**European pilchard**

**Scientific Name**: Sardina pilchardus

**Species Names**: European pilchard, Sardine, European sardine

**Stock Identification**

Many studies have investigated the structure of the European pilchard stock which, commonly, "Sardine" population widely distributed in the northwest and Eastern Central Atlantic, and the Mediterranean and Black Sea (e.g. [González et al. 1984](#)); [Kasapidis et al. 2012](#); [Kasapidis et al. 2016](#); [Kasapidis et al. 2019](#); [Kasapidis et al. 2020](#); however, some uncertainty remains ([Kasapidis et al. 2022](#)), and further research into regional stock subunits is needed ([ICES 2014](#); [ICES 2017](#)).

**European pilchard profiles** presented on FishSource reflect two assessment units delineated by the FAO Working Group on Small Pelagic Fish in the Northern Adriatic Sea ([GSA17](#)) and in the Northern Alboran Sea ([FAO and GFCM 2017](#)); these 2 are already assessed by the FAO and the GFCM ([ICES 2014](#); [ICES 2017](#)).

Other assessments have evaluated the West African stock; however, more work is needed ([ICES 2014](#); [ICES 2017](#)). The recent work of ([Shukhgalter 2013](#)) supports the distinction of these two stock units.

The Southern stock unit, considered here, reflects the populations occurring in the waters of Morocco and countries south, between Cap Blanc at 26ºN, and Boujdour at 32ºN.

In addition to the West African stocks, FishSource considers the following assessment units throughout the species' distribution: 1. Northern Adriatic Sea ([ICES 2014](#); [ICES 2017](#)) and 2. Northern Alboran Sea ([FAO and GFCM 2017](#)).

**General Fisheries Commission for the Mediterranean (GFCM) and FAO (2017)**. These 2 are already covered in profiles:

1. **Northern Adriatic Sea** ([ICES 2014](#); [ICES 2017](#)) and 2. **Northern Alboran Sea** ([FAO and GFCM 2017](#)).

**Future (≥ 6)**

**Compliance**

**Managers**

**Fishers**

**Stock Health**

**Future Health**

**Current Health**

**FIPS**

No related FIPs

**MSC**

No related MSC fisheries

**Recommendations**

**Retailers & Supply Chain**

- Support the Sub-Regional Fisheries Commission and Morocco in their concerns for the Mauritainian small pelagic fishery.

**Assessment**

- The stock is generally managed, and there are national small pelagic TACs, national TACs for foreign fleets operating within the region, and national and regional catch ceilings for European fleets operating within the region. The stock is regularly surveyed by national and regional surveys; however, there is some misalignment between the INRH and the FAO regarding the exploited status of the stock; some methods by INRH yield conflicting results.

- Some species in the mixed stock fishery are overexploited - including Atlantic and Common horse mackerel, and moray and Mediterranean sardine.

- Stock assessment advice by the FAO is not released in a timely manner; and the connection between stock assessment advice, and harvest limits in each zone.

- The stock is highly dependent on environmental dynamics, and the degree to which management adapts to these factors with respect to catch limits.

- Quantification of discarding is limited, particularly in Mauritania.

- ETF interaction is poorly documented, and indicated to be a possible concern based on past studies (sharks, mammals and turtles).

- A variety of IUU fishing activities are indicated to be persistent, but are poorly documented in the region; complex foreign fishing arrangements add ambiguity.

- There is no fishery management plan; no national TAC, and no harvest control rule for sardine or small pelagics in Mauritania.

- Annual acoustic surveys by Mauritania are not consistently carried out.

- For many species, the impact on the seabed ecosystem is unclear.

- Purse-seining and pelagic trawling are not expected to have significant effects on the seafloor ecosystem.

- Monitoring, control and surveillance (MCS) systems throughout the region have undergone improvements in the recent decade.

- Bycatch limits are defined for each of the Moroccan and Mauritanian fisheries. However, these limits are not defined for the European fleets operating within the region.

- There is no national fishery management framework in place.

- The TAC for small pelagics for European fleets operating within the region is uncertain.

- The stock is managed; however, to which management adapts to these factors with respect to catch limits.

**Scores**

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<th>Fishers Compliance</th>
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efforts to develop a strategic plan for management of the small pelagics fisheries in the region. The management plan should include species specific TACs, joint setting of TACs, and consideration of how environmental variability may affect stocks.

- Work with scientists to understand the uncertainties in the stock assessment and improve the different assessment models and input data (catches, discards, biological data) to reduce the level of uncertainty in the assessment and to work towards resolving the differences between the models.
- Encourage management authorities to release stock assessment results sooner and improve transparency of subsequent management actions, including the setting of catch or effort limits.
- Ask the government/regional authorities to continue to improve catch and discard reporting and to publish fishery compliance information, especially for Mauritania.
- Work with scientists to conduct studies to clarify the stock structure of northwest African pilchard/sardine.
- Press managers to implement a recovery strategy for other target species in the multi-species fishery to ensure that all such species are at least above biologically-based limit reference points (or proxies for the point of recruitment impairment), especially for Cunene and Atlantic horse mackerels, and round and Madeiran sardinellas.
- Work with scientists and managers to expand the at-sea observer programme to provide representational coverage of all components of the fishery to better understand catches and discards, as well as interactions with habitats and all types of bycatch.