Sprattus sprattus

RELATED LINKS:
- European Commission (EC)
- International Council for the Exploration of the Sea (ICES)

STOCK IDENTIFICATION

For assessment purposes, ICES formerly considered sprat in the North Sea as an independent unit. However, following results of recent genetic study, ICES determined it appropriate to merge the North Sea (Subarea 4) and Skagerrak and Kattegat (Divisions 3a) stocks into a single assessment unit. (WKSPRAT 2018). The newly excluded area includes the North Sea (Subarea 4) and Skagerrak and Kattegat (Division 3a, and Norwegian fjords). Further research is recommended.

In addition to the North Sea and Skagerrak and Kattegat (Division 3a) unit, FishSource considers the following assessment units currently defined by ICES:
- Celtic Sea and West of Ireland (Subarea 6 and Division 7a–k)
- English Channel (Division 7c)
- Baltic Sea (Subdivisions 22–32)
- Baltic Sea and Skagerrak and Kattegat (Subarea 4 and Division 3a)
- Celtic Sea and West of Scotland (Subarea 6 and Divisions 7a–c and f–k)
- North Sea, Skagerrak and Kattegat (Subarea 4 and Division 3a)
- Skagerrak and Kattegat (Division 3a)
- Norwegian fjords

Uncertainty remains with regard to the boundary of this stock with sprat from the Baltic Sea and English Channel (ICES 2018). Local depletion of sprats is an issue of particular ecological concern in areas where there may be geographically or functionally discrete populations (e.g. coastal periphery of the Baltic Sea and English Channel). Uncertainties in the forecast can lead to unexpectedly high fishing mortality (F); in the former North Sea assessment unit, the F cap was often exceeded by relatively large proportions.

ASSESSMENT

Strengths
- Analytical assessment, conducted in the North Sea since 2010, has expanded to include the Skagerrak and Kattegat population in a single unit. Biomass reference points for the new unit were defined in 2018, including a revised fishing mortality cap (F*msy). The merging of the North Sea and Skagerrak and Kattegat into a single assessment unit has improved the performance of the stock assessment model.
- The newly assessed stock unit is indicated to be in a healthy condition.

Weaknesses
- The F*msy designed to ensure the advice strategy is precautionary, despite uncertainty in forecasts of abundance.
- Since 2017, the timing of TACs and management advice for Subarea 4 in the North Sea (where the majority of the catch occurs) has been aligned for the entire year. However, advice for the assessment unit is applicable for 1 July – 30 June of the following year.
- There are no explicit management objectives for this stock.
- TACs have not consistently conformed to catches advised by ICES, and in Division 3a, they have been up to 6 times the advised limit. Further, the TAC timing is misaligned with the advice timing (TAC for the 3a unit is per calendar year, while the advice for the assessment unit is applicable for 1 July – 30 June of the following year).
- Uncertainties in the forecast can lead to unexpectedly high fishing mortality (F); in the former North Sea assessment unit, the F cap was often exceeded by relatively large proportions.
- Stock structure is not completely understood, and depletion of functionally discrete local populations in the periphery of the assessment unit is a concern.
- There is concern regarding potential incentive for illegal sliptraps, and resultant undocumented catch of target and non-target species.
- Research on the indirect impacts of the fishery (i.e., by means of food web relationships) on other fish species, marine mammals and seabirds is still incomplete.
- Although the impact of purse seines and pelagic trawls in bottom habitats is typically assumed to be negligible, it remains to be tested in this specific fishery, especially taking into account that the sea bottom might be impacted when fishing in shallow waters.
- Research on the indirect impacts of the fishery (i.e., by means of food web relationships) on other fish species, marine mammals and seabirds is still incomplete.
- Although the impact of purse seines and pelagic trawls in bottom habitats is typically assumed to be negligible, it remains to be tested in this specific fishery, especially taking into account that the sea bottom might be impacted when fishing in shallow waters.

RECOMMENDATIONS

- Press ICES to continue to engage with the EU Pelagic Advisory Council (https://www.pelagic-adv-council.eu) to develop a multi-species, ecosystem-based management plan, with specific management objectives for the pelagic fisheries in the North Sea and associated areas.
- Ensure that managers set the TAC in line with scientific advice.
- Press regional advisory bodies, national fisheries administrations and the European Commission to develop a multi-species, ecosystem-based management plan, with specific management objectives for the pelagic fisheries in the North Sea and associated areas.
- Engage with the EU Pelagic Advisory Council (https://www.pelagic-adv-council.eu) to develop a multi-species, ecosystem-based management plan, with specific management objectives for the pelagic fisheries in the North Sea and associated areas.
ensure sustainable exploitation.

- Engage as a stakeholder in all MSC certifications for this stock and support the MSC Client groups to ensure all conditions attached to the Certifications are fully addressed.

Fishery Profile

https://www.fishsource.org/fishery_page/6254

This profile last updated on 18 July 2019