

SEAMAP Winter 2009 Groundfish and Shrimp Survey Cruise Report

Prepared by
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Introduction

SEAMAP groundfish and shrimp cruises are conducted to provide fishery-independent monitoring and assessment information essential to management of Louisiana 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 trawl survey to collect information on shrimp and groundfish abundance and distribution with standard SEAMAP 42ft trawls.
2. Select stations west 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 Louisiana Groundfish Survey was the R/V Pelican on 26-29 January 2009. A 42ft trawl with 1.58 inch stretched mesh was lowered into position at the selected sites and towline was set at a 5:1 cable length water depth ratio to sample shrimp and groundfish species. Trawl towing was conducted at or near 3 knots for a minimum 10 minutes after lockdown and towed across a one-fathom stratum. Direction of tows were south to north or north to south. Each station was occupied once during daytime hours and once during nighttime hours. Trawl catch specimens were identified, counted, measured for length and weighed.

Plankton sampling was conducted at fixed-coordinate stations, using 60cm, 0.333mm-mesh bongo and 1m x 2m, 0.947mm-mesh neuston nets. Samples were transported back to the laboratory for measurements of total plankton biomass, measured as displaced volume. 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 and plankton sample. Temperature, dissolved oxygen, salinity and conductivity values were measured with a CTD.

Results

Louisiana collected 24 groundfish stations in Louisiana's territorial sea and the adjacent FEZ (between latitudes 28° 29' and 29° 8' and longitudes -89° 29' and -91° 30') (Table 1). A total of 448 biological and 5508 length frequency records were recorded (Table 1).

Deviations

There were no significant deviations.

Cruise participants:

Louisiana Department of Wildlife and Fisheries, Marine Fisheries Division personnel collected samples. Sample summary and data entry completed by Marsha Strong.

Submitted By:

Kym Walsh
SEAMAP Chief Scientist

Table 1. LDWF SEAMAP 2009 Winter groundfish cruise report summary.

STA #	DATE	TIME	LAT	LONG	STAT ZONE	MAX DEPTH	SALINITY			TEMPERATURE			DO			FIN CATCH	CRUS CATCH	OTHR CATCH	MIN FISH		
	MM/DD/YYYY						SUR	MID	MAX	SUR	MID	MAX	SUR	MID	MAX						
35004	1/26/2009	16:36	28	51.72	91	19.39	15.0	12	31.2	31.2	32.4	16.67	16.66	16.91	9.1	9.0	5.8	2.0	0.0	0.0	30
35005	1/26/2009	19:00	28	51.86	91	19.51	15.0	12	31.2	31.2	32.4	16.67	16.66	16.91	9.1	9.0	5.8	15.5	0.2	0.0	30
35006	1/26/2009	21:22	28	40.84	91	24.83	15.0	20	33.5	33.9	35.2	17.44	17.73	18.85	8.0	7.1	6.1	25.0	1.0	1.0	25
35007	1/26/2009	23:26	28	37.28	91	25.24	15.0	27	34.5	34.9	35.9	18.30	18.41	19.53	7.5	7.3	6.6	36.8	1.2	1.2	30
35008	1/27/2009	08:16	28	41.14	91	24.88	15.0	24	32.5	34.1	35.7	16.94	17.49	19.42	8.4	7.7	6.2	2.8	0.1	7.2	30
35009	1/27/2009	09:44	28	37.50	91	25.23	15.0	30	34.8	35.0	33.8	18.72	18.88	19.77	7.4	7.3	7.4	7.7	0.0	0.0	30
35011	1/27/2009	15:30	28	31.79	90	47.31	14.0	28	32.7	33.3	35.7	17.91	18.09	19.89	8.6	7.9	5.9	9.5	0.4	7.6	16
35012	1/27/2009	16:18	28	34.85	90	46.45	14.0	21	35.6	33.0	35.2	18.18	17.96	19.50	8.9	8.2	5.4	8.6	0.0	5.4	16
35013	1/27/2009	18:53	28	31.91	90	47.34	14.0	29	32.8	34.0	35.8	18.28	18.54	20.03	8.7	7.6	5.8	11.0	0.6	3.0	13
35014	1/27/2009	19:46	28	35.01	90	46.40	14.0	19	32.4	33.1	35.2	18.27	17.94	19.48	8.9	8.1	5.4	14.3	.2	1.7	13
35015	1/28/2009	00:45	28	59.67	90	08.70	14.0	15	25.8	32.2	35.5	16.72	17.67	21.17	10.9	7.1	4.1	6.4	2.1	5.6	30
35016	1/28/2009	03:46	29	03.09	89	45.28	13.0	32	26.1	35.6	36.2	16.53	20.96	20.91	10.6	5.8	5.6	2.5	1.5	5.0	12
35017	1/28/2009	05:01	29	08.17	89	44.19	13.0	18	24.2	33.8	35.8	16.82	16.14	21.37	12..2	4.5	3.2	5.5	1.8	3.5	14
35018	1/28/2009	08:19	28	59.49	90	09.15	14.0	16	26.4	32.5	35.4	16.80	18.01	21.06	10.5	6.8	4.2	5.3	0.6	4.2	30
35019	1/28/2009	11:30	29	03.10	89	45.43	13.0	33	26.8	35.7	36.2	16.48	21.08	20.77	10.7	5.9	5.7	48.1	0.8	0.9	11
35020	1/28/2009	12:33	29	07.61	89	44.82	13.0	19	26.4	32.7	35.8	16.81	18.20	21.42	11.1	6.2	3.1	26.2	2.7	2.8	13
35021	1/28/2009	14:21	29	08.71	89	33.13	13.0	8	10.8	31.9	34.3	13.55	17.55	19.46	10.4	6.9	2.9	27.4	2.4	2.6	27
35022	1/28/2009	16:16	28	59.91	89	33.38	13.0	18	18.0	35.8	36.3	15.29	21.21	20.90	11.0	4.8	4.5	19.1	2.8	3.9	10
35023	1/28/2009	18:49	29	09.55	89	32.66	13.0	8	21.0	32.1	34.3	15.93	17.54	19.53	10.5	6.6	3.2	6.9	5.4	17.1	23
35024	1/28/2009	20:41	29	00.55	89	31.88	13.0	14	24.3	33.2	36.2	16.09	18.87	21.13	10.1	6.0	4.0	12.4	2.9	9.6	17
35025	1/28/2009	21:33	29	00.55	89	31.88	13.0	20	24.3	34.8	36.2	16.00	20.22	20.94	9.8	5.5	4.5	6.4	1.6	3.6	10
35026	1/28/2009	22:19	28	59.06	89	32.87	13.0	11	22.6	35.5	36.2	15.81	20.93	20.77	10.1	5.2	5.1	7.2	1.1	2.8	10
35027	1/29/2009	08:12	29	00.41	89	31.84	13.0	7	26.0	35.3	36.23	15.45	20.71	21.08	8.1	4.8	4.1	14.7	0.9	4.3	12
35028	1/29/2009	08:55	28	58.96	89	33.05	13.0	23	24.6	36.0	36.24	15.06	21.38	20.74	8.54	4.58	4.9	20.0	2.4	3.0	30

Data transfer summary: number of observations in each table.

Station Card	Environmental	Biological Index	General Length Freq.
28	28	448	5508

Submitted by: Kym Walsh
Date submitted: 26 May 2009