

# Monkfish Research Set-Aside Program: 2024 Projects Underway



The [monkfish fishery](#) is jointly managed by the New England and Mid-Atlantic Fishery Management Councils. The New England Council has the administrative lead. The Councils established the Monkfish RSA Program through Amendment 2 to the Monkfish Fishery Management Plan. Unless otherwise specified, 500 monkfish days-at-sea (DAS) are set aside annually from the total number of allocated days to be used for cooperative monkfish research. No federal money is used to support the research. The Councils are responsible for setting monkfish research priorities, while NOAA Fisheries manages the RSA competition and administers the program. The 2023-2024 awards were [announced](#) on June 6, 2023. Details are listed below. Please reach out to the project contacts for information on how to participate in this work.

## Incorporating Fishermen's Knowledge into a Standardized Catch Per Unit Effort Index for the Commercial Monkfish Gillnet Fishery

### Project Goal

Scientists have been unable to age monkfish, which has resulted in the use of an empirical stock assessment method, applying the Northeast Fisheries Science Center (NEFSC) bottom-trawl survey multiplier to the latest three-year average catch from the fishery to develop new catch advice. Currently, few monkfish are caught in the NEFSC bottom-trawl survey because of the survey gear and deeper distribution of monkfish relative to the survey location. The Council and fishermen have voiced concerns that this method may not accurately reflect current stock trends.

Cape Cod Commercial Fishermen's Alliance and UMass Dartmouth School for Marine Science and Technology (SMAST) are working collaboratively with the fishing industry to develop standardized catch per unit effort (CPUE) indices for the commercial directed monkfish gillnet fishery and possibly the Northeast multispecies (groundfish) trawl fishery to be used for stock assessment purposes. Fishery catch rates need to be standardized for use as a stock index because fishing effort reflects individual fishing decisions (e.g., fishing area, fishing season, vessel characteristics) that are incentivized by markets and constrained by regulations. Understanding fishing effort is necessary to develop a CPUE, including fishing gear, fishing power, and unit of fishing effort for each type of fishery.

### Impacts to Monkfish Stock Assessment

The project will develop standardized fishery catch rates that include fishermen's ecological knowledge and insights into factors that influence monkfish catch rates and potentially contribute a new CPUE stock index to help increase the accuracy of monkfish stock assessments and improve fishery management. Providing standardized CPUE indices for the monkfish stock assessment has the potential to make the stock assessment more robust, resulting in more accurate information to drive management decisions.

Even if not used as an index of abundance in the stock assessment model, considering CPUE in the stock assessment process and documentation can be valuable for providing fishery data with greater spatial and temporal resolution than fishery-independent surveys, as well as understanding fishery dynamics. Working papers that document standardized indices of abundance will be provided to NEFSC lead assessment scientists and the Assessment Oversight Panel in preparation for future stock assessments, including the 2025 management track stock assessment. The resulting datasets, statistical analysis, and code also will be made publicly available to the stock assessment and broader scientific communities.

## Project Compensation and Point of Contact

\$400 per RSA DAS ~ 4,074 pounds of monkfish per DAS, no trip limit (stacking of DAS allowed)

**Project team: Cape Cod Commercial Fishermen's Alliance, UMass Dartmouth SMAST, Monkfish Fishermen Working Group;** Aubrey Church at [aubrey@capecodfishermen.org](mailto:aubrey@capecodfishermen.org), (508) 945-2432 x 105 or Melissa Sanderson at [melissa@capecodfishermen.org](mailto:melissa@capecodfishermen.org), (508) 945-2432 x 103; read the [related feature story](#) and [project fact sheet](#).

## Addressing Monkfish Management Needs by Developing a Standardized Catch Per Unit Effort Index

### Project Goal

To develop a standardized catch per unit of effort (CPUE) index for the commercial monkfish fishery to be used for stock assessment purposes. More specifically to: 1) develop a CPUE index for the commercial directed monkfish gillnet fishery to be used for stock assessment purposes; and 2) help resource managers and fishermen work together to sustainably use, protect, maintain, and rebuild fisheries.

The goals will be accomplished by the following objectives: 1) coordinate with appropriate agencies to obtain comprehensive fishery dependent and fishery independent databases needed to develop and inform a standardized CPUE time series; 2) develop an integrated statistical estimation procedure to construct a standardized CPUE time series; 3) use the CPUE statistical estimation approach on monkfish data sets and provide an assessment of the appropriateness of the available data for constructing a standardized CPUE index; and 4) work with the commercial fishing industry for compensation harvest, input to the project, and outreach and communication of results. The following databases will be used in developing the CPUE index: vessel trip reports (VTRs); data from National Marine Fisheries Service (NMFS) observers and at-sea monitors; Northeast Cooperative Research Program Study Fleet data; NMFS trawl survey data; NorthEast Area Monitoring and Assessment Program (NEAMAP) surveys; and State surveys. The CPUE index developed in this project will be based on actual fishery catches and may be directly incorporated into the monkfish stock assessment.

### Impacts to Monkfish Stock Assessment

This project will collect and organize fisheries databases to inform the development and utilization of an integrated statistical estimation procedure that will determine a standardized CPUE time series. This can be used to estimate the relative abundance of the stock for improved monkfish stock assessment and management purposes. Monkfish have proven difficult to accurately determine monkfish individual ages. This has caused difficulties in the monkfish assessment and has resulted in the use of an approach that utilizes the monkfish catch in the NMFS spring and fall bottom trawl survey to develop an index to provide catch advice for specifications for the fishery. However, there are concerns about using this method and thus, the New England and Mid-Atlantic Fishery Management Councils made the development of a CPUE index a priority in the management of monkfish.

## Project Compensation and Point of Contact

\$400 per RSA DAS ~ 4,074 pounds of monkfish per DAS, no trip limit (stacking of DAS allowed)

**Cornell University Cooperative Extension Marine Program;** Tara McClintock at [taf4@cornell.edu](mailto:taf4@cornell.edu), (631) 740-6486 or Emerson Hasbrouck at [ech12@cornell.edu](mailto:ech12@cornell.edu), (631) 965-1422