



**MEMORANDUM OF UNDERSTANDING
ON THE CONSERVATION OF
MIGRATORY SHARKS**

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4th Meeting of the Signatories (Sharks MOS4)
Bonn, 28 February – 2 March 2023
Agenda Item 10

**DEVELOPMENT OF A
CONSERVATION STRATEGY AND ACTION PLANS
FOR RHINO RAYS**

(Prepared by the Advisory Committee and the Secretariat)

1. This document provides an overview of a planned initiative of the International Union for Conservation of Nature - Species Survival Commission's - Shark Specialist Group (IUCN SSC SSG) to improve the conservation status of rhino rays.
2. The Secretariat has proposed draft decisions of this meeting to support the initiative, included in [Annex 1](#) for consideration at the meeting.
3. [Annex 2](#) makes suggestions on activities that Signatories may wish to include in their Programme of Work for the triennium 2023-2025, also discussed under agenda item 12.

Background

4. "Rhino Ray" is a term used collectively for the five family-level groups of the Rhinopristiformes (Pristidae, Rhinobatidae, Rhinidae, Glaucostegidae, and Trygonorrhinidae).
5. The IUCN Red List Red List of Threatened Species™ identified Rhinidae and Glaucostegidae as the most threatened groups of all marine fishes. Cumulatively, 94 per cent of species comprising these two families face an 'extremely high risk of extinction' and 66 per cent are assessed as threatened with extinction. These high proportions of threatened species, highlight the urgent need for conservation action.
6. The entire family of Rhinobatidae have been listed in Appendix II to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) at the recent 19th Conference of the Parties to CITES, aiming to ensure that international trade will not be detrimental to the survival of the species in the wild.
7. There are nine species of rhino rays listed in Annex 1 of the Sharks MOU: The entire family of sawfish (Pristidae), Common Guitarfish (*Rhinobatos rhinobatos*), Bottlenose Wedgefish (*Rhynchobatus australiae*), Giant Guitarfish (*Rhynchobatus djiddensis*), and Smoothnose Wedgefish (*Rhynchobatus laevis*), all of which are classified as Critically Endangered, Endangered, or Vulnerable on the IUCN Red List.
8. Following a proposal from the IUCN SSC SSG, the 13th Meeting of the Conference of the Parties to the Convention on Migratory Species of Wild Animals (CMS) adopted [Concerted Action 13.9](#) for *R. rhinobatos* and *R. australiae*. This Concerted Action describes the initiative by the IUCN SSC SSG to improve the conservation status of this highly threatened group of species, including the development of a global conservation strategy for rhino rays.

9. Many species of rhino rays, share common threats. They possess some of the highest value fins on the international market, resulting in targeted catch and retained bycatch (Dulvy *et al.* 2014, Jabado 2018, Kyne *et al.* 2019). Their morphology makes them highly susceptible to being caught in many types of fishing gear (Moore 2017). Their dependence on inshore habitats makes them highly exposed to intensive fisheries, as well as the loss and degradation of important habitat (Jabado *et al.* 2018). To prevent further population declines of rhino rays, cooperation between Range States is urgently needed to mitigate obstacles to migration, conserve the species' habitat, and to regulate target and bycatch fisheries, particularly those associated with seasonal breeding migrations.

MOU Mandates

10. The implementation of the initiative would support the following mandates of the Sharks MOU referring to species included in Annex 1 to the MOU:
- a) [Paragraph 5 of the Sharks MOU \(Objective\)](#):
“to achieve and maintain a favourable conservation status for migratory sharks based on the best available scientific information, taking into account the socio-economic and other values of these species for the people of the Signatories.”
 - b) [Activity 4.1 of the Conservation Plan \(Annex 3 to the MOU\)](#):
“to “adopt best practice guidance for the conservation and management of shark populations based on the best available scientific knowledge and following a precautionary and ecosystem approach.”
 - c) [Activity 16 of the Programme of Work 2019-2021](#) (CMS/Sharks/Outcome 3.9);
“Liaise with the IUCN SSC SSG and participate in assessment and conservation planning workshops, where relevant.”
11. In addition to rhino rays, other Annex 1-listed species¹ with similar life-history traits and threats may also benefit from the actions outlined above.

Cooperation between Sharks MOU and CMS

12. The Sharks MOU was invited by CMS COP13 to support Parties and non-governmental organizations (NGOs) involved with the implementation of the initiative as included under the Concerted Action.
13. To this end the Secretariat has made suggestions as to how the Sharks MOU may support the implementation of this initiative to conserve rhino rays. Recommended activities for the Programme of Work 2023-2025 are included as [Annex 2](#) to this document.

Details of the Rhino Ray Initiative

14. The initiative comprises of nine overarching activities, which are also described in the Concerted Action. These are:
- Creating a network of researchers and policy makers;
 - Increasing data collection and research;
 - Launching national campaigns to build public support for species protection;
 - Assisting in the development of a global rhino ray conservation plan and regional action plans;

¹ Other larger bodied coastal elasmobranchs and some demersal elasmobranchs which could include angel sharks (*Squatina squatina* is listed on CMS Appendices I and II and Annex 1 of the Sharks MOU).

- Running workshops aimed at improving identification, and produce identification guides;
 - Researching options to reduce fishing mortality;
 - Building regional capacity and encouraging local engagement and education to minimize fishing mortality and improve fisheries and trade management;
 - Hosting regional conservation planning workshops; and,
 - Increasing rhino ray policy-based protections.
15. International cooperation in the planning and mitigation of threats is vital to improve the conservation status of rhino rays. The IUCN SSC SSG aims to implement these activities on a global scale.
16. However, many of these actions must be implemented on a regional level. While members of these families share similar threats, there are also regional differences in threat levels, fisheries activities, regulations and conservation measures, and local species knowledge. This highlights the need for specific regional actions. The preparation of a global conservation strategy will provide the global priorities and context on which subsequent, regional plans can be based.
17. Regional workshops will allow direct participation of Range States, as well as relevant stakeholders including fishers, fisheries officers, and NGOs, and encourage continued growth and active participation of a stakeholder network. This capacity building will be important in future activities concerning CMS-listed rhino rays, as well as facilitate concurrent consideration of other taxa occurring in the region (e.g., angel sharks).

Regional Action Plan for the Indo-West Pacific

18. Thanks to a voluntary contribution from the government of Australia, the Secretariat will be able to organize and host the first regional workshop to develop a regional action plan for rhino rays for the Indo-West Pacific region, which is tentatively scheduled to take place in 2023.
19. The workshop will be organized by the Secretariat in collaboration with the IUCN SSC SSG and the IUCN Conservation Planning Specialist Group (CPSG). The workshop will bring together Range States as well as NGOs and scientists who are actively involved in rhino ray research, and conservation in the Indo-West Pacific region.
20. The Indo-West Pacific is a region of low coverage of CMS Parties and Sharks MOU Signatories. This workshop will offer an opportunity to engage with other Range States in the region and further support conservation efforts in the region.
21. The Indo-West Pacific regional project is aimed at:
- Building a network of regional researchers and policy makers with expertise relevant to conservation of rhino rays;
 - Increasing rhino ray policy-based protections;
 - Reviewing and research options to reduce fishing mortality;
 - Reaching out to important non-Signatory and non-Party Range States, to identify and establish areas of cooperation on joint objectives related to the conservation of CMS-listed chondrichthyans, and rhino rays in particular, and thereby creating an incentive to join CMS and the Sharks MOU to further cooperation;
 - Holding an Indo-West Pacific regional conservation planning workshop to develop a regional action plan;
 - Providing overall project coordination and planning;
 - Preparing, reviewing, publishing and disseminating the action plan;

22. Future priority activities of this initiative may include additional regional workshops to develop regional action plans, in particular for West Africa, the Mediterranean and the Americas, all of which will be dependent on funding (see Annex 2 for more information regarding budget).

Action requested:

23. The meeting is requested to:
- a) Review and agree a final version of draft decisions of the Meeting in Annex 1 of this document;
 - b) Review and agree activities as suggested in Annex 2 to this document and consider including those in the Programme of Work 2023-2025.

References

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- Moore, A.B.N. 2017. Are guitarfishes the next sawfishes? Extinction risk and an urgent call for conservation action. *Endangered Species Research* 34: 75–88.

ANNEX 1

DRAFT DECISIONS OF THE MEETING

Signatories

1. Welcomed the Initiative by the International Union for the Conservation of Nature Species Survival Commission Shark Specialist Group (IUCN SSC SSG) to develop a global conservation strategy and regional action plans for rhino rays and agreed to support the IUCN SSC SSG to advance these approaches.
2. Requested the Secretariat to continue to liaise with the IUCN SSC SSG on the implementation of their initiative to conserve rhino rays with initial focus on the Indo-West Pacific region.

ANNEX 2

DRAFT ACTIVITIES FOR INCLUSION IN THE PROGRAMME OF WORK 2023 - 2025

No.	Activity	Mandate ²	Priority ranking ³	Time frame ⁴	Responsible entity ⁵	Funding needs for implementation	Secretariat staff required for implementation (working days)
Species Conservation/Habitat Conservation							
X. Development global conservation strategy and regional action plans for rhino rays							
x.1	Provide technical support to the IUCN SSC SSG, including sharing relevant information and expertise and participating in regional conservation planning meetings and processes.	MOS4 decisions	tbd	tbd	AC, SIG	€3,000-6,000 for AC travel per meeting	P staff: 0.5 G staff: 0.5 (managing travel of AC members)
x.2	Liaise with the IUCN SSC SSG on the development of a global conservation strategy and regional action plans for rhino rays.	MOS4 decisions	tbd	2023	SEC		P staff: 5
x.3	Provide support to the IUCN SSC SSG for the implementation of the initiative in the Indo-West Pacific region.	MOS4 decisions	tbd	2023	SEC	Funding is available for the Indo-West Pacific region.	P staff: 25 G staff: 5 (managing donor and project agreements, organizing and holding meetings)

² Conservation Plan (CP), Terms of Reference of the Advisory Committee (AC TOR), Terms of Reference of the Secretariat (SEC TOR)

³ Core Secretariat activities and suggested priorities (High, Medium)

⁴ Year(s) during which activity should be implemented

⁵ Signatories (SIG), Advisory Committee (AC), Secretariat (SEC), Conservation Working Group (CWS), Consultants, Cooperating Partners (Coop)

No.	Activity	Mandate ²	Priority ranking ³	Time frame ⁴	Responsible entity ⁵	Funding needs for implementation	Secretariat staff required for implementation (working days)
x.4	Provide financial support to regional Range State workshops and development of regional action plans.	MOS4 decisions (CP:4.1)	tbd	tbd	SIG, (SEC if funds were provided through the Secretariat)	Approx. €40,000 required for development of action plan Approx €30,000 to host regional workshop (funding was already made available for the Indo-West Pacific region)	P staff: 25 G staff: 5 (per workshop: raising funds, managing donor and project agreements, organizing and holding meeting)
x.5	Provide capacity-building workshops on rhino ray identification for key stakeholder groups.	MOS4 decisions (CP:4.1)	tbd	tbd	SIG (with support from IUCN SSC SSG)	Costs might occur for Signatories to host workshops	No involvement