



**CONVENTION ON
MIGRATORY
SPECIES**

Distribution: General

UNEP/CMS/COP12/Doc.26.2.6
14 June 2017

Original: English

12th MEETING OF THE CONFERENCE OF THE PARTIES
Manila, Philippines, 23 - 28 October 2017
Agenda Item 26.2

**PROPOSAL FOR A CONCERTED ACTION FOR
THE MOBULID RAYS (Mobulidae)
ALREADY LISTED ON APPENDIX I AND II OF THE CONVENTION**

Summary:

The Manta Trust, together with the Wildlife Conservation Society have submitted the attached proposal* for a Concerted Action for the Mobulid Rays (Mobulidae) in accordance with the process elaborated in paragraph 4 and Annex 3 of Resolution 11.13

*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 THE DESIGNATION OF ALL SPECIES OF
THE MOBULID RAYS (MOBULIDAE) FOR CONCERTED ACTIONS**

<p>Proponent</p>	<p>The Manta Trust The Manta Trust is an international organisation that takes a multidisciplinary approach to the worldwide conservation of manta and mobula (mobulid) rays and their habitat through conducting robust science and research, while raising awareness and providing education to the general public and community stakeholders alike. The Manta Trust network extends across the globe and includes collaborations and affiliated projects in 22 countries and mobulid Range States. A Cooperating Partner to the CMS Sharks MOU.</p> <p>Wildlife Conservation Society The Wildlife Conservation Society is an international conservation organization working to save wildlife and wild places worldwide through science, conservation action, education, and inspiring people to value nature. WCS works across the globe in more than 60 countries, and the WCS Marine Conservation Program works in more than 20 countries to protect key marine habitats and wildlife, to end overfishing, and to protect key species, including sharks and rays. The WCS Sharks and Rays Program consists of: scientific research and monitoring; conservation programs; policy reform at local, national, and multilateral levels; and outreach and education. The Program focuses on: saving shark and ray species from extinction; fisheries sustainability; effectively controlling international trade; and reducing consumption of shark and ray products from illegal or unsustainable sources. Cooperating Partner to CMS Sharks MoU.</p>
<p>Target species, lower taxon or population, or group of taxa with needs in common</p>	<p>Class: Chondrichthyes Order: Rajiformes Family: Mobulidae Species: Manta alfredi - Reef Manta Ray Manta birostris – Oceanic Manta Ray Mobula mobular - Giant Devil Ray Mobula japanica - Spinetail Mobula Mobula thurstoni - Bentfin Devil Ray Mobula tarapacana - Chilean Devil Ray Mobula eregoodootenkee - Pygmy Devil Ray Mobula hypostoma - Atlantic Devil Ray Mobula rochebrunei - Lesser Guinean Devil Ray Mobula munkiana - Munk’s Devil Ray</p>
<p>Geographical range</p>	<p>Mobulid rays have worldwide distributions in the tropical and temperate waters of the Pacific, Atlantic and Indian Oceans (Clark <i>et al.</i>, 2006; White <i>et al.</i>, 2006a; Couturier <i>et al.</i>, 2012; Bustamante <i>et al.</i>, 2012). Within this broad range, populations are sparsely distributed and highly fragmented (Clark <i>et al.</i>, 2006; White <i>et al.</i>, 2006a), likely due to their resource and habitat needs.</p>

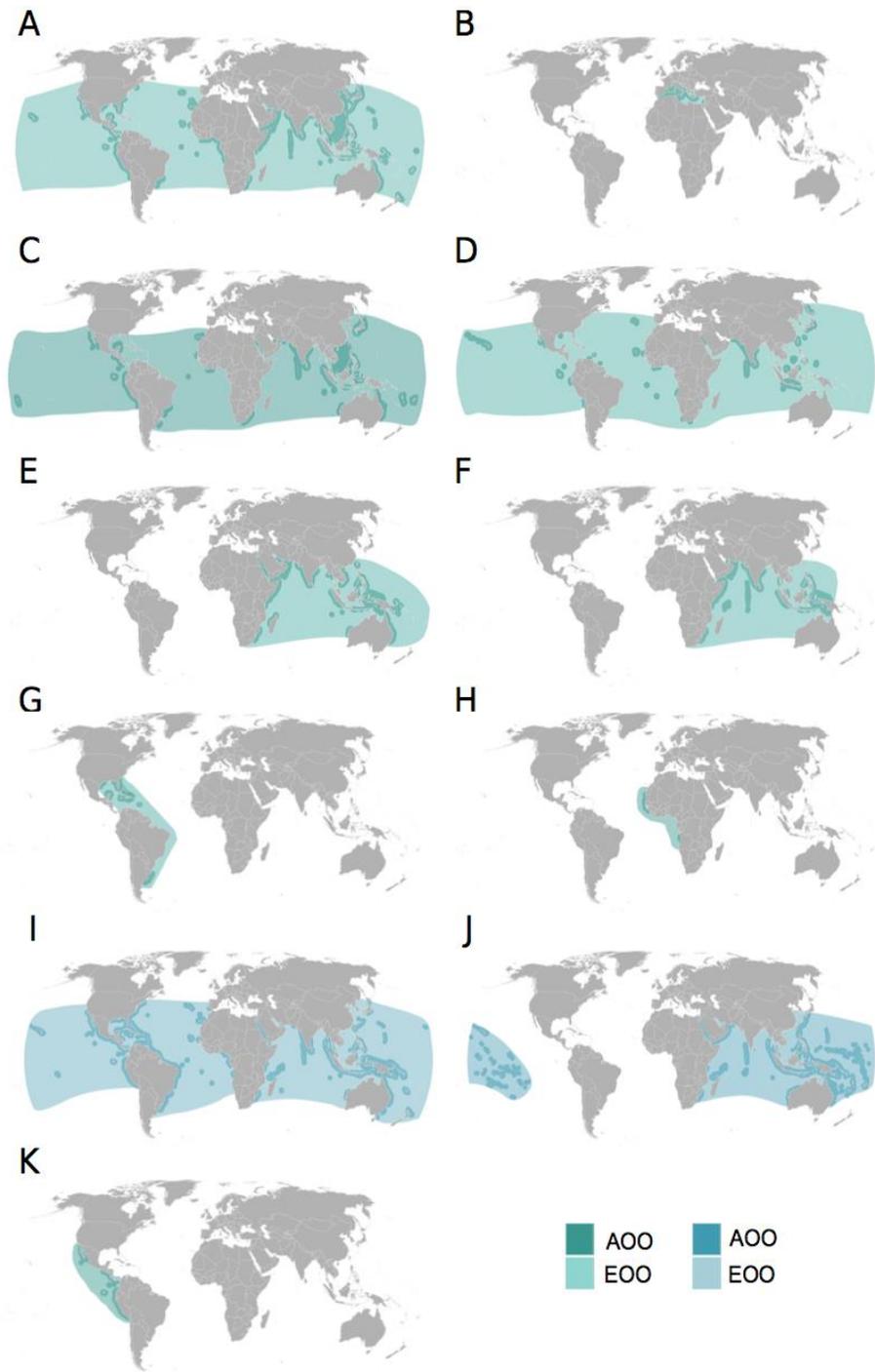


Figure by Lawson *et al.* (2017). **Distribution maps for manta and devil ray species.** Extent of Occurrence (EOO) and Area of Occupancy (AOO) maps for all nine species of devil ray and both species of manta ray. Species are as follows: (A) *Mobula japonica*; (B) *Mobula mobular*; (C) *Mobula thurstoni*; (D) *Mobula tarapacana*; (E) *Mobula eregoodootenkee*; (F) *Mobula kuhlii*; (G) *Mobula hypostoma*; (H) *Mobula rochebrunei*; (I) *Manta birostris*; (J) *Manta alfredi*; (K) *Mobula munkiana*.

<p>Activities and expected outcomes</p>	<p>A comprehensive approach and strategic plan is crucial to ensure the long-term conservation and sustainable use of mobulid rays, along with effective implementation of CMS and CITES requirements and the adoption and implementation of effective national legislation. A global conservation strategy for devil and manta rays has been developed by Lawson <i>et al.</i> (2017) <u>A Conservation Strategy for Devil and Manta Rays</u>, (hereafter “The Strategy”), which describes key objectives and activities under three goals (see below). The Strategy is presented as UNEP/CMS/COP12/Inf.18.</p> <p>The call for Parties to nationally protect mobulid rays is clear. Some Parties have already taken the lead and declared national protection. Legislative changes and international obligations inevitably affect coastal communities that are dependent on mobulid fisheries and these impacts need to be addressed. Including coastal communities when designing conservation measures to ensure the interventions are effective, practical, and informed by stakeholders is of particular importance at this juncture in the work to protect mobulid rays.</p> <p>Empowering coastal communities and ensuring long term support for transition away from a dependence on unsustainable fishing practices and new income sources suitable for their context is needed. This will help safeguard the sustainable development and economic future of communities most impacted by protection measures who often have the least ability to absorb major regulatory changes. In particular, to effectively achieve SDG 1 (No Poverty) and SDG 14 (Life below water), protection of mobulids and supporting alternative livelihoods of fishers will need to be simultaneously addressed.</p> <p>To ensure effective implementation of conservation strategies for mobulids that are also socially and culturally appropriate and ethical, we urge Parties to include community stakeholders fully in the process and assist affected communities in their transition away from mobulid catch to new income opportunities.</p> <p>It is proposed that Parties:</p> <p>1: Review and where appropriate incorporate aspects described in the Conservation Strategy by Lawson <i>et al.</i> (2017). The Strategy provides a framework for improved protection of mobulid rays (<i>Manta spp.</i>; <i>Mobula spp.</i>) throughout their entire range.</p> <p>Vision: Populations of devil and manta rays that flourish in resilient ocean ecosystems, harmoniously with human communities, through knowledge, sustainability, and education.</p> <p>Delivered through objectives and activities under three key goals:</p> <p>Goal A. The knowledge required to sustain devil and manta rays is generated and communicated.</p> <p>Goal B: Devil and manta ray populations are maintained at, or recovered to, ecologically relevant levels by managing fisheries, trade, and demand.</p> <p>Goal C: Educated and engaged communities are supporting and benefiting from devil and manta ray conservation and management through improved alternative livelihoods.</p>
--	---

2: Work with fishing communities that gain significant income from mobulid ray catch to plan for and understand potential impact of protection measures and assist their transition towards alternative livelihood opportunities.

2.1. Conduct a socio-economic baseline study with communities reliant on mobulid fisheries. Engage indigenous and local fishing communities in sharing of traditional ecological knowledge and cultural values (e.g., animal totems) of historical species composition, species distribution and temporal occurrence. Work with communities to fully understand the drivers, incentives, gear profile, and socio-economics of mobulid fisheries.

2.2. Through a participatory approach, consult and work with communities to design and prepare for regulatory or legislative changes prior to implementation.

2.3. Identify, develop and support new sustainable livelihood opportunities with communities so they can diversify away from mobulid catch with a phased approach and planned changes that has long term support from national and international partners.

Timeline: Activities 2.1, 2.2, and 2.3 undertaken at a minimum 6 months before implementation.

2.4. Build capacity in local communities and among artisanal fishers through training (business, tourism management, and sustainable fishing and aquaculture practices, etc.) and assistance with raising capital for the expenses associated with implementation working with relevant national and international partners.

Timeline: Activity 2.4 requires long term commitment and support in place for affected communities.

3: Work with local communities and fishers to understand the threat of bycatch to mobulid rays and design mitigation measures to reduce bycatch.

3.1. Determine areas of overlap between mobulid ray distributions and relevant fisheries to identify priority areas to minimize bycatch.

3.2. Estimate the total annual volume of mobulid ray catch in fisheries bycatch globally, by region and by gear type.

3.3. Develop and implement gears and fishing practices that minimize bycatch.

3.4. Review handling and release procedures using different gears and develop and implement best practice procedures where they don't exist.

3.5. Produce education and outreach materials about safe release and handling and on the regulatory rules for bycatch.

Timeline: Activities to be conducted during 2017 and 2018.

	<p>4: Monitor and evaluate interventions to measure the effectiveness both in terms of reducing socio-economic impact of protection measures and successfully reducing threats to mobulid rays.</p> <p>4.2 Develop a plan to (a) monitor and evaluate the effectiveness of interventions to reduce the socio-economic impact of protection measures and (b) develop an ecological monitoring plan for mobulid rays to determine effectiveness of protection.</p> <p>4.2 Collate and share findings and best practices at relevant national, regional, and international fora.</p>
<p>Associated benefits</p>	<p>It is the intention that the activities proposed in this document serve as a catalyst to deliver effective conservation for mobulid rays and assist Parties in the implementation of their obligations under international treaties (e.g., CITES and CMS). It is also intended that these activities serve as an opportunity for Parties to collaborate, share, and propagate conservation knowledge, generate coordinating actions, and monitor progress that will be applicable to other marine species.</p> <p>Many coastal communities that catch mobulid rays often also land other at-risk shark and ray species listed under CMS that will require protection. Understanding and documenting these fisheries and livelihood options in affected communities will also support coordinated, effective, and socially just management and conservation of marine resources. Support for diversified income opportunities will help alleviate pressure on marine resource and ensure long term economic sustainability.</p>
<p>Timeframe</p>	<p>Action 1: Open-ended to be initiated asap.</p> <p>Action 2: Activities 2.1, 2.2, and 2.3 undertaken at a minimum 6 months before implementation. Activity 2.4 requires long term commitment and support in place for affected communities.</p> <p>Action 3: Activities to be conducted during 2017 and 2018.</p> <p>Action 4: Open-ended and ongoing once Action 2 has begun.</p>
<p>Relationship to other CMS actions</p>	<p>All <i>Manta spp.</i> and <i>Mobula spp.</i> are listed on Appendix I and II of CMS. Parties that are a Range State to a migratory species listed in Appendix I shall endeavour to strictly protect them by: prohibiting the taking of such species, with very restricted scope for exceptions; conserving and where appropriate restoring their habitats; preventing, removing or mitigating obstacles to their migration and controlling other factors that might endanger them.</p> <p>The Memorandum of Understanding on the Conservation of Migratory Sharks (Sharks MOU) is the specialized agreement for chondrichthyan species in accordance with Article IV 1 of the Convention. It aims to guide international cooperation to maintain and achieve a sustainable conservation status for migratory sharks and rays included in its Annex 1.</p> <p>Mobulid rays have been included in Annex 1 of the Sharks MOU, which means they benefit from the agreed measures and actions under the MOU and its Conservation Plan as well as from technical guidance for its conservation, provided by the MOU's Advisory Committee and Conservation Working Group.</p> <p>The proposed concerted actions would support the implementation of the Sharks MOU, and the aim of species listed under CMS Appendix I and II. In particular, with regards to encouraging Sharks MOU Signatories that are also CMS Parties to ensure that national, legally binding regulations are in place to prohibit targeting, retaining, landing, transshipping, selling, etc of mobulid rays, in line with CMS Appendix I obligations, whilst safeguarding the livelihoods of Parties'</p>

	<p>coastal communities that are dependent on mobulid ray fishery. In addition, the proposed concerted actions would be in alignment with SDGs 1 and 14 (eliminating poverty and life below water).</p> <p>The CMS Scientific Council Bycatch Working Group reviews existing measures to mitigate or reduce bycatch of CMS species and aims ensure that recommended measure benefit all taxa. The results of the proposed Concerted Actions would also contribute to this work.</p>
<p>Conservation priority</p>	<p>The greatest threat to mobulid rays is excessive targeted and incidental take in fisheries. As a result, some mobulid populations in Southeast Asia, the Indian Ocean, and Africa exhibit regional declines of over 80%. Of particular concern is the exploitation of this species from within critical habitats, where numerous individuals can be targeted with relatively high catch-per-unit-effort. For such intrinsically vulnerable species (low fecundity, small size of sub-populations, migratory and aggregating behavior), even small negative pressures exerted are likely to have severe consequences for the population's survival.</p> <p>Mobulids have been reported as bycatch in 21 small-scale fisheries in 15 countries and in nine industrial scale fisheries in 11 countries (Croll <i>et al.</i>, 2015). A recent study estimates global bycatch in tuna purse seine fisheries of ~ 13,000 mobulids annually (Croll <i>et al.</i>, 2015). Escalating demand for dried Mobulid gill plates for use in Chinese medicine, as well as meat and cartilage, has also led to targeting of these vulnerable species through fisheries that are largely unregulated and unmonitored.</p> <p>Significant catch declines have been observed in a number of locations in the Indo-Pacific, Eastern Pacific, and Indian Ocean regions, often despite evidence of increased fishing effort. Population declines are likely occurring in other locations, but have gone unnoticed.</p> <p>Historically, subsistence fishing for mobulid rays occurred in isolated locations with simple gear, limiting the distance and time fishermen could travel to hunt. In recent years, however, fishers have begun targeting these rays with modern fishing gear and expanding their fishing range and season. (Dewar, 2002; White <i>et al.</i>, 2006b; Rajapackiam <i>et al.</i>, 2007; White and Kyne, 2010; Heinrichs <i>et al.</i>, 2011; Lewis <i>et al.</i>, 2015; Fernando and Stevens, 2011). Artisanal fisheries also target mobulids for food and local products (Ayala, 2014).</p> <p>For fishing communities, especially small-scale fishers, mobulid rays may represent a significant portion of their income. Mobulid rays are often caught with non-selective gear as part of multispecies fisheries. Small scale fishing communities are often in the poorest sector of their countries and have little capacity to absorb sudden income loss. Without working with affected communities as partners and ensuring support is in place before conservation strategies are implemented, said strategies are often not effective.</p> <p>At the core of alternative, sustainable livelihood initiatives is the focus on working in partnership, co-management, and recognition of local expertise to develop alternative means of making a living that reduces pressure on a particular element of biodiversity. Over the last decade, research into this field has greatly advanced. By working together with social scientists and experts, common errors can be avoided and the paths towards developing alternative incomes for communities can be smoothed.</p> <p>Livelihoods analysis provides a means by which to better understand the nature of small-scale fishery production systems, and helps to identify appropriate entry-points for development intervention or policy support for poverty reduction in fishing communities (Allison and Ellis, 2001).</p>

	<p>A systematic review and community consultation should be performed before beginning investments (Roe <i>et al.</i>, 2015). Such a review can then inform both the decision to proceed as well as the nature of the initiative and investment. The review should be focused not only on the specific intervention planned, but also on understanding the system within which it operates and the role of the activities that they are attempting to substitute for within the livelihood strategy. The work should be constructed in an adaptive management framework that allows testing and learning (Roe <i>et al.</i>, 2015).</p>
<p>Relevance</p>	<p>Parties that are a Range State to mobulid rays, which are listed on CMS Appendix I and II, agree to endeavour to strictly protect them by prohibiting the taking of such species, with very restricted scope for exceptions. However, public and fisher awareness of mobulid rays' threatened status and the existence of protective measures in range states is generally poor. Moreover, support for assisting communities in developing alternative livelihoods is lacking even in locations where protective measures have been established, which therefore questions the effectiveness of and compliance with those measures.</p> <p>Any national conservation initiatives intended to prevent mobulid rays from being driven further towards extinction is unlikely to be successful if the animals are not protected during their seasonal migrations into, and through other Range States' waters as well as areas beyond national jurisdiction. By agreeing to a listing on CMS, Range States also agree to endeavour conserving and where appropriate restoring their habitats; preventing, removing or mitigating obstacles to their migration and controlling other factors that might endanger them. Therefore Parties need to work together in developing effective implementation measures, which incorporate considering the effect on coastal communities and engaging relevant development agencies as appropriate to develop alternative livelihoods.</p>
<p>Absence of better remedies</p>	<p>The CMS Network is the ideal platform for improving awareness and driving implementation of the Global Conservation strategy for Devil and Manta Rays under this Concerted Action. A strategic and collaborative approach is needed to take the next steps for conserving migratory species, such as mobulid rays, and for this purpose it is essential that Parties work together on developing and implementing activities.</p> <p>In addition, all species in the genera <i>Mobula</i> and <i>Manta</i> are now included on CITES Appendix II, thereby requiring that all international trade in their parts and products to be both legal and sustainable. Cooperation through CMS will greatly enhance the ability of CMS Parties to implement their CITES obligations.</p> <p>The partners to CMS, such as engaged NGOs and researchers are able to support these actions once governments decide to go forward and adopt them, through the existing linkages that CMS has created.</p>
<p>Readiness and feasibility</p>	<p>A Devil and Manta Ray Conservation Network is already established enabling effective sharing of data and information, sharing and propagating conservation knowledge, generating coordinating actions, and monitoring progress. The Network has published the comprehensive Global Devil and Manta Ray Conservation Strategy to support countries in planning and implementation for conservation and management of mobulid rays.</p> <p>There are engaged NGOs, researchers, and community organizations ready to support Range States to develop, fund and implement collaborative work. With the support of the partners involved in the Devil and Manta Ray Conservation Network there is a very strong foundation from which Range States can implement the activities proposed. Furthermore, support will be requested from</p>

	<p>the Sharks MOU and Cooperating Partners, to support the development and implementation of the action plans.</p> <p>Some Range States have already implemented national protection for mobulid species, including the Philippines, Peru, Indonesia and others and there is already collaborative work with NGOs and scientists on the ground to support affected communities and implementation. The groundwork exists, but further understanding, planning, and support from these Range States is needed to assist communities to transition away from mobulid fisheries.</p>
<p>Likelihood of success</p>	<p>The Devil and Manta Ray Conservation Network have provided the guidance and action steps, and the proposed activities are supported by engaged NGOs, researchers and community organisations. Approaching the livelihood challenge through the concerted action steps will pave the way for successful implementation of initiatives and incorporate communities as partners to ensure sustainability. No risk factors were identified that have the potential to significantly jeopardize the success of the proposed activities.</p>
<p>Magnitude of likely impact</p>	<p>The engagement of communities in co-management and planning activities for implementation helps to ensure that protection strategies will be effective and realistic. This is of benefit to all Range States where coastal communities depend on mobulid fishery.</p> <p>Some Range States have already implemented national protection for mobulid species (e.g. Philippines, Peru, Indonesia) and there is collaborative work ongoing with NGOs and scientists on the ground to support affected communities and implementation. Other Range States of the same population would benefit of better protection of the species concerned.</p> <p>The actions proposed here will also increase understanding and scientific data from the community level about catch and species information.</p>
<p>Cost-effectiveness</p>	<p>Costs for reviewing The Strategy and identifying objectives and activities that can be implemented by Parties are minimal. Cost of conducting socio-economic surveys and developing alternative income opportunities with communities will vary depending on location. However, the benefits far outweigh the costs of implementing initiatives that are not effective. Costs for sharing the learning through proposed Action 4 are minimal if activities are linked with regional or national fora and conferences.</p> <p>Resources required are funding to conduct the socio-economic baseline studies advised by experts, and to develop and pilot new sustainable alternative livelihood opportunities with affected communities. Funding will also be required for building capacities of community members to assist the transition towards alternative livelihoods. Access to long term capital, grants, or loans to support the new alternative income opportunities is also needed.</p>

References

- Allison E, Ellis F. 2001. The Livelihoods Approach and Management of Small-Scale Fisheries. *Marine Policy*, 25, 377-388.
- Ayala. 2014. First assessment of Mobulid rays fishery in Peru. Asociación Peruana para La Conservación de la Naturaleza (APECO). Final Project Report to the Save Our Seas Foundation.
- Bustamante C, Couturier L, Bennett M. 2012. First record of *Mobula japanica* (Rajiformes: Myliobatidae) from the south-eastern Pacific Ocean. *Marine Biodiversity Records*; Volume 5; e48; 4 pages.
- Clark TB, Smith WD, Bizzarro JJ. 2006. *Mobula tarapacana*. The IUCN Red List of Threatened Species. Version 2014.3. <www.iucnredlist.org>.
- Couturier LIE, Marshall AD, Jaine FRA, Kashiwagi T, Pierce SJ, Townsend KA, Weeks SJ, Bennet MB, Richardson AJ. 2012. Biology, Ecology and Conservation of the Mobulidae. *Journal of Fish Biology*, 80: 1075-1119.
- Dewar H. 2002. Preliminary report: Manta harvest in Lamakera. p. 3 p. Oceanside, USA: Report from the Pflieger Institute of Environmental Research and the Nature Conservancy.Fernando & Stevens 2011).
- Heinrichs S, O'Malley M, Medd H, Hilton P. 2011. Manta Ray of Hope 2011 Report: The Global Threat to Manta and Mobula Rays. WildAid, San Francisco, CA..
- Lawson JM, Fordham SV, O'Malley MP, Davidson LN, Walls RH, Heupel MR, Stevens G, Fernando D, Budziak A, Simpfendorfer CA, Ender I. Sympathy for the devil: a conservation strategy for devil and manta rays. *PeerJ*. 2017 Mar 14;5:e3027.
- Lewis SA, Setiasih N, Fahmi , Dharmadi , O'Malley MP, Campbell SJ, Yusuf M, Sianipar AB. 2015. Assessing Indonesian manta and devil ray populations through historical landings and fishing community interviews. *PeerJ PrePrints* 3:e1642
<https://dx.doi.org/10.7287/peerj.preprints.1334v1><https://dx.doi.org/10.7287/peerj.preprints.1334v1>
- Rajapackiam S, Mohan S, Rudramurthy N. 2007. Utilization of gill rakers of lesser devil ray *Mobula diabolus* – a new fish byproduct. *Marine Fisheries Information Service, Technical and Extension Series*, 191: 22-23.
- Roe D, Booker F, Day M, Zhou W, Allebone-Webb S, Hill N, Kumpel N, Petrokofsky G, Redford K, Russell D, Shepherd G, Wright J, Sunderland T. 2015. Are Alternative Livelihood Projects Effective at Reducing Local Threats to Specified Elements of Biodiversity and/or Improving or Maintaining the Conservation Status of Those Elements? *Environmental Evidence*, 4, 22.
- White WT, Clark TB, Smith WD, Bizzarro JJ. 2006a. *Mobula japanica*. In: IUCN 2011. IUCN Red List of Threatened Species. Version 2011.2. <www.iucnredlist.org>
- White WT, Last PR, Stevens JD, Yearsley GK, Fahmi, Dharmadi. 2006b. Economically important sharks and rays of Indonesia. Australian Centre for International Agricultural Research. 338 pp.
- White W, Kyne P. 2010. The status of chondrichthyan conservation in the Indo-Australasian region. *Journal of Fish Biology*, 76(9), 2090-2117.

Annex I.

Table by Lawson *et al.* (2017). **International, national, and territory/state protections currently in place for devil and manta rays.** International, national, territorial, and state legal protection that restricts fishing and/or trade of a single or multiple species of devil (*Mobula spp.*) and/or manta (*Manta spp.*) ray. The term legal protection is used here to refer to protection obligation, legal or otherwise, and does not examine protection implementation success or effectiveness. The date that this legal protection was passed is included in brackets.

	<i>Mobula eregoodootenkee</i>	<i>Mobula hypostoma</i>	<i>Mobula kuhlii</i>	<i>Mobula japonica</i>	<i>Mobula mobular</i>	<i>Mobula munkiana</i>	<i>Mobula rochebrunei</i>	<i>Mobula tarapacana</i>	<i>Mobula thurstoni</i>	<i>Manta alfredi</i>	<i>Manta birostris</i>
International Protections											
CITES (2016)	✓	✓	✓	✓	✓	✓	✓	✓	✓		
IATTC (2015)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
European Union (2015)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
GFCM (2015)					✓						
CMS Appendix I & II (2014)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
CITES Appendix II (2013)										✓	✓
European Union (2012)											✓
CMS Appendix I & II (2011)											✓
Barcelona Convention SPA/BD Protocol Annex II (2001)					✓						
Bern Convention Appendix II (2001)					✓						
National Protections											
Peru (2016)											✓
Australia (2015)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Indonesia (2014)										✓	✓
Maldives (2014)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
United Arab Emirates (2014)										✓	✓
Brazil (2013)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Australia (2012)											✓
Ecuador (2010)				✓		✓		✓	✓		✓
New Zealand (2010)				✓							✓
Mexico (2007)		✓		✓		✓		✓	✓		✓
Croatia (2006)					✓						
Israel (2005)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Malta (1999)					✓						
Philippines (1998)											✓

Territory and State Protections											
West Manggarai/Komodo, Indonesia Regency (2013)										✓	✓
Raja Ampat, Indonesia Regency (2012)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Guam, USA Territory (2011)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Christmas Island and Cocos (Keeling) Islands, Australian Indian Ocean Territories (2010)										✓	✓
Hawaii, USA State (2009) ^a										✓	✓
Yap, Federated States of Micronesia (2008)										✓	✓
Commonwealth of the Northern Mariana Islands, USA Territory (2007)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Florida, USA State (2006)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Notes.

^a A bill is currently under consideration by Hawaii's state legislature to expand protection to include all sharks and rays.