

COASTAL PELAGIC SPECIES MANAGEMENT TEAM REPORT ON TERMS OF  
REFERENCE FOR THE ACOUSTIC TRAWL METHODOLOGY REVIEW

The Coastal Pelagic Species Management Team (CPSMT) received a presentation from Mr. Dale Sweetnam concerning the terms of reference (TOR) proposed by the Southwest Fisheries Science Center (SWFSC) for the upcoming Acoustic Trawl Method survey (ATM) methodology review scheduled for January 30 through February 2, 2018 (Agenda Item C.1, Attachment 1). The CPSMT reiterates its support of the ATM methodology review for use in coastal pelagic species (CPS) stock assessments. This survey has provided an index of abundance in sardine stock assessment models from 2011 to 2017, but has not been reviewed since February 2011. The survey has also been applied to derive abundance estimates for other species, such as mackerel and anchovy, but these estimates are believed to be negatively biased and have not been approved for use to develop stock assessment models. Accordingly, the CPSMT strongly supports the scope of the proposed TOR that recommends the ATM review panel focus on reviewing acoustic methods for surveying Pacific sardine and other CPS finfish.

Although the CPSMT agrees on the importance of all eight items presented in the TOR, the CPSMT also recognizes there may not be sufficient time to have an in-depth review of all of these items. Therefore the CPSMT recommends the Council consider prioritizing the following six items (as indexed and titled in Agenda Item C.1, Attachment 1) for the ATM review:

1. ATM survey documentation;
2. Estimated target strengths of CPS from the California Current;
4. Effects of trawl survey design;
6. Effects of vessel avoidance for the upper water column;
7. ATM survey design in areas where the ATM vessel is currently not sampling;
8. ATM data analysis and quantification of uncertainty.

Although it would be worth providing background information on past habitat models used for CPS stocks and current methods used to delineate these stocks, the CPSMT recommends that Item # 3 not to be a major focus of the review. Habitat models used for Pacific sardine have been extensively reviewed during past stock assessment review (STAR) panel meetings. Habitat models for Northern anchovy and Pacific mackerel do exist, but they would require extensive review. The CPSMT recognizes that stock delineation methods have been routinely reviewed during STAR panels, and the STAR should remain the venue to address future development in the application of these methods.

To our knowledge, there are not enough EK80 acoustic data compiled and available to merit reviewing the effects of upgrading from the Simrad EK60 to EK80 (Item #5). The EK80 instrumentation has only been used by the SWFSC for less than a year, and thus most of the current available acoustic data for stock assessments were acquired from deploying the EK60 during recent annual spring and fall CPS surveys. According to SWFSC scientists, data that are generally comparable to the EK60, in terms of their application to CPS identification, can also be extracted

from the EK80. Therefore, the CPSMT encourages the SWFSC to continue developing workshops and research using the EK80 until enough data can be collected for a full review of Item #5.

PFMC  
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