

15 Sea bass in southern Bay of Biscay and Atlantic Iberian waters

bss.27.8c9a – *Dicentrarchus labrax* in divisions 8.c and 9.a

15.1 General

Type of assessment: No analytical assessment. Sea bass (*Dicentrarchus labrax*) stock in divisions 8.c and 9.a is considered a data-limited stock (DLS) and it is classified as a category 5.2 stock (ICES, 2012a). Advice basis: Precautionary approach. The advice for this stock is biennial (ICES, 2023a).

15.1.1 Stock identity and sub-stock structure

Sea bass is a widely distributed species in Northeast Atlantic shelf waters with a range from southern Norway, through the North Sea, the Irish Sea, the Bay of Biscay, the Mediterranean and the Black Sea to Northwest Africa. The species is at the northern limits of its range around the British Isles and southern Scandinavia. Further studies are needed on sea bass stock identity using conventional and electronic tagging, genetics and other individual and population markers (e.g. otolith microchemistry and shape), together with data on spawning distribution, larval transport and VMS data for vessels tracking migrating sea bass shoals, to confirm and quantify the exchange rate of sea bass between areas that could form management units for this stock (ICES, 2012a; 2012b; 2012c).

In 2022, a workshop sea bass stock identification (WKSEABASSID; ICES, 2023b) met to review evidence and propose plausible stock structure scenarios that can be integrated on the upcoming sea bass assessment model benchmark, potentially in 2024, with the other seabass stocks in the other ICES ecoregions. The conclusion mentioned in the workshop's report states that “*although this meeting exclusively examined the northern and southern sea bass stock units, future studies must extend this effort to investigate evidence of boundaries and/or connectivity with other areas. ICES advice is currently provided for divisions 8.ab (northern and central Bay of Biscay), 4.b-c, 7.a and 7.d-h (central and southern North Sea, Irish Sea, English Channel, Bristol Channel and Celtic Sea (de Pontual et al., 2019). Additionally, two stocks are recognised but no advice is provided by ICES: divisions 8.c-9.a (Iberian) and 6.a, 7.b, 7.j (West of Scotland and Ireland) (de Pontual et al., 2019). Due to the high degree of connectivity revealed by this report, it is highly unlikely that the Iberian and West of Scotland/Ireland sea bass are isolated components. Therefore, additional genomics, tagging, pelagic connectivity and microchemistry will need to be undertaken to reveal how sea bass within these regions link to existing stock units.*”

15.1.2 Biological reference points

No biological reference points are defined for this stock.

15.2 ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, commercial catches in each of the years 2024 and 2025 should be no more than 382 t. All commercial catches are assumed to be landed. Recreational removals cannot be quantified. Therefore total catches cannot be calculated.

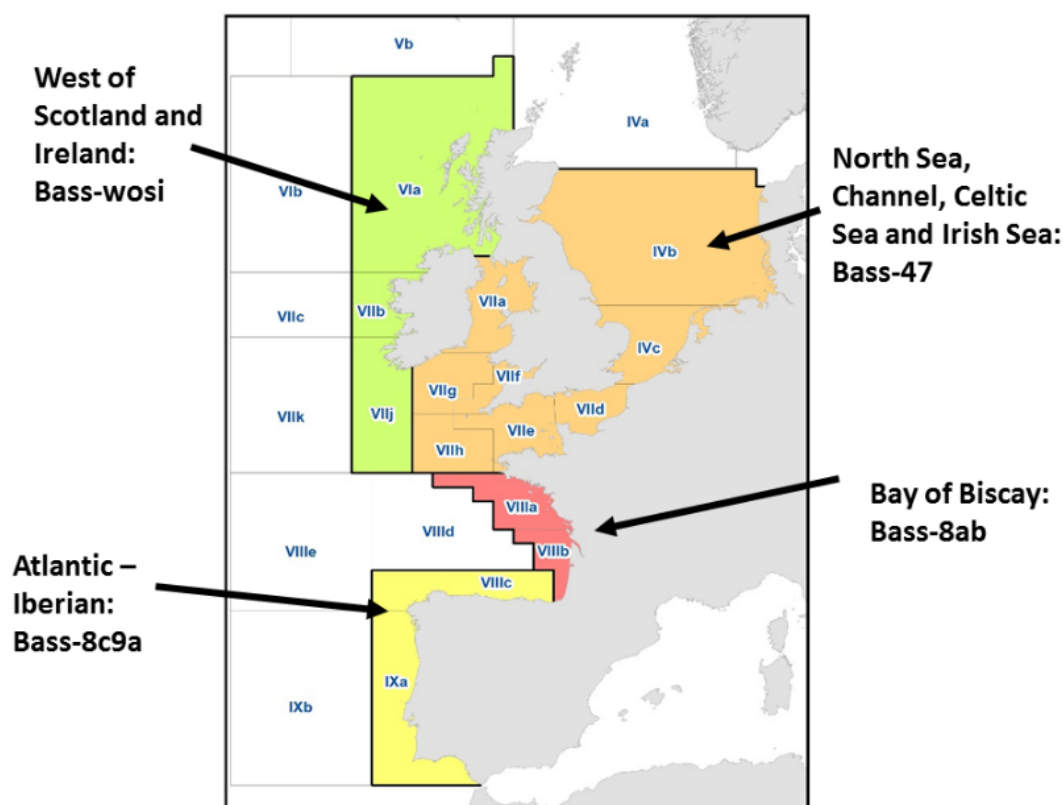


Figure 15.1. Sea bass (*Dicentrarchus labrax*) in divisions 8.c and 9.a. Current stock structure definitions for the sea bass.

15.3 Management

15.3.1 Management applicable to 2017

Sea bass is not subjected to EU TACs and quotas. Under the EU regulation, the minimum landing size (MLS) for commercial fisheries of sea bass in the Northeast Atlantic is 36 cm in total length. A variety of national restrictions on commercial sea bass fishing are also implemented.

The measures affecting recreational fisheries in Portugal include gear restrictions, an MLS equal to the commercial fishery (36 cm), the total catch of fish and cephalopods by each fisher must be less than 10 kg per day or 15 kg per day for spear fishing, excluding, in both cases, the largest fish, and the sale of catch is prohibited.

15.3.2 Management applicable to 2018

No management measures were known in 8.c, 9.a for the year 2018.

15.3.3 Management applicable to 2019–2023

A multiannual management plan (MAP) has been published for the Western Waters (EU, 2019). This plan applies to demersal stocks including sea bass in ICES divisions 8.c and 9.a.

15.4 Fisheries data

15.4.1 Commercial landings data

Landings series are given in Figure 15.1 and are derived from:

- i. Official statistics recorded in the FishStat database (FAO, 2020) since around the mid-1970s;
- ii. Spanish landings for 2007–2011 from sales notes;
- iii. Portuguese estimated landings from 1986 to 2011 including the distinction between *Dicentrarchus labrax* and *D. punctatus*;
- iv. Official landings from recent years (reviewed from 2012 onwards);
- v. InterCatch.

Spanish and Portuguese vessels represent almost all of the total annual landings in areas 8.c and 9.a. Commercial landings represent 816 t in 2022 (source: InterCatch/ICES Accessions). Artisanal fisheries are mainly observed in this area (Table 15.2). Landings from Portugal are only from Division 9.a, while the Spanish landings are distributed between divisions 8.c and 9.a (214 and 242 t in 2022, respectively). Landings per country are given in Figure 15.2 while landings (split by country, gear and area) are given in Table 15.2.

It should be noted that according to the Portuguese administration, official landings from 2018 are probably overestimated due to a duplication in the calculations. Official landings were extracted from the ICES Official Statistics webpage for *D. labrax* (BSS) and divisions 8.c and 9.a. The difference between ICES and official statistics is primarily that prior to 2006, most of the sea bass catches in the Portuguese statistics was registered under the species code BSE which represents all *Dicentrarchus* spp. combined. After the implementation of the Data Collection Framework (DCF), there was a progressive increase in the correct identification of *D. labrax* in the official statistics (the number of BSS increased while BSE decreased) that consider all *Dicentrarchus* spp. landings. *D. labrax* comprises almost all of the landings while 2.3% is deducted from total removals and is considered as *D. punctatus*. This proportion is estimated based on the DCF market and onboard samplings between 2008 and 2012.

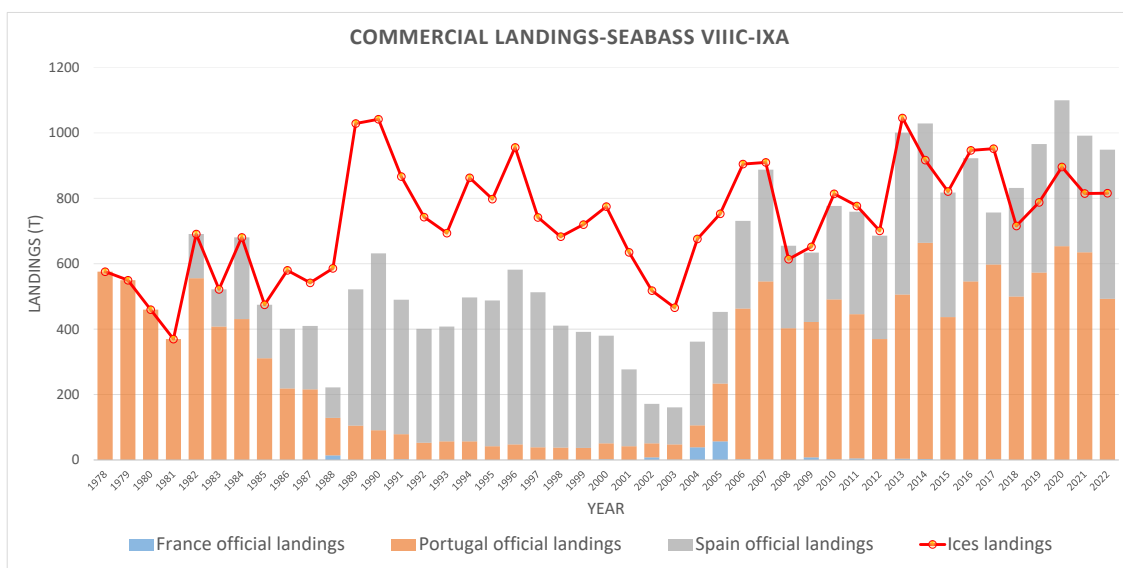


Figure 15.2. Sea bass (*Dicentrarchus labrax*) in divisions 8.c and 9.a. Commercial landings per country in divisions 27.7.8.c and 27.7.9.a (source: official landings and InterCatch/ICES accessions).

15.4.2 Commercial length composition data

Quarterly length composition is available in Division 9.a (source: InterCatch) for the both the commercial Portuguese (MIS_MIS_0_0_0) for the period 2016–2022 (Figure 15.3) and Spanish fleets from 2017 to 2022 (Figure 15.4).

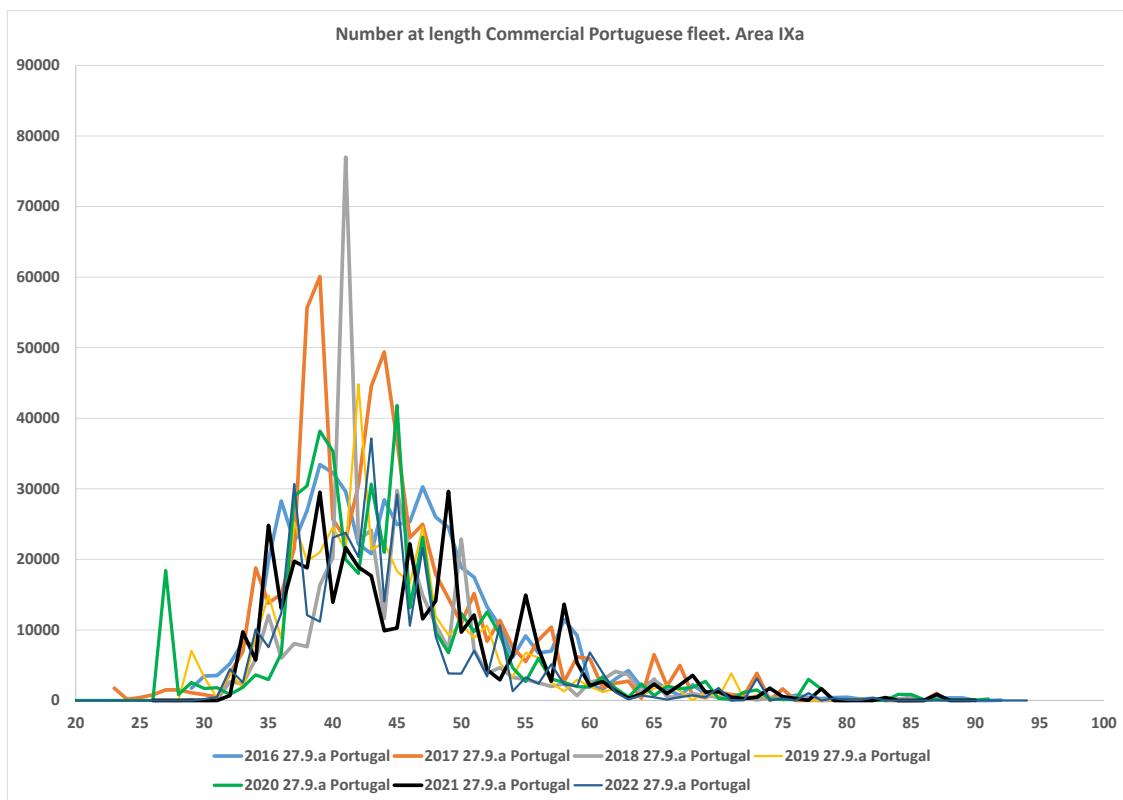


Figure 15.3. Sea bass (*Dicentrarchus labrax*) in divisions 8.c and 9.a. Commercial length composition in 2016–2022 for Portuguese fleet landings (source: InterCatch/ICES accessions).

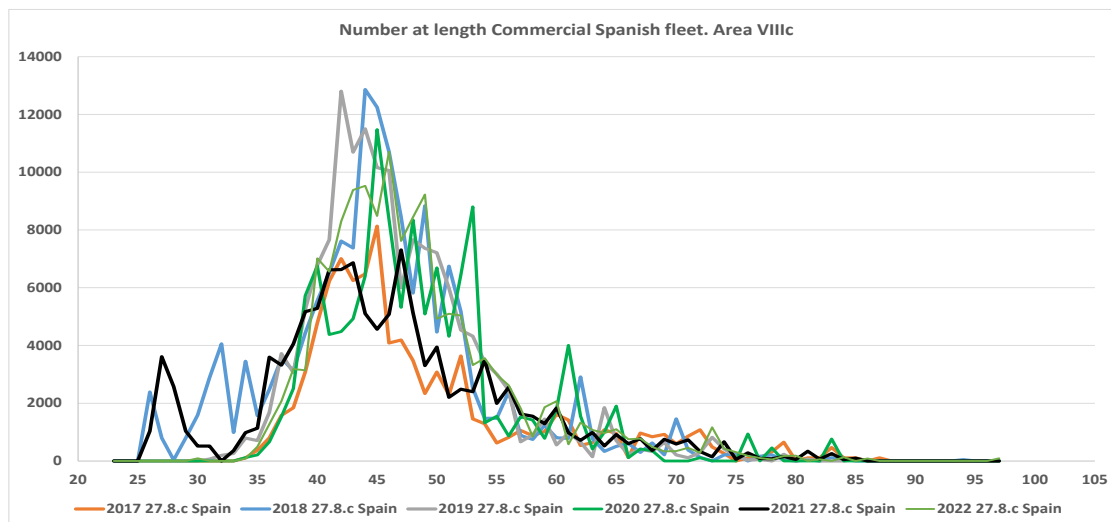


Figure 15.4. Sea bass (*Dicentrarchus labrax*) in divisions 8.c and 9.a. Commercial length composition of the Spanish commercial fleet landings from 2017 to 2022 (source: InterCatch).

15.4.3 Commercial discards

Portugal: Discards are recorded by the DCF onboard sampling program and are reported only for the trawl fisheries. There is no occurrence of sea bass discards during the sampling period 2004–2022. No discards are expected for the other *métiers* due to the high commercial value of the stock.

Spain: No sea bass discards was reported from 2003 to 2022.

15.4.4 Effort

Some effort data were available (source: InterCatch) for the Spanish commercial fleet from 2016. On the other hand, effort data collection from the Portuguese commercial began in 2015 which was followed by slight but consecutive annual decreases from 2016 onwards (Figure 15.5).

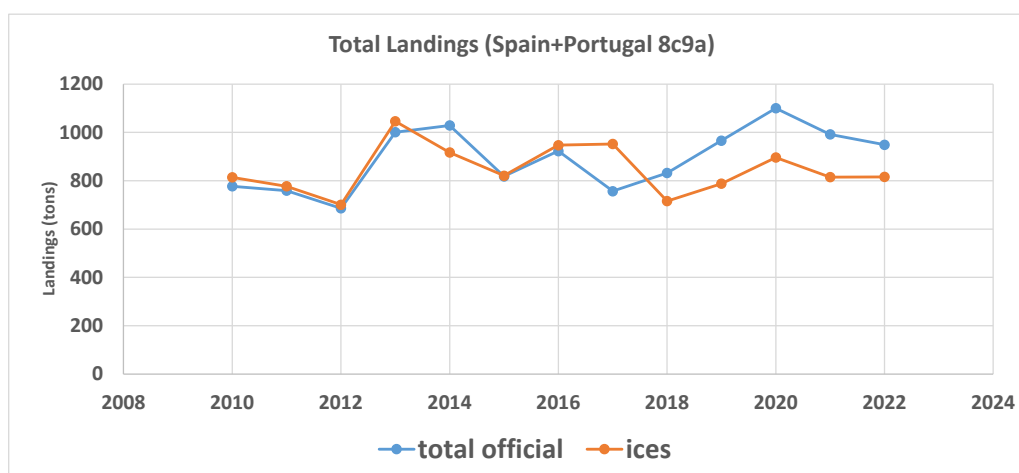


Figure 15.5. Sea bass (*Dicentrarchus labrax*) in divisions 8.c and 9.a. Effort (in KWD) for Spanish and Portuguese commercial fleets in divisions 8.c and 9.a (source: InterCatch).

Recreational removals

Recreational removals of sea bass in divisions 8.c and 9.a are currently unquantified but are considered to be substantial. Several studies exist that supports this:

In Portugal, the ongoing Pescardata project aims to study the DCF recreational removals in mainland Portugal in order to characterize several aspects of this fishery, describe the catches and define robust catch estimates for the stock (ICES, 2023c). Collected data still need to be reviewed. Further details can be found on <https://pescardata.pt/>.

Another study intends to characterize, assess and monitor recreational removals in marine protected areas (MPA), coastal areas and other sensitive marine areas on the Portuguese mainland coast. Surveys took place between April 2021 and November 2022 (ICES, 2023c). The study considered 7 MPAs (Ria Formosa, Natural Park of Southwest's Alentejo and Vicentina Coast, Arrábida Natural Park, Sintra-Cascais Natural Park, Berlengas Natural Reserve, Aveiro's Ria Natural Park, North Litoral – Esposende Natural Park), 2 urban areas (Greater Lisboa and Greater Porto) and 3 other areas (Algarve's Leeward, Algarve's Windward and Peniche). Data analysis showed that the estimated total annual catch reached around 8.650 t. Among the captured species, the white seabream was the most dominant (2.345 t) followed by the sea bass (1.579 tons) then the cephalopods (1.265 tons) and finally the gilthead seabream (1.150 tons). Thus, recreational removals can have a high impact on the total catches of the species. Details can be found at <https://www.dgrm.mm.gov.pt/web/guest/dados-estatisticos>

In Spain, a survey is currently in place to generate annual estimates of participation, effort, and catches of recreational fishers in the Autonomous Region of Andalusia (ICES, 2023c). A routine monitoring programme is running since 2015 in the Basque country to estimate catch and effort for all DCF mandatory species (Zarauz et al., 2015; ICES, 2017b; Bachiller et al, 2022). In addition, multispecies surveys are currently being carried out to estimate effort, catch estimates for main target species and human dimensions of the activity since 2020 (ICES, 2023c).

15.5 Assessment model, diagnostics, and retrospectives¹

15.5.1 History of previous assessments

In 2018, a precautionary approach (PA) has been adopted as the basis for advice of this stock in 2013 based on the average of the 2009–2011 catches (ICES, 2018). A new precautionary buffer of 20% less was applied to the 2018 advice which did not make sense to WGBIE due to the previous period considered for the calculations, the relative stability in landings over time, the presence of very large individuals (up to 92 cm) in length composition of commercial landings and since sea bass is not a targeted species in this area compared to the northern stock. The application of the precautionary buffer (20% less) on the mean catches for the period 2014–2016 would have probably been more appropriate as this resulted in a catch advice of 716 t.

Advice for 2022 and 2023: A new advice was issued in 2021 for the years 2022 and 2023. ICES advises that when the precautionary approach is applied, commercial catches in each of the years 2022 and 2023 should be no more than 382 t. All commercial catches are assumed to be landed. Recreational removals cannot be quantified and, therefore, total catches cannot be calculated. The stock status relative to a candidate reference points was unknown; therefore, the precautionary buffer was applied in the advice (ICES, 2022). The precautionary buffer was also earlier applied in 2017 (ICES, 2017).

¹ Assessment is only based on commercial landings. Recreational removals are not included.

15.5.2 Current assessment

ICES advises that when the precautionary approach is applied, commercial catches in each of the years 2024 and 2025 should be no more than 382 t. All commercial catches are assumed to be landed. Recreational removals cannot be quantified and, therefore, total catches cannot be calculated.

The ICES framework for category 5 stocks (ICES, 2012a) was applied. For stocks without information on abundance or exploitation, ICES considers that a precautionary reduction of catches should be implemented where there is no ancillary information clearly indicating that the current level of exploitation is appropriate for the stock. The precautionary buffer was last applied in 2021 (ICES, 2021) and was therefore not considered this year.

15.6 Recommendations for the next benchmark assessment

In 2019, WGBIE encouraged to document the sea bass data quality for the Iberian waters, and proposed studies to better understand the stock dynamics and movements between the current stock areas (ICES, 2019). Sea bass in Iberian waters is still considered a category 5.2 (ICES, 2023a). The ICES framework for category 5 stocks is applied (ICES, 2012a) for catch advice. Currently, no information is available to provide the status of this stock. Note that divisions 8.c and 9.a are mainly caught by artisanal fleets (vessel < 10 m) which do not fill the logbooks. Nevertheless, sale notes are reported in InterCatch.

WGBIE is aware of ongoing projects on these species in Portugal and Spain. WGBIE is trying to contact with these researchers to look for a collaborative approach that can help to improve the available information for this stock.

15.7 Management plan

The EU multiannual plan (MAP) for stocks in the Western Waters and adjacent waters (EU, 2019). The MAP stipulates that when the F_{MSY} ranges are not available, fishing opportunities should be based on the best available scientific advice. This plan applies to demersal stocks including sea bass in ICES divisions 8.c and 9.a.

15.8 References

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