

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
PACIFIC SARDINE STOCK ASSESSMENT AND HARVEST GUIDELINE FOR 2003

Dr. Ramon Conser presented the results of the Pacific sardine stock assessment and harvest guideline (HG) for 2003. The assessment model and data analysis are similar to those used in previous years. The analysis included the most recent fishery and survey data. The 2002 sardine stock biomass estimate is approximately one million mt and the recommended HG is 110,908 mt. The SSC endorses the use of this HG for the 2003 Pacific sardine fishery. The 2003 HG is slightly lower than the 2002 HG. However, the actual landings in recent years have been less than the HG, and it is expected the 2003 fishery landings will not be constrained by this reduction in HG. Dr. Conser noted that in future years, however, U.S. fisheries may be constrained by Council HG's if, (1) sea-surface temperature continues to decline – invoking a reduction in the exploitation rate as specified in the FMP's environmentally-based harvest control rule and/or (2) the U.S. sardine fisheries continue to grow at rates of increase comparable to those observed over the last few years. In addition, when viewed on a stock-wide basis, an increase in Mexican harvest to its historic level may affect the U.S. fishery.

A new sardine model and assessment are needed that more thoroughly incorporate the expansion of sardine from its core area (central California through Baja California, Mexico) northward to include Oregon, Washington, and British Columbia, Canada. In December 2002, the Third Trilateral Sardine Forum will meet in San Pedro, California. This forum will encourage continuing work on assembling a coastwide sardine database that could be used in a new stock assessment. Fishery independent surveys (as well as continued fishery sampling) from Oregon, Washington, and British Columbia are needed to support new model development. The SSC recommends that funding be secured to conduct simultaneous surveys off Oregon/Washington and the traditional survey area off central/southern California.

The sardine assessment should undergo a STAR panel review in conjunction with the Pacific mackerel assessment in September 2003. The STAR panel would review new model development using data through 2002. The new sardine and revised mackerel models could then be used to establish HGs for the respective 2004 fishing seasons. The SSC will develop terms of reference for the coastal pelagic species STAR panel review for Council consideration at its March 2003 meeting.

PFMC
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