

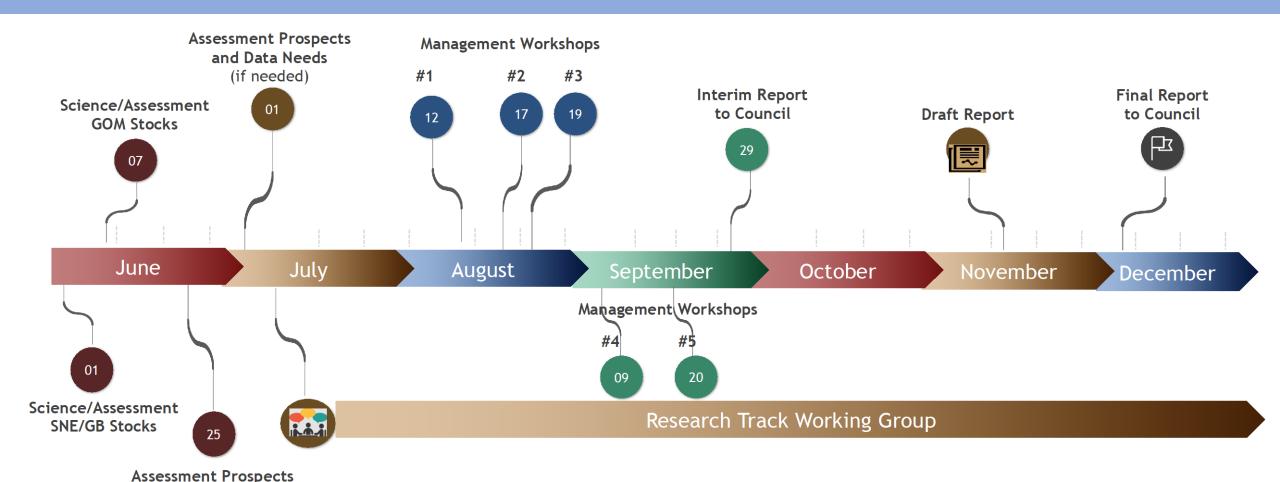








2021 Atlantic Cod Stock Structure Workshop Timeline





and Data Needs







Management Workshop Series

Last Thursday, August 12

• **Setting the Groundwork:** 1pm-3pm

Today, August 17

Gathering Regional Perspectives from Southern New England and Georges Bank East & West

Thursday, August 19

• Gathering Regional Perspectives from Gulf of Maine East & West: 1pm-3pm

Thursday, September 9

Focusing on Recreational Fishing Perspectives: 2pm-4pm (later start time)

Monday, September 20

Evaluating Tradeoffs to Adjusting Management Measures: Monday, September 20, 1pm-3pm (may extend)









Setting the groundwork:

- Brief Overview of Science/Assessment Workshops
- Understanding Existing Atlantic Cod Management
- Considering Example Management Approaches
 - Revising management boundaries
 - Adaptive sampling and monitoring
 - Mixed stock area-based catch limits
 - Re-allocation
 - Additional spawning closures









Setting the groundwork:

- Kerr et al. 2007, N. Atlantic examples/approaches
 - status quo management
 - "weakest link" management
 - spatial and temporal closures
 - stock composition analysis
 - alteration of stock boundaries





ICES Journal of Marine Science (2017), 74(6), 1708–1722. doi:10.1093/icesjms/fsw188

Contribution to the Themed Section: 'Beyond ocean connectivity: new frontiers in early life stages and adult connectivity to meet assessment and management'

Review Article

Lessons learned from practical approaches to reconcile mismatches between biological population structure and stock units of marine fish

Lisa A. Kerr, 1* Niels T. Hintzen, 2 Steven X. Cadrin, 3 Lotte Worsøe Clausen, 4 Mark Dickey-Collas, 4,5 Daniel R. Goethel.⁶ Emma M.C. Hatfield.^{7,†} Iacob P. Kritzer.⁸ and Richard D.M. Nash⁹











Some discussion themes:

- Different management tools may be appropriate for different areas based on data available.
- Altering management boundaries does not necessarily mean changing from 2 stocks to 5 stocks:
 - Potential option for an "in between" scenario that is a better fit for the biological structure than the current management, even if it does not fully align with the 5 biological populations.







Some discussion questions:

- How would mixed composition analysis be implemented?
 - There are lots of practical considerations...can this be done in real-time, cost effectively?
 - How will the temporal (seasonal) aspect of cod spawning be taken into consideration in the assessment and management process? (Specifically winter vs. spring spawners)
- Is status quo really a viable or appropriate option?
- What is the role of re-allocation and how does this relate to the objective of improving stock status?
- How can climate change and other external factors (e.g. warming waters due to wind farms) be incorporated into management options?
- Are there examples where approaches in similar circumstances have been taken?









Navigational Aids

- All options on the table no decisions being made.
- Encourage broad participation especially from folks who often have limited time to share ideas.
- We are all here to learn both questions and ideas welcome.
- Share the floor.
- Be respectful.
- Focus on task at hand.









Agenda

1:00	Welcome and Introductions
1:10	Goals and Objectives of Cod Stock Structure Workshops
1:20	Sharing Examples from Other Fisheries
1:40	Understanding Existing Atlantic Cod Management in SNE/GB
1:50	Recent Research on SNE Cod for Stock Assessment and Fishery Management
2:00	Considering Additional Fisheries Management Options & Tradeoffs
2:50	Wrap-up & Next Steps
3:00	Adjourn







Atlantic Cod Stock Structure Goals & Objectives Jamie Cournane, NEFMC











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For More Information

https://seagrant.unh.edu/2021-atlantic-cod-stock-workshops

Management Questions or Input

Jamie Cournane

jcournane@nefmc.org

Science/Assessment Questions or Input

Russell Brown

Richard McBride

russell.brown@noaa.gov richard.mcbride@noaa.gov





