

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON GROUND FISH HARVEST POLICY EVALUATION WORKSHOP

The Scientific and Statistical Committee (SSC) hosted a workshop to evaluate aspects of the Council's groundfish harvest policy. The discussions centered around three issues: (1) the performance of the 40-10 harvest policy for stocks with different life history and stock-recruitment patterns, (2) alternative methods for estimating B_0 and B_{MSY} proxies, and (3) the use of priors for natural mortality and stock-recruitment steepness.

The SSC notes that considerable progress had been made towards addressing these topics. However, it is not possible at present to draw definitive conclusions about the first two issues as further work is required. Regarding the third issue, the SSC endorses the recommendations of the workshop regarding which empirical methods should be used to estimate natural mortality and the need for assessment authors to show the impact of the value of natural mortality on model fit by means of likelihood profiles. In addition, the SSC recommends that the work to calculate a prior for steepness for rockfish species be completed as soon as possible and the results sent to the groundfish stock assessment coordinator who should provide it to relevant assessment authors and Stock Assessment and Review (STAR) Panels.

The SSC notes that some of the work presented to the workshop indicates that stocks with high recruitment variability have a larger probability of dropping below the overfished threshold. The workshop discussed two ways in which to modify the current harvest policy for such stocks: reduce the harvest rate or change the overfished threshold. Operationalising either of these ideas will require additional work to evaluate the performance of alternatives. In principle, stocks could be classified into categories depending on perceptions regarding recruitment variation, and separate control rules developed for each category.

The SSC emphasizes the importance of providing a way to compare the trade-offs in terms of catch and risk between the 40-10 and 60-20 control rules, as the optimum yield (OYs) for several of the California nearshore groundfish are based on the 60-20 rule.

The SSC notes that the concept of "dynamic B_0 " provides a means for evaluating stock status given "prevailing conditions". The SSC does not believe that dynamic B_0 has been evaluated sufficiently at present for it to form the basis for changes to the current harvest policy. However, the SSC encourages further work on developing and testing control rules based on dynamic B_0 . Also, the SSC recommends that assessment authors report stock depletion in terms of dynamic B_0 in addition to current measures of depletion, to help elucidate causes for stock declines (environment versus fishing).

The SSC endorses the need to develop and examine harvest control rules for data-limited stocks. Several researchers are working on potential control rules for data-poor species and SSC review of this work in a workshop setting could provide focus for Council action in this regard. The SSC also endorses the workshop recommendation that harvest policies that account for and are robust to climate be developed and tested.

The harvest policy evaluation workshop focused on groundfish species. However, many of the considerations discussed during the workshop pertain to other Council-managed species groups. The SSC notes the importance of considering the issues discussed during the harvest policy workshop if the harvest policies for Coastal Pelagic Species (CPS) species are reviewed and possibly revised.

The workshop provided a means for reviewing and discussing the research being conducted outside the Council process in relation to its ability to improve the quality of the advice the Council receives. Interaction between the SSC and outside researchers should help focus the research so that it is of greatest benefit to the Council. The SSC therefore recommends that an additional meeting be held to review the work conducted in response to the recent workshop and perhaps begin the process of refining the harvest policy. Given time constraints, such a meeting could not occur before the next off-year and hence impact OYs for 2009-2010. Participation in the recent workshop by scientists from outside the Council family enhanced the discussions and the SSC recommends that such scientists be invited to any further meetings.

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