

# SEAMAP Summer 2017 Shrimp/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 1701

## 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

Six SEAMAP Groundfish stations were sampled in gulf statistical zone 10 and 11 aboard R/V Alabama Discovery from June 26 through June 30, 2016. 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 six Shrimp/Groundfish stations in Alabama's territorial sea and the adjacent EEZ (figure 1). Stations located north of

N29°24.900" latitude, south of N30°10.600" latitude, east of W88 °10.900" longitude, and west of W87 °45.300" longitude were sampled according to SEAMAP Groundfish protocols. Stations E1003, E1006, E1007, and E1113 were sampled between 14:11 GMT on June 26, 2017 and 02:01 GMT on June 27, 2017. Stations E1108 and E1107 were sampled between 14:50 GMT and 16:49 GMT on June 30, 2017. Environmental variables, effort, station locations and catch by station are summarized (Table 1).

No interactions with protected species occurred during this cruise.

### **Deviations**

Two SDES55 databases were generated to store the data collected during Alabama's Summer Groundfish Cruise 1701. Data from SEAMAP Groundfish Stations E1003, E1006, E1007, and E1113 are stored in "CR771701 6\_26\_2017.mdb" and data from SEAMAP Groundfish Stations E1107 and E1108 are stored in "CR771701 6\_30\_2017.mdb".

A snag was encountered during the first attempt to collect the trawl sample at SEAMAP Groundfish Station E1003. Therefore, Pascagoula Station number 001 and 002 in "CR771701 6\_26\_2017.mdb" represent sampling effort at E1003.

The hydraulic winch on the davit typically used to cast the CTD malfunctioned and the longline winch spooled with monofilament line was used to cast the CTD. The crew experienced difficulty in confirming the CTD reached the seabed due to high currents and the lack of tension on the monofilament line. Therefore, the CTD cast at SEAMAP Groundfish Stations E1006 and E1007 did not reach the seabed. The CTD was cast to a maximum depth of 34m at SEAMAP Groundfish Station E1006, but the actual depth was 67m. Similarly, the actual depth at SEAMAP Groundfish Station E1007 was 69m and the CTD was cast to a maximum depth of 50m.

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  
Diana Marchant, Designated Protected Species Watch Stander, Alabama Marine Resources  
Lauren Jakubowski, Watch Stander, Alabama Marine Resources  
Will Tarver, Watch Stander, Alabama Marine Resources  
Kyle Jenkins, Watch Stander, Alabama Marine Resources

Submitted By:



*D. Craig Newton*  
SEAMAP Field Party Chief

Figure 1. Locations of each SEAMAP Shrimp/Groundfish station sampled by Alabama Marine Resources Division during cruise 1701.

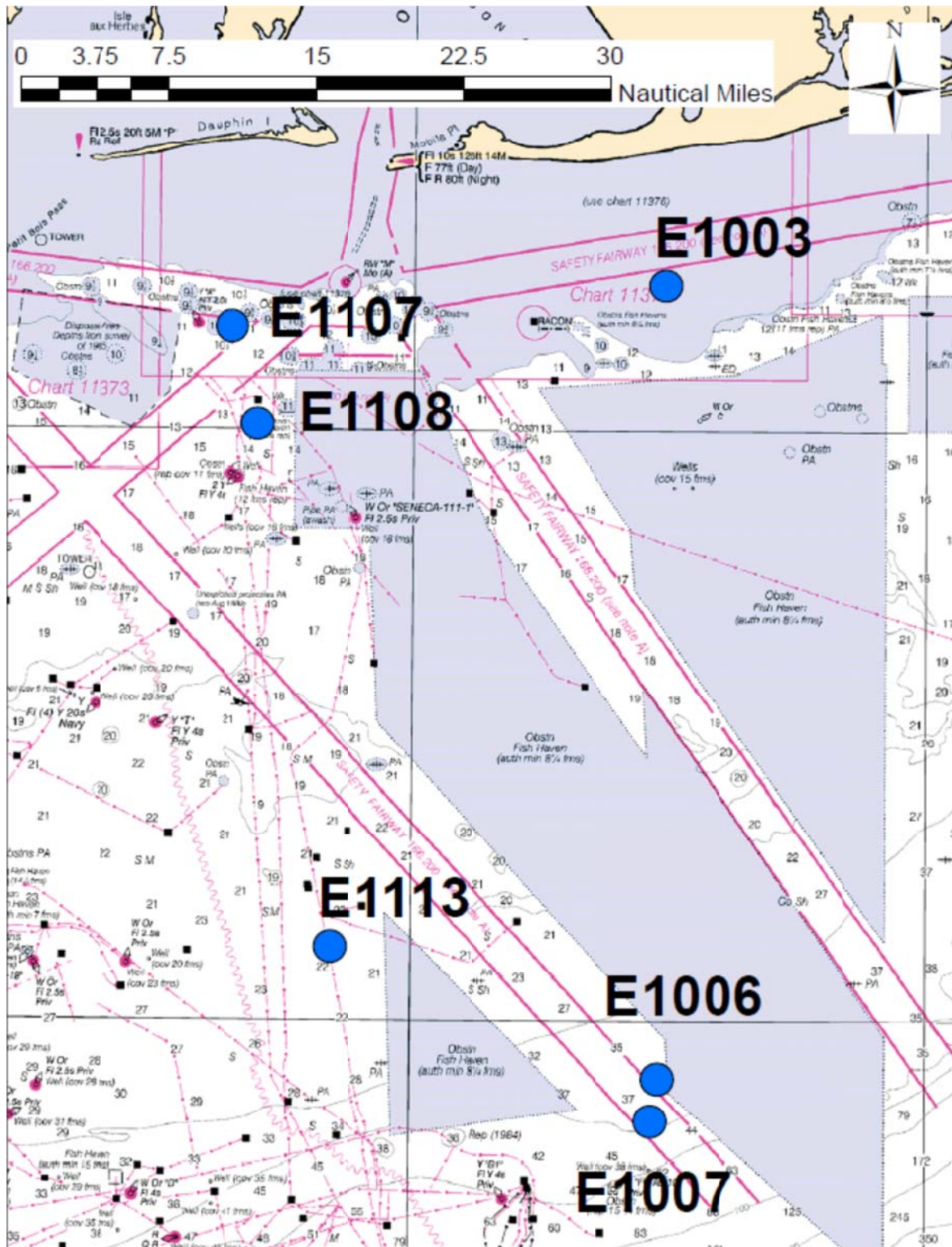


Table 1. Station summary report for each SEAMAP Shrimp/Groundfish station sampled by Alabama Marine Resources Division during cruise 1701.

Table 1. AMRD SEAMAP 2017 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	6/26/2017	14:25	30 07.42	87 45.32	10	15.2	7.0	6.1	5.1	27.55	32.57	32.64	27.82	27.02	26.82	2.24	16	5
77002	6/26/2017	16:19	30 10.59	87 42.65	10	12.7	6.7	6.0	5.0	29.75	32.14	32.42	27.63	27.16	26.98	2.03	30	24
77003	6/26/2017	21:01	29 27.03	87 45.59	10	67.3	6.3	5.7*	5.5*	32.49	34.12*	35.9*	28.38	26.71*	24.08*	1.97	30	53
77004	6/26/2017	22:38	29 25.02	87 46.01	10	69.5	6.3	5.6*	5.5*	32.46	35.89*	36*	28.55	24.4*	23.73*	1.94	30	35
77005	6/27/2017	01:31	29 33.98	88 05.05	11	41.3	6.4	5.8	4.6	30.81	35.53	35.98	28.32	25.25	23.35	1.78	30	62
77006	6/30/2017	15:06	30 00.35	88 09.16	11	24.3	7.4	5.1	2.2	18.40	32.46	35.43	27.70	26.84	23.96	2.10	30	24
77007	6/30/2017	16:19	30 05.17	88 10.83	11	19.3	7.7	5.0	3.5	18.39	31.15	32.84	28.14	27.26	26.61	2.20	30	35

\* data are not representative of samples collected at middle and maximum depths. See deviations outlined above.

Submitted by: D. Craig Newton  
Date submitted: September 6, 2017