Recommendation GFCM/44/2021/16

on additional mitigation measures for the conservation of elasmobranchs in the Mediterranean Sea

The General Fisheries Commission for the Mediterranean (GFCM),

RECALLING that the objective of the Agreement for the establishment of the General Fisheries Commission for the Mediterranean (GFCM Agreement) is to ensure the conservation and sustainable use, at the biological, social, economic and environmental level, of marine living resources in the GFCM area of application;

RECALLING that the 2017 Malta MedFish4Ever Ministerial Declaration requires, in the context of establishing an ecosystem-based fisheries management framework, to ensure adequate protection of vulnerable species and sensitive habitats;

REAFFIRMING the principles of the Code of Conduct for Responsible Fisheries of the Food and Agriculture Organization of the United Nations (FAO) and recalling the precautionary and ecosystem approach to fishery management;

RECOGNIZING that fisheries and bycatch are likely the most serious current anthropogenic threat to elasmobranchs (including sharks, skates and rays);

RECALLING the FAO International Plan of Action for the conservation and management of sharks;

RECALLING the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD Protocol) of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and the listing of some shark species in its Annex II and Annex III;

NOTING the importance of harmonizing conservation and management measures with other international conventions for the protection of elasmobranch species;

TAKING INTO ACCOUNT the advice of the Scientific Advisory Committee on Fisheries (SAC) and, in particular, the need to identify species and ensure a better conservation status of elasmobranchs, including by protecting coastal areas from the most active fishing gear;

TAKING INTO ACCOUNT the Red List of Threatened Species of the International Union for Conservation of Nature and the conservation status assessment of select elasmobranch species currently included in Annex III of the SPA/BD Protocol;

RECALLING the recommendations by the second performance review of the GFCM to develop conservation measures and management plans, making full use of the science-policy interface provided by the SAC and to initiate, within five years, appropriate interim management measures, to conserve fisheries, stocks and habitats targeted by the different fisheries, comprising the small-scale fisheries sector;

FURTHER RECALLING the GFCM 2030 Strategy for sustainable fisheries and aquaculture in the Mediterranean and the Black Sea , in particular its Output 1.3 “Efficient area-based conservation measures, technical and nature-based solutions strengthened to conserve biodiversity and enhance the productivity of marine living resources” that “also addresses the use of other area-based management measures as well as bycatch- and impact-reduction technical measures, such as those aimed at improving fishing selectivity, deterring depredation and decreasing the mortality of incidentally caught vulnerable species”;

CONSIDERING Recommendation GFCM/42/2018/2 on fisheries management measures for the conservation of sharks and rays in the GFCM area of application, amending Recommendation GFCM/36/2012/3, which prohibits the finning of sharks and requires that retention measures be adopted and fins be naturally attached for all shark landing;

FURTHER CONSIDERING Recommendation 04-10 of the International Commission for the Conservation of Atlantic Tunas (ICCAT) concerning the conservation of sharks caught in association with fisheries managed by ICCAT and supplemental Recommendation 07-06 concerning sharks as well as Conservation and Management Measure 2010-07 of the Western and Central Pacific Fisheries Commission requiring the safe release of all shark species caught and the implementation of trade-related measures as well as measures on gear selectivity, size limits and spatial and seasonal closures;

FURTHER CONSIDERING that synergies on issues of reciprocal interest shall be sought between ICCAT, the GFCM and other regional fisheries management organizations;

TAKING INTO ACCOUNT the conclusions of the second meeting of the Working Group on Fishing Technology (online, April 2021) and, in particular, the need to increase the selectivity of fishing gear to reduce bycatch and ensure a better conservation status of elasmobranchs;

ADOPTS, in conformity with Articles 5 b), 8 b), and 13 of the GFCM Agreement, the following recommendation:

PART I
General objective, scope and definitions

General objective

1. Contracting parties and cooperating non-contracting parties (CPCs) shall encourage further actions to improve the conservation status of elasmobranchs and measures to mitigate or eliminate, where possible, the risk of incidental catch in fishing operations and/or the associated mortality in the GFCM area of application.

Scope

2. This recommendation applies to all elasmobranch species of the Mediterranean Sea listed in Annex II and III of the SPA/BD Protocol and includes the adoption of species-specific actions as listed in the annex to this recommendation.

Definitions

3. For the purpose of this recommendation, the following definitions shall apply:

a) "Recreational fishing" means non-commercial fishing exploiting marine living resources for recreation, tourism or sport. Such activities may be exerted by natural or legal persons, including by commercial entities in the tourism and sport competition sectors.

b) "DCRF manual" means the manual prepared by the SAC and endorsed by the Commission at its thirty-ninth session, resulting from the implementation of the Data Collection Reference Framework (DCRF).

PART II
Conservation measures

4. The CPCs are invited to take the necessary steps to reduce the mortality of any elasmobranch species incidentally caught during fishing operations by adopting relevant mitigation measures,

including the establishment of an incentive system for vessel captains to reduce incidental elasmobranch mortality as well as technical training and certification schemes for vessel captains; and by conducting research to improve fishing gear, equipment and fishing techniques, with to a view to reducing bycatch elasmobranch mortality and increasing post-release survival rates.

5. The CPCs are invited to adopt mitigation measures to minimize and eliminate, where possible, the incidental catch of elasmobranchs during fishing operations in fisheries with a high risk of bycatch identified by the SAC and, where possible, in fisheries with a low risk of bycatch. Such measures shall be accompanied by an appropriate monitoring to establish the efficacy of the actions and may include, *inter alia*:

- fishing gear modifications and alternative fishing gear types;
- improvements in fishing gear marking and detection;
- time-area fishing restrictions or closures, if appropriate;
- implementation of maximum potential bycatch thresholds; and
- use of magnetic deterrent devices, when based on scientific studies and after a cost-benefit evaluation.

6. The CPCs may also consider, on a voluntary basis, other types of management such as incentive-based management, which rewards low impact operators while simultaneously driving poorly performing operators to adopt better practices or leave the industry, or market-based incentive management, which includes for example elasmobranch-safe and elasmobranch-friendly labelling in medium to high-risk fisheries.

7. The CPCs shall require fishing vessels catching sharks species as bycatch or incidental catch to limit the bycatch of sharks listed in Annex III to the SPA/BD Protocol to a maximum percentage of the total catch in weight by fishing trip or to no more than three specimens. In 2023, the SAC shall assess the most up-to-date catch and composition data by species. Based on SAC scientific advice, the GFCM will agree, at its forty-sixth session, on a limit of a maximum percentage of catch, expressed in weight.

PART III
Data collection, monitoring and research

8. The CPCs shall enhance the collection and monitoring of data and the reporting of information on the incidental catch of elasmobranchs in line with the provisions of Recommendation GFCM/42/2018/2, with the FAO technical manual on *Monitoring the incidental catch of vulnerable species in Mediterranean and Black Sea fisheries: methodology for data collection* and with Task 3 of the Data Collection Reference Framework (DCRF), with the aim to support regional monitoring programmes.

9. The CPCs are invited to identify elasmobranch critical habitats, study the impacts of fishing gear (e.g. wire leader in longline) and possible alternative fishing gear; and based on the existing pressures, may consider modifying the national legislation in force.

10. The SAC is invited, when relevant, to conduct socio-economic studies on the depredation caused by elasmobranchs, in order to elaborate appropriate compensation and bycatch mitigation measures, which may help to prevent fishers' reactions.

11. Upon request of the CPCs and with the assistance of the GFCM Secretariat, the GFCM shall establish, in 2022, pilot projects for the species listed under Annex II and Annex III of the SPA/BD Protocol with a view to establishing an observation and monitoring programme to collect additional data and ensure compliance with the conservation and management measures contained in this recommendation.

12. The CPCs shall report, by 30 April 2026 at the latest, on at least one activity per species/gender listed in the annex to this recommendation and present in the geographical subarea where fishing activities are carried out, or on at least five species-specific actions in total to improve the conservation status of elasmobranchs, mitigate and, where possible, eliminate the risk of incidental catch of elasmobranch in fishing operations and the associated mortality.

13. By 2025, the SAC is requested to compile, assess and evaluate the results of the actions listed in the annex to this recommendation as reported by CPCs, including available data on the spatial distribution of critical habitats of elasmobranchs. The GFCM Secretariat shall implement ad hoc IT reporting tools to facilitate the transmission of requested data through current platforms such as the DCRF and/or the national reports to the SAC.

14. Based on the results, the SAC shall advise on the setting of new measures with the objective to improve the status of elasmobranchs listed in Annex II and Annex III of the SPA/BD Protocol in the Mediterranean and the Black Sea, including but not limited to:

a) the establishment of a maximum percentage in weight or of a catch limit of no more than three specimens per species listed in Annex III of the SPA/BD Protocol in the total bycatch by vessel and by fishing trip;

b) the adoption of a species-specific minimum and maximum landing size taking into account the gestation and reproductive strategy of the species listed in Annex III of the SPA/BD Protocol and not covered by d);

c) the restriction of the recreational fishing of elasmobranchs; and

d) the restriction of the catch, landing and sale of species covered by this recommendation.

15. The SAC shall advise, by 2025, on other endangered or critically endangered species of elasmobranchs in the Mediterranean Sea and provide an update of the annex to this recommendation.

16. In addition, the SAC shall advise, by 2023, on good practices to increase post-release survival rates of elasmobranchs caught as bycatch in fisheries other than pelagic longlines, for which a good practice guide has been already produced and circulated among CPCs[1].

17. At its twenty-fourth session in 2023, the SAC shall report to the GFCM on the progress accomplished thereon and on the identified knowledge gaps as well as provide the necessary elements for setting out a conservation and management framework for species listed in Annex II and Annex III of the SPA/BD Protocol, that will also include reflections on conservation objectives and targets and a timescale for their achievement, the annual maximum potential elasmobranch-limit-mortality, the coverage of onboard scientific observers and, if possible, the best estimates of population size.

[1] FAO and ACCOBAMS. 2019. Good practice guide for the handling of sharks and rays caught incidentally in Mediterranean pelagic longline fisheries. Leaflet. (available at: http://www.fao.org/3/i9152en/I9152EN.pdf).

PART V
Final provisions

18. The CPCs shall call the attention of the relevant national and international authorities in order to protect elasmobranch species from the impacts of fishing activities that jeopardize the conservation of these particular species.

19. This recommendation shall be without prejudice to stricter measures adopted by the CPCs.

20. The SAC advice, in 2023, should facilitate area- and threat-based[2] conservation efforts to contribute to the conservation management of elasmobranch species.

21. The SAC shall review this recommendation in 2024 and the Compliance Committee (CoC) shall review its implementation on a biennial basis afterwards.

22. At its forty-sixth session, in 2023, upon receipt of advice from the SAC and the CoC, the GFCM shall consider, if appropriate, the adoption of further measures allowing for the achievement of the objectives set in this recommendation.

[2] The threats-based management approach is based on pressures such as: interactions with fisheries (all), pollution including marine litter, anthropogenic noise, ship strikes, at-sea watching, captivity related issues, climate change impacts, others. It has been adopted for instance by ACCOBAMS for cetacean species.

Annex

Species-specific actions for elasmobranchs

Smooth-hound sharks (*Mustelus asterias, M. mustelus, M. punctulatus*):

- assess the incidental (bycatch) and targeted catch rates of smooth-hound sharks in all fisheries, including pelagic/midwater trawlers targeting small pelagics;
- assess the survival rates of smooth-hound sharks caught as bycatch in the different fisheries;
- identify the critical habitats of smooth-hound sharks;
- identify fishing technology solutions to reduce bycatch and increase post-release survival rates;
- compile any fisheries management measures in place, including spatial measures, that can positively affect the conservation of smooth-hound sharks, if any; and
- assess priority market demand (domestic, export, etc.), if any.

Common thresher (*Alopias vulpinus*):

- assess the incidental (bycatch) and targeted catch rates of common thresher in all fisheries;
- assess the survival rates of common thresher caught as bycatch in the different fisheries;
- identify the critical habitats of common thresher;
- identify fishing technology solutions to reduce bycatch and increase post-release survival rates;
- compile any fisheries management measures in place, including spatial measures, that can positively affect the conservation of common thresher, if any; and
- assess priority market demand (domestic, export, etc.), if any.

Sandbar shark (*Carcharhinus plumbeus*):

- assess the incidental (bycatch) and targeted catch rates of sandbar shark in all fisheries;
- assess the survival rates of sandbar sharks caught as bycatch in the different fisheries;
- identify the critical habitats of sandbar shark;
- identify fishing technology solutions to reduce bycatch and increase post-release survival rates;
- compile any fisheries management measures in place, including spatial measures, that can positively affect the conservation of sandbar shark, if any; and
- assess priority market demand (domestic, export, etc.), if any.

Gulper shark (*Centrophorus granulosus*):

- assess the incidental (bycatch) and targeted catch rates of gulper shark in all fisheries;
- assess the survival rates of gulper sharks caught as bycatch in the different fisheries;

- identify the critical habitats of gulper shark;
- identify fishing technology solutions to reduce bycatch and increase post-release survival rates;
- compile any fisheries management measures in place, including spatial measures, that can positively affect the conservation of the gulper shark, if any; and
- assess priority market's demand (domestic, export, etc.), if any.

Sharpnose sevengill shark (*Heptranchias perlo*):

- assess the incidental (bycatch) and targeted catch rates of sharpnose sevengill shark in all fisheries;
- assess the survival rates of sharpnose sevengill sharks caught as bycatch in the different fisheries;
- identify critical habitats of sharpnose sevengill shark;
- identify fishing technology solutions to reduce bycatch and increase post-release survival rates;
- compile any fisheries management measures in place, including spatial measures, that can positively affect the conservation of sharpnose sevengill shark, if any; and
- assess priority market's demand (domestic, export, etc.), if any.

Piked dogfish (*Squalus acanthias*):

- assess the incidental (bycatch) and targeted catch rates of piked dogfish in all fisheries;
- assess the survival rates of piked dogfish caught as bycatch in the different fisheries;
- identify critical habitats of piked dogfish;
- identify fishing technology solutions to reduce bycatch and increase post-release survival rates;
- compile any fisheries management measures in place, including spatial measures, that can positively affect the conservation of piked dogfish, if any; and
- assess priority market's demand (domestic, export, etc.), if any.

Blue shark (*Prionace glauca*):

- assess the incidental (bycatch) and targeted catch rates of blue shark in all fisheries;
- assess the survival rates of blue shark caught as bycatch in the different fisheries;
- identify critical habitats of blue shark;
- identify fishing technology solutions to reduce bycatch and increase post-release survival rates;
- compile any fisheries management measures in place, including spatial measures, that can positively affect the conservation of blue shark, if any; and

assess priority market's demand (domestic, export, etc.), if any.