

## NATIONAL MARINE FISHERIES SERVICE SUGGESTIONS FOR 2015 GROUND FISH STOCK ASSESSMENTS

At its June 2014 meeting, the Council adopted for public review a list of 10 species for full or update assessments. This action identified the following species for full assessments: bocaccio, cowcod, kelp greenling, and black, canary, darkblotched and widow rockfishes. Petrale sole and sablefish were identified as updates. The Council also signaled that there might be further consideration of data-moderate assessments in September.

Assessment staff at the Northwest and Southwest Fishery Science centers have discussed various aspects of assessments for these species over the summer, including the workload requirements of each. Cowcod was just assessed in 2013 and has traditionally been a very data-challenged assessment. Extension of the NWFSC's Hook and Line Survey into the Cowcod Conservation Area, as well as research comparing the 'catchability' of that survey and other visual methods (using submersibles or ROVs) is planned over the next year. However, results from both of those efforts would not be available in time for a 2015 assessment. Consequently, we suggest deferring the next cowcod assessment until at least 2017.

Of the species identified for full assessments, black and China rockfishes and kelp greenling are nearshore species that lack fishery-independent indices of abundance and have presented assessment challenges in the past. Furthermore, because each coastal state has a different suite of available biological and catch/effort data, we expect that separate state-level models are a likely outcome of efforts to assess these species throughout their PFMC range. These assessments will involve the development of new/revised indices for recreational CPUE (up to 5 for each species), nearshore commercial CPUE in Oregon, and exploration of new ways to integrate black rockfish tagging data directly into assessment models for Oregon and Washington. The scope and quantity of these activities will require larger STATs than are normally used for full assessments. Although coastwide integration of assessment efforts for these species is important, each state area really needs to have its own leader, in order to coordinate with state agency representatives and understand the unique data issues as completely as possible.

The importance of conducting a new assessment for kelp greenling was elevated this spring, when the SSC discovered that the catch history used in the last assessment (2005, for Oregon only) was very different than the reconstructed catch history, which was completed more recently. Because of the staffing demands of conducting assessments for all three of these species on a coastwide basis, we suggest that the Council consider limiting kelp greenling to a full assessment for Oregon only, at this time, in order to provide management with a high-quality replacement for the 2005 assessment results.

We support all of the other items in the Council's preliminary list. Bocaccio, darkblotched, and petrale sole may all be rebuilt, and the first two should be conducted with the freedom to change model structure. A full widow assessment is important because of the industry's interest in reestablishing a target fishery, and the concerns which were expressed following the last

assessment, regarding model changes that occurred during the mop-up. Sablefish is tremendously important to many fishery sectors, and this update will help verify that the population is not continuing the decline observed throughout the late-2000s. Canary is also important, as it acts as a constraint on many fisheries. It has not had a full assessment since 2007, and NWFSC staff have been working to update inputs to the assessment over the past 9 months.

Although not included in the Council motion, we suggest including chilipepper rockfish as an update. Dr. Field has been routinely updating the inputs to the last full assessment (2007), and this is not expected to add significantly to the assessment or review workload.

Because of the considerable amount of work that will be associated with nearshore species in 2015, along with four other full assessments and 3-4 updates (including Pacific hake), we recommend not scheduling an additional data-moderate review panel in 2015. Research on various aspects of data-limited assessment methods is ongoing, and we suggest reviewing results of this work and the Terms of Reference for data-moderate assessments in 2016. In June, the Council expressed interest in the potential for revisiting the status and allowable harvest for arrowtooth flounder. We feel that a data-moderate assessment for arrowtooth in 2015 could be accommodated, given the workload associated with the assessments discussed above. Updating the prior assessment would present greater challenges, and the Stock Synthesis model has undergone major changes since 2007 and no age data currently exists beyond the last year included that assessment (2005). We would be happy to discuss options for arrowtooth with the SSC, prior to Council consideration of this agenda item.

A proposed review schedule for 2015 assessments is provided in Table 1. This draft schedule is based on a kelp greenling assessment being limited to Oregon waters. If a coastwide assessment is necessary, along with all other assessments identified above, an additional panel will likely be needed, as well as some additional assessment resources.

Table 1. Proposed Groundfish Stock Assessment Review Schedule for 2015.

	<b>Dates</b>	<b>Location</b>	<b>Species</b>	
<b>STAR Panel 1</b>	April 27 - May 1	Seattle, WA	Canary rockfish	Darkblotched rockfish
<b>STAR Panel 2</b>	July 6-10	Newport, OR	Black rockfish	
<b>June SSC</b>	June 10-12	Spokane, WA	Canary and darkblotched rockfishes & updates	
<b>STAR Panel 3</b>	July 13-17	Seattle, WA	China rockfish	Kelp greenling (OR)
<b>STAR Panel 4</b>	July 27-31	Santa Cruz, CA	Bocaccio	Widow rockfish
<b>September SSC</b>	Sept 9-11	Sacramento, CA	Bocaccio, kelp greenling, and black, china, and widow rockfishes	