

SEAMAP Summer 2009 Shrimp & Groundfish Survey Cruise Report

Prepared by
John F. Mareska
Alabama Marine Resources Division
P.O. Box 189
Dauphin Island, Al. 36528

R/V A.E. Verrill, Cruise 0902

Introduction

SEAMAP Shrimp and Groundfish cruises are conducted to provide fishery-independent monitoring, assessment, shrimp abundance and location information essential to management of Alabama and nearshore FMZ Gulf of Mexico fisheries resources in a coordinated and cost-efficient program. Fishery-independent information is collected without direct reliance on statistics reported by commercial or recreational fishermen.

Objectives

1. Conduct a summer trawl survey to collect information on shrimp and groundfish abundances and distribution with a standard SEAMAP 40-ft trawl.
2. Select stations from NMFS generated charts of SEAMAP station locations east of the Mississippi River for random sampling. All species are identified, weighed and counted. Selected species are sexed and measured according to NMFS SEAMAP Operations Manual.
3. Collect information on environmental parameters (salinity, temperature, dissolved oxygen, wind speed and direction, 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

The vessel that participated in the Alabama summer Shrimp and Groundfish Survey was the A.E.Verrill. Ten stations were sampled in gulf statistical zone 11 on the June 8 and 11, 2009. A 40-foot trawl with 1.58 inch stretched mesh was lowered into position at the selected site and towline was set at a 5:1 cable length water depth ratio. Trawl towing was conducted at or near 3 knots for a minimum 10 minutes after lockdown, and towed across a fathom strata. Direction of tows were south to north or north to south. Sample workup and data processing was conducted in accordance with the NMFS SEAMAP Operations Manual guidelines. Data was entered and checked with the NMFS SEAMAP Data Entry Database. Environmental data were collected in conjunction with each trawl. Temperature and dissolved oxygen, salinity, and turbidity values were measured with a CTD.

Results

Alabama collected samples at ten Shrimp and Groundfish stations in Alabama's territorial sea and the adjacent EEZ (between latitudes 01' and 29° 57' and longitudes -88° 12' and -31') (Table 1). Stations ED01, ED05, ED06, ED25, ED27, EN07, EN11, EN12, EN14 and EN15 were completed. Debris was encountered at EN12 on the night of 8 June. The debris was sufficient in size to tear the cod end from the trawl and EN12 was completed on 11 June, 2009 by moving the trawl to the west. Debris location upon retrieval of the trawl was approximately N 29 57.630 W 88 08.920. Environmental variables, effort, station locations and catch by station are summarized (Table 1).

Deviations

There were no significant deviations to SEAMAP protocols.

Cruise participants:

Alabama Marine Resources Division personnel collected samples.

Submitted By:

John F. Mareska
SEAMAP Field Party Chief

Table 1. AMRD SEAMAP 2009 summer shrimp & groundfish cruise report summary.

STA#	DATE	START	LAT	LONG	STAT ZONE	MAX DEPTH	D.O			SALINITY			TEMPERATUR			FIN CATCH	CRUS CATCH	OTHR CATCH	MIN FISHED
	MM/DD/YY	TIME					SUR	MID	MAX	SUR	MID	MAX	SUR	MID	MAX				
23 A.E. Verrill																			
23001	6/8/2009	1040	30 13.42	88 16.28	11	5	7.1	7.1	2.2	22.0	27.0	34.2	27.5	25.9	22.8	0.154	0.042	0.104	10
23002	6/8/2009	1112	30 13.72	88 17.21	11	3	6.9	6.9	6.8	21.1	23.3	25.4	27.8	26.8	26.4	17.898	0.421	0.362	10
23003	6/8/2009	1230	30 07.39	88 16.53	11	11	7.1	6.0	4.5	24.1	34.7	36.2	27.7	23.8	23.5	4.967	1.093	0.434	30
23004	6/8/2009	1356	30 08.83	88 19.26	11	11	7.3	6.1	4.8	24.4	34.4	35.5	27.8	23.8	23.5	13.711	0.930	0.293	21
23005	6/8/2009	1529	30 11.88	88 23.42	11	5	7.2	7.2	5.6	24.3	25.2	30.0	26.9	26.5	25.1	14.072	0.106	0.129	14
23006	6/8/2009	1955	30 02.83	88 24.73	11	12	6.7	6.4	3.1	27.9	34.5	35.6	27.2	24.1	21.8	1.837	0.080	0.172	15
23007	6/8/2009	2148	29 59.13	88 12.71	11	16	6.7	6.2	3.7	25.6	35.4	36.2	27.7	24.0	22.0	7.846	1.178	0.023	11
23008	6/8/2009	2304	29 55.70	88 08.93	11	17	6.6	5.1	4.9	26.3	35.9	36.3	27.8	24.3	22.4	--	--	--	55
23009	6/11/2009	2021	29 45.12	88 03.55	11	20	6.9	6.3	5.6	27.9	36.4	36.4	28.6	25.4	23.6	18.016	0.347	0.013	11
23010	6/11/2009	2200	29 48.93	88 11.17	11	19	6.5	6.4	5.7	29.6	36.4	34.9	28.2	25.4	23.2	9.932	0.007	0.035	12
23011	6/11/2009	2316	29 55.88	88 09.03	11	17	6.5	4.8	5.4	27.2	35.9	36.3	28.7	23.9	22.3	46.492	1.502	0.001	40

Submitted by: John F Mareska
Date submitted: June 26, 2009