

# Chesapeake Bay Stock Assessment Committee Fall 2020 Meeting

Tuesday, October 27, 2020 9:30am – 11:30am

### Attendees:

Tom MillerJustin ShapiroEric JohnsonLynn FegleyAdam KenyonRom LipciusAlexei SharovAlexa KretschDan HennenMarty GaryPat GeerMike WilbergGenine McClairGlenn DavisEllen Cosby

Sean Corson Amy Schueller

# I. Adoption of Updated BRPs

Presenter: Genine McClair (MDNR)

- MDNR conducted a blue crab stock assessment update in 2017 using the same framework (model, parameters, abundance indices) as the 2011 benchmark stock assessment, but included data through 2016-17
- The BRPs generated in the update were slightly less conservative than those in the current framework, but the population is still within the updated target and threshold (i.e. still not overfished and overfishing is not occurring)

Stock Assessment	Female Abundance (Age 1+) (millions)		Female Exploitation Rate (Age 0+)	
	Target	Threshold	Target	Threshold
2011	215	70	25.5%	34%
2017	196	72	28%	37%

- In 2020, CBSAC decided that MDNR would run the model update annually to continue assessment of the model framework and stability
- CBSAC has had internal discussions about adopting the updated BRPs and agreed that they represent the best available science and should be considered by management jurisdictions

#### Discussion:

- General agreement among the jurisdiction leadership that it makes sense to use the best available science and adopt the updated reference points
- Should note that even with new BRPs the fishery trajectory is not as expected; abundance and exploitation are still lower than we would expect
  - CBSAC should have a discussion about the underlying mechanism for this underestimation

Vote outcome: Unanimous vote to adopt the BRPs generated by the 2017 stock assessment update.

# II. Tow Comparison Analysis Update

Presenter: Glenn Davis (MDNR, CBSAC Chair)

 MD and VA have been conducting paired tow sampling in the Potomac River and Pocomoke Sound since 1998 to examine differences in gear efficiency between the vessels used for the winter dredge surveys

- Catch rates were different between vessels, but the difference was not as large as depletion experiments had indicated.
- Sampling has been conducted in a limited geographic range so it may be worthwhile to do paired tows in different areas to gather more robust data in various habitats and depths

#### Discussion:

- Potential difference in catch efficiency by substrate (e.g. mud, sand) which is also likely confounded by depth
- Need to determine underlying cause of differences in catch between the two vessels (i.e. length of dredge bottom time, habitat type, depth)
  - Rom can look into effects of habitat type using data from previous disaster relief study – can present to CBSAC at next meeting
- Could use divers or SONAR to determine length of dredging along the bottom
  - Might also be an on-board instrument that can provide this information
- During the WDS, could select an area in the Bay and have MD and VA both take samples to compare catch rates; could be done this year
  - Could propose a location to CBSAC at the next meeting
  - Could also do a formal simulation study to determine area size needed, but this would be a bigger effort requiring funding
- CBSAC should examine these differences and the causes and determine how this will affect the correction factor used to model abundance in the assessment

Action: Mandy and Glenn will coordinate the next CBSAC meeting to discuss underlying mechanisms of model underestimation and gear efficiency differences.

# III. CBSAC Charter Update

Presenter: Mandy Bromilow (ERT/NOAA, CBSAC Coordinator)

- Slight changes were made to the CBSAC charter, primarily focused on roles and procedures for making management recommendations
- The role of CBSAC is to advise on scientific priorities to support management and work with the Bay jurisdictions to develop management advice for the blue crab stock in the Chesapeake Bay
- The SFGIT Executive Committee provides oversight for CBSAC and serves as the charging body, and often makes the final decisions for membership changes and management recommendations

Action: CBSAC members should provide feedback on the charter update to Mandy as soon as possible.

#### IV. Member Updates

- Blue crab projects did not receive GIT funding this year
  - Environmental drivers of blue crab productivity would be a good project to try for again next year, just need to gain support from other GITs to strengthen proposal
- Blue crab harvests followed similar trends in VA, MD, and PRFC
  - o Above average harvest in spring, lower in summer, and picked back up in fall
- MDNR received request to extend October bushel limits into November due to Covid
- VMRC experiencing low reporting rates; will be voting to extend the crab pot season into December this year due to Covid