

Proposal #: 20GAR032-067

Project Title: Improving Business Practices to Reduce Mortality in the Lobster Supply Chain

Applicant: University of Maine

Priority Addressed Priority #1 – Promotion, Development and Marketing

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Abstract: This project primarily addresses SK Priority #1 – Promotion, Development, and Marketing Projects, and secondarily Priority #2 – Science and technology promoting sustainable seafood production. To address these priorities, we propose to monitor and mitigate stress points in the supply chain of American lobster with the overall goal of avoiding waste and improving efficiency and profitability. The project builds upon preliminary work already begun through a collaboration between the Maine Lobster Dealers’ Association and UMaine’s Lobster Institute, its affiliated faculty within UMaine, and external scientific collaborators at St. Josephs College and Wells National Estuarine Research Reserve. We specifically propose to promote better handling practices to reduce the mortality or “shrink” in the harvester-to-dealer segment of the lobster supply chain where the industry can most influence down-stream quality. Under our monitoring objective we aim to identify specific stress points in the supply chain by relating quantitative information on environmental conditions to lobster health indicators. Under our mitigation objective we aim to evaluate recommended mitigation strategies emerging from our monitoring objective. We also plan to implement outreach and education that will convey our findings and mitigation recommendations to the wider industry. The project also creates training opportunities at the graduate and undergraduate level.

Summary of potential commercial benefits to the fishing community of the research results:

Identifying and mitigating stress points along the supply chain can mean millions of dollars of savings and avoided waste for the US lobster industry. Lobster dealers, processors and pound owner typically experience shrink rates ranging from 3-20%. For an annual harvest valued near half a billion dollars, this level of loss could equate to as much as one hundred million dollars. By identifying the stress points and recommending ways to mitigate them, the proposed project aims to help the industry stem these losses, improve profitability, and make more efficient use of our valuable, publicly managed resource.
