Blue Crab Abundance

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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
<table>
<thead>
<tr>
<th>Science/Research Need</th>
<th>Priority</th>
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<tbody>
<tr>
<td>Evaluate the efficacy of the WDS as an index of abundance and compare to trawl survey estimates.</td>
<td>High</td>
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<tr>
<td>Improve accountability and reporting for commercial and recreational harvest.</td>
<td>High</td>
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<tr>
<td>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.</td>
<td>High</td>
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<td>Improve characterization of catch composition and effort using fishery-dependent sampling.</td>
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<td>Examine differences in gear efficiency between Maryland and Virginia.</td>
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<td>Improve documentation of the sex ratio and the effect of shedding mortality on reported harvest in the peeler/soft crab fishery.</td>
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<td>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.</td>
<td>High</td>
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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?
Help Needed

- 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
Discussion