



Science and Statistical Committee Report

Steve Cadrin, Chair

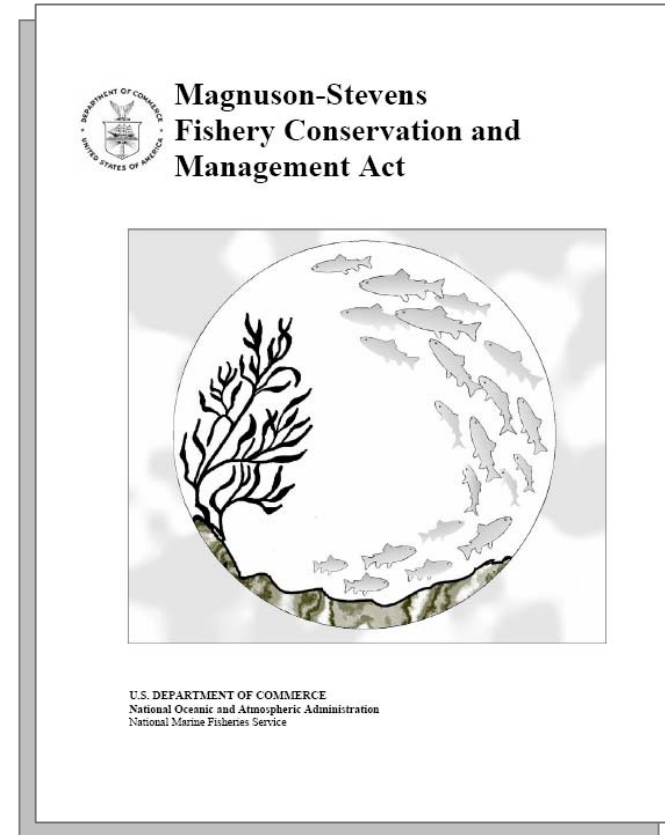
October 2008

SSC Agenda

- Committee elections
- SSC Process
 - Address committee priorities and workload issues including defining operating procedures for
 - Prepare draft operating procedures in preparation for the national SSC workshop (Nov 12-14)
- Scallop overfishing definition under consideration in Amendment 15 to the Fishery Management Plan
 - Oct 7 memo from SSC to Council
- Amendment 3 to the Skate Fishery Management Plan
- Other requests

SSC Priorities (draft)

- In the development of annual and monthly agendas:
 - Prioritize Acceptable Biological Catch (ABC) recommendations
 - Prioritize other requests according to:
 - the source of the request (in descending order: from the Council, Executive Committee, Plan Committees, PDTs, other,
 - with the nature of request (consensus, majority, member) explicit in the request.
 - In addition to Council requests, consider larger aspects of the 'spirit of the act' (e.g., ecosystem-based fishery management, socio-economic benefits)



SSC Procedures (draft)

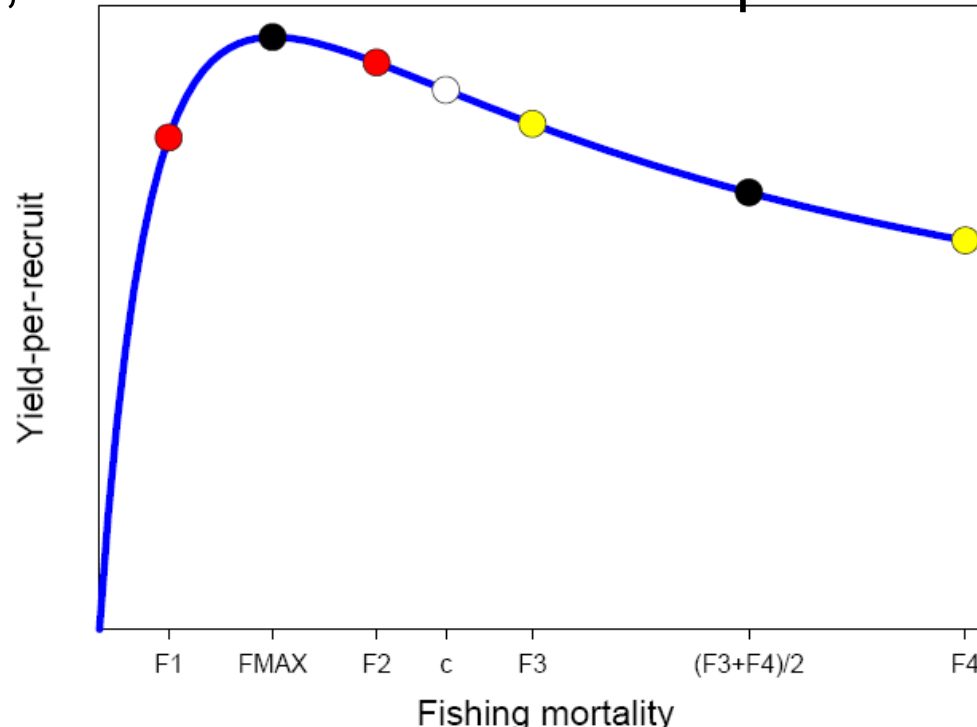
- SSC should meet in conjunction with Council meetings (5/year), others as needed.
- SSC should consider each request one month before the Council deliberates on issue.
- A majority quorum ($\geq 7/15$) should be sought for SSC recommendations.
- SSC recommendations should consensus statements. Consensus statements can identify greatest common perception with caveats.
- As a matter of principle, SSC input in Council decisions is as important as input from Council members. The New England Council should make a statement about compensation for SSC members.

Scallop Overfishing Definition

- The SSC was asked to review the modified scallop overfishing definition being considered for Scallop Amendment 15.
- The SSC previously reviewed a similarly modified overfishing definition proposed in Amendment 10 and recommended that the modified overfishing definition “*provides an appropriate scheme for addressing area rotation and protects against the loss of yield due to excessive fishing in open areas. It allows management flexibility both in terms of which areas are opened and the time frame over which the stock is utilized.*”
- The SSC re-considered a slightly revised definition of overfishing that accounts for spatial and temporal heterogeneity in fishing mortality rate.
- The SSC reviewed the Council request, an overview presentation, and three background documents.

Scallop Overfishing Definition

- Maximum yield-per-recruit is produced by fishing the entire resource at a constant rate of F_{max}
- Variation in F produces less than the expected yield-per-recruit for the entire resource.
- Modified calculation considers spatial variation (permanently closed areas, rotational closures and open areas).



Scallop Overfishing Definition

- Recommendations (Oct 7 SSC memo):
 1. The analyses supporting the proposed overfishing definition are scientifically sound and should be considered in Scallop Amendment 15.
 2. The spatially adjusted F_{\max} calculation used in this alternative is more realistic than the conventional F_{\max} calculation, because it is more compatible with the current area management strategy. For example, there may be an instance under the current overfishing definition in which the overall resource may not be experiencing overfishing, but given the spatial distribution of scallops and the fishery, individual management areas may be experiencing growth overfishing (i.e., producing less than maximum yield-per-recruit), resulting in foregone potential yield.

Scallop Overfishing Definition

- Recommendations (Oct 7 SSC memo):
 3. Although F_{\max} may be a reasonable proxy for F_{MSY} , the SSC recommends more explicit consideration of long-term sustainable yield, rather than maximizing yield-per-recruit.
 - For example, aspects of long-term sustainable yield include: non-equilibrium conditions, stock recruit relationship, conservation of spawning potential, density dependence, and environmental influences; all of which should be monitored as a condition managing the fishery based on F_{\max} .
 - Yield-per-recruit is sensitive to changes in the spatial patterns of fishing and the age/size distribution of the catch. Alternatively, an overfishing definition based on spawning-biomass-per-recruit associated with high resource productivity would be less sensitive to changes in the nature of the fishery and would allow flexibility to manage for a variety of management objectives (e.g., optimum yield, economic and social utilities).

Skate FMP Amt 3 (draft)

- Intention of Amt 3:
 - Overfished status of smooth, thorny and winter skates
 - Overfishing of thorny skate
 - Implementation of annual catch limits (ACLs) and accountability measures (AMs)
 - The need to revise the baseline review process
- SSC will report to the Council at the November Council meeting.