

SEAMAP Winter 2010 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 25-28 February 2010. 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 (or 4:1) cable length water depth ratio to sample shrimp and groundfish species. Trawl tows were conducted at or near 3 knots for 30 minutes after lockdown. Trawl catch specimens were identified, counted, measured for length and weighed.

Plankton sampling was conducted at fixed-coordinate stations, using 60cm, 0.335mm-mesh bongo and 1m x 2m, 0.950mm-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 33 groundfish stations in Louisiana's territorial sea and the adjacent EEZ (between latitudes 28° 35' and 29° 15' and longitudes -89° 30' and -91° 29') (Table 1). A total of 796 biological and 7369 length frequency records were recorded (Table 1).

Deviations

There were no significant deviations.

Cruise participants:

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

Submitted By:

Schuylar Dartez
SEAMAP Chief Scientist

Table 1. LDWF SEAMAP 2010 Winter groundfish cruise report summary.

STA #	DATE	TIME	LAT	LONG	STAT ZONE	MAX DEPTH (fm)	SALINITY			TEMPERATURE			DO			FIN CATCH	CRUS CATCH	OTHR CATCH	MIN FISH		
	MM/DD/YYYY						SUR	MID	MAX	SUR	MID	MAX	SUR	MID	MAX						
35002	02/25/2010	1024	28	56.79	90	30.28	14	8	24.9	25.2	30.5	13.27	13.37	15.34	9.5	9.3	4.1	10.9	0.1	0.2	30
35003	02/25/2010	1140	28	55.03	90	32.12	14	9	23.3	25.8	32.3	13.09	13.79	16.43	9.6	9.0	4.5	104.9	0.6	0.3	30
35004	02/25/2010	1351	28	52.25	90	45.55	14	8	24.0	26.4	27.4	13.41	13.31	13.19	9.9	9.2	8.9	1.6	0.7	0.4	30
35006	02/25/2010	1901	28	47.33	90	58.47	14	9	28.5	28.5	28.5	13.95	13.94	13.95	8.9	8.9	8.9	79.5	1.4	0.1	30
35007	02/25/2010	2105	28	38.49	90	54.75	14	10	27.5	27.5	32.3	14.23	14.24	16.35	9.2	9.2	5.8	34.4	0.3	1.3	30
35008	02/25/2010	2256	28	35.51	91	05.40	15	14	29.0	29.2	35.3	14.69	14.60	18.95	9.2	8.6	4.3	83.7	2.1	0.2	30
35009	02/26/2010	0019	28	36.48	91	11.93	15	14	29.3	31.3	35.2	14.66	15.51	18.86	8.8	7.8	3.7	45.2	2.4	0.3	30
35010	02/26/2010	0239	28	41.95	91	22.22	15	14	29.6	29.6	34.0	14.40	14.39	17.63	8.9	8.9	3.6	23.3	1.1	0.2	30
35011	02/26/2010	0432	28	35.37	91	28.53	15	20	30.6	32.3	35.9	14.92	16.45	19.38	5.5	4.2	3.9	75.9	3.5	0.1	30
35013	02/26/2010	1116	28	47.39	91	18.35	15	9	28.6	28.6	31.7	13.93	13.94	15.86	8.8	8.8	4.8	76.4	0.1	0.4	30
35014	02/26/2010	1319	28	38.41	91	13.12	15	14	29.8	29.9	34.6	15.15	15.00	18.24	9.3	9.0	3.5	42.7	1.7	0.7	30
35017	02/26/2010	2154	28	36.63	90	22.21	14	19	32.6	33.8	36.2	16.80	17.73	18.70	8.1	6.4	3.6	3.7	0.2	0.0	30
35018	02/26/2010	2309	28	38.15	90	28.05	14	13	30.5	33.3	35.7	15.99	16.93	18.76	6.1	7.9	5.0	109.8	0.1	0.2	30
35019	02/27/2010	0205	28	45.41	90	21.55	14	12	25.3	29.6	35.3	14.24	15.73	18.87	9.4	7.8	5.4	44.7	0.2	0.1	30
35020	02/27/2010	0535	28	55.66	90	03.06	14	15	21.9	34.1	35.3	12.55	18.05	18.95	9.5	6.8	5.7	29.2	1.7	0.1	30
35022	02/27/2010	0922	28	58.99	89	57.05	13	17	23.1	32.6	35.4	13.06	17.10	19.13	9.8	6.9	4.8	72.8	1.8	0.4	30
35023	02/27/2010	1056	29	02.82	89	52.34	13	16	22.7	34.4	35.6	12.98	18.39	19.28	9.6	5.5	5.1	64.7	0.7	0.6	30
35024	02/27/2010	1252	29	02.29	89	44.08	13	21	23.3	35.6	36.3	13.18	19.15	19.41	9.5	8.5	4.2	52.8	2.9	1.3	30
35025	02/27/2010	1438	28	59.89	89	35.77	13	20	20.3	36.0	36.3	12.90	19.88	19.25	9.9	4.6	5.3	24.8	0.6	0.6	30
35026	02/27/2010	1555	28	59.06	89	31.37	13	15	21.1	36.0	36.3	13.05	19.45	19.30	9.7	5.4	5.4	8.1	0.3	0.7	30
35028	02/27/2010	1827	29	06.43	89	30.63	13	6	21.2	30.4	33.9	13.19	15.98	18.17	9.3	6.6	4.3	1.7	0.4	0.0	30
35029	02/27/2010	1930	29	07.30	89	33.57	13	7	19.0	30.4	34.0	12.52	16.13	18.10	9.9	6.6	4.0	21.4	1.5	0.0	30
35030	02/27/2010	2032	29	10.14	89	35.01	13	6	19.8	27.0	32.9	12.67	14.56	17.11	9.6	8.0	5.4	6.8	1.7	0.1	30
35031	02/27/2010	2225	29	15.05	89	45.26	13	7	19.0	24.6	33.0	12.57	13.56	17.32	10.0	8.9	5.3	7.4	1.3	0.0	30
35032	02/27/2010	2334	29	10.32	89	44.50	13	10	20.3	34.1	34.9	12.53	18.11	18.74	10.0	5.7	5.2	4.9	0.5	0.1	30
35033	02/28/2010	0038	29	07.34	89	41.92	13	11	19.1	33.8	35.8	12.12	17.91	19.40	10.1	5.6	4.8	31.3	1.2	0.5	30
35034	02/28/2010	0139	29	07.66	89	44.97	13	13	23.6	33.9	36.0	12.90	17.94	19.52	9.4	6.1	4.7	22.5	1.0	0.5	30
35035	02/28/2010	0324	29	00.27	89	50.19	13	20	23.0	35.7	36.1	12.93	19.33	19.42	9.5	6.1	5.2	36.8	1.9	0.8	30
35036	02/28/2010	0446	29	02.78	89	55.32	13	14	22.3	35.1	35.8	12.70	18.92	19.40	9.7	5.4	5.1	12.5	1.0	0.2	30
35037	02/28/2010	0632	28	55.78	90	00.77	14	16	22.4	35.1	35.7	12.95	18.97	19.16	9.3	5.9	5.4	8.7	1.3	0.2	30
35038	02/28/2010	0821	29	02.50	90	04.08	14	10	21.8	32.2	34.7	12.45	17.07	18.65	9.7	6.9	5.4	10.4	0.2	0.2	30
35039	02/28/2010	1029	28	56.58	90	17.63	14	10	22.0	29.6	34.6	12.60	15.15	18.54	9.7	7.6	5.1	44.3	0.6	0.1	30
35040	02/28/2010	1131	28	58.23	90	21.52	14	9	22.1	24.3	32.8	13.00	13.46	17.25	9.8	8.9	4.2	10.8	0.9	0.8	30

Data transfer summary: number of observations in each table.

Station Card	Environmental	Biological Index	General Length Freq.
40	40	796	7369

Submitted by:Schuyler Darte
Date submitted: 14 July 2010

SEAMAP Plankton Sample Check-In

Cruise 101

Month/Year February 2010

List stations in ascending order by Pascagoula Station No. (refer to Plankton Station data sheets or Cruise Summary page), then fill in corresponding LDWF Stn. No.

Pascagoula Stn. No.	LDWF Stn. No.	Target Lat.	Target Long.	Net	Coll. Date	No. Jars, Remarks	SEAMAP Plankton Sample No.
35001	P103	29 00.00	90 30.00	Bongo-Lt.	2/25/10	1	38962
				Bongo-Rt.	2/25/10	1	38963
				Neuston	2/25/10	1	38964
35005	P102	29 00.00	91 00.00	Bongo-Lt.	2/25/10	1	38965
				Bongo-Rt.	2/25/10	1	38966
				Neuston	2/25/10	1	38967
35012	P101	29 00.00	91 30.00	Bongo-Lt.	2/26/10	1	38968
				Bongo-Rt.	2/26/10	1	38969
				Neuston	2/26/10	1	38970
35015	P106	28 30.00	91 00.00	Bongo-Lt.	2/26/10	1	38971
				Bongo-Rt.	2/26/10	1	38972
				Neuston	2/26/10	2	38973
35016	P107	28 30.00	90 30.00	Bongo-Lt.	2/26/10	1	38974
				Bongo-Rt.	2/26/10	1	38975
				Neuston	2/26/10	3	38976
35021	P104	29 00.00	90 00.00	Bongo-Lt.	2/27/10	1	38977
				Bongo-Rt.	2/27/10	1	38978
				Neuston	2/27/10	1	38979
35027	P105	29 00.00	89 30.00	Bongo-Lt.	2/27/10	1	38980
				Bongo-Rt.	2/27/10	1	38981
				Neuston	2/27/10	1	38982