

Stock Annex for Pollack in Subarea 8 and Division 9a

Stock specific documentation of standard assessment procedures used by ICES.

Stock Pollack in Subarea 8 and Division 9a

Working Group: Working group for Bay of Biscay and Iberian waters Ecoregion(WGBIE)

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A. General

A.1. Stock definition

There is little published information on pollack (*Pollachius pollachius*, Linnaeus, 1758) biology. The species is restricted to the Northeast Atlantic with a main distribution from the Portuguese continental coast northwards around the British Isles, into the Skagerrak and along the Norwegian coast where it is fairly common up to the Lofoten Islands.

Charrier *et al.* (2006) used genetic markers to assess the stock structure of pollack by comparing samples collected in the Atlantic French coast and off southern Norway; however, a limited genetic differentiation among samples was found. There are no morphological studies that allows to separate stocks for this species. Data from the fishery indicate three main areas of exploitation, so WGNEW proposed, based on a pragmatic approach, to distinguish three different stock units (ICES, 2012a): the southern European Atlantic shelf (ICES Subarea 8 and Division 9a), the Celtic Seas (ICES Subareas 6 and 7), and the North Sea (ICES Subarea 4, including Divisions 7d and 3a).

A.2. Fishery

Pollack is mainly a bycatch in various fisheries in both 8 and 9a including small-scale fisheries taking place in coastal waters. Catches are taken by the three countries with quota: France and Spain, followed distantly by Portugal. In France, pollack is mainly caught in nets, but also by lines, in Subarea 8 (the majority from Division 8a). French observations also show that it is most available for fishing when it forms spawning aggregations. Otherwise its preference for wrecks and rocky bottom, makes it difficult to catch them with trawls. Spanish landings are taken mostly from Iberian waters (8c and 9a), where they are basically caught by gillnet and longline (Rodriguez *et al.*, 2011). The scarce Portuguese catches are made basically by the polyvalent fleet (Jardim *et al.*, 2011).

However, there is a small-scale target gillnet fishery that started in 2006 by the UK (Readdy and Robinson, 2011) which operates mainly in ICES Subarea 8a. In 2016 recorded landings from the UK were 25 tonnes.

A.3. Ecosystem aspects

Pollack is benthic-pelagic, found mostly close to the shore over hard bottom (Svetovidov, 1986). It usually occurs at 40–100 m depth but is found down to 200 m. In the Cantabrian Sea and off Galicia it mainly occurs between 50 and 150 m deep (Rodri-

guez *et al.*, 2011). Feeding is mainly on fish, and incidentally on crustaceans and cephalopods. According to FishBase spawning takes place from January to May, depending on the area, and mostly at 100 m depth. Cohen *et al.* (1990) report different spawning periods for Spain and Bay of Biscay, February and March, respectively.

B. Data

B.1. Commercial catch

A TAC has been adopted for the Subarea 8 and Division 9a in 2000. Since then, the TAC has been decreasing and according to the regulation for 2011 the fishing opportunities were fixed in 1482 t for Divisions 8abde, 231 t for 8c and 282 t for 9–10 (precautionary TAC). The national quotas are allocated between France (62.8%) and Spain (36.7%), followed distantly by Portugal (0.5%).

A time-series of landings has been obtained from EuroStat, the statistical office of the European Union, since 1950; however, data show much more reliable from 1977 onwards. At the same time, the National laboratories of countries with pollack catches have provided more detailed data of landings, disaggregated by gear, since 2001. There is some mixing in Portuguese markets with whiting (*Merlangius merlangus*) due to use of common names. This resulted in most pollack landings being recorded as whiting from 2004 onwards. Sampling data indicates that Portuguese landings of whiting and pollack from 9a consisted of 2% whiting and 98% pollack. The working group presents corrected estimates of the landings in addition to the official landings.

Portuguese discard data of pollack can be assumed null (Fernandes and Prista, 2012). Likewise, discard estimates from the French fleets and Spanish trawl fleets show low levels.

B.2. Biological

Length-at-maturity for females was considered 47.1 cm and 36.1 cm for males (Fernández Cohen *et al.* (1990) give a maximum length of 130 cm, maximum published weight of 18.1 kg and maximum reported age of eight years. Life-history (growth) parameters for Pollack 89a were estimated to be $L_{\max} = 130$ cm, $L_{\inf} = 85.6$ cm, $K = 0.19$ year⁻¹, and $M = 0.55$ (ICES, 2012).

Since 2011, IEO (Spain) starts to collect information for pollack under the multiannual Community programme (DCF). Most samplings provide from the gillnet fleet because is compounded by a higher number of DCF métiers than longline.

UK took length samples during scientific surveys up until 2001. Currently, UK under the DCF is undertaking sampling from fixed net fishery although this mostly covers 7e–h as most of Area 8 landings are made into France.

B.3. Surveys

Pollack abundance indices result negligible in the groundfish surveys developed in the area (French, Spanish and Portuguese surveys). The bottoms preferred for this species (wrecks and rocky bottoms) makes that trawl surveys are probably not very well suited for monitoring this species.

However, despite the low abundance indices in the Spanish survey (SP_GFS), developed in Cantabrian Sea and off Galicia since 1983, it can be noted that pollack started to be detected since 2004 onwards. Biomass and abundance indices were greatest in

2009 and bathymetric distribution ranged between 0–150 m with maximum abundance between 100–150 m.

B.4. Commercial cpue

Cpue data are not available.

B.5. Other relevant data

No other relevant data were available.

C. Assessment: data and method

No reliable assessment was presented for this species in the southern European Atlantic shelf ecoregion due to the lack of sufficient data. However, the existence of a landings time-series makes it feasible to apply DLS assessment methods in future. For data limited stocks without information on abundance or exploitation (Category 5) ICES considers that a precautionary reduction of catches should be implemented, unless there is ancillary information clearly indicating that the current exploitation is appropriate for the stock. In 2015 ICES advised that commercial landings should be no more than 1316 tonnes (updated to 1414 t in 2016) in each of the years 2016 and 2017.

D. Short-term projection

No fishing possibilities can be projected.

E. Medium-term projections

No medium-term projections can be projected.

F. Long-term projections

No long-term projections can be projected.

G. Biological reference points

No reference points have been defined. However, WKLife (ICES, 2012b) applied basic life-history parameters to generate a proposal of reference points, assuming knife-edge recruitment-at-age 1 and also at age 2.

H. Other issues

So far, no further management regulations have been defined for pollack in the Atlantic region, apart from a Minimum Landing Size of 30 cm in European Member States (Council Regulation (EU) 850/1998).

I. References

- Charrier, G., Durand, J.D., Quiniou, L., Laroche, J. 2006. An investigation of the population genetic structure of pollack (*Pollachius pollachius*) based on microsatellite markers. *ICES Journal of Marine Science* 63, 1705–1709.
- Cohen, D.M., Inada, T., Iwamoto, T. and Scialabba, N. 1990. FAO Species Catalogue. Vol. 10. Gadiform fishes of the world (Order Gadiformes). An annotated and illustrated catalogue of cods, hakes, grenadiers and other gadiform fishes known to date. FAO Fish. Synop. 125(10). 442p.

- Fernandes, A.C. and Prista, N. 2012. Portuguese discard data on WGNEW 2012 species. Working document presented to the ICES WGNEW, Copenhagen, 5–9 March 2012.
- Alonso-Fernández A., Villegas-Rios, D., Valdés-López, M., Olveira-Rodríguez, B. and Saborido-Rey, F. (2013) Reproductive biology of pollack (*Pollachius pollachius*) from the Galician shelf (north-west Spain). Journal of the Marine Biological Association of the United Kingdom, 2013, 93(7): 1951–1963.
- ICES. 2012a. Report of the Working Group on Assessment of New MoU Species (WGNEW). ICES CM 2012/ACOM:20.
- ICES. 2012b. Report of the Workshop on the Development of Assessments based on Life-history traits and Exploitation Characteristics (WKLIFE). ICES CM 2012/ACOM:36.
- Jardim, E., Alpoim, R., Silva, C., Fernandes, A.C., Chaves, C., Dias, M., Prista, N., Costa, A.M. 2011. Portuguese data of sole, plaice, whiting and pollock provided to WGHMM in 2011. Working document presented to the ICES WGHMM, Copenhagen, 5–11 May 2011.
- Readdy, L. and Robinson, P. 2011. Data availability for the UK, England and Wales component, for *Pleuronectes platessa* in ICES Area 89, *Pollachius pollachius* in ICES Area 89, *Solea solea* in ICES Area 8c9 and *Merlangius murlangus* in ICES Area 89. Working document presented to the ICES WGHMM, Copenhagen, 5–11 May 2011.
- Rodríguez, J., Fariña, A.C., Velasco, F., Pérez, N., Acosta, J.J. 2011. Spanish fishery data on plaice (*Pleuronectes platessa*), pollack (*Pollachius pollachius*), sole (*Solea* spp.) and whiting (*Merlangius merlangus*) in Iberian and Bay of Biscay waters. Working document presented to the ICES WGHMM, Copenhagen, 5–11 May 2011.
- Svetovidov, A. N. 1986. Gadidae. In Fishes of the North-eastern Atlantic and the Mediterranean (Whitehead, P. J. P., Bauchot, M.-L., Hureau, J.-C., Nielsen, J. and Tortonese, E., eds), pp. 680–710. Paris: UNESCO.