

iv) Provide B_{msy} and F_{msy} for cod in Div. 3M (Item 6)

The Fisheries Commission requests the Scientific Council to provide B_{msy} and F_{msy} for cod in Div. 3M.

Scientific Council concluded that is not possible at this time to provide candidates values of B_{msy} and F_{msy} for this stock.

Scientific Council estimated the Yield per Recruit (YPR), Spawner per Recruit (SPR) and Maximum Sustainable Yield (MSY) reference points with uncertainty to provide candidates for B_{msy} and F_{msy} for cod Div. 3M. The results of the B_{msy} and F_{msy} estimated based on different stock-recruitment relationship (Ricker, Beverton-Holt and Segmented Regression) were not plausible due to the high uncertainty in the stock recruit relationship for this stock. Scientific Council noted that the level of B_{msy} estimated from YPR-SPR depends on assumptions about the level of recruitment. Scientific Council concluded that more research about the possibility of changes in productivity and the level of recruitment that should be used to estimate the MSY is needed.