

ix) Witch flounder in Div. 3NO exploitable biomass and spawning stock biomass (Item 11)

With regards to witch flounder in Div. 3NO, the Fisheries Commission requests the Scientific Council to provide estimates for exploitable biomass and for spawning stock biomass, or appropriate proxies, as well as smoothing, as appropriate.

Scientific Council responded:

An index of spawning stock biomass (SSB) for witch flounder in Div. 3NO was accepted by Scientific Council. The index shows an increase from the lowest values in the mid-1990s, but remains well below the peak values in 1985 to 1990. Indices of exploitable biomass, although not developed here, would likely be very similar to the total biomass indices.

An SSB index was developed from Canadian spring survey (Campelen or Campelen equivalent) data from 1984 – 2012 by combining length frequency data for females with corresponding maturity at length estimates, and applying annual length-weight relationships to give estimates of female SSB (Fig. 7). The data were also examined in attempts to develop reference points for the stock (see Section VII 1. c) vii, for further description of the survey data). Smoothers can be applied to the data as necessary, depending on the purpose. Although no index of exploitable biomass was calculated, Scientific Council noted that it would likely be very similar to the index of total biomass from the surveys, given the relatively low proportion of young fish in the datasets.

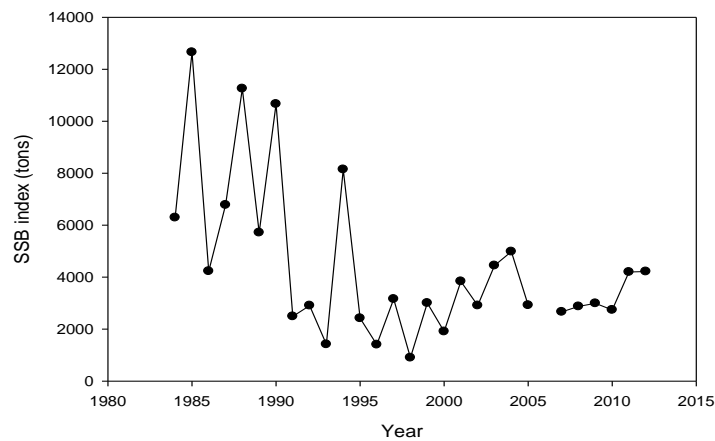


Fig. 7. SSB index for 3NO witch flounder, derived from Canadian spring survey data.