UPDATES ON Stakeholders involvement in the Management Strategy Evaluation on small pelagic in the Adriatic Sea in the framework of the GFCM WGMSE

FG Adriatic - April 9, 2024



Recommendation GFCM/44/2021/20 on a multiannual management plan for the sustainable exploitation of small pelagic stocks in the Adriatic Sea (GSA 17-18)



2022-2023: transitional fishing effort regime

2024: transitional fishing effort regime extended

2025-2029: long-term management plan



GFCM WGMSE Mandate

to carry out an MSE in order to define the most appropriate HCR to be implemented for anchovy and sardine to manage the stocks from 2025

16. The SAC, at its twenty-third session in 2022, shall give mandate to the Working Group on Stock Assessment of Small Pelagic Species (WGSASP) to complete a sardine benchmark assessment in 2022 and to the Workshop on the assessment of management measures (WKMSE) to carry out an MSE in order to define the most appropriate HCR to be implemented for anchovy and sardine according to paragraphs 17 and 18.

17. A long-term management plan is established for the period 2024–2029 or 2025–2029. Each year, on the basis of the SAC advice and of the advisory timing established in paragraph 35, the GFCM shall establish yearly catch limits by single species based on a HCR, in line with paragraph 18, based on the proposals of the WKMSE and endorsed by the SAC in 2023 or 2024.

Stakeholder consultation

Oct. 12, 2023

Medac Meeting - FG Adriatic

since last MEDAC FG Adriatic Meeting

Dec. 2023

GFCM sent the document "Management Strategy evaluation for stakeholders - Small pelagics in the Adriatic Sea: a case study"

Feb. 1, 2024

GFCM Workshop on Adriatic Sea small pelagics MSE

Feb. 7, 2024

Ref:29_MEDAC Letter on the GFCM Workshop on Adriatic Sea small pelagics MSE February 1

Feb. 29, 2024

Deadline for stakeholders input to MSE process

Medac Secretariat sent a contribution (Ref.44/2024) thanks to an

effort to simplify the document to gather inputs from Medac Members



Stakeholder consultation

April 15 & 16 Online

GFCM Data Preparation meeting

for Small-Pelagic stocks in the Adriatic Sea

Next steps

May 20-22 Online

WGMSE on Adriatic Sea small pelagics, including stakeholder consultation

May 27-31 Podgorica, MNE (hybrid) Subregional Committee for the Adriatic Sea (SRC-AS) including a session of the WGMSE on small pelagics

June 24-27 Marseille, FR Twenty-fifth session of the Scientific Advisory Committee on Fisheries (SAC)



47th GFCM Annual meeting

New recommendation on the long term management plan



Ref:29_MEDAC Letter on the GFCM Workshop on Adriatic Sea small pelagics MSE February 1



MSE envisages the involvement of stakeholders in the process, trying to implement a holistic, ecosystem and bottom up approach

Scientific content:

BUT: no evidence that the MSE process takes into account socio-economic aspects, and how it will be carried out

The used examples of HCRs and MSE at global level are not all comparable to the reality of the Adriatic

Questions: no exemplified or detailed, incomprehensible, making an informed answer impossible.

Informative workshop (Feb.1st)

Significant lack of communication

(English was the only working language; Meeting times and agenda were communicated less than 48 hours before the meeting)

The background document/the questions are completely incomprehensible to those who not scientific experts are

Very low stakeholder participation

(complete absence of Croatians, Montenegrinis, Albanians and NGOs)

(1) Further considerations

Ecological factors leading to a decrease of small pelagic stocks in Adriatic Sea

Climate change, changes of water temperature, changes in salinity, changes in oxygens levels, predators, non-indigenous species, extreme weather events etc.

"One year study on the reproductive biology, ovary characterisation and age of the European sardine (Sardina pilchardus) in the middle-west Adriatic Sea" (G. Chemello, G. Cerrone, V. Tavolazzi, F. Donato, F. Tiralongo and G. Gioacchini), October 2023. https://www.frontiersin.org/articles/10.3389/fmars.2023.1266894/full



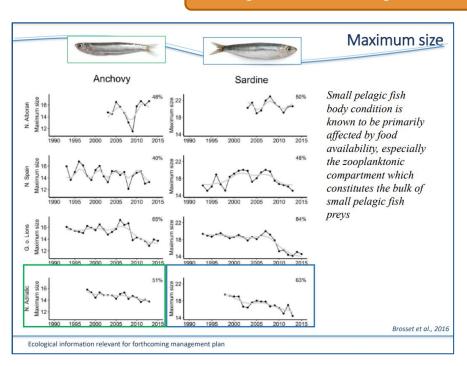
- A general reduction in size (15.5 cm was the highest size class observed) and age (max age 2+, greater than 2 years old but less than 3 years).
- The reproductive period seemed to occur between October and June, as suggested by ovarian characterization, instead of between October and May.

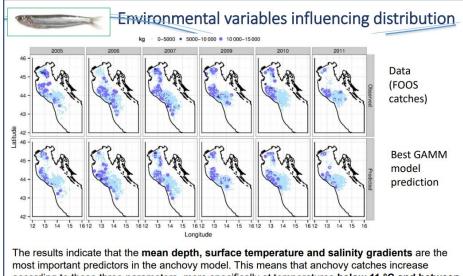


(2) Further considerations



Ecological factors leading to a decrease of small pelagic stocks in Adriatic Sea





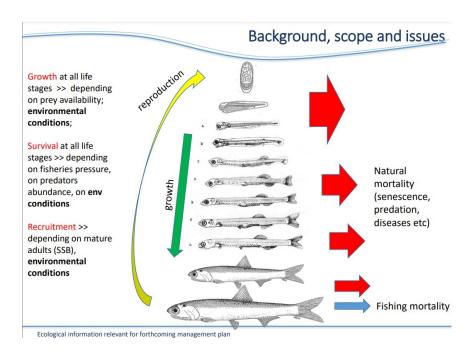
The results indicate that the **mean depth, surface temperature and salinity gradients** are the most important predictors in the anchovy model. This means that anchovy catches increase according to these three parameters, more specifically at temperatures **below 11 °C and between 14 and 22 °C**, **depths between 20 and 50 m and with a positive increase in the salinity gradient**. Surface temperatures higher than 22 °C seem to reduce the catches of anchovy and high salinity gradients

Brosset et al., 2017, Spatio-temporal patterns and environmental controls of small pelagic fish body condition from contrasted Mediterranean areas

Carpi et al, 2015 - A joint stock assessment for the anchovy stock of the northern and central Adriatic Sea: Comparison of two catch-at-age models

(2) Further considerations

Ecological factors leading to a decrease of small pelagic stocks in Adriatic Sea





Libralato 30 September 2020,

PPT at the FG Adriatic Ecological information relevant for the forthcoming management plan (https://www.med-ac.eu/files/documentazione_eventi/2020/09/2020_smallpelagics_medac_libralato_vdef.pdf)

(3) Further considerations

Improve stakeholders involvement

Medac Letter_Ref.29/2024



Relevant GFCM experts should exemplify the questions asked if a real stakeholder input is required, as has been done for other species (MSE bluefin tuna ICCAT)

Bluefin Tuna impact on small pelagics in Adriatic



Since the successful management rules for bluefin tuna stock made the population grow in Adriatic and according to the local ecological knowledge bluefin tuna became one of the most impactful predators for sardine and anchovies

TAC & quota system from 2025

PROPOSALS FROM COORDINATORS



Could guarantee social and economic stability and sustainability

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Could be an advantage in terms of work and time
management for the fishing enterprises, if TAC and quota
are managed at national level, therefore managed by the
fishery operators themselves

Temporal closure PROPOSAL FROM COORDINATORS



Fishing enterprises should be supported at socio-economic level when they observe biological closure in favour of the necessary stock recovery



Thank you for your attention!

FG Adriatic - April 9, 2024

