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Agenda Item 32.3

PROPOSAL FOR A CONCERTED ACTION FOR THE BLUE SHARK (*Prionace glauca*) ALREADY LISTED ON APPENDIX II OF THE CONVENTION*

Summary:

Marine Research and Conservation Foundation (MARECO) has submitted the attached proposal* for a Concerted Action for the blue shark (Prionace glauca) in accordance with the process elaborated in Resolution 12.28 (Rev.COP13).

This document was revised to address recommendations from ScC-SC6.

*The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CMS Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

PROPOSAL FOR A CONCERTED ACTION FOR THE BLUE SHARK (*Prionace glauca*)) ALREADY LISTED ON APPENDIX II OF THE CONVENTION

(i). Proponent

Marine Research and Conservation Foundation (MARECO)

(ii). Target species, lower taxon or population, or group of taxa with needs in common

Class:	Chondrichthyes
Subclass:	Elasmobranchii
Order:	Carcharhiniformes
Family:	Carcharhinidae
Genus:	*Prionace*
Species:	*Prionace glauca*

Listed on CMS Appendix II

(iii). Geographical range

The blue Shark is one of the most wide-ranging of all sharks, found throughout all oceans in tropical and temperate waters, usually in water temperatures of 12–18 ℃, but tolerating water temperatures of 10–30 ℃, from the surface to >1,100 m (Ebert et al. 2021). The global population shows little or no genetic variation according to Bailleul et al. 2018 and Verissimo et al. 2017; but Nikolic et al. (2023) identified two genetic clusters in the northern Atlantic/Mediterranean and the Indo-Pacific.

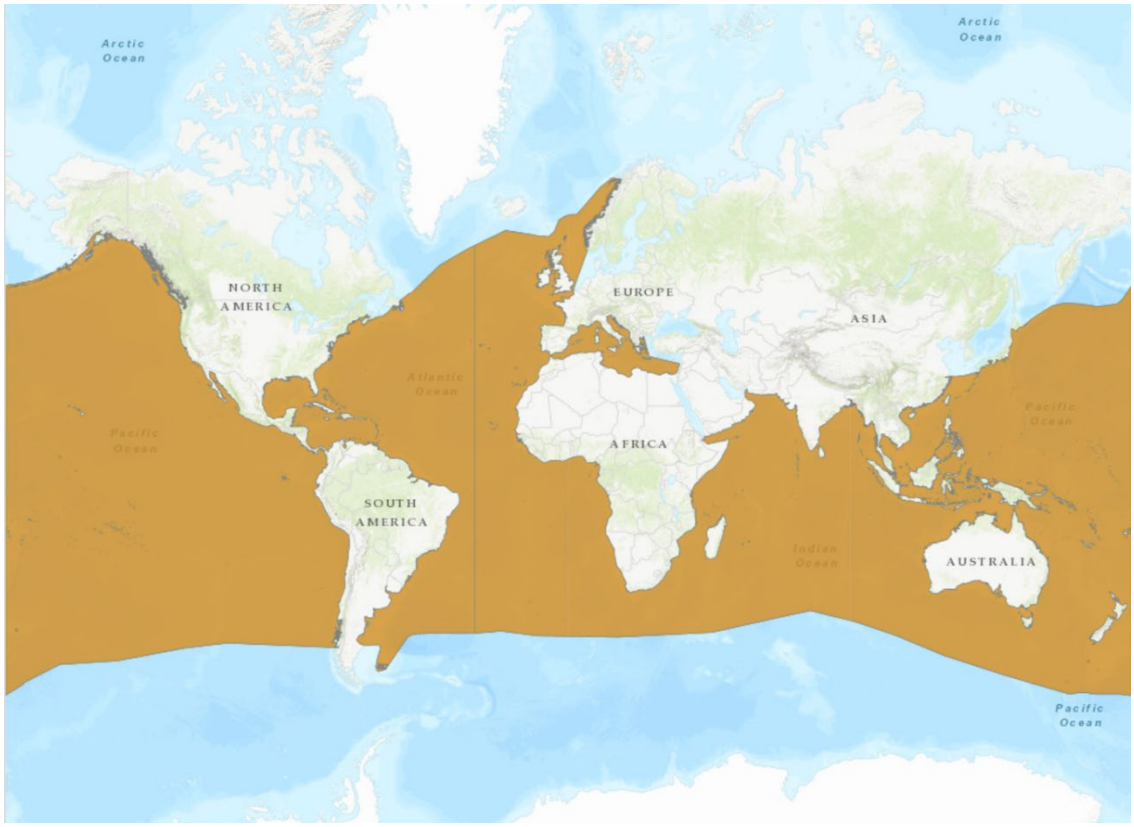

Figure 1: Distribution of the blue shark (©IUCN Red List).

(iv). Summary of Activities

1) Encourage Parties to continue engaging with other MEAs, RFBs, and other relevant entities to enhance blue shark management including the development of the IUCN SSC SSG Conservation Strategy and Action Plan for Pelagic Sharks and Rays, in cooperation with the Sharks MOU;
2) Develop international guidelines from countries with established blue shark tourism (e.g. Azores, UK, South Africa);
3) Support the assessment into the impacts of fisheries on blue shark interactions (fisheries-induced mortality, discards to design mitigation strategies and support the assessment of post-release mortality of blue sharks across regions, demographics and fishing gears);
4) Support the identification of sub-population and genetic differences (to support regional TACs through fisheries-independent data);
5) Identify inconsistencies in the level of protection ensured by different Party Range States;
6) Identify critical habitats and understand the connectivity and migrations;
7) Support assessments into the impacts of climate change on blue sharks by stock or region.

(v). Activities and expected outcomes

Blue sharks would benefit from the improved information, management and conservation efforts proposed. This document should act as a blueprint for CMS Parties to help with their implementation of obligations under CMS, whilst also delivering a sustainable future for blue sharks. Blue sharks are one of the most broadly distributed species of shark, and therefore, any recommendations to enhance their conservation outlook will likely have positive implications for other threatened and CMS-listed species that have the same range and are caught by the same fisheries and fishing gears. Such obligations will also align with the Pelagic Shark Conservation Strategy, which is currently being developed by the Shark Specialist Group of the International Union for the Conservation of Nature Species Survival Commission (IUCN SSC SSG). Signatories to the Memorandum of Understanding on the Conservation of Migratory Sharks (Sharks MOU) welcomed this initiative and progress made and agreed to support the approach outlined in CMS/Sharks/MOS4/Doc 10.2/Rev.1.

The Annex provides a source of actions that Parties could, where relevant, follow and adopt for the successful management of the blue shark (see NDF Step 6 in Mundy-Taylor et al. 2014). The Annex is not exhaustive and could be used as a mold for shaping a species conservation action plan if necessary.

(vi). Associated benefits

Blue sharks would benefit from the improved information, management and conservation efforts proposed. This document should act as a blueprint for CMS Parties to help with their implementation of obligations under CMS, whilst also delivering a sustainable future for blue sharks. Blue sharks are one of the most broadly distributed species of shark, and therefore, any recommendations to enhance their conservation outlook will likely have positive implications for other threatened and CMS-listed species. Such obligations will also align with the Pelagic Shark Conservation Strategy and Action Plan.

Blue sharks are also the most commonly caught species of shark globally, and therefore any socio-economic losses resulting from enhanced management would need to be diligently addressed.

(vii). Timeframe

Please refer to the Annex for an overview.

(viii). Relationship to other CMS actions:

This CA would significantly contribute to the implementation of the following mandates established under CMS and the Sharks MOU:

- Resolution 12.22 and Decisions 13.62 to 13.63 on Bycatch
- Resolution 13.3 and Decisions 13.71 to 13.73 on Chondrichthyan Species
- Decisions 13.66 to 13.68 on Marine Wildlife Watching
- Sharks MOU Programme of Work 2023-2025: Development of a global strategy and regional action plans for pelagic sharks

(ix). Conservation priority

Blue sharks in the Mediterranean are Critically Endangered, with numbers having declined by ~78-90% over three generations (Sims et al. 2016). Atlantic stocks are believed to be at second greatest risk globally, with spatial overlaps of close to 80% with longline fisheries (Queiroz et al. 2019), and a median population change for the blue sharks in the North Atlantic over three generations of -53.9% in 2018 (Rigby et al. 2019). Although TACs have been adopted in ICCAT, these have not yet been allocated to fishing States in the form of quotas. In the Indian Ocean, population levels are also decreasing (Rigby et al. 2019), but stocks appear to be stable or increasing in the Pacific Ocean (Li et al. 2020; WCPFC stock assessments, 2022).

A recent analysis (Poseidon, 2022) estimated that ~10M blue sharks are caught annually, globally, frequently in target multi-species fisheries. These intensive fisheries for blue shark take a bycatch of other, seriously depleted pelagic sharks listed in the CMS Appendices (Pacoreau et al. 2021), whose recovery is also dependent upon conservation action for blue shark.

(x). Relevance

CMS provides a global platform for the conservation of migratory animals and their habitats, aiming to ensure that their use does not exceed sustainable levels. The blue shark is one of the most migratory species (if not the most) of shark and this Concerted Action will add value to the enhanced conservation of this highly migratory shark. This CA will contribute significantly by: (i) strengthening the political will to implement conservation measures in a coordinated and timely fashion; (ii) bridging migratory shark fisheries and conservation interests; and (iii) contributing to the implementation of the FAO's IPOA-Sharks for the world's most heavily fished shark

(xi). Absence of better remedies

Only few t-RFMOs have adopted management measures for this species and the mandate of the Convention on the International Trade in Endangered Species of Fauna and Flora (CITES) is narrowly focused on ensuring that international trade does not endanger the species further. Therefore, the Concerted Action proposed here provides an important avenue for addressing the threats to and lack of cooperative management for this species and for promoting further research and conservation.

(xii). Readiness and feasibility

There are engaged NGOs, experts, and community organizations ready to support Range States to develop, fund and implement collaborative work. Recent initiatives at other international fora, shows that expert networks exist that could support Range States with the implementation of the proposed activities. Furthermore, support will be appreciated from the Sharks MOU and Cooperating Partners, to support the development and implementation of the action plans.

(xiii). Likelihood of success

Supported by engaged NGOs, experts and organisations, and these Concerted Actions, it is bound for success. Moreover, the alignment of some of the Concerted Actions herein with the Conservation Strategy and Action Plans for Pelagic Sharks and Rays under the Sharks MOU, means that there is already active engagement of stakeholders. No risk factors were identified that have the potential to significantly jeopardize the success of the proposed activities.

(xiv). Magnitude of likely impact

It is anticipated that these Concerted Actions can improve the management of blue shark practices, with a greater degree of protection for the species across its geographic range by ensuring all CMS Parties are engaged in these activities. Simultaneously, it can pave the way for greater consideration of blue shark conservation in the high seas by working together with RMFOs.

Tourism is a fast-growing industry (e.g. UK, Mexico) and blue sharks are becoming increasingly popular. It is expected that the demand for blue shark tourism will rise globally, becoming both a threat and an opportunity. If well managed, this economic activity can assist in the management of the species, help raise awareness and facilitate research. CMS can provide effective guidelines to ensure this practice is sustainable and equitable, with a model replicable to other species.

(xv). Cost-effectiveness

This CA is of particular importance given that the Sharks MOU Signatories have not yet listed the blue shark in Annex 1 of the MOU. One of the key components of the Concerted Actions is to encourage cooperation between Parties, information and knowledge exchange, and the development of effective strategies. If conservation successes can be replicated and best practices (such as tourism guidelines) established, this collaboration will prove vastly more cost-effective than individual countries forging their own path separately.

References

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Consultations-Planned/Undertaken: planned workshop with Parties and relevant stakeholders to implement the concerted actions listed herein.

ANNEX

Activity list under this Concerted Actions for blue shark. This detailed activity list is intended to guide positive change for the species under CMS and can be expanded and molded into a conservation action plan for the species.

Activity	Expected Outcomes	Timeframe	Entity responsible for implementation	Indicators for success
Management				
1. Encourage Parties to continue engaging with other MEAs, RFBs, and other relevant entities to enhance blue shark management including the development of the IUCN SSC SSG Conservation Strategy and Action Plan for Pelagic Sharks and Rays, in cooperation with the Sharks MOU.	Heightened attention to blue shark conservation needs	2024-2026	NGOs, experts	Improved long-term population outlook for the blue shark
Sustainable tourism				
2. Develop international guidelines from countries with established blue shark tourism (e.g. Azores, UK, South Africa).	Protocols for responsible blue shark tourism interaction established	2024-2025	NGOs, experts	All Parties with tourism activities implementing or incorporating the implementation of good practices into their tourism management plans
Research				
3. Support the assessment into the impacts of fisheries on blue shark interactions (fisheries-induced mortality, discards to design mitigation strategies and support the assessment of post-release mortality of blue sharks across regions, demographics and fishing gears)	– Interactions incidence and mortality rates determined; – Proposals to reduce risk of interactions of blue sharks produced; – Effects of fisheries interaction on blue shark populations assessed – Post-release survival for blue sharks determined	2024 – 2026	CMS Parties (and non-Party Range States)	Party Range States developing research on interactions and catch risk. Good knowledge of species-specific post-release survival across gears and regions.

Activity	Expected Outcomes	Timeframe	Entity responsible for implementation	Indicators for success
4. Support the identification of sub-population and genetic differences (to support regional TACs through fisheries-independent data)	Sub-populations identified	2025	CMS Parties (and non-Party Range States)	All management units /populations/ stocks genetically identified.
5. Identify inconsistencies in the level of protection ensured by different Party Range States.	Protection gap analysis undertaken.	2024	NGOs	All of Party Range States with gaps identified
6. Identify critical habitats and understand the connectivity and migrations	– Critical areas identified; – Migratory routes identified; – Priority areas for conservation (PAC) identified; – E-Atlas/other GIS output of critical habitats	2024 – 2025	NGOs/Research groups/IUCN SSG ISRA	A global database of blue shark key habitats and key migratory routes PACs identified and shared with global initiatives (e.g. ISRAs)
7. Support assessments into the impacts of climate change on blue sharks by stock or region	Vulnerability and impacts of climate change on blue shark populations better understood.	2025	NGOs/Research groups	Risk assessments done to define blue sharks' vulnerability to climate change