

Developing a sentinel longline/jig survey for groundfish species in the eastern Gulf of Maine.

Mattie Rodrigue and Dr. Yong Chen

The eastern Gulf of Maine, while not closed to groundfishing, has been perceived to have a low groundfish population and is subject to little targeted groundfish activity. State and federal fisheries-independent survey programs have limited sampling coverage because of fixed gear conflicts. Currently, groundfish stock assessment and management encompass the entire Gulf of Maine, although the majority of fishing effort and catch occurs in the western Gulf of Maine. Sparse fishery-independent as well as fishery-dependent data in the eastern Gulf of Maine, and skewed distribution of the groundfish fisheries into the western Gulf of Maine may complicate the determination of the status of groundfish stocks in the Gulf of Maine. Working with local fishermen, we developed a stratified random sentinel longline/jig survey targeting key groundfish species that have low catchability in the bottom trawl survey. We estimate the abundance indices for Atlantic cod (*Gadus morhua*), cusk (*Brosme brosme*), Atlantic halibut (*Hippoglossus hippoglossus*), and white hake (*Urophycis tenuis*) in the eastern Gulf of Maine. This study shows large spatial inconsistency of temporal variability in fish populations, raising importance of fine-scale groundfish populations in management.

Contact author: Mattie Rodrigue (mattie.rodrigue@gmail.com; 602-781-5652), University of Maine School of Marine Sciences.