# SEAMAP Summer 2008 Groundfish and Shrimp Survey Cruise Report

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## Introduction

SEAMAP Summer 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 Summer 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 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 Summer Groundfish Survey was the R/V Pelican on June 23-26, 2008. 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 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.

Sampling of the plankton was conducted at fixed-coordinate stations, using 60cm, 0.333mm-mesh bongo and 1m x 2m, 0.947mm-mesh neuston samplers. 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 Summer 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 429 biological and 3586 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:

*Jaimie David* SEAMAP Chief Scientist

STA #	DATE MM/DD/YYYY	TIME	LAT		LONG		STAT	MAX	DO			SALINITY			TEMPERATURE			FIN	CRUS	OTHR	MIN
				LAT	LONG		ZONE	DEPTH	SUR	MID	MAX	SUR	MID	MAX	SUR	MID	MAX	CATCH	САТСН	САТСН	FISH
85004	6/23/2008	1711	28	40.76	91	26.70	15.0	25	7.4	5.3	2.3	23.640	35.130	36.270	30.34	27.63	24.20	13.4	5.9	0.4	30
35005	6/23/2008	1856	28	41.60	91	17.01	15.0	19	7.3	5.9	1.4	24.850	34.810	36.010	30.72	28.40	25.71	3.6	1.7	0.7	30
35006	6/23/2008	2133	28	40.99	91	26.88	15.0	25	7.1	5.7	2.5	24.660	35.190	36.280	30.15	27.90	24.15	22.1	18.3	0.2	30
85007	6/23/2008	2323	28	41.43	91	17.47	15.0	19	6.9	5.7	1.2	26.080	34.760	36.040	30.27	28.33	25.45	2.4	5.0	0.1	22
85008	6/24/2008	0202	28	42.72	91	2.52	15.0	12	5.9	5.4	3.2	28.210	30.940	35.210	30.16	29.74	27.79	1.5	0.6	0.2	29
5009	6/24/2008	0430	28	33.99	91	11.16	15.0	29	6.3	5.7	3.0	28.650	35.430	36.380	29.89	28.55	22.82	6.9	19.7	0.1	18
85010	6/24/2008	0506	28	32.16	91	11.98	15.0	32	6.2	6.0	3.1	28.700	34.990	36.420	29.61	28.33	22.37	117.9	9.6	0.0	30
85011	6/24/2008	0737	28	42.49	91	2.57	15.0	12	5.9	5.6	2.6	27.570	34.640	35.310	29.78	29.18	27.58	0.6	0.5	0.0	30
5012	6/24/2008	0951	28	34.27	91	11.20	15.0	29	6.4	6.0	2.9	27.570	34.870	36.370	29.97	28.46	22.93	1.7	0.9	0.1	23
85013	6/24/2008	1052	28	32.33	91	11.94	15.0	32	6.6	5.1	3.1	26.220	35.210	36.410	29.95	28.62	22.50	40.8	0.9	0.8	18
85016	6/24/2008	2125	28	54.00	90	10.17	14.0	22	5.8	4.1	0.0	27.600	35.060	35.910	29.82	27.43	24.32	0.0	0.4	0.1	30
85017	6/25/2008	0013	28	59.20	89	51.60	13.0	34	6.6	3.8	2.2	19.940	35.680	36.390	29.95	26.14	22.02	2.5	2.4	0.0	17
85018	6/25/2008	0115	29	0.44	89	52.71	13.0	30	6.0	3.8	1.2	22.160	35.560	36.340	29.93	26.44	22.34	36.2	3.3	0.0	17
85019	6/25/2008	0222	29	4.09	89	50.18	13.0	26	6.2	3.9	0.2	19.990	35.000	36.190	30.32	27.49	22.84	7.2	0.4	0.0	15
35020	6/25/2008	0327	29	7.21	89	47.32	13.0	21	6.2	3.9	1.3	20.440	34.770	36.060	29.59	27.82	24.25	32.2	7.8	0.0	15
85021	6/25/2008	0447	29	5.69	89	39.16	13.0	14	4.6	5.0	4.3	14.510	34.500	35.370	29.35	28.76	27.00	1.0	0.7	0.0	17
35023	6/25/2008	0849	29	5.51	89	39.18	13.0	15	5.8	5.0	3.1	14.820	34.420	35.500	29.82	28.84	26.27	0.5	0.0	0.0	11
35024	6/25/2008	1012	29	7.17	89	47.60	13.0	20	6.6	4.2	2.4	19.310	34.990	35.940	29.76	27.56	24.84	8.2	0.1	0.0	14
5025	6/25/2008	1109	29	3.64	89	50.25	13.0	27	5.6	2.6	0.2	21.260	35.100	36.200	30.03	26.87	22.93	0.6	0.0	0.0	14
5026	6/25/2008	1209	29	0.22	89	52.80	13.0	30	5.8	1.8	0.6	24.740	35.380	36.320	30.65	26.24	22.44	25.8	0.2	0.0	14
85027	6/25/2008	1256	28	59.04	89	51.72	13.0	34	5.8	2.6	1.5	24.260	35.750	36.360	30.05	25.73	22.22	7.0	1.4	0.8	24
85028	6/25/2008	1526	28	53.97	90	10.03	14.0	23	6.1	4.0	0.1	26.210	35.150	35.920	30.07	27.47	24.28	0.9	0.4	0.1	21
5029	6/25/2008	1808	29	8.53	89	56.50	13.0	13	7.1	2.1	0.2	22.680	31.210	35.280	31.19	28.71	27.09	1.7	0.1	0.0	30
5030	6/25/2008	2121	29	8.69	89	56.80	13.0	13	7.0	2.3	0.1	21.260	30.890	35.280	30.85	28.82	27.12	4.5	0.2	0.0	30

Table 1. LDWF SEAMAP 2008 Summer groundfish cruise report summary.