European pilchard

**IDENTIFICATION**

**SCIENTIFIC NAME**
Sardinia pilchardus

**SPECIES NAME(S)**
European pilchard, Sardine, European sardine

**COMMON NAMES**
Atlantic-Iberian sardine, Atlanto-Iberian sardine, Iberian sardine, sardinha (Portuguese)

**STOCK IDENTIFICATION**
Several studies have been conducted to understand European pilchard stock structure widely distributed in the Northeast and Eastern Central Atlantic, and the Mediterranean and Black Sea (e.g. Spanakis et al., 1989; Tinti et al., 2002; Kasapidis et al., 2004; Afentoulis et al., 2005; Chlaida et al., 2006; Silva et al., 2016; Laurent et al., 2017; Chlaida et al., 2019; Antonakakis et al., 2019). However further research is needed considering uncertainties (Kasapidis et al., 2012; ICES, 2014b). Thus here we consider the following assessment units along the European pilchard distribution:

- By the International Council for the Exploration of the Sea (ICES):
  - Iberian (ICES Divisions VIIIc and IXa) and Bay of Biscay, Southern Celtic Seas and English Channel (ICES Divisions VIIIa,b,d and Subarea VII)

- By the General Fisheries Commission for the Mediterranean (GFCM; FAO) of the 8 stock assessment units assumed (FAO, 2009; Kasapidis et al., 2012; GFCM, 2014) these 2 are already covered in profiles:
  - Northern Adriatic Sea (GSA 17) and Northern Alboran Sea (GSA 01)

- By the Fishery Committee for the Eastern Central Atlantic (FAO, 2013a,b):
  - NW Africa central (zones A+B; 32ºN – 26ºN) and NW Africa southern (zone C; 26ºN – the southern extent of the species distribution).

**RELATED LINKS**
- European Commission (EC), Portuguese Ministry of Sea (MM), Spain Ministry of Agriculture, Food, and the Environment (MAGRAMA)
- International Council for the Exploration of the Sea (ICES)

**ASSESSMENT**

**Strengths**
The stock is assessed with an analytical age-based model and a benchmark assessment was conducted in 2012. Fishing effort and catch limitations have been in place for over a decade (ICES, 2013b). Impacts on FEP species and benthic habitats are deemed low. A new management plan, with a harvest control rule, has recently been reportedly adopted and has been found to be provisionally precautionary (ICES, 2013c). In 2013, overall catches (66,100 tons) represented 83% of those recommended by scientists (55,000 tons).

**Weaknesses**
The biomass of age 1 and older fish has decreased since 2010 and is currently around the historic low. Recruitment has been below the long-term average since 2015. Fishing mortality since 2009 has been above the average of the last two decades prior to 2009 (ICES, 2016). No international annual TAC is set by management authorities and this has led the most recent catches to significantly exceed scientifically recommended limits (ICES, 2014a). The extent of mixing with sardine stocks to the north is unknown. The main uncertainties in the assessment relate to the discrepant signals about the stock trends provided by the daily egg production method (DEPM) and the comparability of Portuguese and Spanish acoustic surveys, on survey and fishery selection patterns, and on the weighting of the different data sources in the assessment (ICES, 2014a). The level of discards and discards is not completely known.

**SCORES**

**Management Quality:** 0

**Management Strategy** 8

**Managers Compliance** 6-8

**Fishers Compliance** 8

**Stock Health:**

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<thead>
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<th>Current Health</th>
<th>Future Health</th>
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<tr>
<td>&lt; 6</td>
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**FIPS**

No related FIPs

**MSC**

- Portugal Sardine Purse seine: Withdrawn

**RECOMMENDATIONS**

**CATCHERS & REGULATORS**

1. Support a decrease in fishing mortality.
2. Ensure that catches follow scientifically recommended limits.
3. Explore stock dynamics at low biomass levels further and translate findings into precautionary criteria to improve the proposed management plan.

**RETAILERS & SUPPLY CHAIN**

1. Refer to the FishSource profile and encourage the formation of a Fisheries Improvement Project.
2. Attend or have a trade association representative attend the Southern Western Waters Regional Advisory Council meetings.
Fisheries

Within FishSource, the term “fishery” is used to indicate each unique combination of a flag country with a fishing gear, operating within a particular management unit, upon a resource. That resource may have a known biological stock structure and/or may be assessed at another level for practical or jurisdictional reasons. A fishery is the finest scale of resolution captured in FishSource profiles, as it is generally the scale at which sustainability can most fairly and practically be evaluated.

<table>
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<tr>
<th>ASSESSMENT UNIT</th>
<th>MANAGEMENT UNIT</th>
<th>FLAG COUNTRY</th>
<th>FISHING GEAR</th>
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Management Unit

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<th>FISHING AREA</th>
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[Assessment Unit Profile](https://www.fishsource.org/stock_page/778)