

SEAMAP Summer 2013 Shrimp/Groundfish Survey Cruise Report

Prepared by
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R/V Alabama Discovery, Cruise 1301

Introduction

Southeast Area Monitoring and Assessment Program (SEAMAP) Summer Shrimp/Groundfish cruises are annually conducted during June and July of each year. The goal of SEAMAP Shrimp and Groundfish cruise is to produce fishery-independent monitoring and assessment data as well as to estimate penaeid shrimp abundance and distribution 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 summer 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

Five stations were sampled in gulf statistical zones 10 and 11 aboard R/V Alabama Discovery on July 3 and 12, 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 five Shrimp/Groundfish stations in Alabama's and Florida's territorial sea and the adjacent EEZ. Stations located north of 30° 0.40' latitude, south of 30° 09.65' latitude, east of -88° 28.25' longitude, and west of -87° 33.85' longitude were sampled according to SEAMAP Groundfish protocols (Table 1). Stations E1004 and E1003 were sampled between 9:54 CDT and 12:32 CDT on 3 July, 2013. Stations E1101, E1102, and E1103 were sampled between 11:16 CDT and 17:13 CDT on 12 July, 2013. Environmental variables, effort, station locations and catch by station are summarized (Table 1). Alabama cruise 1301 was the first cruise in which new protocols were adopted to record depth measurements in meters (tow depth was previously recorded in fathoms).

Pascagoula Station 77004 does not occur in CR771301-55.mdb. An incorrect value was entered into "Manual Trawl Version3.exe", but was not identified until Station 77004 was initialized in "FSCSControlPanel.exe". If incorrect values entered into "Manual Trawl Version3.exe" are not identified prior to initialization in the "FSCSControlPanel.exe", the incorrect value can not be corrected until the data are ingested into CR771301-55.mdb. Therefore, the Field Party Chief authorized the change of sequence in Pascagoula Station numbers to maintain consistency in files generated by "Manual Trawl Version3.exe" and "FSCSControlPanel.exe" with the data ingested into CR771301-55.mdb.

Deviations

Samples collected on 3 July 2013 (E1004 and E1003) were placed in coolers with ice, labeled, and returned to AMRD laboratory for sample processing due to the inability to use the Marel M-1100 scales in the swells generated by a tropical wave near the Florida Big Bend area. The logistical strategy of storing samples in coolers and processing at AMRD laboratory likely resulted in a significant reduction in errors identified by "Station_check8.exe".


The unit of measure for the "depth" field value in CR771301-55 under the "Trawl" tab is fathoms. However, all depths were recorded in meters.

Air temperature was not recorded while sampling E1101 due to dead batteries in the weather station aboard R/V Alabama Discovery.

Cruise participants:

Alabama Marine Resources Division personnel.

Submitted By:



D. Craig Newton
SEAMAP Field Party Chief

Table 1. AMRD SEAMAP 2013 Summer shrimp/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			TOW SPEED	MINUTES FISHED	TAXON COUNT
							SUR	MID	MAX	SUR	MID	MAX	SUR	MID	MAX			
77001	7/3/2013	9:54	30 06.08	87 33.88	10	26	5.7	5.2	4.6	28.94	35.85	35.91	29.12	23.14	22.27	2.36	30	31
77002	7/3/2013	11:48	30 09.66	87 50.52	10	11.8	5.7	4.9	5.2	32.57	35.45	35.65	28.02	25.02	23.58	2.57	30	14
77003	7/12/2013	11:16	30 07.95	88 21.80	11	19.0	6.2	5.5	3.7	27.03	31.74	33.11	27.39	27.36	26.70	2.52	30	32
77005	7/12/2013	13:52	30 02.11	88 19.98	11	26.6	6.5	6.1	2.8	28.93	32.92	35.82	27.55	27.34	23.38	2.51	30	30
77006	7/12/2013	16:23	30 00.44	8828.24	11	26.8	6.5	5.4	2.8	29.55	33.35	35.88	29.18	27.07	23.04	2.58	30	40

Submitted by: D. Craig Newton

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