

DRAFT PROPOSED AGENDA
Review of Assessment Methods
for Data-Poor Stocks

Santa Cruz Lab
NMFS Southwest Fisheries Science Center
110 Shaffer Road
Santa Cruz, CA 95060
April 25-29, 2011

The requirement in the re-authorized Magnuson-Stevens Act (2007) to set annual catch limits (ACLs) based on science recommendations implies some kind of basic assessment is required for all stocks in fishery management plans (FMPs). This mandate has led to an increased focus on assessing “data-poor” stocks. Many data-poor stocks are of minor economic importance and assessing all of them using size/age structured models would be difficult given data limitations and the resources required. Simple assessment methods that use historical catches and available trend or size-composition information could potentially be applied to many data-poor stocks. These methods could be used to set ACLs, and to identify stocks which may be at risk of depletion that would be elevated to high priority for more detailed assessments.

With just a few exceptions, overfishing limits (OFLs) for all of the stocks in the Pacific Council’s Groundfish FMP were developed for 2011-2012 biennial specifications process during January to June, 2010, using new assessment methods designed for data-poor stocks. These methods included Depletion-Corrected Average Catch (DCAC) and Depletion-Based Stock Reduction Analysis (DB-SRA). The methods were applied by NMFS Southwest Fisheries Science Center staff and reviewed by PFMC’s Groundfish Subcommittee of the Scientific and Statistical Committee and endorsed by the full SSC. However, the methods and their application did not receive the level of review afforded by a stock assessment review (STAR) panel process and in June, 2010, the PFMC requested a formal review of data-poor methodologies:

“The Council also requested a formal review of methodologies for determining harvest specifications for data-poor stocks. Such methods include catch-based approaches as well as those that might be considered rudimentary assessments, and should include the methodology used in the current biennial specifications process as well as reasonable alternatives to that methodology.”

Source: <http://www.pcouncil.org/wp-content/uploads/0610decisions.pdf>

The Data-Poor Methodology Review Panel will meet during the week of April 25-29, 2011, in Santa Cruz, California. Based on the Council’s request, the primary objective of this panel is different than a STAR panel, where the objective is to review and endorse a stock assessment for use by the Council in developing management measures. The objective of the methodology

review meeting will be to provide a list of endorsed methods for use on data-poor or data-limited stocks in the Pacific Council's Groundfish FMP. Depletion-Corrected Average Catch (DCAC) and Depletion-Based Stock Reduction Analysis (DB-SRA) will be reviewed at the meeting. Several developments of these methods have been proposed, which could raise stocks from Category 3 (catch-based only) to Category 2 in the Groundfish FMP tier system. Category 2 stocks are those where a basic assessment model is fit to trend information. For each method reviewed, a standard set of questions/issues will be addressed by the Methodology Review Panel as follows.

1. What are the data requirements of the method?
2. What are the conditions under which the method is applicable?
3. What are the assumptions of the method?
4. Is the method correct from a technical perspective?
5. How robust are model results to departures from model assumptions and atypical data inputs?
6. Does the model provide estimates of uncertainty? How comprehensive are those estimates?
7. What level of review is appropriate for assessments conducted using the method?

The technical teams presenting new methods should provide a document to the panel least two weeks prior to the review meeting describing: 1) input data, 2) model development, 3) model testing and evaluation, 4) example applications. Since robustness is a key attribute in stock assessments, examples should be provided for operating models or already assessed stocks for which the assumptions of the simpler models are not met.

MONDAY, APRIL 25, 2011

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| A. | Call to Order
(8 a.m.) | Martin Dorn |
| | 1. Introduction | |
| | 2. Logistics and Goals of the Review Panel Meeting | |
| B. | Overview of the Depletion-Corrected Average Catch Methodology
(9 a.m.) | Alec MacCall |
| C. | Depletion-Based Stock Reduction Analysis Development
(10 a.m.) | E.J. Dick and Alec MacCall |
| D. | DCAC, DB-SRA, and SS3 Simulation
(1:30 p.m.) | Chantel Wetzel |
| E. | DCAC and DB-SRA Application
(3:30 p.m.) | E.J. Dick |

TUESDAY, APRIL 26, 2011

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| F. | Mimicking DB-SRA / Age-Structured Production Models in SS3 | Jason Cope |
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(8 a.m.)

- G. Catch, Life History, and Length Compositions in SS3
1. Introduction (10 a.m.) Steve Ralston
 2. Operating Model (10:30 a.m.) Dan Hively
 3. Simulation Results (2 p.m.) E.J. Dick and Dan Hively
- H. Extended DB-SRA
1. Introduction (3 p.m.) E.J. Dick
 2. Development of Abundance Indices (3:30 p.m.) Alec MacCall and Jason Cope
 3. Model description (4 p.m.) E.J. Dick
- I. Panel Assignments (5 p.m.) Martin Dorn

WEDNESDAY, APRIL 27, 2011

- J. Extended DB-SRA (Continued)
1. Application to selected stocks (8 a.m.) E.J. Dick and Alec MacCall
 2. Extended DB-SRA in SS3 (10 a.m.) Jason Cope
- K. Review work assignments (1 p.m.) Martin Dorn

THURSDAY, APRIL 28, 2011

- Follow-up and Review Work Assignments (8 a.m.) Martin Dorn

FRIDAY, APRIL 29, 2011

- Review Work Assignments and Report Writing (8 a.m.) Martin Dorn

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