SEAMAP Winter 2009 Shrimp & Groundfish Survey Cruise Report

Prepared by
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R/V A.E. Verrill, Cruise 0901

Introduction

SEAMAP winter 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 winter 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 Winter Shrimp and Groundfish Survey was the A.E.Verrill. Seven stations were sampled in gulf statistical zone 11 on the January 21, 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 seven winter Shrimp and Groundfish stations in Alabama's territorial sea and the adjacent EEZ (between latitudes 01'and 29 ^{o} 57' and longitudes -88 ^{o} 12'and - 31') (Table 1). One Loggerhead sea turtle was captured at night station 23006, measured and released alive. The individual weight of the sea turtle was not obtained nor included into the catch. Significant anomalies occurred with the CTD that data from stations 23002, 23004 and 23005 were omitted. Surface data for stations 23003 and 23007 were omitted. An up cast of the CTD data was entered for stations 23001 and 23007, where a down cast was used for the other stations. A total of 116 biological and 694 length frequency records were recorded (Table 1)

Deviations

There were no significant deviations to SEAMAP protocols.

Cruise participants:

Alabama Marine Resources Division personnel collected samples.

Submitted By:

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John F. Mareska
SEAMAP *Field Party Chief*

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

STA#	DATE MM/DD/YY	TIME	LAT	LONG	STAT ZONE	MAX DEPTH	D.O SUR	D.O MID	D.O MAX	SALINITY SUR	SALINITY MID	SALINITY MAX	TEMPERATUR SUR	TEMPERATUR MID	TEMPERATUR MAX	FIN CATCH	CRUS CATCH	OTHR CATCH	MIN FISHED	BIO COUNT	LENGTH COUNT	OP
23 A.E. Verrill																						
23001	1/21/2009	1106	29 59.89	88 12.53	11	15	7.5	6.6	6.5	30.9	35.4	35.4	15.4	18.7	18.8	20.207	0.0	2.917	22	15	70	
23002	1/21/2009	1215	29 59.66	88 17.85	11	16	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0	14	0	0	
23003	1/21/2009	1348	30 02.57	88 27.11	11	13	-	7.2	6.9	-	34.3	35.1	-	16.5	17.2	0.565	0.0	0.080	10	5	12	
23004	1/21/2009	1512	30 04.87	88 31.22	11	10	-	-	-	-	-	-	-	-	-	13.667	0.054	0.131	33	14	83	
23005	1/21/2009	1738	30 01.09	88 27.53	11	14	-	-	-	-	-	-	-	-	-	48.864	0.208	0.833	13	25	88	
23006	1/21/2009	2013	29 59.63	88 20.12	11	17	6.8	6.3	4.1	35.1	35.6	36.4	18.0	19.0	19.6	143.403	2.450	0.942	48	32	286	
23007	1/21/2009	2115	30 00.66	88 15.46	11	15	-	6.1	5.1	-	35.7	36.2	-	19.2	20.1	19.832	0.315	0.157	10	25	155	

Data transfer summary: number of observations in each table.

Station Card	Environmental	Biological Index	General Length Freq.
80	39	116	694

Submitted by: John F Mareska

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