

Summary of the Results of the Weakfish Technical Committee Conference Call on Thursday, June 27, 2002

Des Kahn, Chair

Update of the Biological Reference Points. The TC (technical committee) agreed to stick with the proposed Amendment 4 Spawning Stock Biomass Per Recruit reference points (target  $F = 0.31$ , limit  $F = 0.50$ , SSB threshold = 14,400 mt). The Committee felt that insufficient time was available to revise the reference points. At the time the F-based reference points were adopted (after the 1998 assessment), they represented 30% and 20% of the maximum spawning potential, respectively. They now appear to represent about 28% ( $F = 0.31$ ) and 17% ( $F = 0.50$ ) of MSP. The values of  $F_{30\%}$  and  $F_{20\%}$  were slightly lower in the current (2000) assessment, 0.28 and 0.43. The Biomass overfishing threshold, 14,400 MT, was risk-averse in comparison to some of the revised estimates, so we decided to stay with it.

The TC expressed some concern about diminished growth of weakfish in the past decade; however, it was uncertain whether this was an artifact of sampling or a real phenomenon. Analysis of growth information from Long Island Sound suggested that sexual dimorphism may be present and females may attain a larger size. Changes in growth estimates between the late 1980s (Lowerre-Barbieri et al. 1995) and 2000 had little effect on the Thompson-Bell estimates of %MSP because they were standardized as ratios with unfished SBR. However, alternative estimates based on the Shepherd Equilibrium approach were quite affected by the changes in growth. The Committee concluded that further work on approaches that included compensation (stock-recruit relationships) were needed.

Creel Limit Tables. The Creel limits will change very slightly as a result of reduced growth rates. Vic Crecco will complete this revision and transmit it to the Committee.

Commercial Reference Period. The Committee determined that changing the reference period to the early 1980s involved unforeseen problems, due to the very high F rates at that time and the changes in gear and seasons over the two decades since then. Consequently, we do not recommend a change in the commercial reference period.

Data Collection Requirements. The committee holds with its previous threshold recommendation that any state that landed at least 2.5% of the 2000 coastwide commercial landings of 5,372,672 (NMFS data) should sample its commercial landings for biological information. This amounts to 134,317 lbs. This level includes the states of Rhode Island, New York, New Jersey, Delaware, Maryland, Virginia and North Carolina. The minimum amount of data required should be 100 otolith ages and 300 lengths. The data should be stratified by region, season (first half of the year, second half of the year), major gears and market grade.

The Committee recommended a second option of stepped data collection requirements. If a state landed more than 500,000 pounds in 2000, the sampling requirements would double to 200 otolith ages and 600 lengths. If a state landed more than 1,000,000 pounds in 2000, the requirements would triple to 300 otolith ages and 900 lengths. Currently, most states that sample landings greatly exceed these levels. These levels should be considered minimum.

There was some concern from some members of the TC that budgetary limitations and uncooperative fishers may preclude meeting mandatory sampling guidelines in some states. One member expressed concern that mandatory sampling may disrupt the continuity of the catch at age matrix.

Age and Size Structure Options. The Committee produced several options. One option was based on both deterministic and stochastic cohort extinction analyses that estimated the proportion of weakfish reaching age 7 should be at least 5% and the proportion reaching age 6+ should be at least 8.5%. These simulations used  $M = 0.25$  and  $F = 0.31$ .

Another size structure option was based on the 1982-1984 MRFSS length frequency distribution.. Recent length distributions can be compared to this period, which had a relatively extended size structure.

The TC also expressed reservations about recommending age or size structure criteria at all because many factors that influence them are out of control of management.

The Committee also expressed strong approval for a proposal from Maryland DNR to conduct a hook and line mortality study in deep water and warm temperatures.