Engaging Fishermen: A Spatial Characterization of New England Commercial Fisheries

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Introduction

Commercial fishing is an important economic driver in the Gulf of Maine. Fishing activity is driven by a complex range of factors and these factors are not well represented in existing data sets. For this project, key engagement related themes such as the timing of the project, misconceptions about how the project related to other projects, prior experiences with other mapping projects, and apathy were identified as barriers to participation.

This poster outlines a recent regional fisheries characterization and resulting data set that provides important context for identifying where fishing activity takes place off of New England. The fisheries characterization was completed for the Northeast Regional Ocean Council (NROC) as part of a larger effort to characterize a variety of ocean uses for ocean planning purposes.

NROC’s ocean planning work focuses on supporting more formal efforts underway in New England by developing information (data and map products) and engaging affected constituencies. These maps and maps of shipping activity, other human uses, and natural resources are publicly available through the Northeast Ocean Data Portal (http://www.northeastoceandata.org).

Approach

The fisheries characterization report, caveats, and data were developed through a robust four-year time period. Fishing activity is driven partly by species location and abundance, and by management considerations. The short time period that data was available for this project hides significant shifts in all of these factors. Areas that are closed because of fisheries management considerations are clearly visible on this map and the map does not separate when vessels are steaming to the fishing grounds and when they are fishing.

The fisheries characterization was completed for the Northeast Regional Ocean Council (NROC) provides important context for identifying where fishing activity takes place off of New England.

Key Findings

The use of ocean space by fishing activity in New England is driven by a complex set of factors, many of which are not all captured or represented in existing data sets.

The VTR and VMS maps help identify regional scale patterns in the fisheries for ocean planning purposes, but, without further contextual information, they are misleading. In interviews throughout the project, fishermen expressed concern that the many factors influencing where they fished would not be accounted for in the ocean planning process.

Examples of the VMS and VTR Maps: VMS and VTR maps are only available for five fisheries: groundfish, monkfish, scallop, herring, and surf clam. VTR data sets were available for a wide range of fisheries, however concerns from the fishing industry about how accurate the location data is limits their utility.

Remaining Data Gaps And Future Work

Many fishermen the project team spoke with emphasized that the lack of accurate information about current and recent fishing patterns can result in mistrust and confusion in the ocean planning process.

These concerns led to the identification of important caveats and contextual information that help in the interpretation of the maps. Considerations identified through this project include target species population, habitat requirements, seasonal variations in species distribution, weather, gear type used, management decisions, homeport and fishing community, and socioeconomic factors. The report from this project includes recommendations about caveats for displaying or using the maps and a discussion of the major themes coming out of the meetings about the limitations of these data sets.

A fishermen identifies historic fishing areas and where his community currently fishes. The regional scale data set makes it difficult for fishermen to see themselves and their fishing activity in the data.

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