



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

CMS/Sharks/AC2/Rec.2.5  
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2<sup>nd</sup> Meeting of the Advisory Committee (AC2)  
2<sup>nd</sup> Workshop of the Conservation Working Group (CWG2)  
Bonaire, Netherlands, 20 - 24 November 2017  
Agenda Item 9

**RECOMMENDATIONS OF THE ADVISORY COMMITTEE TO THE 3<sup>RD</sup> MEETING OF THE  
SIGNATORIES OF THE SHARKS MOU  
ON  
COOPERATION WITH CMS ON THE IMPLEMENTATION OF CONCERTED ACTION FOR  
WHALE SHARKS AND MOBULIDS**

1. The Advisory Committee (AC) has made recommendations to the Third Meeting of the Signatories (MOS3) on the cooperation with CMS on the implementation of CMS Concerted Action for the (1) Whale Shark (*Rhincodon typus*) and (2) Moulid Rays.
2. The recommendations are provided in form of a table for each of the Concerted Action species, which summarizes the activities agreed at COP12 . The recommendations made by the AC specifically refer to ways on how the Sharks MOU could support the implementation of these activities. Furthermore, the AC made suggestions on the most suitable entities under the MOU for implementation and what implications the recommended activities would have for the budget of the MOU.
3. The Concerted Action for the Angelshark, which was also approved by CMS COP12, was not reviewed by the AC, because the species hadn't been included in Annex 1 at the time of the meeting.
4. The AC and CWG generally welcomed Concerted Actions as a tool for conservation, and in particular to generate momentum for activities by the Range States of the respective species.

**1. Overview of activities in the CMS COP12 Proposal for Concerted Action for Mobulid Rays, suggestions for implementation support by the Sharks MOU, entities responsible for implementation and possible implications for the Sharks MOU Budget**

<b>Activity (as approved by CMS COP12)</b> <i>(please refer to UNEP/CMS/Concerted Action 12.6 for further details)</i>	<b>Suggestions for implementation support by the Sharks MOU</b>	<b>Entity</b>	<b>Implications for the Sharks MOU Budget</b>
1.1. Review the Global Conservation Strategy (Lawson <i>et al.</i> 2017) and implement priority actions.	<ul style="list-style-type: none"> <li>– The AC may provide advice on the Strategy and potential initiatives for Signatories to implement</li> <li>– Signatories may consider adopting the Strategy</li> </ul>	<ul style="list-style-type: none"> <li>– AC</li> <li>– Signatories</li> </ul>	none
2.1. Engage with local communities and fisheries sector to gather socio-economic information on mobulid catch, share information and develop collaborative conservation and management strategies.	<ul style="list-style-type: none"> <li>– Signatories may coordinate with local communities in their countries.</li> </ul> <p>AC comment: there needs to be feedback process on implementation without creating additional work for Signatories and the Secretariat.</p>	<ul style="list-style-type: none"> <li>– Signatories</li> </ul>	<p>none</p> <p>Costs might occur for Signatories</p>
2.2. Build capacities within local communities to support a transition towards alternative livelihoods.	<ul style="list-style-type: none"> <li>– Signatories may coordinate with local communities in their countries.</li> </ul> <p>AC comment: there needs to be feedback process on implementation without creating additional work for Signatories and the Secretariat.</p>	<ul style="list-style-type: none"> <li>– Signatories</li> </ul>	<p>none</p> <p>Costs might occur for Signatories</p>
2.3 Consult and collaborate with communities and fisheries sector to design and plan for regulatory or legislative changes prior to implementation.	<ul style="list-style-type: none"> <li>– Signatories may coordinate with local communities in their countries</li> </ul> <p>AC comment: there needs to be feedback process on implementation without creating additional work for Signatories and the</p>	<ul style="list-style-type: none"> <li>– Signatories</li> </ul>	<p>none</p> <p>Costs might occur for Signatories</p>

<b>Activity (as approved by CMS COP12)</b> <i>(please refer to UNEP/CMS/Concerted Action 12.6 for further details)</i>	<b>Suggestions for implementation support by the Sharks MOU</b>	<b>Entity</b>	<b>Implications for the Sharks MOU Budget</b>
	Secretariat.		
3.1. Conduct participatory community research to improve knowledge on target and incidental mobulid catches and the distribution and occurrence of mobulid rays within Range States.	<ul style="list-style-type: none"> <li>– Signatories may coordinate with local communities in their countries</li> </ul> <p>AC comment: there needs to be feedback process on implementation without creating additional work for Signatories and the Secretariat.</p>	<ul style="list-style-type: none"> <li>– Signatories</li> </ul>	<p>none</p> <p>Costs might occur for Signatories</p>
3.2. Develop, disseminate, and support implementation of best-practice approaches to reduce incidental catches of mobulid rays and for safe-handling and release to minimize post-capture mortality.	<ul style="list-style-type: none"> <li>– Signatories may coordinate with local communities in their countries</li> <li>– The AC may provide technical expertise on bycatch mitigation and safe handling and release techniques (e.g. guidelines on purse seine fisheries by IOTC, add link, other safe release guidelines need to be developed, ICES/FAO technologies on fish behaviour)</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> <li>– Cooperating Partners</li> <li>– Secretariat</li> </ul>	<p>none</p> <p>Costs might occur depending on the activity</p>
3.3. Collaborate and coordinate research and management implementation with both local stakeholders and neighboring Range States, recognizing the need to address shared stocks conservation through coordinated approaches - e.g. via RFMOs and RFBs.	<ul style="list-style-type: none"> <li>– Signatories may coordinate their activities with local stakeholders and neighboring Range States;</li> <li>– The AC may provide technical expertise.</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> </ul>	<p>none</p> <p>Costs might occur depending on the activity</p>
3.4. Ensure effective implementation of complementary CITES requirements and regulations particularly if no strict national protection for mobulids exists.		<ul style="list-style-type: none"> <li>– Signatories</li> </ul>	<p>none</p>

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3.5 Expand enforcement against illegal fishing and illegal trade		– Signatories	none
4.1 Develop a plan to monitor and evaluate the effectiveness of interventions to reduce the socio-economic impact of protection measures.			
4.2 Develop an ecological monitoring plan for mobulid rays to determine effectiveness of conservation and management measures.	<ul style="list-style-type: none"> <li>– The AC may provide technical expertise.</li> </ul> AC: The AC may review ecological monitoring plans	– AC	none  Costs might occur depending on the activity
4.3 Collate and share findings and best practices at national and regional workshops.	<ul style="list-style-type: none"> <li>– Signatories may share best practice examples;</li> <li>– AC may assess best practice</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> <li>– Cooperating Partners</li> </ul>	none  Costs might occur depending on the activity

**2. Overview of activities in the CMS COP12 Proposal for Concerted Action for the Whale Shark, suggestions for implementation support by the Sharks MOU, entities responsible for implementation and possible implications for the Sharks MOU Budget**

<b>Activity (as approved by CMS COP12)</b> <i>(please refer to UNEP/CMS/Concerted Action 12.7 for further details)</i>	<b>Suggestions for implementation support by the Sharks MOU</b>	<b>Entity</b>	<b>Implication for the Sharks MOU Budget</b>
1.1: Investigate (through research, including satellite tagging and genetic studies) the connectivity of local populations and migrations.	<ul style="list-style-type: none"> <li>– Signatories may support research activities.</li> <li>– AC may provide technical expertise</li> <li>– Secretariat may foster collaboration in other regions</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> <li>– Secretariat</li> </ul>	none
1.2: Collect information on the scale of bycatch and fisheries interaction to assess the level of impact this has on Whale Sharks and any potential mitigation strategies.	<ul style="list-style-type: none"> <li>– Signatories may support research activities.</li> <li>– AC may provide technical expertise</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> </ul>	none
1.3: Investigate locations and conditions in which pollution (such as discarded fishing gear, noise, plastics etc.) may be affecting Whale Shark populations.	<ul style="list-style-type: none"> <li>– Signatories may support research activities</li> <li>– AC may provide technical expertise</li> <li>– Secretariat may foster collaboration amongst Signatories</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> <li>– Secretariat</li> </ul>	none
1.4: Assess the impacts of climate change on Whale Sharks.			
1.5: Identify (through research, including satellite tagging studies) and protect critical Whale Shark habitats (e.g. feeding or mating habitats) and migratory routes.	<ul style="list-style-type: none"> <li>– Signatories may support research activities.</li> <li>– AC may provide technical expertise</li> <li>– Secretariat may foster collaboration amongst Signatories</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> <li>– Secretariat</li> </ul>	none

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2.1: Identify potential threats to Whale Sharks from tourism activities.	<ul style="list-style-type: none"> <li>– Signatories may support research activities.</li> <li>– AC may provide technical expertise</li> <li>– Secretariat may foster collaboration amongst Signatories</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> <li>– Secretariat</li> </ul>	none
2.2: Collate and share good practice from countries with established Whale Shark tourism.	<ul style="list-style-type: none"> <li>– Signatories may share good practice examples;</li> <li>– AC may provide technical expertise</li> <li>– Secretariat may foster collaboration amongst Signatories</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> <li>– Secretariat</li> </ul>	none
2.3: Encourage licensing and regulation of Whale Shark tourism interaction tour operators.			
2.4: Develop unified tourism guidelines to limit impacts on Whale Sharks and provide a code of conduct			
2.5: Ensure socio-economic benefits of Whale Shark tourism benefits the local community.	<ul style="list-style-type: none"> <li>– Signatories may coordinate with local communities and ensure full stakeholder participation in Whale Shark tourism.</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> </ul>	none
2.6: Develop appropriate education and awareness tools, incorporating scientific and traditional knowledge for a range of different stakeholders.	<ul style="list-style-type: none"> <li>– Signatories may include the development of education and awareness tools into a Capacity Building Programme.</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> </ul>	?
2.7: Capacity-building of Government agencies and local communities to deliver educational campaigns.	<ul style="list-style-type: none"> <li>– The Secretariat may respond to specific requests from Signatories:</li> <li>– AC may provide technical expertise</li> </ul>	<ul style="list-style-type: none"> <li>– Secretariat</li> <li>– AC</li> </ul>	none

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2.8: Ensure clear communication and stakeholder engagement with local communities that may be affected by conservation efforts and mitigate any negative impacts.	– Signatories may engage with local communities and mitigate negative impacts of tourism.	– Signatories	none
3.1: Coordinate with RMFOs to encourage the sharing of information and streamlining of conservation efforts.	– See AC recommendations on RFMO engagement		
3.2: Proposal of minimum onboard observers on commercial shipping lines & fishing vessels to gain more information on vessel strikes, bycatch and fisheries interactions.	– Signatories may work towards improving observer coverage on their fishing fleets.	– Signatories	none
3.3: Collate information on the scale of bycatch and fisheries interaction to assess the level of impact this has on Whale Sharks and any potential mitigation strategies.	– Signatories may provide information on bycatch and fisheries interactions.	– Signatories	none
4.1: Engage non-CMS Parties in the conversation to protect Whale Sharks and encourage their integration.			
4.2: Arrange a regional workshop to encourage cooperation and increase awareness.			
5.1: Identify inconsistencies in the level of protection ensured by different Range States.	– The Secretariat may support with gathering information from Signatories	– Secretariat	

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5.2: Encourage all Range States to implement a ban on all targeted fishing of Whale Sharks.	<ul style="list-style-type: none"> <li>– Signatories may address this with other Range States</li> <li>– Cooperating Partners may develop awareness raising materials.</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– Cooperating Partners</li> </ul>	none
5.3: Encourage all Range States to develop action plans (AP) for the conservation of Whale Sharks.	<ul style="list-style-type: none"> <li>– Signatories may consider developing an AP for Whale Sharks</li> <li>– The AC may provide guidance to Signatories upon request</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> </ul>	?
5.4: Strengthen existing policies and legislation, develop new legislation where necessary, for the effective conservation of Whale Sharks, including measures to protect key habitats and alleviate threats.	<ul style="list-style-type: none"> <li>– Signatories may strengthen or develop policies</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> </ul>	none
5.5: Ensure enforcement capacity for the implementation of national protection regulations	<ul style="list-style-type: none"> <li>– Signatories may strengthen or develop capacity</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> </ul>	none
5.6: Encourage the development of regional action plans to foster cooperation between Range States with connected populations.	<ul style="list-style-type: none"> <li>– Signatories may consider developing regional AP;</li> <li>– The AC may provide technical expertise.</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> </ul>	?
5.7: Develop management plans for marine sanctuaries, Marine Protected Areas (MPAs) and other ecosystem-based protection measures that include Whale Sharks.	<ul style="list-style-type: none"> <li>– Signatories may consider developing management plans for MPAs;</li> <li>– The AC may provide technical expertise. (See AC recommendations on spatial management)</li> </ul>	<ul style="list-style-type: none"> <li>– Signatories</li> <li>– AC</li> </ul>	?



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5.8: Ensure all RMFOs ban the setting of purse seine nets around Whale Sharks.	– Signatories, that are also members to the different RFMOs concerned, may propose to ban the setting of purse sein nets around Whale Sharks.	– Signatories	none
6.1: Encourage climate change mitigation strategies and awareness.			
6.2: Encourage enhanced waste management at small and large scales to reduce marine debris entering the oceans.			