

ICES HAWG REPORT 2016

ICES ADVISORY COMMITTEE

ICES CM 2016/ACOM:07

REF. ACOM

Report of the Herring Assessment Working Group for the Area South of 62° N (HAWG)

29 March–7 April 2016

ICES HQ, Copenhagen, Denmark



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International Council for the Exploration of the Sea Conseil International pour l'Exploration de la Mer

H. C. Andersens Boulevard 44-46
DK-1553 Copenhagen V
Denmark
Telephone (+45) 33 38 67 00
Telefax (+45) 33 93 42 15
www.ices.dk
info@ices.dk

Recommended format for purposes of citation:

ICES. 2016. Report of the Herring Assessment Working Group for the Area South of 62°N (HAWG), 29 March-7 April 2016, ICES HQ, Copenhagen, Denmark. ICES CM 2016/ACOM:07. 867 pp.

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Executive Summary

The ICES herring assessment working group (HAWG) met for eight days in March 2016 to assess the state of five herring stocks and four sprat stocks/populations. HAWG also provided advice for seven sandeel stocks but reported on those prior to this meeting. The working group conducted update assessments for five of the herring stocks. An analytical assessment was performed for North Sea sprat and data limited assessments were conducted for English Channel sprat, Celtic Sea sprat and 3.a sprat.

The **North Sea autumn spawning herring** SSB in 2015 was estimated at 1.80 m tonnes while F_{2-6} in 2015 was estimated at 0.24, below the target F_{2-6} of 0.26. Fishing mortality on juveniles, mean F_{0-1} is 0.05, just below the agreed ceiling. The estimate of 0-wr fish in 2016 (2015 year class) is estimated to be at approximately 23 billion and indicates a year class similar to those observed since 2003. Year classes since 2002 are estimated to be consistently weak with year classes 2002 to 2007 to be among the weakest. ICES considers that the stock is still in a low productivity phase. The **Western Baltic spring spawning herring** assessment was updated. The SSB in 2015 has increased from last year and was estimated to be around 125 744 tonnes. Fishing mortality has been estimated at 0.24, and it is below the estimate of F_{msy} (0.32). After a minimum in 2008, recruitment is increasing although these should be considered with caution due to the uncertainty in the estimates. Under an historical perspective the estimates of SSB are considered still low, but give similar perception that the stock may have started to recover. The **Celtic Sea autumn and winter spawning stock** is estimated to be at a high level, although coming down in recent years. SSB is currently estimated at 101 382 tonnes in 2015, having rebuilt from 36 000 tonnes in 2004. Mean F (2–5 rings) was estimated at 0.19 in 2015, having increased from 0.06 in 2009. Overall there has been a substantial decrease in F from 0.41 in 2004. Recruitment has been good in recent years with several strong cohorts (2003, 2005, 2007, 2011, 2012) entering the fishery. The 2015 SSB estimate of **6.a/7.b, c** (the combined stock of 6.aN and 6.aS/7.b, c) was 250 296 tonnes, below at B_{pa} . Low recruitment has caused a decline of the stock while fishing mortality is low at 0.07 in recent years. Advice has been drafted to setup a monitoring fishery to ensure data relevant for the assessment and genetic studies are secured. **Irish Sea autumn spawning herring** assessment showed a decline in SSB in 2015 to 13 242 tonnes, and a continued high recruitment in recent years, with $F_{4-6} = 0.26$ in 2015. Catches have been relatively stable since the 1980s, and close to TAC levels in recent years. Based on the most recent estimates the stock is being harvested sustainably and below F_{MSY} . Issues related to fish aging that could have affected the assessment were investigated and corrected for in 2015 and 2016. **North Sea sprat** is estimated to have come down from a high level in 2014 to 355 782 tonnes in 2015 with expected decline to 208 904 tonnes in 2016. Fishing mortality was estimated at 1.76 in 2015, above the F_{cap} of 0.7 that was estimated in 2015. Expected recruitment for 2016 is estimated to be well below the values observed in 2013–2015. **Sprat in Division 3.a** This stock was benchmarked in 2013 (WKSPRAT) but an analytical assessment is not presented. Short term projections are to be based on a combination of indices providing in year advice for 3.a based on the ICES approach for data limited stocks (Category 3 / 4). The surveys indicate a substantial increase in the stock. Catch advice for **sprat in the English Channel (7.d, e)** was based on criteria for data limited stocks. Data available are landings and a short time series of acoustic biomass (2013–2015). The acoustic biomass indicates a decline in the stock. Quantitative advice was provided for **Sprat in the Celtic Sea (spr-irls)** based on criteria for data limited stocks where only data on landings are available.

The HAWG reviewed the assessments performed on seven sandeel stocks and the related advice of these stocks. Section 11 of this report contains the assessment of sandeel in Division 3.a and Subarea 4.

A special requests for a monitoring catch advice was dealt with at HAWG 2016 but will be issued as separate advice.

The working group commented on four Terms of Reference: bias in advice, the role of pelagic fish in the ecosystem, information from surveys relevant for HAWG and the potential effects of the landing obligation. Standard issues such as the quality and availability of data, estimating the amounts of discarded fish and the use of the data system InterCatch were discussed. The group also executed estimation of missing reference points as requested by the EU for some of the stocks.