

SEAMAP Summer 2010 Shrimp & Groundfish Survey Cruise Report

Prepared by
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R/V Alabama Discovery, Cruise 1002

Introduction

Southeast Area Monitoring and Assessment Program (SEAMAP) Shrimp and Groundfish cruises are annually conducted near the beginning of summer. 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 and groundfish 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 wave height) 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

Nine stations were sampled in gulf statistical zone 11 aboard R/V Alabama Discovery on June 2 and 8, 2010. A 40-foot trawl with 1.58 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 3 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 nine Shrimp and Groundfish stations in Alabama's territorial sea and the adjacent EEZ. Stations located north of 29° 40.44' latitude, south of 30° 9.23' latitude, east of -88° 22.16' longitude, and west of -88° 00.47' longitude were sampled according to SEAMAP Shrimp and Groundfish protocols (Table 1). Stations E1104, E1106, E1108, E1115, E1102, E1105, E1110, E1114, and E1116 were sampled per protocols. Station E1111, however, was not sampled due to the presence of an extensive oil slick from the Deepwater Horizon oil spill. A low relief snag was encountered at Pascagoula station 23007; therefore, the trawl was retrieved, inspected, tickler chain repaired, redeployed, and logged as Pascagoula station 23008. Environmental variables, effort, station locations and catch by station are summarized (Table 1).

Deviations

The R/V Alabama Discovery has been issued the vessel code "77"; however, data collections during the SEAMAP Summer Shrimp and Groundfish cruise were conducted using vessel code "23". The update has not been implemented in the NMFS SEAMAP data entry system. Data, therefore, will subsequently be ingested using vessel code "23".

Only one station was sampled at night, while the remainder of the stations were sampled during daylight hours. The R/V Alabama Discovery was operated only during hours of suitable visibility for avoidance of oil slicks that originated from the Deepwater Horizon oil spill.

The other deviation from protocol occurred due to calibration constraints of the Seabird 19 CTD. A Hydrolab Surveyor 4a was used to collect hydrographic data at the surface, midwater, and at maximum depth due to the status of the Seabird 19. However, the Hydrolab experienced a severe power supply issue and the majority of the data are no longer accessible.

Cruise participants:

Alabama Marine Resources Division personnel collected samples.

Submitted By:

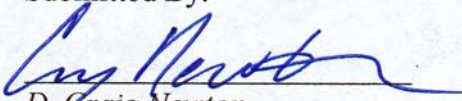

D. Craig Newton
SEAMAP Field Party Chief

Table 1. AMRD SEAMAP 2010 summer shrimp & groundfish cruise report summary.

STA#	DATE MM/DD/YY	TIME	LAT	LONG	STAT		D.O	SALINITY		TEMPERATUR		FIN CATCH	CRUS CATCH	OTHR CATCH	TOW SPEED	MINUTES FISHED	TAXON COUNT				
					ZONE	DEPTH		SUR MID	MAX	SUR MID	MAX							SUR MID	MAX		
23 R/V Alabama Discovery																					
23001	6/2/2010	0930	30 07.97	88 15.84	11	11.5						78.841	0.467	8.907	2.76	30	18				
23002	6/2/2010	1203	29 59.35	88 22.16	11	16.1						205.813	0.0	0.755	2.93	30	12				
23003	6/2/2010	1409	29 55.15	88 18.72	11	17.4						10.167	0.145	1.798	3.04	30	25				
23004	6/2/2010	1658	29 42.23	88 20.85	11	20.6						123.654	1.054	0.035	2.83	30	16				
23005	6/2/2010	1955	30 09.23	88 08.78	11	7.0	7.0	3.0	1.8	21.9	33.2	35.4	27.6	23.2	20.5	47.759	1.572	2.720	2.56	30	18
23006	6/8/2010	0908	30 03.82	88 03.62	11	12.1						34.393	0.292	0.743	2.34	30	26				
23007	6/8/2010	1139	29 52.39	88 03.42	11	17.6										13					
23008	6/8/2010	1212	29 51.73	88 03.67	11	18.1						15.533	0.047	0.301	2.30	30	31				
23009	6/8/2010	1502	29 41.14	88 00.47	11	22.0						4.304	0.377	0.318	2.33	30	27				
23010	6/8/2010	1705	29 40.44	88 05.75	11	20.4						3.458	0.034	0.734	2.43	30	25				

Submitted by: D. Craig Newton
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