

## THE GROUND FISH MANAGEMENT TEAM (GMT) REPORT ON OFF-YEAR SCIENCE IMPROVEMENTS

The Groundfish Management Team (GMT) discussed science activities necessary to prepare for the next stock assessment cycle and possible projects to resolve scientific issues that play a significant role in groundfish decision-making. The GMT identified management strategy evaluation (MSE) of current target reference points and harvest control rules, completion of catch reconstruction efforts, development of alternative assessment methods, and improved access to and documentation of raw recreational data and derived quantities as key issues.

The GMT supports the Scientific and Statistical Committee's (SSC) recommendation for an evaluation of proxy reference points and harvest control rules. This effort should look at taxon-specific life history traits and include examination of alternative stock-recruitment relationships, recruitment compensation, natural mortality, growth, and other factors affecting stock productivity. As has been recognized for a number of years, current proxy reference points may still be appropriate to rockfishes, while other reference points may better capture the relationship between yield and stock productivity for flatfishes, Pacific whiting, or other non-rockfish taxa.

The historical catch reconstruction for California was completed during the previous off-year period, and results from that study were incorporated into multiple stock assessments this cycle. The GMT supports the reconstruction efforts currently underway in Washington and Oregon, and continued refinement of the California reconstruction.

The GMT supports the ongoing development of alternative assessment methods useful in data-limited situations to inform Council decisions regarding the setting of annual catch limits.

The GMT recognizes the need for improved access to raw recreational data and documentation of the methods (metadata) and parameters used for derived quantities. Access and interpretation of RecFIN data was an issue for multiple Stock Assessment Teams during this stock assessment cycle. Specifically, a single database providing tables of all raw (i.e., not summarized) recreational data would help analysts identify potential outliers and other factors that may lead to questionable estimated quantities. Clearer documentation and availability of parameters used in the development of summary statistics is needed by stock assessors and the GMT. These steps would facilitate investigation of quantities used for inseason management, such as outlier catch estimates resulting from inflated effort, average weight or cost per unit of effort estimates.

In addition to historical catch reconstruction efforts, the GMT would also support organization of a workshop focusing on the identification and utilization of historical databases (e.g. discard studies) not already commonly provided for use in stock assessments. Discard and catch were major sources of uncertainty in the assessment of greenstriped rockfish and will likely be so for many rockfish that have yet to be assessed. The workshop could produce a guide to the use and availability of these alternative databases.