Feasibility of Certifying the Gulf of Maine Shrimp Trap Fishery as Sustainable

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Abstract

The Northern shrimp (*Pandalus borealis*) fishery in the Gulf of Maine utilizes two types of gear, trawls and traps, targeting females as they move mid-winter to inshore waters. With an unstable market and an increased proportion of catch coming from the trap shrimp fishery, the goal of this project is to understand the benefit and feasibility of certifying the trap fishery as sustainable with the Marine Stewardship Council (MSC). We will address several data gaps required for the certification process: monitoring, industry support, and bycatch assessment. 1) Reviewing the fishery-dependent data from two monitoring programs, logbook and port sampling is needed. We will evaluate the efficiency, and look for overlaps and discrepancies of both programs at different spatial and temporal scales. A computer simulation will then model an efficient and comprehensive fishery for monitoring program maintaining representative data collection for landings, gear types, locations, and season variability. 2) Certification requires the fishers' support. A survey sent at the end of the 2009 winter season was designed to obtain in-depth understanding of the fishers' thoughts about the fishery and the certification process. 3) Limited information is available on the shrimp fishery bycatch in the Gulf of Maine, in particular, in the trap fishery. Using on-board observers during the 2010 season, we will quantify trap bycatch species composition, amounts, and temporal and spatial variations in the fishing season. With limited data and the trap fisheries' increased importance in the overall shrimp harvest, each component of this study will provide critical information needed for MSC sustainable certification. This certification may significantly enhance the economic value of the shrimp fishery in the state of Maine.