

SEAMAP Summer 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 16-19 June 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 29 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 392 biological and 5138 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 Spring groundfish cruise report summary.

STA #	DATE	TIME	LAT	LONG	STAT ZONE	MAX DEPTH	DO			SALINITY			TEMPERATURE			FIN CATCH	CRUS CATCH	OTHR CATCH	MIN FISH		
	MM/DD/YYYY						SUR	MID	MAX	SUR	MID	MAX	SUR	MID	MAX						
35004	6/17/1909	0048	28	32.42	91	20.19	15.0	25	8.4	3.4	2.9	13.210	35.950	36.310	29.95	24.76	23.50	2.2	2.0	0.0	30
35005	6/17/1909	0339	28	32.54	91	1.49	15.0	28	6.8	5.8	3.9	24.870	34.310	36.240	29.46	25.49	23.33	1.3	1.2	0.0	30
35006	6/17/1909	0602	28	37.64	91	11.74	15.0	22	7.0	4.5	3.7	25.290	30.170	36.210	28.85	26.86	24.00	41.7	7.2	2.1	30
35007	6/17/1909	0713	28	37.63	91	11.81	15.0	22	7.0	4.5	3.7	25.290	30.170	36.210	28.85	26.86	24.00	68.4	4.3	1.3	30
35008	6/17/1909	0917	28	32.26	91	20.14	15.0	36	6.3	4.8	3.7	30.790	35.380	36.250	27.21	24.92	22.12	20.8	12.3	3.9	30
35009	6/17/1909	1143	28	32.51	91	3.44	15.0	29	6.9	4.2	3.6	25.050	33.840	36.230	29.44	25.24	23.00	30.4	10.2	2.4	28
35012	6/17/1909	2110	28	57.94	90	5.59	14.0	21	6.8	2.4	3.0	17.930	34.860	36.240	29.14	24.61	24.39	11.7	8.1	0.1	30
35013	6/17/1909	2321	28	59.96	89	54.84	13.0	28	7.5	6.3	2.2	22.330	36.010	36.350	29.89	25.14	24.37	12.1	10.9	0.0	24
35014	6/18/1909	0059	29	5.92	89	53.11	13.0	20	7.7	4.4	2.8	17.410	34.930	36.220	30.70	25.08	24.43	15.8	11.1	0.1	29
35015	6/18/1909	0412	28	58.89	89	29.97	13.0	37	7.2	6.4	4.1	26.110	35.720	36.260	28.60	25.35	21.89	16.8	8.6	0.1	10
35016	6/18/1909	0717	28	58.77	89	29.99	13.0	25	6.8	4.0	3.7	15.330	35.620	36.260	29.30	25.14	24.32	40.3	10.2	0.5	10
35018	6/18/1909	1125	28	0.04	89	54.70	13.0	29	7.6	5.9	1.8	18.890	35.980	36.340	29.57	25.03	24.21	11.1	6.1	0.5	30
35020	6/18/1909	1419	28	57.81	90	5.57	14.0	21	7.1	1.6	3.0	19.510	35.260	36.240	29.39	24.58	24.34	27.6	7.0	1.4	30
35021	6/18/1909	1646	29	5.62	89	53.28	13.0	20	7.8	4.5	4.1	18.270	35.290	36.290	30.76	25.16	24.71	46.5	8.3	0.1	30
35022	6/18/1909	1816	29	8.27	89	49.19	13.0	17	8.8	4.9	0.8	13.680	35.210	36.100	29.89	25.46	23.97	18.0	13.9	1.1	30
35023	6/18/1909	2115	29	9.03	89	49.07	13.0	16	9.4	5.1	0.7	11.180	35.190	36.100	30.11	25.53	23.96	21.1	19.4	0.0	30
35024	6/18/1909	2235	29	11.81	89	51.28	13.0	12	8.4	0.1	0.1	15.040	32.840	35.850	31.00	24.89	24.00	27.3	0.8	0.0	30
35025	6/18/1909	2356	29	13.29	89	45.90	13.0	11	10.4	0.1	0.1	10.310	34.220	35.670	30.47	24.52	24.17	0.0	0.5	0.0	30
35026	6/19/1909	0118	29	13.02	89	40.31	13.0	9	11.5	0.2	0.1	3.510	31.060	35.200	31.02	25.45	24.46	-9.0	-9.0	-9.0	30
35027	6/19/1909	0712	29	12.64	89	40.27	13.0	9	8.1	1.0	0.1	4.860	29.540	35.290	30.32	26.05	24.48	0.1	0.0	0.0	30
35028	6/19/1909	0841	29	13.05	89	45.97	13.0	12	8.8	0.7	0.1	11.060	33.740	35.670	30.17	24.83	24.17	0.0	0.0	0.0	30
35029	6/19/1909	1012	29	11.53	89	51.13	13.0	13	7.2	0.1	0.1	17.210	33.900	35.880	30.21	24.66	23.98	0.0	0.0	0.0	30

Data transfer summary: number of observations in each table.

Station Card	Environmental	Biological Index	General Length Freq.
29	29	392	5138

Submitted by: Kym Walsh
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