

SEAMAP Fall 2012 Groundfish and Shrimp Survey Cruise Report
Cruise Dates: 10/30/12-11/02/12

Prepared by Suzy Delaune on 11/05/12
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Introduction

SEAMAP Shrimp/Groundfish surveys are conducted to provide fishery-independent monitoring and assessment information and are part of a Gulf-wide coordinated and cost-efficient program. This data is essential to the management of the fisheries resources in Louisiana's Gulf of Mexico.

Objectives

1. Conduct a trawl survey to collect information on shrimp and groundfish abundance and distribution with standard SEAMAP 42ft trawls.
2. Sample in conjunction with the National Marine Fisheries Service (NMFS) SEAMAP Fall Shrimp/Groundfish Survey and select stations from their Fall randomized sampling grid. Select stations from the grid west of the Mississippi River for LDWF sampling. Species are identified, weighed and counted, and measured according to NMFS SEAMAP Operations Manual guidelines.
3. Collect a water column profile (salinity, temperature, dissolved oxygen, conductivity) at each SEAMAP station using a Conductivity/Temperature/Depth (CTD) device. Other environmental data is taken according to the NMFS SEAMAP Operations Manual guidelines.
4. Measure chlorophyll in the water column by collecting water with the CTD water sampler and filtering onboard for later spectroscopic analysis in the LDWF lab.
5. Code all data according to approved NMFS SEAMAP Operations Manual guidelines, and enter data on the LDWF SEAMAP data entry system.
6. Submit data to Jeff Rester, SEAMAP coordinator and Lloyd Kirk, Data Manager at the Gulf States Marine Fisheries Commission.

Methods

SEAMAP Groundfish trawl sampling consists of pulling a 42ft trawl with 1.58 inch stretched mesh at each selected site. The towline is set at a 5:1 (or 4:1) cable length/water depth ratio to target shrimp and groundfish species. Trawl tows are conducted at or near 2.5 knots for 30 minutes after the net is fully deployed. Trawl catch specimens are identified, counted, measured for length and weighed.

Plankton sampling is conducted at each station using 60cm, 0.335mm-mesh bongo and 1m x 2m, 0.950mm-mesh neuston nets. Samples are transported back to the LDWF Fisheries Research Laboratory for preparation and transfer. Sample workup and data processing is

conducted in accordance with the NMFS SEAMAP Operations Manual guidelines. Samples are then transferred to the NMFS Pascagoula, MS lab.

Environmental data is collected in conjunction with each plankton station. Temperature, dissolved oxygen, salinity and conductivity values are measured with a CTD. In the event a DO reading falls below 2.0 mg/L, the DO is verified using a YSI.

Data is coded according to the NMFS SEAMAP Operations Manual guidelines and entered into the LDWF SEAMAP data entry system. The data is then submitted to Jeff Rester, SEAMAP coordinator and Lloyd Kirk, Data Manager at the Gulf States Marine Fisheries Commission.

Results

Louisiana conducted its SEAMAP Fall Groundfish Survey on 30 October – 02 November, 2012. Eighteen groundfish stations were sampled in Louisiana's territorial sea and the adjacent EEZ (between 28° 14.95 and 29° 11.14 and longitudes -89° 30.00 and -91° 30.00) (Table 1). The vessel used was the R/V Pelican. Louisiana also sampled seven plankton stations between latitudes 28° 30.00 and 29° 00.00 and longitudes -89° 30.00 and -91° 30.00. Twenty-three plankton sample jars were collected (see Plankton Sample Check-In Form). Plankton samples will be transferred to the NMFS Pascagoula, MS lab as soon as possible. All chlorophyll samples were analyzed by spectroscopy in the LDWF Fisheries Research Laboratory.

Deviations

There were originally 28 sites selected for LDWF sampling, but due to inclement weather delaying the departure of the R/V Pelican, the R/V Oregon II sampled the following sites from LDWF's list: W1511; W1512; W1510; W1509; W1506; W1505; W1504; W1503; W1502; W1501.

Cruise participants:

Sampling was conducted by Louisiana Department of Wildlife and Fisheries, Research and Assessment Division personnel. The crew consisted of the following biologists: Suzy Delaune, Mark Belter, Jeremy Miller, Les Sonefeld, Robert Boothe, Mike Sweda, Clint Edds and Chris Davis. Sample summary and data entry completed by Suzy Delaune.

Submitted By:

Suzy Delaune
SEAMAP Chief Scientist

Table 1. LDWF SEAMAP 2012 Fall groundfish cruise report summary.

STA #	PASC #	DATE MM/DD/YYYY	GMT TIME	LAT	LONG	STAT ZONE	MAX DEPTH (fm)	SALINITY			TEMPERATURE			DO			FIN CATCH	CRUS CATCH	OTHR CATCH	MIN FISH		
								SUR	MID	MAX	SUR	MID	MAX	SUR	MID	MAX						
W1401	35002	10/30/2012	1207	29	05.29	90	07.91	14	6	32.2	32.2	32.3	23.16	23.17	23.35	6.6	6.6	6.6	0.347	1.228	0.076	30
W1301	35004	10/30/2012	1634	29	10.72	89	52.35	13	8	32.5	32.5	34.9	23.06	23.05	25.82	6.6	6.6	5.6	21.335	1.580	0.008	30
W1302	35005	10/30/2012	1835	29	02.31	89	13.00	13	19	34.3	34.4	36.0	24.84	25.00	26.69	6.6	6.5	5.7	21.233	2.642	0.058	30
W1304	35006	10/30/2012	2033	28	56.63	89	35.44	13	32	37.0	36.1	36.3	23.74	26.19	23.96	3.7	2.4	3.6	25.088	3.244	0.045	30
W1303	35008	10/30/2012	0015	28	58.41	89	40.06	13	28	31.6	34.3	36.0	22.56	25.05	26.67	7.0	6.5	5.6	4.697	1.503	0.049	30
W1305	35009	10/30/2012	0424	28	38.17	89	41.69	13	55	36.2	36.2	36.2	26.32	26.35	26.31	6.3	6.3	6.3	7.195	1.598	1.008	30
W1408	35010	10/31/2012	0808	28	41.22	90	03.25	14	27	36.2	36.2	36.4	25.38	25.40	23.62	6.1	6.1	5.0	1.964	0.514	0.178	30
W1405	35011	10/31/2012	1055	28	49.84	90	12.84	14	13	34.2	34.2	35.9	23.95	23.91	25.90	6.7	6.7	5.9	13.872	0.997	0.045	30
W1403	35012	10/31/2012	1258	28	51.65	90	22.63	14	9	33.0	34.8	35.2	22.86	23.98	24.31	6.8	6.6	6.4	20.450	0.165	0.003	30
W1410	35014	10/31/2012	1845	28	16.79	90	26.53	14	36	36.2	36.2	36.5	25.74	25.35	21.74	6.2	6.0	3.9	4.273	0.839	6.375	30
W1409	35015	10/31/2012	2147	28	27.01	90	45.03	14	20	36.0	36.0	36.1	25.22	25.01	25.06	6.5	6.3	6.3	18.532	0.987	0.775	30
W1411	35016	10/31/2012	0018	28	14.56	90	50.39	14	39	36.3	36.3	34.5	26.00	25.92	21.21	6.3	6.3	4.1	9.636	2.578	7.058	30
W1508	35018	11/01/2012	0705	28	29.64	91	06.60	15	18	35.9	35.9	36.1	24.66	24.88	25.09	6.3	6.3	6.2	12.793	1.222	0.193	30
W1507	35019	11/01/2012	0957	28	36.62	91	19.12	15	15	33.9	34.7	35.8	23.44	24.57	25.20	6.6	6.2	5.9	14.434	1.629	0.028	30
W1406	35022	11/01/2012	1924	28	48.98	90	57.47	14	8	33.0	34.0	34.3	22.55	23.25	23.44	6.9	6.7	7.0	1.108	0.195	0.012	30
W1402	35023	11/01/2012	0020	28	56.50	90	47.23	14	6	32.5	32.7	32.9	23.12	22.56	22.38	7.3	7.4	7.4	5.797	1.451	0.026	30
W1407	35024	11/01/2012	0312	28	44.10	90	44.71	14	11	33.6	33.9	34.9	23.42	23.28	23.73	6.9	6.9	6.2	17.357	0.476	0.160	30
W1404	35025	11/02/2012	0629	28	50.46	90	35.83	14	9	33.2	35.0	35.5	23.31	24.12	24.04	6.9	6.6	6.4	13.637	1.192	0.003	30

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: 5 Nov. 2012

SEAMAP Plankton Sample Check-In

Cruise 1204

Month/Year Oct./Nov. 2012

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.
						Plastic	Glass	
35001	P103	29 00.00	90 30.00	Bongo-Lt.	10/30	1	1	44778
				Bongo-Rt.	10/30	1	1	44779
				Neuston	10/30	1	1	44780
35003	P104	29 00.00	90 00.00	Bongo-Lt.	10/30	2	2	44781
				Bongo-Rt.	10/30	2	2	44782
				Neuston	10/30	1	1	44783
35007	P105	29 00.00	89 30.00	Bongo-Lt.	10/30	1	1	44784
				Bongo-Rt.	10/30	1	1	44785
				Neuston	10/30	1	1	44786
35013	P107	28 30.00	90 30.00	Bongo-Lt.	10/31	1	1	44787
				Bongo-Rt.	10/31	1	1	44788
				Neuston	10/31	1	1	44789
35017	P106	28 30.00	91 00.00	Bongo-Lt.	10/31	1	1	44790
				Bongo-Rt.	10/31	1	1	44791
				Neuston	10/31	1	1	44792
35020	P101	29 00.00	91 30.00	Bongo-Lt.	11/1	1	1	44793
				Bongo-Rt.	11/1	1	1	44794
				Neuston	11/1	1	1	44795
35021	P102	29 00.00	91 00.00	Bongo-Lt.	11/1	1	1	44796
				Bongo-Rt.	11/1	1	1	44797
				Neuston	11/1	1	1	44798