Scientific and Statistical Committee Report

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April 2010

SSC Agenda

June 21

- SSC Business
  - Meeting with Mid Atlantic and Center staff
  - TRAC & SAW51
- Review of Acceptable Biological Catch control rules
- Research recommendations

June 22

- Draft policy paper on Ecosystem-Based Fishery Management
- Red crab Acceptable Biological Catch recommendation

- Atlantic salmon Acceptable Biological Catch recommendation

Red Crab Terms of Reference

1. Review the information provided by the Red Crab Plan Development Team on historical dead discards of red crab in the directed trap fishery and in bycatch fisheries and recommend an ABC that includes both landings and dead discards; and
2. Review the information provided by the Red Crab PDT and develop recommendations concerning the potential inclusion of female red crab landings in the ABC

Red Crab – March 2010 Recommendations

1. Given the data-poor condition of the assessment of the red crab fishery, OFL cannot be estimated;
2. Landings of male red crabs should be limited to an interim ABC of 1775 mt;
3. Sustainability of future landings at or below the recommended ABC is conditional on not exceeding past discard rates; and
4. Estimates of discards will be needed to provide advice on total catch.

Historical Dead Discards

- The PDT reviewed data concerning discards and discard mortality from a variety of sources (2006 & 2008 stock assessments, the 2009 SAFE Report, observer data).
- The SSC concludes that the available monitoring data on magnitude of discards and research on discard mortality are inadequate for reliably estimating the magnitude of dead discards.
- Therefore, despite guidance on including dead discards in catch limits, the best scientific information available for deriving ABC is the time series of landings.

Female Landings

- An exempted fishery permit (EFP) exempts four vessels from the prohibition on landing more than one standard tote of female crab per trip.
- The EFP allows for landing of no more than 1 million lb of female red crab over two years.
- The long-term purpose of the EFP is sustainable female landings, but it is not clear whether the experimental fishery will support an evaluation of sustainable female landings.

Female Landings

- The basis of the SSC's previous recommendation on ABC is that there is no evidence of population depletion since the beginning of the fishery, and the time series of male landings provides an estimate of sustainable yield of males only.
- This inference of sustainability is conditional on the male-only fishing strategy that existed during the observed time series.
- If the Council desires that the ABC include landings of females, the SSC would need to reconsider the inference of sustainability and derive a new scientific basis for the ABC recommendation.

Female Landings

- The Fishery Management Plan for deep sea red crab prohibits the landings of females, and the Council has not explicitly decided to revise that management strategy.
- Allowing the landing of females is being considered through an experimental fishery.
- Therefore, results of the experiment and other research should be evaluated in comparison to the performance of the male-only harvest strategy.

SSC Recommendations

- The SSC repeats its previous recommendations:
  1. Landings of male red crabs should be limited to an interim ABC of 1775 mt; and
  2. Sustainability of future landings at or below the recommended ABC is conditional on not exceeding past discard rates;
- In response to the terms of reference, the SSC recommends that:
  1. Inclusion of dead discards in red crab catch limits requires improved monitoring of the magnitude of discards and research on discard mortality.
  2. Including female landings of red crab in catch limits requires an evaluation of sustainability of a male and female fishery and a more explicit decision on management strategy.

Salmon – Term of Reference

- Review the information provided by the NEFSC and develop recommendations for an ABC for Atlantic salmon and for other management reference points, MSY, MSST and OFL if possible.

Salmon Status

- The current Fishery Management Plan prohibits possession of Atlantic salmon and any directed or incidental commercial fishery for Atlantic salmon in federal waters.
- The Gulf of Maine Distinct Population Segment of Atlantic salmon was listed as endangered under the Endangered Species Act (ESA) in June 2009.
- The other stock complexes in the US - Long Island Sound and Central New England and the trans-boundary Outer Bay of Fundy complex are also well below conservation limits.

Salmon Reference Points

- A management reference point used by salmon managers, Conservation Spawning Escapement (CSE), is comparable to minimum stock size threshold (MSST) and under current natural mortality regimes
- US salmon stock complexes are below the minimum stock size at which rebuilding to B_{MSY} will occur within 10 years.
- Since 1967, CSE has not been achieved for a stock complex and abundance estimates are less than 25% of these conservation reference points, even with extensive hatchery support.

Salmon Threats & Bycatch

- Given the endangered status of Atlantic salmon, the SSC supports the full implementation of the ESA recovery plan.
- Atlantic salmon were listed as endangered primarily because of significant ongoing threats from poor marine survival and dams.
- Observed bycatch of salmon in New England fisheries appears to be a minimal component of mortality.
- For example from 1989 to 2009 bycatch of salmon was observed in only five of 12 years, totaling of 45 lb.

Salmon International Agreement

- The North Atlantic Salmon Conservation Organization (NASCO) is a formal international agreement.
- National Standard 1 guidelines implementing the Magnuson Stevens Fishery Conservation and Management Act state that "*For internationally-assessed stocks, an ABC as defined in these guidelines is not required if they meet the international Exception*."

Salmon Conclusions

1. The prohibition on possession and directed fishing for Atlantic salmon is consistent with conservation and management objectives;
2. Annual catch limits and accountability measures are not appropriate for fishery resources managed according to international agreements.
3. Therefore, no ABC recommendation is provided.

Ecosystem-Based Fishery Management

- EBFM Workshop August 2009 (Newport RI)
- SSC subgroup drafted policy paper:
  - Two forms of EBFM ('evolutionary' and 'revolutionary')
- 1st Draft reviewed by SSC in March
  - Rationale, worked examples ('incremental,' 'intermediate,' 'holistic')
- 2nd Draft reviewed this week
  - Development of area-based, multispecies production and transition plan
- 3rd Draft to be reviewed at fall SSC meeting.

Review of ABC Control Rules

- Terms of Reference:
  1. Review ABC control rules or methods for deriving ABC in each FMP with respect to their expected performance for avoiding overfishing (i.e., conformance with the Act)
  2. Identify the information needed to develop ABC control rules that account for scientific uncertainty in OFL and the Council's desired risk tolerance (i.e., conformance with guidelines).
- All New England Plans were reviewed
- All ABC control rules from other Councils were reviewed
- Draft recommendations to be reviewed at fall SSC meeting and presented to the Council in November.

Research Recommendations

- Research recommendations and data needs were developed by the Research Steering Committee and expanded by Plan Development Teams.
- Last year the SSC organized recommendations by topic and plans to provide a list of priorities.
- Two SSC subgroups formed:
  - Natural sciences & modeling priorities
  - Socioeconomics
- Subgroup reports to be reviewed at fall SSC meeting and presented to the Council in November.

Upcoming SSC Schedule

- August 24-26 (Boston MA)
  - Scallop ABC recommendation
  - Groundfish ABC recommendations
    - Pollock ABC (review SARC results)
    - GBYT ABC (review TRAC results)
    - Index-based ABCs (review calibration workshop and recent survey data)
- Oct 18-22 National SSC (Charleston SC)
- October-November (3-day)
  - Monkfish OFL and ABC recommendation
  - Ecosystem-Based Fishery Management policy paper
  - ABC control rules
  - Research priorities
  - Spring 2011 SARC and TRAC
  - SSC Procedures and 2011 agenda