Original: English

Atlantic Bluefin Tuna MSE – Executive Summary Lite

Progress Update

- With regular guidance from the Commission, the SCRS's Bluefin Tuna Species Group has been developing a management strategy evaluation (MSE) framework for Atlantic bluefin tuna (BFT) since 2014.
- The Atlantic bluefin tuna MSE framework is based on two genetically distinct *stocks* (western and eastern) that migrate and mix throughout the North Atlantic. The 45°W management boundary is used to divide the East and West *management areas*.
- The MSE accounts for uncertainty about the stock and dynamics of the fishery by setting up multiple operating models (OMs). Each OM represents a plausible scenario/a potential truth for dynamics of the stocks and the fishery.
- The BFT MSE includes 48 main operating models (i.e., the "reference set or grid of OMs") and 44 additional "robustness" OMs to evaluate less likely but possible scenarios. To ensure that the OMs are all within the bounds of reality, actual data from 26 different indices, both fishery dependent and independent, are used as the basis for OM development.
- The MSE code was independently reviewed in 2021, and no substantive problems were found.
- There are currently 9 candidate management procedures (CMPs) under development by 6 different international teams of scientists. All calculate a separate total allowable catch (TAC) for the West and East management areas.
- The BFT MSE includes 7 key preliminary performance statistics as a benchmark for evaluating CMP performance against the Commission's selected management objectives (Res. 18-03).
- Preliminary results indicate that the key tradeoffs are in catch vs. abundance and catch vs. TAC stability. As catch increases, stock abundance decreases and variability in catch increases, and vice versa. The goal is to use the MSE results to balance these tradeoffs, for example, by maximizing catch while also meeting biomass standards and stability objectives.

Next Steps

- The SCRS is on track to present 2-3 final CMPs to the Commission in 2022 for providing TAC advice starting for 2023.
- We are now at a critical point in MSE development with the need to increase the engagement of developers, stakeholders, and the Commission.
- Several meetings are envisioned for the exchange of information among the SCRS, Panel 2 /Commission, and stakeholders between SCRS plenary in 2021 and the 2022 Commission meeting, including a series of ambassador meetings in October 2021 and four meetings with Panel 2.
- Feedback is requested from managers at this time on:
    - Acceptable ranges of tradeoffs (catch vs. biomass, catch stability vs. average catch, etc.)
    - Operational management objectives and associated performance statistics
    - CMP structure, including TAC setting interval, limitations on maximum/minimum TAC and catch stability
    - A potential limit reference point for stock size (BLIM)