for inclusion in the SEAMAP Database.

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

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

Submitted By:



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**Table 1. Time, location and depth data for 40-ft trawl samples collected aboard R/V Tommy Munro, SEAMAP Cruise Number 1105 – East Delta, October 21-25, 2011.**

SEAMAP Station	Start Date / Time	Start Latitude	Start Longitude	Start Depth (fathoms)	Tow Time (min)
W1303	10/21/2011 13:31	2900.16	8859.90	6	30.10
E1116	10/23/2011 11:57	2909.91	8854.39	25	30.13
E1115	10/23/2011 14:50	2914.19	8846.72	36	29.95
E1111	10/23/2011 17:07	2920.19	8844.33	29	30.12
E1112	10/23/2011 19:40	2918.48	8840.15	33	30.20
E1110	10/23/2011 22:30	2924.20	8827.03	28	30.08
E1113	10/24/2011 1:07	2916.22	8820.71	47	29.75
E1108	10/24/2011 11:34	2938.82	8801.32	21	42.27
E1109	10/24/2011 13:58	2932.61	8806.23	22	29.92
E1008	10/24/2011 16:58	2921.84	8748.52	44	30.50
E1104	10/24/2011 21:28	2949.17	8804.30	19	30.00
E1101	10/25/2011 1:00	3011.27	8809.19	7	30.10
E1107	10/25/2011 11:14	2939.67	8832.32	17	30.02
E1106	10/25/2011 13:22	2944.56	8830.45	17	30.07
E1105	10/25/2011 15:21	2946.53	8841.46	10	30.03
E1103	10/25/2011 17:51	2959.69	8841.31	10	30.32
E1102	10/25/2011 20:30	3011.39	8835.44	6	30.13

**Table 2. Total catch weight (kg) for SEAMAP Cruise Number 1105 – East Delta, October 21-25, 2011.**

SEAMAP Station	"Finfish" Total	"Crustacean" Total	"Other" Total	Total Catch
W1303	87.29	3.89	0.00	91.18
E1116	30.04	2.36	0.07	32.47
E1115	1.77	0.21	0.45	2.43
E1111	32.52	0.67	0.26	33.45
E1112	19.32	1.22	0.03	20.57
E1110	137.87	0.00	0.00	137.87
E1113	108.61	4.07	36.95	149.63
E1108	NET TORN - NO CATCH			N/A
E1109	27.67	0.00	1.31	28.98
E1008	20.91	0.35	9.00	30.26
E1104	72.45	0.00	0.74	73.19
E1101	82.74	1.33	90.41	174.48
E1107	337.19	2.52	4.21	343.92
E1106	86.41	0.95	13.33	100.70
E1105	10.07	0.08	231.04	241.19
E1103	48.38	0.26	0.00	48.64
E1102	150.83	0.30	2.08	153.21
<b>Survey Total</b>	<b>1254.08</b>	<b>18.21</b>	<b>389.88</b>	<b>1662.17</b>

**Table 3. Dominant species collected by number (A) and weight (B) in 40-ft trawls aboard *R/V Tommy Munro*, SEAMAP Cruise Number 1105 – East Delta, October 21-25, 2011.**

A. Dominant Species by Total Number

<b>SPECIES</b>	<b>TOTAL NO.</b>
<i>MICROPOGONIAS UNDULATUS</i>	14760
<i>CHLOROSCOMBRUS CHRYSURUS</i>	6488
<i>STENOTOMUS CAPRINUS</i>	3751
<i>STEINDACHNERIA ARGENTEA</i>	2162
<i>TRICHIURUS LEPTURUS</i>	1427
<i>AURELIA AURITA</i>	790
<i>SELENE SETAPINNIS</i>	631
<i>PENAEUS AZTECUS</i>	604
<i>ANCHOA HEPSETUS</i>	371
<i>LEIOSTOMUS XANTHURUS</i>	235
<i>MULLUS AURATUS</i>	212
<i>LAGODON RHOMBOIDES</i>	190
<i>TRACHURUS LATHAMI</i>	182
<i>CYNOSCIION ARENARIUS</i>	177
<i>PRIONOTUS LONGISPINOSUS</i>	165
<i>SYNODUS FOETENS</i>	153

B. Dominant Species by Total Weight (kg)

<b>SPECIES</b>	<b>TOTAL WT.</b>
<i>MICROPOGONIAS UNDULATUS</i>	616.21
<i>AURELIA AURITA</i>	378.38
<i>STENOTOMUS CAPRINUS</i>	178.76
<i>DASYATIS CENTROURA*</i>	100.00
<i>CHLOROSCOMBRUS CHRYSURUS</i>	70.32
<i>TRICHIURUS LEPTURUS</i>	41.60
<i>MUSTELUS</i> sp.	34.37
<i>CYNOSCIION ARENARIUS</i>	25.17
<i>LEIOSTOMUS XANTHURUS</i>	22.85
<i>SYNODUS FOETENS</i>	18.45
<i>AETOBATUS NARINARI</i>	14.28
<i>LAGODON RHOMBOIDES</i>	13.63
<i>MULLUS AURATUS</i>	12.67
<i>PENAEUS AZTECUS</i>	12.36
<i>LUTJANUS CAMPECHANUS</i>	11.63

\* *D. centroura* weight estimated on deck