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Report of the Scientific and Statistical Committee on Working

Definitions for Use in Management Plans

A. Determinants of Catch Levels

  1. Maximum sustainable Yield (MSY) is an average over a

      reasonable length of time of the largest catch which can

      be taken continuously from a stock under current environ-

      mental conditions. It should normally be presented with

      a range of values around its point estimate.

      Where sufficient scientific data as to the biological

      characteristics of the stock do not exist or the period

      of exploitation or investigation has not been long

      enough for adequate understanding of stock dynamics, the

      MSY will be estimated from the best information available.

  2. Equilibrium Yield (EY) The annual or seasonal harvest

      which at a given fishing intensity maintains the resource

      at approximately the same level of abundance (apart from

      the effects of environmental variation) in succeeding

      seasons or years.

  3. Acceptable biological catch (ABC) is a seasonally determined

      catch that may differ from MSY for biological reasons. It

      may be lower or higher than MSY in some years for species

      with fluctuating recruitment. It may be set lower than MSY

in order to rebuild overfished stocks.

4. Optimum Yield (OY) may be obtained by a plus or minus deviation from ABC for purposes of promoting economic, social or ecological objectives as established by law and public participation processes. Ecological objectives, where they primarily relate to biological purposes and factors are included in the determinate of ABC. Where ecological objectives relate to resolving conflicts and accommodating competing uses and values, they are included as appropriate with economic and/or social objectives. Adjustments also may be made for defined scientific purposes.

OY may be set higher than ABC in order to produce higher yields from other more desirable species in a multi-species fishery. It might be set lower than ABC in order to provide larger sized individuals or a higher average catch per unit effort.