

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
FINAL REPORT ON MARKET SQUID MAXIMUM SUSTAINABLE YIELD
METHODOLOGY WORKSHOP

At the Council's request, the Scientific and Statistical Committee (SSC), in conjunction with the California Department of Fish and Game (CDFG) and the National Marine Fisheries Service (NMFS), held a market squid maximum sustainable yield (MSY) methodology workshop in May of 2001. Dr. Paul Crone of the Coastal Pelagic Species Management Team (CPSMT) presented an overview of the various modeling approaches, and provided considerable detail on the egg escapement approach to assessing the market squid resource. SSC member Dr. Raymond Conser, co-chair of the squid Stock Assessment Review (STAR) Panel, briefed the SSC on the panel's report.

The squid MSY workshop was a highly successful collaboration among CDFG, NMFS, and the SSC. This collaboration was essential to the assembly and analysis of all available biological and fishery data. The panel provided a thorough review of the data and alternative approaches to the squid MSY problem. All of these efforts resulted in productive and timely completion of the review.

The STAT Team and STAR Panel worked together in refining a yield-per-recruit approach based on egg escapement, and both groups recommend this policy for monitoring status of the squid stocks. There are two parts to the egg escapement approach, 1) eggs produced per female in the catch, and 2) recruitment to the spawning grounds. Squid recruitment is highly variable and probably environmentally driven. The egg escapement approach requires an estimate of remaining eggs per female at the time of capture by the fishery. CDFG port samplers are collecting the specimens needed to make this estimate on a seasonal basis. It will be important to provide continuing support for this sampling and for the laboratory work needed to count the eggs.

The egg escapement approach developed by the STAT Team and further refined during the STAR Panel process provides a sound basis for developing a harvest control rule that is based on biological principles. However, there is a continuing need to address uncertainties in the science that were identified during the workshop. To this end, the SSC supports the idea of a STAR Panel review in 2004. It will also be important that the CPSMT develop precautionary management options that reflect uncertainties in the science. The SSC looks forward to reviewing this work as it is incorporated into Amendment 10 of the CPS Fishery Management Plan.

PFMC
09/13/01