Snapper Grouper • Coastal Migratory Pelagics • Dolphin Wahoo

Updating Distributions & Essential Fish Habitat

Resilient Fisheries Project Overview

Description

Using state-of-the-art spatiotemporal modeling techniques this project will explore indicators of non-stationarity in the spatial distribution and habitat associations for the fish and fisheries managed under the Council's Snapper-Grouper, Coastal Migratory Pelagics and Dolphin Wahoo FMPs. The outcomes will inform more resilient fisheries management and governance, by updating descriptions of distributions and Essential Fish Habitat. This will also inform decisions during an evaluation of existing governance structures, potential changes in interjurisdictional governance and implementing more resilient and adaptive management.

Objectives

1. Develop analytical tools (i.e., state-of-the-art spatiotemporal models) to quantify and predict species distributions of reef-associated and pelagic fishes in the Southeastern United States (SEUS) by integrating disparate survey data.

2. Evaluate the relative importance of habitat features and environmental conditions in driving the spatial distributions of reef-associated and pelagic fishes in the SEUS.

3. Predict habitat areas for reef-associated and pelagic fishes in the SEUS using multiple surveys.

4. Estimate abundance indices and document changes in species distributions by evaluating multiple range shift metrics and examine their associations with changing ocean conditions.

Project Oversight Team

Contractors: Jie Cao, NCSU (Co-PI); Janet Nye, UNC IMS (Co-PI)

Oversight Team: Kathleen Howington, Myra Brouwer, Lara Klibansky, Chip Collier, Tori Kentner (MAFMC), Simen Kaalstad (ASMFC)

Project Timeline

2024 – INITIATE

- **Oct.** - Request for proposals released.
- **Dec.** - Proposals reviewed and contractor selected.

2025 – DEVELOP

- **Jan.** - Project Oversight Team formed
- **Mar.** - Begin quarterly Project Oversight Team meetings with contractors

2026 – REVIEW

- **Feb.** - Project Oversight Team initial model review
- **Oct.** - SSC review of spatiotemporal models

2027 – PRESENT

- **Feb**. - Presentation to Habitat and Ecosystem AP
- **Mar**. -Presentation to Council; Submit final report

2028 – IMPLEMENT

Begin Council consideration and implementation of project outcomes & recommendations