

Report on SAW 34 SARC Meeting Northeast Fisheries Science Center, Woods Hole, MA. Nov. 26-30, 2001

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1. Executive Summary

SARC 34 reviewed 3 stocks or stock complexes: long-finned squid (*Loligo*), Georges Bank winter flounder, and goosefish. As well as work supporting the respective Advisory Documents, several Working Papers that developed analytical methods or exploratory models were presented. In general the Working Papers were well prepared and ready for review.

None of the assessments were straightforward. Georges Bank winter flounder, which had previously been analysed using a VPA, was assessed with production models and a forward projecting age structured population model. The VPA had been rejected by the Assessment Working Group. In the case of the goosefish assessment, stock definition is still an issue, and as well numerous models (yield per recruit, production models, age and length structured analysis) were presented. *Loligo* was perhaps the most difficult, because of their very high growth and mortality rates, they are often not well described by traditional fisheries models. For example, new analysis showed that carrying capacity, and hence MSY and traditional concepts of surplus production, was not definable from the data. New production and yield per recruit models were presented as well as new statistical model of the survey data.

The technical issues involved in the determination of stock status should not have been difficult considering the depth of talent and experience in the assessment teams. However, productivity was impeded due to non-technical considerations. The first was the on-going tension among models; new versus old approaches to assessments. The SAW frequently had to act as a body for technical review. This is not an efficient use of time, as the SAW is not drawn together with personnel for that purpose. Secondly, time taken on technical matters detracts from stock assessment review activities. Thirdly, draft Advisory Documents were not prepared based on the Assessment

There is an on-going need for a body to address technical/analytical/ methodological issues. Such reviews could take place as part of the SAW as was done in Saw #33 which dedicated time for production models; or if more time were required, special panels could be constructed.

2. Background

Two background issues are relevant in order to put some context to a number of points raised in this review. The first is the role of the Assessment Working Groups. Three such groups were formed, one for each assessment: the Invertebrate Subcommittee, and two, both of which were, named Southern Demersal Working Group. See the authors' lists for the Working Papers for the members of each. Although I have never participated in one of these groups, I expect that their role is analogous to similar groups in Atlantic Canada, that is, to complete the technical analysis, to prepare the assessment and a draft of the Advisory Document

The second is the make-up of the SARC. There were about 16 people on the panel *per se*; 2 from CIE, 4 experts from NEFSC, 2 from Fishery Management Councils, 2 from Atlantic States Marine Fisheries Commission, 2 from academia and 2 from industry. As well there were about 10 *ex officio* participants from NEFSC. This represents a broad pool of expertise well constituted for the review. However, many of them would not wish to, or in some cases be able to, contribute to methodological discussions. To assure that their time is not wasted, such issues should be kept to a minimum at the SAW, presumably having been resolved by the Assessment Working Groups

3. Review Activities

Upon receipt of the relevant documents, they were read and summarised and questions/observations compiled. The SARC reviewed three stocks and I actively participated in all discussions and in the drafting of management advice. At the Stock Assessment Review Committee (SARC) the chair asked me, and I agreed, to act as the SARC Leader (See ToR in Appendix A) for squid (*Loligo*). Because of time constraints later in the week, the Chair further requested that I convene a parallel session to draft the *Loligo* Advisory Document. As well, during breaks in the meeting, I would try to talk the various individual researchers and give specific technical recommendations for analysis or ideas for to clarify the presentation of results.

After the SAW, drafts were finalised, and thanks to the diligence of the Chairman during the SAW the revisions were neither major nor controversial.

4. Summary of Findings

My observations have been broken into two sub sections on the stock review *per se* and the other pertaining to the environment in which the advice is generated and reviewed, for lack of a better title, it is labelled 'Corporate culture'. My expertise is in the former topic. The report on the latter topic should be tempered with the understanding that although I have worked and have wide experience in the stock assessment environment, personnel management and related issues are not my field of expertise. In some cases the inter-relationship between the two topics means that some of the points could be presented in either sub-heading.

4.a Review related observations.

The Chair was informed, experienced and led the meeting well. He kept the SARC focused and moving towards the production of the Advisory Document and related reports. However, he had to repeatedly prod the SARC to get movement on, and in some cases even responses to, various issues. The review of the co-operative goosefish survey took a bit of time away from the review process but was of importance to many of the fishing industry representatives present.

All three of the assessments came forward with new analysis. For some reason, such analyses often seemed to be presented in terms of new versus old methods. A more constructive approach would be to emphasise a synthesis of new and old methods. In other words, focusing on what is gained by considering what all the models reveal about the resource, instead of “my model works better than yours”.

The SAW frequently had to act as a body for technical review. This is not an efficient situation for two reasons. The first is that the SARC is constituted principally as an Advisory Report preparation body and is not constructed with technical expertise as a primary responsibility. Secondly, time taken on technical matters usually detracts from direct stock assessment activities.

4.b Corporate culture.

Topics in this realm are difficult to report on because they are to some degree based only on perceptions. Also, it is not constructive to introduce issues without any suggested remedies. However, it would be remiss not to mention such trends, although subjective, which have been increasing over the last few years during which I have been attending SAWs because of their impact on the Review process.

One of the *Loligo* Working Papers was not reviewed by the respective Assessment Working Group prior to the SAW. Although it had been prepared in time, no explanation was brought forward as to why it had not been reviewed. This meant that it had to be done during the meeting and its implications considered separately from the other analysis had already been compiled. Although opening issues that are internal to the running of the Woods Hole Laboratory is done reluctantly, the impact on the SAW was significant.

It would save some time if Draft Advisory Documents had been prepared before the SARC. There seemed to be a perception that there was no benefit to have the Assessment Working Groups prepare them ahead of time, as the SARC would always want changes anyhow and why do it twice. It would be more efficient to have a preliminary draft available, as it is easier to work from and edit an existing document than to produce it during the SAW and then review it.

Finally, there seemed to be a reluctance for members of the assessment teams to raise questions about or criticise the assessments. This may be because of an unwritten code that if I do not criticise your work, later you will return the favour to me. This reticence meant that a lot of time was spent by the Chair trying to illicit input, and some of my time trying to unearth problem areas that were already known to members of the SARC or the audience. Although the atmosphere was not adversarial, it was not as openly co-operative as would be wished.

5. Conclusions/Recommendations

These have been made in the Executive Summary and Section 4.

6. References SARC Working Papers

MS A-1. Stock Assessment and Reference Points for Inshore Longfin Squid, *Loligo pealeii*. Invertebrate Subcommittee¹

MS A-2. Yield-Maximizing Fishing Mortality for Short-Lived Squids with Monthly Cohort Dynamics: A Case Study of *Loligo pealeii*. H. Lai and J. Brodziak

MS A-3. Summary of Commercial Landings and Survey Abundance Indices. H. Lai and C. Keith

MS A-4. Generalized Additive Modeling Approach for Estimating Survey Abundance Indices of Loligo Squid. H. Lai and P. Rago

MS B-1. Assessment of the Georges Bank Southern Winter Flounder Stock, 1982 – 2000 Southern Demersal Working Group²

MS B-2. An Age-Structured Assessment Model For Georges Bank Winter Flounder. J. Brodziak

MS C-1. Assessment of Goosefish Stocks Off the Northeast United States. Southern Demersal Working Group³

MS C-2. Some Surplus Production Analyses For Northern, Southern, and Combined-Area Monkfish J. Brodziak

¹ Brodziak, J.; Cadrin, S.; Glass, C.; Jacobson, L. (Chair); Keith, C.; Lai, H.; Monsen, G.; Powell, E.; Rago, P.; Seagraves, R.; Weinberg, J.

² Brodziak, J.; Brown, R.; Cadrin, S.; Hendrickson, L.; Mayo, R.; Nitschke, P.; O'Brien, L.; Sosebee, K.; Terceiro, M. (Chair); and Wigley, S.

³ Applegate, A.; Downey, K.; Franco, H.; Haring, P.; Kavanagh, P.; Legault, C.; Maguire, J.; Mahoney, J.; McHugh, N.; Milliken, H.; Richards, A.; Shepherd, G.; Smith, T.; Sosebee, K.; Terceiro, M. (Chair); Vassal, M. Whittingham, A.; and Wigley, S.

Appendix A

Responsibilities of SARC Leaders

A SARC Leader is a SARC member assigned a specific species/stock for the purpose of facilitating the discussion and documentation on the species/stock, including:

- (1) Ensuring that the final documents appropriately reflect the consensus of the SARC;
- (2) Consulting with the Rapporteur in the development of the final draft of a species section of the SARC report, including review after the meeting, in necessary;
- (3) Ensuring that research recommendations are properly recorded;
- (4) Consulting with the SARC Chairman and Rapporteur on subsequent drafts of the Advisory Report during the meeting, and after the meeting, if necessary; and
- (5) Reviewing final drafts after the meeting.

Appendix B

STATEMENT OF TASK

Consulting Agreement between the University of Miami and Robert Mohn

November 2, 2001

General

The Stock Assessment Review Committee meeting (SARC) is a formal, one-week long meeting of stock assessment experts who serve as a peer review panel for several tabled stock assessments. It is part of the overall Northeast Stock Assessment Workshop (SAW) process which also includes peer assessment development (SAW Working Groups), public presentations, and document publication within a cycle that lasts six months. The panel is made up of some 12-15 assessment scientists: 4 scientists from the NEFSC; a scientist from the Northeast Regional office, scientists from the staff of the New England and Mid-Atlantic Fishery Management Councils, and Atlantic States Marine Fisheries Commission and additional panelists from state fisheries agencies, academia (US and Canada), and other federal research institutions (US and Canada).

Designee will serve as a panelist on the 34th Stock Assessment Review Committee panel. The panel will convene at the Northeast Fisheries Science Center in Woods Hole the week of 26 November (26-30 November, 2001) and review assessments for goosefish (monkfish), Georges Bank winter flounder and loligo squid (long-finned inshore squid, *Loligo pealeii*).

Specific

A Workshop Participant's duties will occupy a total of 7-10 workdays; a day or two prior to the meeting for document review; the week long meeting; and a day or two following the meeting to ensure that the final documents are consistent with the SARC'S recommendations and advice. No consensus opinion between two CIE reviewers will be accepted.

- (1) Prior to the meeting: become familiar with the working papers produced by the SAW Working Groups (total number not final; there will be at least one per stock);
- (2) During the meeting: participate, as a peer, in panel discussions on assessment validity, results, recommendations, and conclusions. Participate in the formulation of the draft SARC Advisory Report;
- (3) Review the final Draft Advisory Report and Consensus Summary Report.

(4) No later than January 7, 2002, submit a written report of findings, analysis, and conclusions. The report should be addressed to the “UM Independent System for Peer Reviews, “ and sent to David Die, UM/RSMAS, 4600 Rickenbacker Causeway, Miami, FL 33149 (or via email to ddie@rsmas.miami.edu).