

**Proposal #:** 20GAR028-065

**Project Title:** CFRF's Lobster and Jonah Crab Research Fleet: A Collaborative Fishing Vessel Approach to Addressing Data Needs for the American Lobster and Jonah Crab Fisheries

**Applicant:** Commercial Fisheries Research Foundation

**Priority Addressed** Priority #2 – Science or Technology that Promotes Sustainable U.S. Seafood Production and Harvesting

**Principal Investigator:** Christopher Glass, [cglass@cfrfoundation.org](mailto:cglass@cfrfoundation.org)

**Abstract:** The proposed project focuses on continuing CFRF's successful Lobster and Jonah Crab Research Fleet (currently funded by 2017 S-K Program Award # NA17NMF4270208), which implements a cost-effective method to collecting biological data, especially from under-sampled offshore areas, in support of stock assessments and management plans for the American lobster and Jonah crab fisheries. To date, the 21 fishing vessels participating in the Lobster and Jonah Crab Research Fleet have collected biological data from over 139,973 lobsters and 74,540 Jonah crabs as well as coupled bottom water temperatures from the Gulf of Maine to the Mid-Atlantic. These data have been used extensively by stock assessment scientists and managers. The proposed project seeks to extend this successful data collection effort for an additional 12 months, and to add two new vessels, while also testing Bluetooth calipers for data collection. Ultimately, continuation of the Lobster and Jonah Crab Research Fleet will provide data from areas and times of year not covered by existing surveys, which is critically important for the assessment and management of these valuable resources.

**Summary of potential commercial benefits to the fishing community of the research results:** The anticipated benefits and outcomes of the proposed project are as follows: 1) Demonstration of a cost-effective and efficient way for members of the commercial fishing industry to help supply needed biological data for lobster and Jonah crab stock assessments and management plans, 2) Implementation of new technology (Bluetooth calipers) to increase the efficiency of at-sea lobster and Jonah crab sampling, 3) Provision of biological and catch data for lobsters and Jonah crabs from otherwise un-sampled areas and time of year, 4) Development of a seven year time series of biological lobster and Jonah crab data and bottom water temperature to advance understanding of the impacts of a changing environment on these valuable fisheries resources, 5) Increased transparency of the lobster stock assessment process and trust in the data sources used.

---