

SEAMAP Fall 2007 Shrimp & Groundfish Survey Cruise Report

Prepared by
Mark Van Hoose
Alabama Marine Resources Division
P.O. Box 189
Dauphin Island, Al. 36528

Introduction

SEAMAP Fall Shrimp and Groundfish cruises are conducted to provide fishery-independent monitoring assessment and 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 that collected without direct reliance on statistics reported by commercial or recreational fishermen.

Objectives

1. Conduct a fall trawl survey to collect information on shrimp and groundfish abundance and distribution with standard SEAMAP 40-ft trawls.
2. Select stations from NMFS generated charts of SEAMAP station location east of the Mississippi River for random sampling. All species are identified, weighed and counted, and measured according to NMFS SEAMAP Operations Manual.
3. Collect information on environmental parameters (salinity, temperature, dissolved oxygen, wind speed and direction, wave height, precipitation) in conjunction with trawl sampling.
4. Code all data according to approved NMFS SEAMAP Operations Manual guidelines, and enter data on the NMFS SEAMAP data entry system.
5. Submit data to the Gulf States Marine Fisheries Commission/NMFS Data Manager.

Methods

The vessel that participated in the Alabama Fall Shrimp & Groundfish Survey was the A.E.Verrill. Ten trawls samples were collected in gulf statistical zone 11 on October 9, 2007 and November 6, 2007. A 40 ft 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 CDT.

Results

Alabama collected ten Fall Shrimp and Groundfish stations in Alabama's territorial sea and the adjacent FEZ (between latitudes 29° 50' and longitudes -88 - 28') (Table 1). A total of 240 biological and 1873 length frequency records were recorded (Table 1)

Deviations

Station 23010 was limited to 30 minutes because of increasingly rough seas and having covered only one foot in the last 20 minutes of the tow. A CDT malfunction resulted in only surface hydrography for stations 23008 and 23009.

Cruise participants:

Alabama Marine Resources Division personnel collected samples. Sample summary and data entry completed by Ashley Edwards.

Submitted By:

Mark Van Hoose
SEAMAP Field Party Chief

Table 1. AMRD SEAMAP 2007 Fall Shrimp & groundfish cruise report summary.

STA#	DATE		LAT	LONG	STAT ZONE	MAX DEPTH	D.O			SALINITY			TEMPERATUR			FIN CATCH	CRUS CATCH	OTHR CATCH	MIN FISHED	BIO COUNT	LENGTH COUNT	OP
	MM/DD/YY	TIME					SUR	MID	MAX	SUR	MID	MAX	SUR	MID	MAX							
23 A.E. Verrill																						
23001	10/09/2007	1007	30 05.51	88 11.04	11	20	5.8	5.7	5.7	35.5	35.5	35.5	27.1	27.7	27.7	13.438	0.304	4.856	41	?	?	
23002	10/09/2007	1308	30.08.78	88 28.31	11	13	5.9	5.8	5.7	34.7	35.1	35.1	27.6	27.5	27.5	10.125	0.095	0.009	11			
23003	10/09/2007	1423	30 10.73	88 23.11	11	13	6.0	5.9	5.6	34.5	34.9	35.1	27.8	27.6	27.6	2.426	0.084	0.036	10			
23004	10/09/2007	1619	30 14.03	88 10.03	11	9	6.2	6.0	5.4	34.0	34.1	34.8	27.7	27.6	27.6	15.583	0.420	0.000	13			
23005	10/09/2007	1833	30 14.36	88 12.95	11	7	6.4	6.4	5.2	33.6	33.9	34.4	27.9	27.9	27.6	3.998	0.144	0.034	10			
23006	10/09/2007	1927	30 09.63	88 12.53	11	17	5.9	5.9	5.1	34.7	35.4	35.2	28.3	27.7	27.6	5.717	0.252	1.456	26			
23007	10/09/2007	2024	30 09.20	88 10.23	11	17	6.0	6.0	5.5	34.5	35.4	35.4	27.8	27.6	27.6	30.512	1.679	4.601	29			
23008	11/06/2007	1112	30 00.19	88 17.50	11		6.0			33.0			24.4			124.721	0.274	0.0	18			
23009	11/06/2007	1223	29 59.54	88 21.32	11		5.1			35.8			23.9			74.891	0.359	0.347	48			
2310	11/06/07	1502	29 50.01	88 12.45	11	34	6.1	6.1	5.9	35.7	35.7	35.7	24.4	24.4	24.1	50.778	0.084	12.406	30		k	

Data transfer summary: number of observations in each table.

Station Card	Environmental	Biological Index	General Length Freq.	Submitted by: Mark Van Hoose
80	126	240	1873	Date submitted: November 8, 2007