

Stock Annex: Grey gurnard in Subarea VIII and Division IXa

Stock specific documentation of standard assessment procedures used by ICES.

Stock	Grey Gurnard in Subarea VIII and Division IXa
Working Group:	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion (WGBIE)
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A. General

A.1. Stock definition

Grey gurnard (*Eutrigla gurnardus*) occurs in the Eastern Atlantic from Iceland, Norway, southern Baltic and North Sea to southern Morocco and Madeira. It is also found in the Mediterranean and Black Seas. The species is more abundant in the North Sea and less so in the Channel, the Celtic Sea and in the Bay of Biscay. It can be found at depths ranging from 10 to 340m though less often below 150m. This species grows up to 60 cm though usually reaching 30 cm, with 19.3 cm as the length at first maturity (Fishbase).

No studies are known of the stock ID of grey gurnard and individual behaviour does not militate to maintain the population in a single stock. WGNEW concluded that in the absence of specific information on stock structure, the ICES ecoregions (North Sea including VIId, Celtic Seas and South European Atlantic) are to be used as minimum level of disaggregation for the definition of stock units (ICES, 2012). This is an interim solution until more information is available on the stock.

A.2. Fishery

In the past, gurnards were often not sorted by species when landed and reported into one generic category of “gurnards”. In recent years the official statistics seem to improve gradually, however, catch statistics are incomplete for several years. Grey gurnard is mainly taken as a by-catch in mixed demersal fisheries for flatfish and roundfish. However, the market is limited and the larger part of the catch appears to be discarded. Owing to the low commercial value of this species, landings data will usually not reflect the actual catches very well.

In South European Atlantic (VIII and IX), official landings have fluctuated at low level and were on average 63 t since 2000 (ICES, 2012). In North Portugal, Rocha (2007, 2008) determined the composition and proportion of Triglidae landings in artisanal fleet and Feijó et al. (2008) studied the mixture of Triglidae species in the trawl fleet. This work revealed that grey gurnard may represent as little as 0.5% of all gurnard landings and it is the tub gurnard (*Chelidonichthys lucerna*) that is the most valuable and frequently landed species of gurnard.

The Portuguese discard observer program in the period 2004-2011, recorded grey gurnard in less than 3% of the hauls sampled in the demersal fish bottom trawl fleet. For

the crustacean bottom trawl fleet there was no occurrence of Grey gurnard in this period. Discarding of grey gurnard by Spanish trawl fleet has declined from 500 to 80t in recent years.

A.3. Ecosystem aspects

Grey gurnard is most common on sandy bottoms, but also on mud, shell and rocky bottoms. Juveniles feed on a variety of small crustaceans. The diet of older specimens consists mainly of larger crustaceans and small fish. Spawning takes place in spring and summer. There do not seem to be clear nursery areas.

B. Data

B.1. Commercial catch

Landings data are incomplete and issues with speciation makes commercial data difficult to interpret. Grey gurnard is taken as a by-catch in mixed demersal fisheries for flatfish and roundfish and it is thought that the larger part of the catch is discarded.

B.2. Biological

Biological information was available from the Portuguese Ground Fish Survey. Length distribution ranged from 11 to 28cm, with mean length close to the length at first maturity (19.3cm). Studies in the Baie de Douarnenez (Brittany) have shown that the length at which 50% of males and females were mature were 29.4 and 31.2 cm, respectively (Baron, 1985a, 1985b).

Biological sampling of gurnards was carried out on a fortnightly basis in Northern Portugal during 2007. From 1965 Gurnards collected, 56 specimens of *Eutrigla gurnardus* (2.8%) were randomly sampled from bottom trawler landings. Total length, total weight, eviscerated weight and gonad weight were recorded in addition to information on sex and maturity of each specimen. Length-based maturity ogives were generated. Otoliths were also collected.

Between 2009 and 2012 the Portuguese port sampling program collected data from 947 fishing trips. Grey gurnards were observed in gill and trammel nets and in trawlers, normally mixed with other gurnards like tub, red, longfin, piper and streaked gurnards. The presence of grey gurnard occurred during all year, without remarkable seasonal variation. A bi-modal distribution (24cm and 29cm) was observed and specimens smaller than 19cm were not present. Although smaller individuals may be discarded at sea. Despite bibliography information indicating a maximum size of ~60cm, individuals greater than 46cm were not observed in these samples.

B.3. Surveys

Biological data on grey gurnard were compiled from Portuguese Ground Fish Survey (PtGFS-WIBTS) for 2007 and 2008. This survey covered the whole Portuguese continental coast, within depths ranging from 20 to 500m. Despite the low abundance the species was seen in the 20-100m and the 101-200m depth range, mainly in North zone (Caminha to Lisbon). The species was not observed in the 2010 or 2011 survey. Biomass indices were also available from EVHOE-WIBTS-Q4 in the Bay of Biscay but values were very low (<0.4Kg/30min).

B.4. Commercial CPUE

Commercial indices were not available but exploration of logbook data may produce useful information.

B.5. Other relevant data

No information.

C. Assessment: data and method

For data-limited stocks where landings are negligible compared with discards (Category 6) 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 this stock, ICES advises that catches should decrease by 20% in relation to the average catch of the last three years.

D. Short-Term Projection

E. Medium-Term Projections

F. Long-Term Projections

G. Biological Reference Points

H. Other Issues

I. References

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