

# SEAMAP Fall 2012 Groundfish Survey Cruise Report

Prepared by  
Craig Newton  
Alabama Marine Resources Division  
P.O. Box 189  
Dauphin Island, Al. 36528

R/V Alabama Discovery, Cruise 1203

## Introduction

Southeast Area Monitoring and Assessment Program (SEAMAP) Fall Groundfish cruises are annually conducted during October and November of each year. The goal of SEAMAP Groundfish program is to produce fishery-independent monitoring and assessment data which are essential for management of Alabama and nearshore FMZ Gulf of Mexico fisheries resources. State and federal agencies collaboratively coordinate the scheduling of cruise dates and the selection of stations to be sampled by each agency, which results in a coordinated and cost-efficient program.

## Objectives

1. Conduct a fall trawl survey to generate shrimp, groundfish, and miscellaneous demersal invertebrate abundance and distribution data with a standard SEAMAP 40-ft trawl.
2. Sample at stations located east of the Mississippi River that are randomly selected from NMFS generated charts of SEAMAP station locations. Identify, enumerate, and determine taxon-specific weight of all organisms collected during trawl sampling as well as determine length and weight of selected individuals according to NMFS SEAMAP Operations Manual.
3. Collect information on environmental parameters (salinity, temperature, dissolved oxygen, wind speed, wind direction, and barometric pressure) in conjunction with trawl sampling.
4. Code all data according to approved NMFS SEAMAP Operations Manual guidelines, and enter data through the NMFS SEAMAP data entry system.
5. Submit data to the Gulf States Marine Fisheries Commission.

## Methods

Eight stations were sampled in gulf statistical zones 10 and 11 aboard R/V Alabama Discovery on October 9 and 10, 2012. A 40-foot trawl with 1.63 inch stretched mesh was lowered to depth at each site and the towline was set at a 5:1 cable length water depth ratio. Desired vessel speed while towing was 2.0 – 2.5 knots, and the trawl was towed for 30 minutes at each station.

Sample and data processing was conducted in accordance with the NMFS SEAMAP Operations Manual guidelines, and data were entered and checked with the NMFS SEAMAP Data Entry Database. Atmospheric and hydrologic data were collected prior to

each trawl.

## Results

Alabama Marine Resources Division collected samples at seven SEAMAP Groundfish stations in territorial sea and adjacent EEZ of Florida, Mississippi, and Alabama . Stations located north of 29° 48.90' latitude, south of 30° 11.95' latitude, east of -88° 32.15' longitude, and west of -87° 20.45' longitude were sampled according to SEAMAP Groundfish protocols (Table 1). SEAMAP Groundfish stations E1101 and E1001 were sampled during daylight hours on October 9, 2012 and October 10, 2012 respectively. SEAMAP Groundfish stations E1102, E1103, E1104, E1003, and E1002 were sampled during night time hours between 18:33 on October 9, 2012 and 05:46 on October 10, 2012. Environmental variables, effort, station locations and catch by station are summarized (Table 1).

A hang was encountered with the shrimp trawl at Station E1101 (Pascagoula station 77001). The snag resulted in a broken leg of the starboard lead line. Pascagoula Station Number 77001 was initialized in the FSCS 1.6 Control Panel v.11 after entering the required fields in Manual\_trawl\_Version3.exe and ingested into CR771203-55.mdb with Operational Code "Z". The net was replaced and the sample was collected while towing in the opposite direction as the tow that resulted in the hang to prevent potentially damaging the last trawl aboard the vessel. The second attempt of collecting the sample was logged into Manual\_trawl\_Version3.exe as Pascagoula Station Number 77002 and collection/biological data were ingested in CR771203-55.mdb accordingly. The CTD cast associated with E1101 was made immediately prior to the first attempt of collecting the sample (i.e. Pascagoula Station Number 77001), and was injected into Station 001 of CR771203-55.mdb.

## Deviations

The trawl sample at station E1102 began at 18:48, but retrieval did not occur until 19:19. Therefore, the required tow-time of 30 minutes was exceeded by one minute. The delay in retrieval time was due to a reduction in hydraulic fluid flow to the winch that prevented the winch from retrieving the tow cable. Retrieval of the trawl began immediately after the hydraulic valve was adjusted to increase flow, which was 1 minute after the required 30 minute tow time. The hydraulic issue was quickly rectified, and no longer created a problem during the remainder of the cruise.

## Cruise participants:

Alabama Marine Resources Division personnel.

Submitted By:



*D. Craig Newton*

*SEAMAP Field Party Chief*

Table 1. AMRD SEAMAP 2012 fall groundfish cruise report summary.

77 R/V Alabama Discovery

STA#	DATE MM/DD/YY	TIME	LAT	LONG	STAT ZONE	MAX DEPTH	D.O.			SALINITY			TEMPERATURE			FIN CATCH	CRUS CATCH	OTHER CATCH	TOW SPEED	MINUTES FISHED	TAXON COUNT
							SUR	MID	MAX	SUR	MID	MAX	SUR	MID	MAX						
77001	10/9/2012	14:50	30 06.14	88 09.26	11	11.2	5.8	6.0	4.6	32.86	33.02	33.80	25.87	25.83	26.55	-	-	-	2.40	30	-
77002	10/9/2012	16:09	30 06.38	88 09.62	11	11.1	-	-	-	-	-	-	-	-	-	23.17	0.11	0.18	2.21	30	29
77003	10/9/2012	18:48	29 57.06	88 32.32	11	15.2	5.8	5.7	4.3	32.28	33.03	35.61	25.91	26.49	27.08	105.34	2.00	0.22	2.43	31	33
77004	10/9/2012	20:31	29 56.31	88 26.16	11	16.8	5.7	5.4	2.9	33.14	34.54	36.05	25.75	26.89	25.94	312.09	4.63	0.00	2.37	30	15
77005	10/9/2012	22:33	29 48.99	88 16.94	11	19.6	5.6	6.2	1.9	32.70	33.16	36.26	26.11	26.36	24.27	31.07	8.07	0.11	2.55	30	28
77006	10/10/2012	3:24	30 03.27	87 20.44	10	16	5.4	6.1	4.2	34.08	34.09	35.66	26.43	26.47	27.45	11.63	0.90	0.25	2.32	30	36
77007	10/10/2012	5:16	30 08.73	87 31.74	10	14.8	5.6	6.1	3.3	33.25	33.42	35.39	25.71	25.89	27.65	53.43	1.49	45.92	2.08	30	33
77008	10/10/2012	7:46	30 11.02	87 50.09	10	6.7	5.5	5.9	6.2	32.83	32.83	32.85	25.28	25.36	25.37	4.20	0.07	0.11	2.55	30	16

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Submitted by: D. Craig Newton  
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