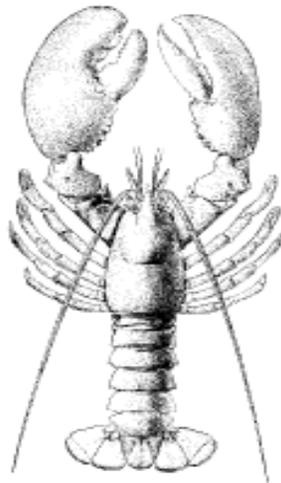


*"Our mission is to ensure that the Freshwater, Marine, and Wildlife Resources of the State of Rhode Island will be conserved and managed for equitable and sustainable use."*

## RHODE ISLAND

### LOBSTER RESEARCH AND MANAGEMENT PROJECT



### SEMI-ANNUAL PROGRESS REPORT

November 30, 2018 – April 30, 2019

Prepared by:

Corinne Truesdale

Rhode Island Division of Marine Fisheries  
to the National Oceanic and Atmospheric Administration  
pursuant to NOAA Award No. NA15NMF4070143.  
UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Management Division  
State-Federal Relations Branch

SEMI-ANNUAL PROGRESS REPORT

- A. Award Number:** NA15NMF4070143
- B. Grantee:** State of Rhode Island
- C. Project Title:** Rhode Island Lobster Research and Management Project
- D. Amount of Grant:**
- |             |                  |
|-------------|------------------|
| Federal     | \$ <u>97,904</u> |
| State Match | \$               |
| Total       | \$               |
- E. Award Period:** May 1, 2015 – April 30, 2020
- F. Period covered by this report:** November 30, 2018 – April 30, 2019
- G. Summary of Progress to Date:**

**JOB 1:**

**Title:** Analysis of Biological and Fishery Statistics Collected on the American Lobster Resource in Rhode Island.

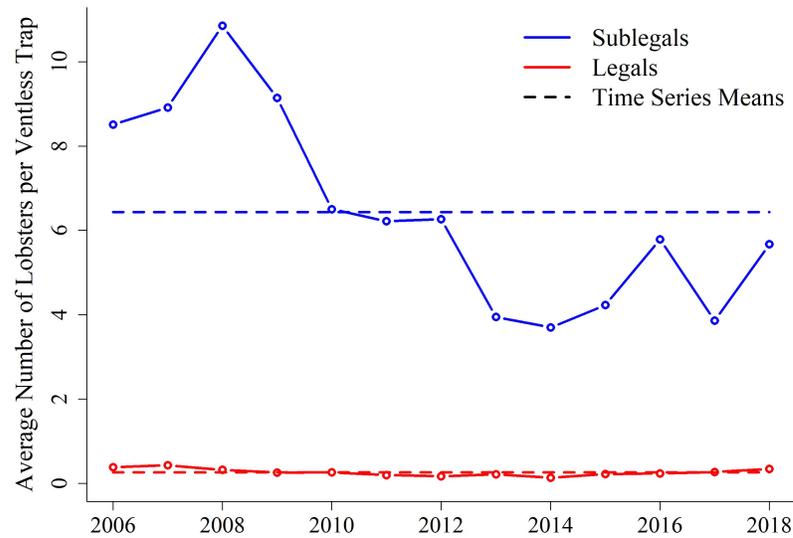
**Objectives:** To process, analyze, and report on biological data and population statistics collected during preceding segments of this project, and to characterize the Rhode Island commercial lobster fishery.

**Accomplishments:**

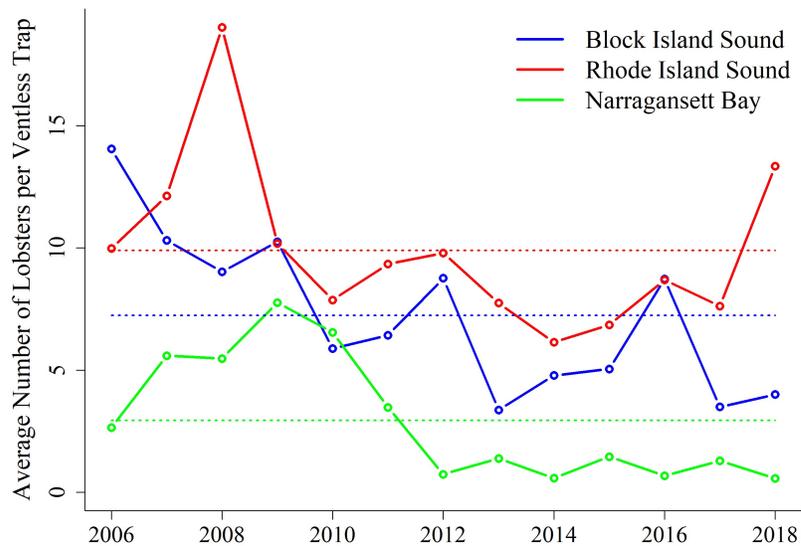
Project data collected during this award period have been entered into Microsoft Access databases housed at Rhode Island Department of Environmental Management Division of Marine Fisheries (RI DMF) in Jamestown, RI. Data through August 2018 have been analyzed and compared to previous years to investigate potential trends and possible deviations from the population time series average. Data through 2018 have been provided to the ASMFC for use by the ASMFC American Lobster Technical Committee and Stock Assessment Sub-committee to develop more precise estimates of relative abundance, indices of legal-sized and sublegal-sized lobsters of the Southern New England stock, and to monitor biological characteristics (e.g. shell disease, sex ratios, egg stages) in Lobster Management Area 2. More specifically, the ventless trap survey data from this project has become a critical program and data stream used to infer the population trends of American lobster through time. The survey data from Rhode Island has been integrated into a coastwide dataset which is being further analyzed for use in the 2020 Stock Assessment. Fisheries-independent data from this award period are further being QA/QC'ed to confirm results, and updated data will be given to the ASMFC Lobster TC and SAS as well.

Further analyses on data in addition to abundance (e.g. sex ratio, size selectivity and composition, egg stage and shell disease prevalence) will also be further investigated.

The 2018 survey was conducted over June, July and August in Block Island Sound, Rhode Island Sound, and Narragansett Bay over 24 stations. Over the 18 trips and 839 pots (ventless and vented) hauled, 2,855 lobsters were sampled. Abundance indices of sublegal lobsters in the 2018 ventless survey remain below the time series mean of 6.7 lobsters per ventless trap (Figure 1). Indices vary between sampling regions, but since 2012, region-specific indices have generally fallen below the time series mean (Figure 2).



**Figure 1.** Average number of legal and sublegal lobsters caught per ventless trap in RI DMF’s ventless trap survey, 2006-2018.



**Figure 2.** Average number of lobsters caught per ventless trap in RI DMF’s ventless trap survey, 2006-2018, separated by sampling region.

Administration and coordination of the ASMFC Lobster Trap Tagging Program, conducting and reviewing analyses performed by the ASMFC through the Technical Committee, the ASMFC American Lobster 2020 Stock Assessment Working Group, the ASMFC Plan Development Team, the ASMFC Lobster Conservation Management Team, and the Large Whale Take Reduction Team also occurred as part of this grant. Many meetings were attended by Lobster Research and Management staff during the grant period with staff from ASMFC, state lobster biologists and managers, academic lobster experts, commercial lobstermen, and additional stakeholders. This reporting period was exceptionally busy for the ASMFC American Lobster Plan Development Team and the New England Fishery Management Council's Large Whale Take Reduction Team. Staff from RI DMF are represented in both groups, and they collectively participated in weekly calls (from February and April) to address the risk of North Atlantic right whale entanglement in lobster fishing gear.

**JOB 2:**

Title: Collection of Biological and Fishery Statistics on the American Lobster Resource in Rhode Island

Objectives: To continue a data collection program to obtain biological and population statistics on the Rhode Island lobster resource in the Federal and State waters portion Rhode Island.

Accomplishments:

For the past few years, the RI Division of Marine Fisheries experienced staffing limitations which affected the Division's capacity to conduct sea sampling. With the hire of a new staff biologist in October 2018, the Division has addressed this deficiency and, moving forward, expects to be fully compliant with the sea sampling requirements outlined in Addendum XXVI to Amendment 3 to the American Lobster Fishery Management Plan. The new hire brings extensive experience working on commercial fishing vessels, including three years of cooperative work with the Rhode Island crustacean trap fishery prior to being hired. With the recent staffing change, effort is being made to conduct a minimum of three sea sampling trips per quarter. The Division believes that there will be sufficient inshore sea sampling opportunities for the foreseeable future that will enable us to continue the program and provide valuable data for the stock assessment and lobster management. For the reporting period, there were five sea sampling trips conducted on commercial lobster fishing vessels. During these trips, a total of 71 trawls were sampled (Table 1). Biological data is still being processed, and the number of lobsters sampled during these trips will be made available by the submission of the next semi-annual report.

**Table 1:** Summary of Lobster Sea Sampling Activity: November 1, 2018 – April 30, 2019

Sample Date	Stat Area	Number of Trawls
12/7/2018	539	12
1/8/2019	539	2
1/15/2019	539	12
2/17/2019	539	15
4/29/2019	537, 538 & 539	30

Several lobster port samples were conducted over this project period. The lobster port sampling survey has been on-going since 2006 and uses the same sampling strategy along the entire northeast coast to characterize the harvested lobster population for the offshore lobster fishery in Southern New England. Samples are collected by NOAA Fisheries statistical area and at the trip level on the landed catch. For this reporting period, a total of five port samples were completed with data collected on a total of 1,419 lobsters over three statistical areas. As with Sea Sampling, data on lobsters collected include carapace length, sex, shell condition (degree of shell hardness), cull status (claws missing), other shell/body damage, V-notch status, mortality, incidence and severity of shell disease. Additionally, total catch in pounds, number of lobster, trap type, bait type, depth and bottom type are recorded.

**Table 2:** Summary of Lobster Port Sampling Activity: November 1, 2018 – April 30, 2019

Sample Date	Stat Area	Lobsters Sampled	Lobsters Landed
11/5/2018	616	330	4400
12/3/2018	525	290	2719
1/30/2019	515	402	4020
1/30/2019	525	90	708
2/25/2019	515	307	2851

The program of port sampling offshore lobster vessels by NOAA Fisheries Statistical Area will be continued during the upcoming project period, as this information continues to be used in regional stock assessments for American Lobster. Size distribution of the inshore and offshore lobster fisheries of Southern New England remains important in analyzing the effects of changing minimum and maximum size on both the harvest/fishery and the population.

Prepared by: Corinne Truesdale  
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Principle Investigator

Date: 5/28/2019