

## ECOSYSTEM WORKGROUP REPORT ON THE SABLEFISH ECOSYSTEM INDICATORS

The Ecosystem Workgroup (EWG) met jointly with the Ecosystem Advisory Subpanel (EAS) for a presentation by Drs. Nick Tolimieri and Melissa Haltuch of the National Marine Fisheries Service (NMFS) Northwest Fisheries Science Center (NWFSC), on incorporating ecosystem indicators into the sablefish assessment. They presented new modelling efforts that evaluate the relationships between sablefish recruitment and environmental metrics. In addition to sea surface height, the main factor considered in past sablefish assessments, they attempted a fuller, more mechanistic approach that considers the effects of the physical environment on the key life stages of sablefish. The complexity of the approach was eye-opening to the EWG. The EWG appreciates the substantial efforts and recognizes them as being very much in line with the Council's request to look at using ecosystem approaches for the assessment of sablefish.

Using ecosystem information to improve stock assessments, such as to better understand variability in recruitment, is one of the more frequently suggested ideas heard around the Council during ecosystem related discussions. The EWG supports such efforts. However, what we may better understand now is that the approach taken for sablefish is not currently possible except for the few, best studied species (e.g. petrale sole). The approach is not only work intensive for analysts like Drs. Tolimieri and Haltuch, but also depends on a lot of basic biology field research that has yet to be conducted for most species. Even for sablefish, which ranks as one of the best studied species, some basic life history research was conducted several decades ago and has not been re-examined since. The investment in such research for other species could be substantial.

For sablefish, we understand the next step in the analysis is to look at a Management Strategy Evaluation approach in the fall. We thank the analysts involved for their efforts and look forward to seeing the results.

PFMC  
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