European sprat

Baltic Sea

**IDENTIFICATION**

**SCIENTIFIC NAME:**
Sprattus sprattus

**SPECIES NAME(S):**
European sprat

**STOCK IDENTIFICATION:**

Previous attempts to identify different populations of European sprat during the 1980-1990s were unsuccessful (Nielsen 1994). Gulf of Lyon and the Adriatic Sea populations have the "biggest genetic distance" within the Mediterranean and any population differentiation was found between the Baltic Sea, the North Sea and the Bay of Biscay (Debes et al. 2008). Genetic analysis showed a clear genetic distinction from the NE Atlantic Ocean and the Baltic Sea and a high differentiation of the Adriatic Sea population from all northern samples (Limborg et al. 2012). More recently, a "complex population structure is considered across the species' distribution" (Limborg et al. 2012). Nevertheless ICES recommends the conduction of further studies to clarify this structure (e.g. apparent overlap between North Sea and English Channel spratts) thus here we consider the existing assessment units (ICES 2014):

- Celtic Sea and West of Scotland in Subarea VI and Divisions VIIa–c and f–k
- Skagerrak and Kattegat in Division IIIa
- North Sea in Subarea IV
- English Channel in Divisions VIId,e
- Baltic Sea in Subdivisions 22–32.

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

**ASSESSMENT**

**Strengths**

- A multiannual plan (MAP) for the stocks of cod, herring and sprat in the Baltic Sea was established in 2016. ICES advice is based on this MAP and is considered precautionary.
- Spawning stock biomass has been well above the target reference point in the last years and has increased since 2014.
- Specific management measures are incorporated in the MAP in case SSB is below the limit reference point.
- Fishers compliance with set TAC has been high in the last years in general.
- Around 1% of the marine and coastal areas are currently being protected by the network of Baltic Sea Protected Areas.

**Weaknesses**

- The retrospective pattern of the main assessment model (XSA model) shows quite large deviations of estimates for certain years, specially for fishing mortality, and as compared to the secondary model (SAM).
- Fishing mortality in 2017 was slightly above the upper limit advised by ICES.
- The sum of EU TAC plus Russian autonomous quota for 2018 is slightly above the upper advised catch by ICES in 2018.
- The amount of discarding of age-groups 0 and 1 in fisheries directed to human-consumption is unknown.
- A spatial management plan must consider prey availability for the recovery of cod stocks and redistribution of the fishery in Subdivisions 27–32 to promote growth of cod’s prey species (e.g. sprat, herring).
- Gillnetters, especially the smaller ones that usually operate closer to the shore occasionally can have rather big number of birds in the nets.

**Options**

- Develop a spatial management plan for the fisheries that catch sprat, with the aim to improve cod condition.
- Reduce uncertainties regarding landings by each species and amount of discarding of recruits, as these uncertainties could influence the estimates of absolute stock size and fishing mortality.

**SCORES**

- Management Quality:
  - Management Strategy: ≥ 8
  - Managers Compliance: 9.8
  - Fishers Compliance: 10

- Stock Health:
  - Current Health: 10
  - Future Health: 7.7

- FIPS
  - For related FIs

- MSC
  - LFPO pelagic trawl sprat (Sprattus sprattus): MSC Certified
  - NZRO Gulf of Riga herring and sprat trawl fishery: MSC Full Assessment

**RECOMMENDATIONS**

- Work with managers to develop a spatially explicit management plan for the fisheries that catch Baltic sprat, ensuring there are adequate amounts of sprat in all areas to serve as prey for cod stocks and other ecosystem needs.
- Improve catch, discard, and bycatch data reporting. Catch and discard data should be reported at a species specific level, and bycatch data collection should include interactions with birds and mammals, especially for the gillnet fleet.
- Ensure these recommendations are represented to the EU Pelagic Advisory Council (https://www.pelagic-ac.org/) directly or through one of the existing assessment units.
The General Assembly members.