





Distribution: General

UNEP/CMS/ScC18/Doc.10.6

15 May 2014

Original: English

18th MEETING OF THE SCIENTIFIC COUNCIL Bonn, Germany, 1-3 July 2014 Agenda Item 10.6

CONSERVATION OF MIGRATORY SHARKS AND RAYS

Summary

The attached draft Resolution aims to bring to the attention of Parties activities for the conservation of sharks and rays which would benefit from a global approach and immediate action. The draft Resolution would complement the objectives of the Sharks MOU and assist Parties in meeting their obligations regarding Appendix I species.

The draft Resolution contributes to the implementation of objectives 1-3 of the CMS Strategic Plan 2006-2014 and activities 2 and 3 of Resolution 10.9 on the Future Structure and Strategies of the CMS and CMS Family.

CONSERVATION OF MIGRATORY SHARKS AND RAYS

(Prepared by the UNEP/CMS Secretariat)

- 1. The attached draft Resolution on the "Conservation of Migratory Sharks and Rays" has been drafted in order to bring to the attention of all Parties activities for the conservation of shark and ray species which would benefit from a global approach and immediate action, ,. The Resolution does not aim to duplicate the work of the Memorandum of Understanding on the Conservation of Migratory Sharks (Sharks MOU), although it contains certain key elements of the MOU and the Conservation Plan for Migratory Sharks. Rather, it was developed to complement and support the objectives of the MOU.
- 2. With regard to species which are listed in Appendix I (see table 1), Parties to the Convention have a legally binding obligation to take appropriate and necessary steps to conserve such species and their habitat. This Resolution would assist Parties to meet these obligations.

Background:

- 3. The most recent IUCN assessment of the "Extinction Risk and Conservation Status of the World's Sharks and Rays", Dulvy et al. (2014)1 concluded that one quarter of the 1,041 examined species of sharks rays and chimera are threatened due to overfishing and that the overall Chondrichthyan extinction risk was substantially higher than for most other vertebrates. Rays were particularly affected, making up five out of seven most threatened Families of cartilaginous fish.
- 4. Sharks are taken in targeted fisheries and as bycatch, primarily for their meat and fins, but also for their cartilage, liver and skin. A recent study by Worm et al. (2013)2 suggests that between 63 million and 273 million sharks are killed per year, globally. An estimated 26 million to 73 million sharks were killed in 2010 alone, to supply the global fin market (Clarke et al. 2006)3.
- 5. The value of shark fins has increased in recent times due to the rising demand in Asian countries. The fins generally fetch much higher prices than the meat. This discrepancy creates an economic incentive to keep only the fins and discard the body at sea. This wasteful practice of shark finning, has been prohibited by many countries and Regional Fisheries Organizations. This has been achieved by applying a 5% "fin to carcass ratio" rule, requiring that fins should total no more than 5% of the weight of the sharks on board a vessel. However, this approach was widely criticized for not being able to close loopholes to the finning ban, since ratios of fin to carcass size differ significantly between species or between whole or dressed sharks. In many cases fishers are allowed to land fins separately from the sharks' bodies, making it difficult for enforcement officials to identify the species based on fins alone.
- 6. If instead sharks were required to be landed with their fins naturally attached, this would be the most reliable method for ensuring that finning does not occur, while also facilitating species-specific data collection. The removal of shark fins on board vessels at sea

¹ Dulvy et al. (2014). "Extinction Risk and Conservation of the World's Sharks and Rays." eLife.

² Worm B, Davis B, Kettermer L, Ward-Paige CA, Chapman D, Heithaus MR, Kessel ST, Gruber SH. 2013.

Global catches, exploitation rates, and rebuilding options for sharks Marine Policy 40, 194-204.

³ Clarke, S. C., McAllister, M. K., Milner-Gulland, E. J., Kirkwood, G. P., Michielsens, C. G. J., Agnew, D. J., Pikitch, E. K., Nakano, H. and Shivji, M. S. (2006), Global estimates of shark catches using trade records from commercial markets. Ecology Letters, 9: 1115–1126. doi: 10.1111/j.1461-0248.2006.00968.x

has already been prohibited by an increasing number of countries, including the USA, many Central and South American nations, and the 28 Member States of the EU.

7. The lack of data on shark populations and catch continues to hamper the development of effective conservation measures for these species, which should be based on sound scientific information on the ecology of sharks and rays. Fisheries-related data on catch and landings, discards and by-catch are crucial for the development of conservation targets and indicators. In order to build this fundamental base of knowledge more research, monitoring and information exchange would need to be undertaken preferably in cooperation with relevant fisheries organizations and scientific bodies.

Shark Conservation in CMS:

8. Sharks have gained significant attention amongst CMS Parties in recent years. Between 1999 and 2011 seven species of sharks and the Giant Manta Ray have been listed in Appendix II of the Convention, three of which were also listed in Appendix I (table 1).

Table 1: Shark and Ray Species listed in CMS Appendices, Annex 1 to the Sharks MOU and CITES Appendices, including year of inclusion as of May 2014

Species	CMS	Sharks MOU	CITES
Whale Shark	App II 1999	2010	App II 2003
Rhincodon typus			
Great White Shark	App I 2002	2010	App II 2005
Carcharodon carcharias	App II 2002		(previously III since 2000)
Basking Shark	App I 2005	2010	App II 2003
Cetorhinus maximus	App II 2005		(previously III since 2000)
Porbeagle	App II 2008	2010	App II 2013
Lamna nasus			
Spiny Dogfish	App II 2008	2010	
Squalus acanthias			
Shortfin Mako Shark	App II 2008	2010	
Isurus oxyrinchus			
Longfin Mako Shark	App II 2008	2010	
Isurus paucus			
Giant Manta Ray	App I 2011	will be	App II 2013
Manta birostris	App II 2011	automatically	(Manta spp)
		proposed for	
		listing at MOS2	
Great hammerhead Shark			App II 2013
Sphyrna mokarran			
Scalloped Hammerhead Shark			App II 2013
Sphyrna lewini			
Smooth Hammerhead Shark			App II 2013
Sphyrna zygaena			
Oceanic Whitetip Shark			App II 2013
Carcharinus longimanus			
All species of Sawfishes			App I 2007
Pristidae spp			

- 9. Following CMS Recommendation 8.16, adopted in 2005, a Memorandum of Understanding on the Conservation of Migratory Sharks (Sharks MOU) was concluded in Manila in 2010.
- 10. The Sharks MOU is the first global instrument which is dedicated to the conservation of migratory sharks and aims to achieve and maintain a favourable conservation status for these species based on the best available scientific information and taking into account the socio-economic value of these species for the people in various countries.
- 11. Seven of the CMS listed shark species are also listed in Annex I of the Sharks MOU. The Giant Manta Ray, which was listed in CMS after the MOU entered into effect, will be automatically proposed for inclusion in Annex I to the MOU according to a procedure adopted by the Signatories at their first Meeting in 2012.
- 12. A Conservation Plan for Migratory Sharks which was adopted at the same meeting, complements the MOU and provides guidance to the Signatories on priority conservation measures in five main fields, namely research, sustainable fisheries, international cooperation, awareness raising and habitat conservation.

Increasing the Membership of the CMS Sharks MOU:

- 13. The MOU is a global instrument, open for signature to all Range States of migratory sharks and States, flag vessels of which are engaged outside their national jurisdictional limits in taking, or which have the potential to take, migratory species of sharks.
- 14. As of May 2014 the number of Signatories to the MOU had reached 36 including the European Union. In order to conserve highly migratory species, a broader membership is still required to enhance international cooperation in conserving and managing sharks (and rays) within and beyond the limits of national jurisdictions.

Enhancing cooperation with organizations relevant for the conservation of sharks:

15. It is widely understood that successful shark conservation and management require the fullest possible cooperation among governments, intergovernmental organizations (IGOs), non-governmental organizations (NGOs), stakeholders of the fishing industry and local communities.

Activities to conserve sharks and rays by other organizations:

- 16. Five shark species and all manta rays were included in CITES Appendix II at COP16 in 2013. They joined other sharks and sawfishes (elasmobranchs) that had already been included in their Appendices over the past decade. See table 1 for a comparison with CMS listed species.
- 17. The United Nations Law of the Seas (UNCLOS) and the United Nations Fish Stocks Agreement established binding obligations for coastal and flag states to cooperate in the conservation of and management of straddling and highly migratory fish stocks. Cooperation on fish stocks on the high seas (areas beyond national jurisdictions) take place through Regional Fisheries Management Organizations (RFMOs).

- 18. A number of RFMOs have adopted generic measures for the management and conservation of sharks including prohibiting the targeting of sharks and shark finning and encouraging the release of live shark bycatch as well as a number of species-specific provisions. In the context of developing the Sharks MOU, Range States have reiterated that Regional Fisheries Management Organizations (RFMOs) should play a crucial role in the management of shark populations and that it is a matter of concern that not all RFMOs have adopted conservation and management measures for directed shark fisheries and for the regulation of by-catch of sharks from other fisheries as yet.
- 19. The voluntary International Plan of Action for the Conservation and Management of Sharks (IPOA-SHARKS) has been elaborated within the framework of FAO's Code of Conduct for Responsible Fisheries. The objective of the IPOA-SHARKS is to ensure the conservation and management of sharks and their long-term sustainable use and is therefore in line with the objectives under CMS. The IPOA-SHARKS foresees the development of National Plans of Action (NPOAs) by States for the conservation and management of sharks if their vessels regularly catch sharks in directed fisheries or as bycatch in non-directed fisheries.
- 20. The review of the Implementation of IPOA-SHARKS in 2012 by the FAO shows that 18 of the 26 top shark fishing countries, areas and territories had adopted an NPOA Sharks and that an additional five of these countries were in the process of adopting or developing such a plan.
- 21. In order to complement and not to duplicate efforts of the above-mentioned organizations, it is suggested in the attached draft Resolution that the Secretariat should engage in close cooperation with CITES, FAO, RFMOs, civil society and other relevant stakeholders in order to promote coordinated actions for the conservation and sustainable use of sharks and rays.

Action requested:

The Scientific Council is invited to:

- (a) Review the draft Resolution on the Conservation of Migratory Sharks annexed to this document.
- (b) Endorse it for submission by the Scientific Council to CMS COP11.

ANNEX

DRAFT RESOLUTION

CONSERVATION OF MIGRATORY SHARKS AND RAYS

Preamble

Aware of the critical role that migratory sharks and rays play in marine ecosystems and local economies, and concerned about the significant mortality of these species, especially those listed on Appendices I and II of the Convention from a range of impacts and threats;

Noting IUCN Shark Specialist Group's (SSG) 2014 assessment on the conservation status of sharks, rays (including skate, guitarfish, sawfish, wedgefish, numbfish, etc.) and chimaera species (Chondrichthyan fish), estimating that one quarter of all examined species are threatened with extinction, and only one third are classified as being of low conservation concern;

Noting that the IUCN has warned that rays are generally more threatened and less protected than sharks, and that the Giant Manta Ray was added to CMS Appendix I and II at the 10th Meeting of the Conference of the Parties;

Noting with concern that overfishing is the driver behind significant declines in shark and ray species worldwide, threatening many populations, the stability of marine ecosystems, sustainable fisheries, shark- and ray-based eco-tourism and food security;

Aware that finning, the removal and retention of the fins of sharks (and some rays) and the discard at sea of the rest of the carcass, is associated with unsustainable mortality and unacceptable waste;

Recalling the UN Fish Stocks Agreement aiming to ensure the long-term conservation and sustainable use of straddling and highly migratory fish stocks and the UN General Assembly Resolution 68/71 on Sustainable Fisheries calling upon States to take national measures that regulate shark fisheries and incidental catch of sharks, in particular those measures which prohibit or restrict fisheries conducted solely for the purpose of "harvesting" shark fins and, where necessary, to consider taking other measures, as appropriate, such as requiring that all sharks be landed with each fin naturally attached;

Aware that, despite past and present scientific research and monitoring, knowledge of the biology, ecology and population dynamics of many migratory sharks and rays is deficient, and that it is necessary to promote stronger co-operation among fishing nations on research, monitoring, enforcement and compliance in order to effectively implement conservation measures;

Noting that, as of June 2013, eight species of shark and all manta rays are included in Appendix II of the Convention on the International Trade in Endangered Species (CITES), and that all species of sawfishes are listed in Appendix I;

Emphasizing the importance of the International Plan of Action for the Conservation and Management of Sharks, which was adopted by the Food and Agriculture Organization

(FAO) of the United Nations in 1999, in providing guidance on the development of such measures, and welcoming the fact that 18 out of 26 top fishing nations have adopted National Plans of Action for Sharks (NPOA Sharks);

Recalling Recommendation 8.16 on the Conservation of Migratory Sharks requesting all Parties to strengthen measures to protect migratory shark species against threats, including habitat destruction, IUU fishing, and fisheries by-catch; and

Recalling the establishment of the CMS Memorandum of Understanding on the Conservation of Migratory Sharks (Sharks MOU) in 2010, which aims 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, and the first Meeting of the Signatories in 2012 where the Conservation Plan for Migratory Sharks was adopted;

The Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals

- 1. *Urges* Parties to ensure that all fishing and trade of sharks and rays are ecologically sustainable, and that a lack of scientific data does not preclude conservation or fisheries management action towards this objective;
- 2. *Urges* Parties to enact, where not already in place, legislation or regulations requiring sharks to be landed with all fins naturally attached, in line with applicable UN General Assembly Resolutions and IUCN advice;
- 3. *Urges* Parties to develop and implement National Plans of Action for Sharks (NPOA SHARKS) that are defined to apply to all Chondrichthyan fish species to manage sharks within a State's jurisdictional waters and for the regulation of the activities of State's fleets fishing on the High Seas, in accordance with FAO's International Plan of Action for Sharks IPOA-Sharks;
- 4. *Urges* Parties to develop and implement strategies that ensure that sharks and rays are fished and traded in accordance with existing conservation and management measures and applicable regulations, including those mandated or directed by CITES and Regional Fisheries Management Organizations (RFMOs);
- 5. *Requests* Parties to identify the needs of training and capacity development in research, data collection and monitoring, and to facilitate initiatives to enhance institutional capacities and competencies in shark and ray identification, management and conservation techniques;
- 6. Requests Parties to improve their biological and ecological knowledge of migratory shark and ray populations relevant to effective conservation measures through research, monitoring and information exchange and promote population assessments and research in cooperation with relevant fisheries organizations and competent scientific bodies;
- 7. Encourages Parties to prioritize programmes to monitor and document directed shark and ray fisheries and those fisheries where sharks and rays are a significant by-catch, which may include vessel monitoring systems, inspections and on-board observer or monitoring

programmes;

- 8. *Encourages* Parties to establish conservation targets for migratory sharks and rays, and indicators to assess progress towards reaching these targets;
- 9. *Requests* Parties to identify and conserve critical habitats, including nursery and spawning grounds, migration routes and vulnerable life stages with a view to developing effective conservation and sustainable management measures, based on the best available scientific knowledge and the precautionary principle;
- 10. Calls upon Parties to prohibit all fishing in migration corridors and other habitats deemed critical to the recovery and sustainability of shark and ray populations, including those that straddle jurisdictional boundaries;
- 11. *Invites* Parties and Range States to sign the Sharks MOU and engage in conservation and research measures in order to prevent the unsustainable use of sharks and rays; and
- 12. *Instructs* the Secretariat to continue to liaise with CITES, FAO, RFMOs, civil society and other relevant stakeholders in order to promote coordinated actions for the conservation and sustainable use of sharks and rays.