CBSAC update

Sustainable Fisheries GIT Dec 19, 2017

CBSAC update

Current Projects

Stock Assessment efforts

Looking ahead

Photo: VIMS

Current Projects

- How to present uncertainty around estimates of exploitation
  - **Quantifiable sources**
    - Sampling error
  - **Unquantifiable, unknown sources**
    - Bias in harvest reports
    - Discard mortality
  - **Modeling error**
    - Liang et al (UMCEES) developed a Bayesian approach to estimate sampling and non-sampling error around estimates of abundance.

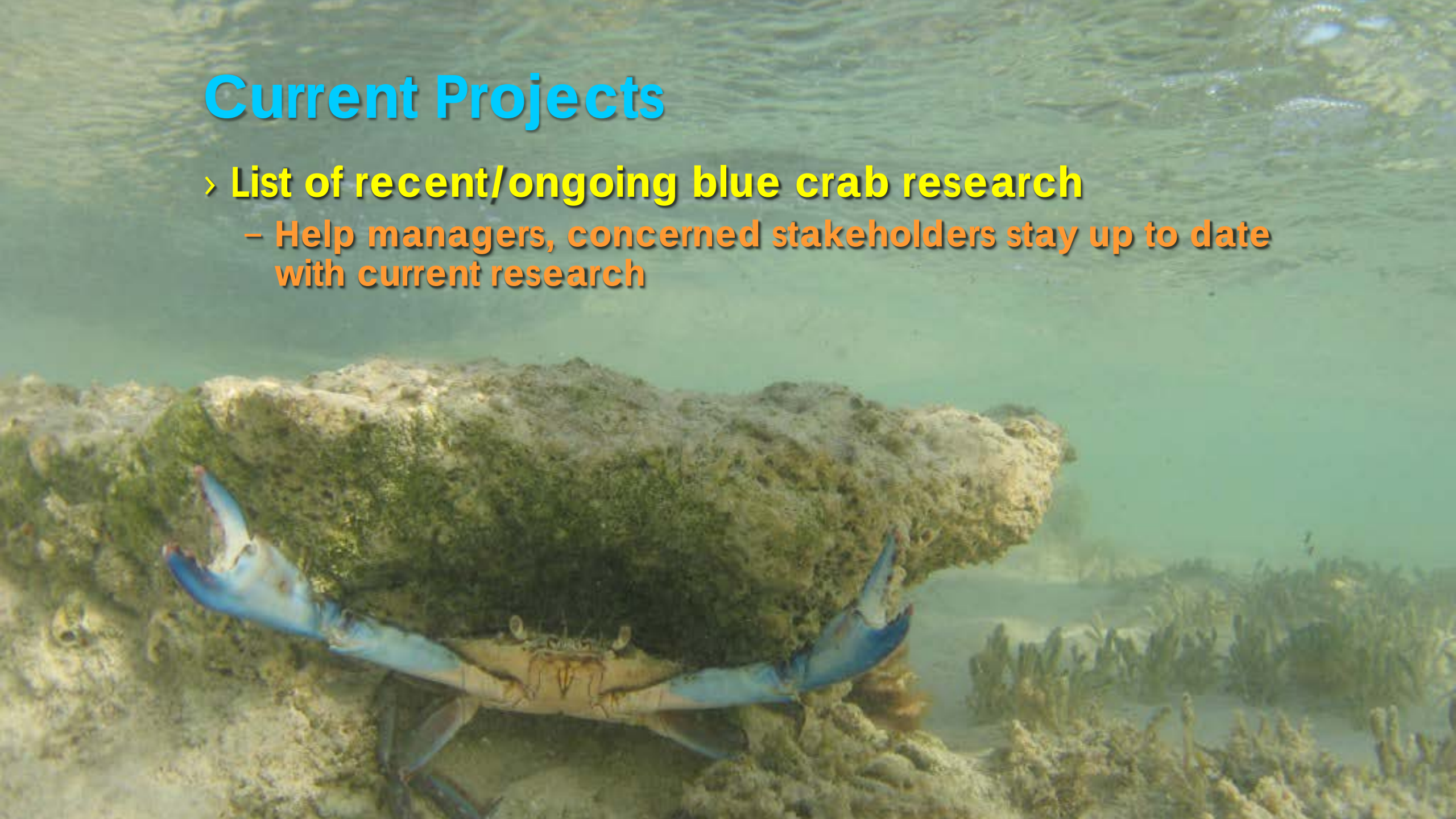
Current Projects

- **Review of *Ecological and Economic Effects of Derelict Fishing Gear in Chesapeake Bay***
  - **Funded by NOAA Marine Debris Program**
  - **Comprehensive study estimating the number of derelict crab pots and marine life captured**
  - **Flaws in the authors' approach**
    - **Choice of spatial model**
    - **Over-estimated input values (No. of pots in use, loss rate,…)**
    - **Likely biased assumptions (additive catch, catch rates,…)**
    - **Potential COI - authors' patent for biodegradeable panels**

Photo: Jay Fleming

Current Projects

- List of recent/ongoing blue crab research
  - Help managers, concerned stakeholders stay up to date with current research



Stock Assessment update

More than an update, less than a benchmark

Use same Catch Multiple Survey model developed by UMCEES

- **Address questions of reviewers**
- **Address ToRs being developed last year**

Resolve issues with catchability / relative abundance of juveniles and adults.

Review life history parameters (e.g. - variable M – by age, sex)

Incorporate commercial CPUE as tuning index (Co-op dataset: 14 years // CPUE by gear, region, size, sex)

Looking ahead…

- Winter meeting Jan 5, 2018
- For Chesapeake Bay Agreement, provide input on updated work plan for blue crab management strategies.
- Timing of next benchmark assessment