

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON
PACIFIC MACKEREL HARVEST GUIDELINE FOR THE 2004/2005 SEASON

Dr Kevin Hill discussed the 2004-2005 Pacific mackerel harvest guideline (HG) with the SSC. The recommended HG is 13,268 mt based on the maximum sustainable yield control rule in Amendment 8 to the Coastal Pelagic Species (CPS) fishery management plan. The SSC notes that the HG is based on the same stock assessment methodology and harvest control rule used in several previous years, with the addition of one additional year of catch data, and new or revised data for four of the six indices of abundance. Over-estimation of biomass for the last year of the assessment period is a chronic feature of the Pacific mackerel assessment. For example, the biomass estimate for 2003 based on the 2004 assessment (46,121 mt) is lower than the estimate of this biomass based on the 2003 assessment (68,924 mt). The estimate of biomass for 2003 is higher than that for 2002 due primarily to the large 2001 recruitment.

The bulk of Pacific mackerel spawning occurs off Baja California while larval surveys are conducted in the California Bight. Therefore, data used to develop abundance indices for use in the stock assessment cover only a small proportion of the area of spawning. Data from the Investigaciones Mexicanas de la Corriente de California (IMECOCAL) program could provide information that covers a larger proportion of the spawning area, which could then be used in future assessments of Pacific mackerel as well as Pacific sardine and bocaccio.

The methodology on which this assessment is based is not fully documented in the Stock Assessment and Fishery Evaluation (SAFE) report, precluding a detailed review by the SSC. This assessment will, however, be reviewed, along with that of Pacific sardine, during a CPS STAR Panel meeting in 21-25 June 2004. The control rule used to set Harvest Guidelines for Pacific mackerel was established over 20 years ago. The SSC highlights that there may be value in reviewing the basis for this control rule during a future CPS STAR Panel.