QUARTERLY PROGRESS MEETING – November 2019 Chesapeake Bay Program





Blue Crab Abundance

Marty Gary Potomac River Fisheries Commission Sustainable Fisheries GIT Vice Chair Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Program has committed to...



Goal: Sustainable Fisheries

Outcome: Maintain a sustainable blue crab population based on the current 2012 target of 215 million adult females. Refine population targets through 2025 based on best available science.



How You Can Help



- Current management framework is working
- Focus on prioritized science needs
- Limited research funding



Learn

What have we learned in the last two years?



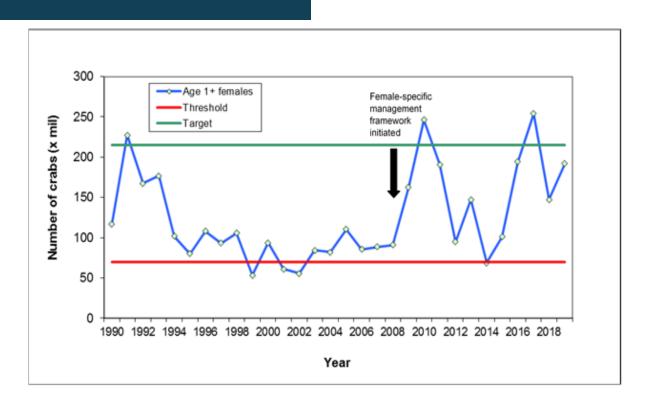
Successes and Challenges



- Focus on science and research needs
- Current management framework is working
 - No need for benchmark stock assessment at this time
- Completed blue crab ecosystem study
 - Need to identify applications of results



What is our Expected and Actual Progress?





On the Horizon



- Recently prioritized blue crab science needs
 - Will inform future logic and action plans
- No immediate financial or policy needs

Science/Research Need	Priority
Evaluate the efficacy of the WDS as an index of abundance and compare to trawl survey estimates.	High
Improve accountability and reporting for commercial and recreational harvest.	High
Evaluate the effects of environmental factors (climate change) on blue crab abundance and recruitment variability. Evaluate models for fishery-independent indices (e.g., GAM, GLMM, GLM) to identify the most appropriate form and standardize index development. Evaluate catchability and fishery-independent surveys.	High
Improve characterization of catch composition and effort using fishery-dependent sampling.	High
Examine differences in gear efficiency between Maryland and Virginia.	High
Improve documentation of the sex ratio and the effect of shedding mortality on reported harvest in the peeler/soft crab fishery.	High
Investigate the model's poor fit to the sex-specific catch and abundance indices, including evaluation of higher male natural mortality and higher proportion of recruiting females as reasons.	High



Adapt

How does all of this impact our work?

Based on what we learned, we plan to ...

- Provide the best available science to jurisdictions
- Focus on science and analysis to improve assessment models
- Include annual stock assessment update in the Blue Crab Advisory Report



Help

How can the Management Board lead the Program to adapt?

- Continue to support science and research needs for blue crab population assessment and management
- Modeling and analytical training for staff
- Identify funding sources for analytical work
- Potential links with habitat and climate outcomes

QUARTERLY PROGRESS MEETING Chesapeake Bay Program





Discussion