




SSC Report to NEFMC


NOAA Fisheries Science Center | 2020 STATE OF THE ECOSYSTEM REPORT



The Northeast US Shelf is one of the most productive marine ecosystems in the world. Changes in climate, nearshore, and oceanographic processes as well as human uses affect productivity at all trophic levels and impact fishing communities and regional economies.

Research Spotlight

Fish condition, "fatness", is an important driver of population productivity. Condition is affected by changing habitat (e.g. temperature) and ecosystem productivity, and in turn can affect market prices. We are investigating potential factors influencing fish condition to better inform operational fishery management decisions.



<https://www.fisheries.nm.gov/about/northeast-ecosystem-dynamics-and-assessment>

April 14, 2020

Jason McNamee, SSC Chair

Topics

- SSC Comments on the NEFSC 2020 State of the Ecosystem (SOE) Report



SSC Comments

- First general comment was a lot of appreciation for the work that has gone into this report
 - Praise for bringing the human and environmental factors together in one report
 - The first two pages of the SOE report were believed to be particularly useful for the Council
- “Overview Memo” of changes was very helpful, there was appreciation for the inclusion of the MAFMC comments, and appreciation for the overview indicators summary
 - Encourage that the wording in the overview be clear that there is strong influence on the indicators from lobster and scallops, but other species are still important especially outside of the major ports
- The SSC felt climate change was not highlighted in the report, and it should be more of a focal point for the information



SSC Comments

- There is considerable scientific jargon used in the document, which make the SOE harder to understand by non scientific audiences
 - SOE should be thoroughly reviewed for readability by one of the NEFSC's editorial staff, and that a Glossary to Terms be added at the end of the report
- The recently completed interviews with Council members regarding their perspectives on social information in the NEFMC process might be helpful to consider in the context of the SOE
- Estuarine Water Quality was a welcome addition given link between estuarine systems for juvenile and prey species and primary production
 - There are additional nearshore datasets available as well and should be folded in as appropriate



SSC Comments

- The SSC had a discussion on the conceptual model
 - Could potentially ask SSB to develop one from a socio-economic perspective to link back and merge with the one created by biologists as a way to continue to link the human (economic and socio-cultural) and the environmental factors and look at what those feedback loops look like when there are changes and/or shocks to the system
- The SSC discussed the integration of some of the data elements through modeling approaches (focusing on the use of VAST)
 - Noted that model-based approaches impose structure on empirical info
 - The SSC stated that it is important to use models, but we also shouldn't lose contact with the data; the two methods should be used together to get a full picture of the system
 - A final note was that modeling approaches can mask uncertainty so may lead to our missing significant elements of this important feature of fisheries info



SSC Comments

- The SSC offered some specific guidance on certain areas within the report
 - The SSC felt it would be helpful to add the definition of what it means that the engagement level is "low", "moderate", "medium-high", and "high." to the commercial engagement information
 - Additionally the message of the "Med-High Communities" graph is unclear, so some additional detail was needed on that information
 - The ecosystem production units should be reexamined, and a metric should be developed to indicate when this reexamination should take place
 - An index of bycatch should be added, can use National Standards definition
 - There was a discussion on trendlines and how they needed further definition followed by a recommendation to look in to multivariate analyses looking at where breakpoints are common across species as a useful alternative
- As a final note, the NEFSC stated that they could use some guidance on when the SOE report for stock assessments would be valuable

