

Boarfish in the Northeast Atlantic: the basis for the ICES advice and how it relates to the landing obligation

Martin Pastoors (IMARES)

23 April 2014

The ICES advice for boarfish in the Northeast Atlantic was based on a full assessment in 2013. This was the first time that the assessment model was applied for this stock. ICES noted that:

“The 2012 and 2013 acoustic survey data were considered reliable, but there is high uncertainty in the estimates of total biomass due to the short time-series. Bottom-trawl survey indices were considered indicative of trends in their respective areas. The commercial catch data are thought to be quite complete, including discards from other fisheries from 2003 onwards. It is thought that discarding due to bycatch fisheries prior to 2003 were likely to have been small in comparison with subsequent catches.” (ICES 2013, section 9.4.6).

The ICES expert group dealing with this stock (WGWIDE) commented on the discard data (Table 6.1.2.4) available for boarfish as follows:

“Discard data were available from Dutch and German pelagic freezer trawlers (areas not specified) and from Irish, Spanish and Portuguese demersal fleets (Prista et al., WD 2013; Valeiras et al., WD 2012; van Overzee and van Helmond, 2013). The Portuguese data relate to Division IXa and are not relevant to this stock. (...) Discard data were included in the calculation of catch numbers at age. All discards were raised as one métier using the same age length keys and sampling information as for the landed catches. In the absence of better sampling information on discards, this was considered the best approach.” (WGWIDE 2013)

Table 6.1.2.4. Boarfish in ICES Areas VI, VII, VIII. Discards of boarfish in demersal and non-target pelagic fisheries by year (t), 2003–2012. (Data provided by Working Group members). These figures may not in all cases correspond to the official statistics and cannot be used for management purposes.

| Year | Germany | Ireland | Netherlands | Spain | Total |
|------|---------|---------|-------------|-------|-------|
| 2003 | | 119 | 1998 | 8812 | 10929 |
| 2004 | | 60 | 837 | 3579 | 4476 |
| 2005 | | 55 | 733 | 5007 | 5795 |
| 2006 | | 22 | 411 | 3933 | 4365 |
| 2007 | | 549 | 23 | 2617 | 3189 |
| 2008 | | 920 | 738 | 8410 | 10068 |
| 2009 | | 377 | 1258 | 5047 | 6682 |
| 2010 | | 85 | 512 | 5947 | 6544 |
| 2011 | 49 | 107 | 185 | 5461 | 5802 |
| 2012 | | 181 | 88 | 6365 | 6634 |

This means that discard data have been integral part of the stock assessment procedure and the ICES advice. This also means that the calculation of recent fishing mortality and Fmsy takes into account the discards that have been generated since 2003.

There appears to have been a weak relationship between discards and landings over the period that a targeted fishery has developed (2007-2012). In the table below (based on WGWIDE 2013), the estimated discards have been relatively stable whereas the landings have fluctuated substantially. This is also visible from the higher Coefficient of Variation (CV) for the landings compared to the discards. This indicates that the landings are probably related to targeted fisheries for boarfish, whereas the discards are generated as bycatches in other fisheries for horse mackerel or whitefish.

| Year | Ireland | Denmark | Scotland | Total landings | Discards | Total catch | %disc |
|---------------|---------|---------|----------|----------------|----------|-------------|-------|
| 2003 | 458 | 0 | 0 | 458 | 10929 | 11387 | 96% |
| 2004 | 675 | 0 | 0 | 675 | 4476 | 5151 | 87% |
| 2005 | 165 | 0 | 0 | 165 | 5795 | 5960 | 97% |
| 2006 | 2772 | 0 | 0 | 2772 | 4365 | 7137 | 61% |
| 2007 | 17615 | 0 | 772 | 18387 | 3189 | 21576 | 15% |
| 2008 | 21585 | 3098 | 0.45 | 24683 | 10068 | 34751 | 29% |
| 2009 | 68629 | 15059 | 0 | 83688 | 6682 | 90370 | 7% |
| 2010 | 88457 | 39805 | 9241 | 137503 | 6544 | 144047 | 5% |
| 2011 | 20685 | 7797 | 2813 | 31295 | 5802 | 37097 | 16% |
| 2012 | 55949 | 19888 | 4884 | 80721 | 6634 | 87355 | 8% |
| Avg 2007-12 | 45487 | 14275 | 2952 | 62713 | 6487 | 69199 | 13% |
| StDev 2007-12 | 29849 | 14523 | 3619 | 46381 | 2201 | 46616 | |
| CV 2007-12 | 66% | 102% | 123% | 74% | 34% | 67% | |

Because the discards have already been taken into account in the assessment and advice, setting a catch quota in line with the ICES advice would include the level of discards observed in the recent three years. Whether these discards would be landed under the agreed landing obligation or whether they would be discarded under a de-minimis exemption would not matter for the resulting fishing mortality, as long as these catches are fully and verifiably documented. It could be debated whether a catch quota would need to be established if a de minimis exemption would be applied.

References

- ICES (2013). Report of the ICES Advisory Committee, 2013, ICES advice, 2013. Book 9, section 9.4.22.
- WGWIDE (2013). Report of the Working Group on Widely Distributed Stocks (WGWIDE), Copenhagen, 27 August-2 September 2013. ICES C.M. 2013 / ACOM:15.