

# **SEAMAP Summer 2007 Groundfish Survey Cruise Report**

Prepared by

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## **Introduction**

SEAMAP summer groundfish 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 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 a 40-ft trawl.
2. Select 80 stations for random sampling. All species are identified, weighed and counted, and 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, cloud cover) 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 26 – 29, 2007. 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 EEZ (between latitudes 28° 40' and 29° 12' and longitudes -89° 44' and -91° 29') (Table 1). A total of 555 biological and 6923 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:

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*Cara Hoar*  
SEAMAP Field Party Chief

**Table 1. LDWF SEAMAP 2007 Summer 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	6/26/2007	1851	28	44.50	91	27.30	15.0	21	6.0	6.2	5.7	34.250	36.130	36.280	28.81	28.25	27.42	44.3	15.6	0.1	30
35005	6/26/2007	2122	28	44.62	91	28.51	15.0	21	6.0	6.2	5.7	34.250	36.130	36.280	28.81	28.25	27.42	43.7	43.9	0.4	30
35006	6/26/2007	2326	28	41.37	91	26.39	15.0	23	5.7	6.1	5.5	35.310	36.170	36.260	28.18	27.93	27.25	27.0	22.8	0.2	30
35007	6/27/2007	0156	28	45.89	91	15.33	15.0	12	6.4	6.2	4.5	32.450	35.510	35.910	28.90	28.39	26.83	10.8	4.6	0.0	30
35008	6/27/2007	0411	28	40.85	91	6.64	15.0	13	6.1	6.1	6.0	36.130	36.140	36.140	28.15	28.13	28.10	51.3	16.7	1.0	30
35009	6/27/2007	0715	28	41.38	91	26.27	15.0	25	5.8	6.0	5.5	35.650	36.060	36.300	28.05	28.17	27.55	31.5	5.3	0.2	30
35010	6/27/2007	0928	28	45.66	91	15.42	15.0	13	6.4	6.1	5.3	33.700	35.700	35.800	28.53	28.44	27.39	43.8	9.5	3.2	30
35011	6/27/2007	1126	28	40.48	91	6.74	15.0	14	6.0	6.0	6.1	35.820	36.120	36.160	28.11	28.15	28.11	23.1	5.5	1.5	26
35014	6/27/2007	2105	28	54.45	90	18.85	14.0	17	6.1	6.0	1.0	33.500	34.810	35.730	29.15	28.88	25.91	44.9	2.1	0.0	30
35015	6/27/2007	2250	28	55.47	90	13.03	14.0	19	6.1	6.0	1.7	34.140	35.180	35.970	29.03	28.63	25.86	67.8	4.2	0.1	30
35016	6/28/2007	0145	28	57.57	89	53.62	13.0	33	6.7	1.3	0.7	27.680	35.470	36.580	29.38	26.27	23.85	19.1	13.8	0.0	24
35017	6/28/2007	0314	29	0.98	89	52.31	13.0	29	6.4	4.0	0.2	28.850	36.020	36.520	29.10	26.27	24.26	1.6	6.4	0.0	30
35018	6/28/2007	0717	28	55.54	90	18.78	14.0	18	6.0	5.2	1.0	33.950	35.580	35.720	28.64	28.01	25.93	0.1	0.0	0.0	30
35019	6/28/2007	0903	28	55.46	90	13.05	14.0	20	6.0	6.0	1.3	34.630	35.260	36.020	28.54	28.59	25.83	1.1	0.4	0.1	30
35020	6/28/2007	1156	28	57.29	89	53.68	13.0	33	6.7	2.2	0.7	27.690	34.910	36.590	29.24	26.99	23.85	3.7	4.5	0.0	25
35021	6/28/2007	1329	29	0.92	89	52.32	13.0	29	6.9	5.4	0.2	27.940	33.500	36.530	29.77	28.88	24.21	0.2	0.4	0.0	30
35023	6/28/2007	1822	29	5.14	89	44.97	13.0	25	6.5	3.5	2.1	28.000	35.860	36.390	30.07	26.48	24.64	2.8	1.1	0.0	22
35024	6/28/2007	1919	29	6.34	89	47.25	13.0	21	6.6	4.1	1.2	27.420	35.130	36.340	29.83	26.97	24.94	1.0	0.6	0.3	18
35025	6/28/2007	2027	29	6.41	89	47.13	13.0	21	6.6	4.1	1.2	27.420	35.130	36.340	29.83	26.97	24.94	5.7	3.5	0.0	30
35026	6/28/2007	2210	29	4.95	89	45.06	13.0	28	6.4	3.4	3.2	29.180	35.990	36.430	29.63	25.82	24.43	27.3	6.7	0.0	17
35027	6/29/2007	0001	29	10.34	89	48.09	13.0	13	7.2	5.0	0.0	25.710	32.680	35.600	29.85	28.92	25.57	0.5	0.6	0.0	30
35028	6/29/2007	0149	29	11.41	89	55.72	13.0	9	9.5	4.8	2.9	18.490	28.930	31.000	30.66	29.36	28.64	0.0	0.1	0.0	30
35029	6/29/2007	0649	29	11.32	89	55.69	13.0	10	8.4	4.8	2.2	21.410	29.500	32.260	29.96	29.28	28.13	1.2	0.1	0.2	30
35030	6/29/2007	0829	29	10.47	89	47.09	13.0	14	6.6	4.7	0.1	24.180	33.320	35.660	29.46	28.36	25.52	0.1	0.0	0.0	28

Data transfer summary: number of observations in each table.

Station Card  
31

Environmental  
31

Biological Index  
555

General Length Freq.  
6923

**Submitted by:** Marsha Strong  
**Date submitted:** Thursday, July 26, 2007

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