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Report of the Report of the Working Group on Widely Distributed Stocks (WGWIDE)

26 August – 1 September 2014

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Executive Summary

The Working Group (WG) on Widely Distributed Stocks (WGWHITE) met at ICES HQ in Copenhagen, Denmark, from 26 August to 1 September 2014. The meeting was attended by 31 delegates from Netherlands, Ireland, Spain, Norway, Portugal, Iceland, United Kingdom (England and Scotland), Faroe Islands, Greenland, Denmark, Russia and Germany. Other fisheries scientists participated by correspondence. The WG reports on the status and considerations for management of northeast Atlantic mackerel, blue whiting, western and North Sea horse mackerel, northeast Atlantic boarfish and Norwegian spring spawning herring stocks.

WGWHITE also replied to one special request regarding the short term forecasting of blue whiting stocks.

Northeast-Atlantic (NEA) Mackerel. This species is widely distributed through the ICES area and currently supports one of the most valuable European fisheries. Mackerel is fished by a variety of fleets from many countries (ranging from open boats using hand lines on the Iberian coasts to large freezer trawlers and Refrigerated Sea Water (RSW) vessels in the Northern Area. NEA mackerel assessment was benchmarked in February 2014 (WKPELA). The benchmark was successful in producing a state-space assessment model with three fisheries-independent survey series and tagging data, in addition to the catch-at-age data from ages 0-12 (plus group). After the benchmark, a WGWHITE subgroup ran the assessment in April 2014 and update advice for 2013 was released in May 2014.

The benchmark changed the perception of the stock, adjusting the SSB upwards. As a consequence, the long term management plan is now under evaluation. Nevertheless, advising according to the current management plan is considered precautionary, but might not lead to maximizing the long term yield.

Blue whiting. This pelagic gadoid is widely distributed in the eastern part of the North Atlantic. The assessment this year was considered an update. SSB has almost doubled from 2010 (2.9 million tonnes) to 2014 (5.5 million tonnes) and is clearly above precautionary biomass reference point B_{pa} (2.25 million tonnes). This increase is due to historical low fishing mortality since 2011 in combination with a higher recruitment (age 1) since 2010. The uncertainty around the recruitment in the most recent year is high. The year classes 2005-2008 are in the very low end of the historical recruitments, but recruitment since 2009 and 2010 year class are estimated higher. Information on the 2012 and 2013 year classes is uncertain, but the level is confirmed from qualitative analysis of survey indices.

WGWHITE provided a response to a NEAFC request considering the short term forecast used in the blue whiting assessment. As a result of the analyses, WGWHITE decided to switch from stochastic short term forecast to deterministic short term forecast.

Western Horse Mackerel. The WG performed an analytical assessment for western horse mackerel following the benchmark procedure. Year classes following 2001 have been weak, 2010 recruitment in particular is the lowest in the time-series. 2008 year class is estimated as higher than the recent average. Fishing mortality has been increasing since 2007 as a result of increasing catches and decreasing biomass as the 2001 year-class was reduced. In the absence of any notably large recent year classes, SSB is perceived to be declining and SSB in 2013 is estimated as the third lowest in the time-series. The current outlook for the coming years suggests that this decline will continue.

North Sea horse mackerel. Exploratory data analyses were conducted for the North Sea horse mackerel stock. However, these exploratory assessment models are not considered acceptable as a basis for advice. The available data all suggest that the North Sea horse mackerel stock is currently at a low biomass in the North Sea, potentially increasing slightly in the most recent years.

Northeast Atlantic Boarfish. This is a small, pelagic, planktivorous, shoaling species, found at depths of 0 to 600 m. The species is widely distributed from Norway to Senegal. The fishery for boarfish in the NEA is a new one, and hence landings of boarfish have showed a sharp increase in recent years. An analytical assessment was accepted for this stock last year, but there is high uncertainty in the estimates of total biomass due to the short time-series, and the assessment is still sensitive to the inclusion of data from the acoustic survey given the short time series currently available. Bottom-trawl survey indices are considered indicative of trends in their respective areas. Since 2012 there has been a sharp decline in the estimated total stock biomass of boarfish in the North East Atlantic, and total stock biomass in 2014 is below the proposed B_{trigger} (B_{msy}). Fishing mortality is estimated to have increased from a negligible rate in 2007 to a peak of 0.216 in 2010. The fishing mortality in 2013 was estimated to be 0.134, still under F_{MSY} .

Norwegian spring spawning herring. This is the largest herring stock in the world. It is highly migratory and distributed throughout large parts of the NE Atlantic. The assessment was performed using the assessment tools software TASACS (benchmarked in 2008). Even though F has been decreasing in recent years, in the absence of any strong year classes since 2004, the stock has declined still further in 2014. SSB at the start of 2014 is estimated to be below B_{pa} . This decline is expected to continue in the near future even when fishing according to the management plan, though it is expected that following the management plan will lead to the stock stabilising above B_{lim} .