



OFFICE OF FISHERIES

2013 SEAMAP Summer Groundfish and Shrimp Survey Cruise Report

Prepared by

Suzy Delaune

Louisiana Department of Wildlife and Fisheries

195 Ludwig Annex

Grand Isle, LA 70358

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 Blazing Seven on 08-12 July 2013. 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 towing was 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. In the event the DO readings fell below 2.0 Mg/l, the DO was verified using the YSI.

Results

Louisiana collected 29 groundfish stations in Louisiana's territorial sea and the adjacent EEZ (between latitudes 28° 45.54 and 29° 43.99 and longitudes -89° 57.44 and -93° 39.74) (Table 1). Totals of biological and length frequency will be available when data entry is complete. Louisiana also collected plankton stations between latitudes 28° 30.00 and 29° 00.00 and longitudes -89° 30.00 and -91° 30.00.

Deviations

The main CTD's bulkhead connector shorted out the wires on the inside of the unit therefore a full water column profile could not be taken from sites 88022-88036. The YSI on board also malfunctioned and while we attempted to repair it, no water quality data at all was taken from sites 88022-88025. After troubleshooting, we determined that the YSI oxygen sensor wires in the cable was out therefore there are no surface oxygen readings from sites 88022-88036. There is however, surface salinity and temperature readings taken with the YSI for sites 88026-88036. Water for chlorophyll analysis was taken from 3 depths (top, middle, and bottom) for sites 88001-88021 but only at the surface for sites 88022-88036. For all sites except 88022-88025 pH was taken at the surface using the YSI.

Cruise participants:

Louisiana Department of Wildlife and Fisheries, Fisheries Research Lab and Baton Rouge Headquarters personnel collected samples. Sample summary and data entry completed by Suzy Delaune.

Submitted By:

Suzy Delaune
SEAMAP Chief Scientist

Table 1. LDWF SEAMAP 2013 Summer groundfish/shrimp cruise report summary.

STA #	PAS #	DATE	TIME (GMT)	LAT	LONG	STAT ZONE	MAX DEPTH (m)	SALINITY			TEMPERATURE			DO			FIN CATCH	CRUS CATCH	OTHR CATCH		
		MM/DD/YYYY						SUR	MID	MAX	SUR	MID	MAX	SUR	MID	MAX					
W1302	88001	07/08/2013	1043	29	11.08	89	57.41	13	12	17.9	27.8	32.4	27.86	27.64	27.06	5.8	5.1	0.2	1.458	0.036	0.068
W1405	88004	07/08/2013	2157	28	57.89	90	3.87	14	23	27.5	30.3	36.1	28.00	28.12	24.90	7.7	5.1	2.1	20.847	0.205	2.020
W1406	88005	07/08/2013	2411	28	51.78	90	14.56	14	23	27.6	28.3	36.1	28.00	27.93	25.02	7.8	5.9	2.3	2.610	0.179	5.480
W1404	88006	07/09/2013	0157	28	53.75	90	19.67	14	20	27.6	27.6	35.8	28.22	28.21	25.83	6.7	6.6	1.7	34.318	0.767	0.300
W1407	88007	07/09/2013	0427	28	46.06	90	22.60	14	18	28.3	28.6	35.8	28.32	28.20	24.32	6.8	5.3	0.1	0.030	0.250	0.051
W1506	88010	07/09/2013	1751	28	57.72	91	26.53	15	12	27.4	28.3	28.6	29.24	28.53	28.50	6.5	6.4	6.1	19.906	0.074	0.129
W1505	88012	07/09/2013	2205	29	6.46	91	46.26	15	7	25.2	25.2	25.6	29.42	29.11	28.10	7.9	7.4	5.4	6.597	1.113	8.757
W1606	88013	07/10/2013	0059	29	8.67	92	6.86	16	13	26.7	26.8	27.2	28.59	28.52	28.30	6.3	6.2	5.4	12.620	0.407	0.961
W1604	88014	07/10/2013	1629	29	12.67	92	34.58	16	19	28.6	29.0	35.1	29.36	29.21	24.43	6.4	6.2	0.2	13.590	0.423	1.554
W1602	88015	07/10/2013	0709	29	18.29	92	49.82	16	18	29.8	29.8	34.2	29.41	29.42	25.17	6.1	6.0	0.3	0.036	1.050	0.168
W1603	88016	07/10/2013	0832	29	14.01	92	52.04	16	20	30.3	30.3	30.3	29.50	29.50	29.50	6.3	6.3	6.3	0.007	1.295	0.136
W1710	88017	07/10/2013	1303	29	16.26	93	24.44	17	17	31.2	31.2	32.9	29.54	29.52	28.18	6.3	6.2	2.4	7.589	0.090	5.196
W1709	88018	07/10/2013	1415	29	17.88	93	25.85	17	18	31.4	31.4	31.8	29.55	29.52	29.14	6.0	6.0	3.6	8.328	0.083	1.464
W1708	88019	07/10/2013	1614	29	18.37	93	35.17	17	15	31.6	31.6	31.6	29.67	29.47	29.41	6.1	6.1	6.0	23.461	1.974	0.310
W1706	88020	07/10/2013	1906	29	32.86	93	26.44	17	13	28.9	30.5	30.9	29.89	29.51	29.77	6.7	6.1	5.7	14.717	0.845	1.076
W1705	88021	07/10/2013	2112	29	40.00	93	35.57	17	11	18.8	27.0	28.7	30.05	29.45	29.43	8.2	4.6	3.5	17.470	0.862	0.173
W1703	88022	07/10/2013	2239	29	41.29	93	36.77	17	9										10.945	0.346	0.495
W1701	88023	07/10/2013	2357	29	43.82	93	39.69	17	6										16.020	0.826	0.101
W1702	88024	07/11/2013	0255	29	42.72	93	25.69	17	6										20.960	3.530	0.037
W1704	88025	07/11/2013	0443	29	41.14	93	13.48	17	9										14.652	2.828	3.165
W1707	88026	07/11/2013	0718	29	28.98	93	3.89	17	14	30.1			29.52						5.879	2.080	15.518
W1601	88027	07/11/2013	1001	29	21.13	92	49.83	16	18	29.4			29.41						1.838	0.780	5.194
W1501	88028	07/11/2013	1542	29	22.29	91	58.70	15	7	12.5			30.03						9.612	0.641	1.178
W1502	88029	07/11/2013	1645	29	19.56	91	55.30	15	5	12.6			29.74						3.726	1.244	1.255
W1504	88030	07/11/2013	1926	29	15.57	91	37.68	15	5	8.90			30.16						2.785	0.966	0.384
W1503	88031	07/11/2013	2033	29	16.55	91	32.98	15	3	3.67			29.95						8.332	2.483	0.770
W1403	88033	07/12/2013	0430	28	54.40	90	41.28	14	9	24.7			29.20						14.578	0.140	0.829
W1402	88034	07/12/2013	0546	28	55.18	90	34.31	14	11	24.9			28.78						0.428	0.038	0.531
W1401	88035	07/12/2013	0707	28	59.11	90	29.75	14	13	25.3			28.57						0.876	0.041	0.096

Data transfer summary: number of observations in each table (will be filled in when data entry is complete).

Station Card Environmental Biological Index General Length Freq.

Submitted by: Suzy Delaune
Date submitted: 16 July 2013

LDWF SEAMAP Plankton Sample Check-In

Cruise 1302

Month/Year July, 2013

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.	SEAMAP Stn. No.	Target Lat.	Target Long.	Net	Coll. Date	Preservation Initial - Final	Time (GMT)	No. Jars Glass	SEAMAP Plankton Sample No.
88002	P105/B187	29 00.00	89 30.00	Bongo-Lt.	7/8	F - E	1527	1 pt.	45990
				Bongo-Rt.	7/8	E - E	1527	1 pt.	45991
				Neuston	7/8	E - E	1531	1 pt.	45992
88003	P104/B188	29 00.00	90 00.00	Bongo-Lt.	7/8	F - E	1908	1 pt.	45993
				Bongo-Rt.	7/8	E - E	1908	1 pt.	45994
				Neuston	7/8	E - E	1939	1 pt.	45995
88008	P107/B191	28 30.00	90 30.00	Bongo-Lt.	7/9	F - E	0801	1 pt.	45996
				Bongo-Rt.	7/9	E - E	0801	1 pt.	45997
				Neuston	7/9	E - E	0808	1 qt.	45998
88009	P106/B194	28 30.00	91 00.00	Bongo-Lt.	7/9	F - E	1158	1 pt.	45999
				Bongo-Rt.	7/9	E - E	1158	1 pt.	46000
				Neuston	7/9	E - E	1207	1 qt.	46001
88011	P101/B197	29 00.00	91 30.00	Bongo-Lt.	7/9	F - E	1933	1 pt.	46002
				Bongo-Rt.	7/9	E - E	1933	1 pt.	46003
				Neuston	7/9	E - E	1937	3 qt.	46004
88032	P102/B193	29 00.00	91 00.00	Bongo-Lt.	7/12	F - E	0200	1 pt.	46005
				Bongo-Rt.	7/12	E - E	0200	1 pt.	46006
				Neuston	7/12	E - E	0204	3 qt.	46007
88036	P103/B192	29 00.00	90 30.00	Bongo-Lt.	7/12	F - E	0753	1 pt.	46008
				Bongo-Rt.	7/12	E - E	0753	1 pt.	46009
				Neuston	7/12	E - E	0756	1 qt.	46010

