

SEAMAP Summer 2018 Shrimp/Groundfish Survey Cruise Report

Prepared by
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R/V Alabama Discovery, Cruise 1801

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 SEAMAP Groundfish stations were sampled in gulf statistical zone 10 aboard R/V Alabama Discovery on June 28, 2018. 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 territorial sea and the adjacent EEZ. Stations located north of N29°58.93" latitude,

south of N30°07.11" latitude, east of W87 °51.34" longitude, and west of W87 °15.37" longitude were sampled according to SEAMAP Groundfish protocols. Stations E1001, E1002, E1004, E1003 and E1007 were sampled between 14:55 GMT and 22:37 GMT on June 28, 2018. Environmental variables, effort, station locations and catch by station are summarized (Table 1).

No harmful interactions with protected species occurred during this cruise.

Deviations

The crew observed relatively high current velocities throughout the day and the CTD cast at E1001 did not reach the seabed. The depth at E1001 was 21m, but the CTD only reached a depth of 9m. This deviation was not known until the crew began processing the CTD data once onshore.

The unit of measure for the "depth" field value in the under the "Trawl" tab is fathoms. The label of the "Depth" in the "Trawl" tab of each database indicates the unit of measurement is fathoms. However, all depth data were collected and recorded in meters.

Cruise participants:

Craig Newton, Field Party Chief, Alabama Marine Resources
Lauren Jakubowski, Designated Protected Species Watch Stander, Alabama Marine Resources
Will Tarver, Watch Stander, Alabama Marine Resources
McKenzie Olson, Watch Stander, Alabama Marine Resources
Tyler Rose, Watch Stander, Alabama Marine Resources

Submitted By:



D. Craig Newton
SEAMAP Field Party Chief

Table 1. Station summary report for each SEAMAP Shrimp/Groundfish station sampled by Alabama Marine Resources Division during cruise 1801.

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STA#	DATE MM/DD/YY	TIME	LAT	LONG	STAT ZONE	MAX DEPTH	D.O.			SALINITY			TEMPERATURE			TOW SPEED	MINUTES FISHES	TAXON COUNT
							SUR	MID	MAX	SUR	MID	MAX	SUR	MID	MAX			
77001	6/28/2018	14:55	30 03.24	87 51.34	10	22.5	6.0	5.8	n/a	26.33	36.29	n/a	29.73	23.36	n/a	3.00	30	4
77002	6/28/2018	17:38	30 02.39	87 23.69	10	29.7	5.9	5.8	4.8	26.67	35.77	36.06	30.33	24.26	22.68	2.57	30	38
77004	6/28/2018	19:01	29 58.93	87 19.23	10	29.9	5.8	6.0	4.9	27.01	35.34	36.11	30.29	25.47	22.46	2.39	30	27
77005	6/28/2018	20:27	30 01.19	87 15.37	10	32.7	5.8	6.1	5.3	27.52	35.48	36.07	30.20	25.35	22.54	2.41	30	43
77007	6/28/2018	22:07	30 07.11	87 15.43	10	29.9	5.9	6.0	4.7	30.94	35.67	36.15	29.88	23.95	22.52	2.37	30	31

Submitted by: D. Craig Newton
 Date submitted: August 14, 2018