
PROGRESS MADE ON THE RECOMMENDATIONS OF WPEB12

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PURPOSE

To provide participants at the 14th WPEB with an update on the progress made in implementing those recommendations from the previous Working Party on Ecosystems and Bycatch (WPEB) meeting which were endorsed by the Scientific Committee (SC), and to provide alternative recommendations for the consideration and potential endorsement by participants as appropriate given any progress.

BACKGROUND

At the 13th Session of the WPEB, participants agreed on a series of actions to be taken by participants, CPCs, and the IOTC Secretariat on a range of issues. The subsequent table developed and agreed to by the WPEB was provided to the SC for its endorsement at its December 2017 meeting.

DISCUSSION

The Rules of Procedure of the Scientific Committee include the following seven core tasks, which are to be supported by the various Working Parties.

- a) recommend policies and procedures for the collection, processing, dissemination and analysis of fishery data;
- b) facilitate the exchange and critical review among scientists of information on research and operation of fisheries of relevance to the Commission;
- c) develop and coordinate cooperative research programmes involving Members of the Commission in support of fisheries management;
- d) assess and report to the Commission on the status of stocks of relevance to the Commission and the likely effects of further fishing and of different fishing patterns and intensities;
- e) formulate and report to the sub-commission, as appropriate, on recommendations concerning conservation, fisheries management and research, including consensus, majority and minority views;
- f) consider any matter referred to by the Commission;
- g) carry out other technical activities of relevance to the Commission.

Recalling that the SC, at its 16th Session adopted a set of reporting terminology SC16.07 (para. 23), which was subsequently endorsed by the Commission at its 18th Session in 2014 (S18, para 10), to further improve the clarity of information sharing from, and among the science bodies, the following two term levels should be noted when interpreting the Reports and Appendix I to this paper:

Level 1: From a subsidiary body of the Commission to the next level in the structure of the Commission:

RECOMMENDED, RECOMMENDATION: Any conclusion or request for an action to be undertaken, from a subsidiary body of the Commission (Committee or Working Party), which is to be formally provided to the next level in the structure of the Commission for its consideration/endorsement (e.g. from a Working Party to the Scientific Committee; from a Committee to the Commission). The intention is that the higher body will consider the recommended action for endorsement under its own mandate, if the subsidiary body does not already have the required mandate. Ideally this should be task specific and contain a timeframe for completion.

Level 2: From a subsidiary body of the Commission to a CPC, the IOTC Secretariat, or other body (not the Commission) to carry out a specified task:

REQUESTED: This term should only be used by a subsidiary body of the Commission if it does not wish to have the request formally adopted/endorsed by the next level in the structure of the Commission. For example, if a Committee wishes to seek additional input from a CPC on a particular topic, but does not wish to formalise the request beyond the mandate of the Committee, it may request that a set action be undertaken. Ideally this should be task specific and contain a timeframe for the completion.

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In addition to the Recommendations endorsed by the SC at its 20th Session, the SC also made several requests which, although are not passed to the Commission for its endorsement, are considered actions which the Scientific Committee has the mandate to issue. The revised recommendations are contained in Appendix I for the consideration and potential endorsement by the WPEB14.

RECOMMENDATION

That the WPEB **NOTE** the progress made in implementing the recommendations and requests of the 13th Session of the WPEB, and consider whether revised recommendations need to be sent to the SC for its consideration.

APPENDICES

Appendix I: Progress made on the Recommendations and Requests of WPEB12

APPENDIX I

Progress made on the recommendations and requests of WPEB13 and SC20

WPEB13 Rec. No.	Recommendation from WPEB13	SC20 Rec. No.	Recommendation adopted by the SC20	Progress/Comments
WPEB13. 01	<p><i>Evaluation of the mitigation measures contained in Resolution 13/06 for Oceanic whitetip shark</i></p> <p>(para. 4) The WPEB NOTED the ongoing compliance issue for those CPCs reporting nominal catch of oceanic whitetip sharks and RECOMMENDED that the Scientific Committee request the Compliance Committee investigate these reported catches further and report the findings to the Commission.</p>	SC20.20	(para. 61) The SC noted the ongoing compliance issue for those CPCs reporting nominal catch of oceanic whitetip sharks and RECOMMENDED that the Compliance Committee investigate these reported catches further and report the findings to the Commission.	(Para. 36) The Commission NOTED the information provided by the SC that there continues to be catches of oceanic whitetip shark in the IOTC Area, although prohibited as per Resolution 13/06.
WPEB13. 02	<p><i>Longline hook identification guide</i></p> <p>(para. 24) NOTING the continued confusion in the terminology of various hook types being used in IOTC fisheries, (e.g. tuna hook vs. J-hook; definition of a circle hook), the WPEB REITERATED its previous RECOMMENDATIONS (2013, 2014 and 2016) and the RECOMMENDATION from SC19 (SC19.16; para. 55 of IOTC-2016-SC19-R) that the Commission allocate funds in the 2018 IOTC Budget to develop an identification guide for fishing hooks and pelagic fishing gears used in IOTC fisheries.</p>		(para. 62) NOTING the continued confusion in the terminology of various hook types being used in IOTC fisheries, (e.g. tuna hook vs. J-hook; definition of a circle hook), the SC reiterated its previous RECOMMENDATION (SC19.16; para. 55 of IOTC-2016-SC19-R) that the Commission allocate funds in the 2018 IOTC Budget to develop an identification guide for fishing hooks and pelagic fishing gears used in IOTC fisheries.	Update: [Ongoing] US\$15,000 in the IOTC RB for identification cards has been allocated to this activity
WPEB13. 03	<p><i>Review of the statistical data available for ecosystems and bycatch species</i></p> <p>(para. 28) NOTING the highly aggregated nature of information requested on discards, the WPEB RECOMMENDED that the discard reporting form (Form 1DI) is updated to include seasonal (month) and spatial information (5 x 5 or 1 x 1) in a similar format to the catch and effort data reporting forms.</p>		(para. 60) NOTING the highly aggregated nature of information requested on discards, the SC AGREED that the discard reporting form (Form 1DI) is updated to include seasonal (month) and spatial information (5 x 5 or 1 x 1) in a similar format to the catch and effort data reporting forms.	Update: [Ongoing] To be presented to the WPEB14 in draft format for discussion.

<p>WPEB13. 04</p>	<p><i>Pilot projects under Resolution 16/04</i></p> <p>(para. 36) NOTING the increasing number of CPCS that are now submitting observer data in electronic format, the WPEB RECOMMENDED the next revision of Resolution 11/04 should consider including the requirement for all observer data to be submitted in an electronically readable format (including historic data).</p>	<p>SC20.36</p>	<p>(<u>para. 115</u>) Resolution 11/04 On a Regional Observer Scheme requests the submission of a report after each trip but the SC RECOMMENDED that on the next revision of the Resolution, this should be amended to request the submission of data in an electronic format suitable for automated data extraction (including historic data) with a given deadline so that information from multiple trips can be provided.</p>	<p>Update: [Ongoing]</p> <p>This was included in Proposal IOTC-2018-S22-PropD which was presented to the Commission in 2018, however, this was deferred to the next session.</p>
<p>WPEB13. 05</p>	<p><i>Biodegradable materials in FAD construction</i></p> <p>(para. 85) The WPEB DISCUSSED some of the challenges in conducting these studies in view of the limitations on the number of FADs active per purse seine vessel in the Indian Ocean. For example, the limit of active number of FADs at sea in the Indian Ocean hinders the deployment of BIOFAD following experimental sampling designs and the engagement of the fleet to deploy them as they might not be successful for fishing. Thus, WPEB RECOMMENDED the Commission consider special allocations for experimental FADs deployed for scientific data collection for vessels willing to participate in biodegradable FAD testing under experimental protocols reviewed and endorsed by the Scientific Committee.</p>		<p>(<u>para. 163</u>) The SC noted the challenges in conducting studies on biodegradable FADs (for example the limit on the number of active FADs per purse seine vessel in the Indian Ocean that may hinder the deployment of BIOFADs following experimental sampling designs, and also engagement with the fleet to deploy BIOFADs that may not be successful for fishing). Thus, the SC RECOMMENDED the Commission consider special allocations for experimental FADs deployed for the collection of scientific data for vessels willing to participate in biodegradable FAD testing under protocols reviewed and endorsed by the Scientific Committee.</p>	<p>Update: [Completed]</p> <p>The S22 adopted Resolution 18/04 <i>On bioFAD experimental project</i></p>
<p>WPEB13. 06</p>	<p><i>CPUE Collaborative study of shark CPUE from multiple Indian Ocean longline fleets</i></p> <p>(para. 130) NOTING the conflicting patterns in blue shark CPUE derived from different Indian Ocean longline fleets and CONSIDERING the success of using joint analysis of operational catch and effort data to resolve such conflicts in other Working Parties, the WPEB RECOMMENDED initiating work on joint analysis of operational catch and effort data from multiple fleets, to further develop methods and to provide indices of abundance for sharks of interest to the IOTC. A consultant should be considered to conduct such work for a budget of around EUR45 000.</p>		<p>(<u>para. 63</u>) Noting the conflicting patterns in blue shark CPUE derived from different Indian Ocean longline fleets and considering the success of using joint analysis of operational catch and effort data to resolve such conflicts in other Working Parties, the SC RECOMMENDED initiating work on joint analysis of operational catch and effort data from multiple fleets, to further develop methods and to provide indices of abundance for sharks of interest to the IOTC. A consultant should be considered to conduct such work for a budget of around EUR45,000.</p>	<p>Update: [Pending]</p>

<p>WPEB13. 07</p>	<p>Joint analysis of marine turtle mitigation measures</p> <p>(para. 185) NOTING the findings of the Pacific workshop regarding the effectiveness of large circle hooks, finfish bait and the removal of the first and/or second hooks next to the floats for mitigating sea turtle interactions and mortalities in Pacific longline fisheries, the WPEB AGREED that further consideration of these mitigation techniques for Indian Ocean fisheries is warranted. Such a study should attempt to develop findings regarding the consequences of various mitigation techniques, primarily with regard to impacts on target and non-turtle bycatch species catch rates, to the extent possible based on data availability and quality. The WPEB therefore RECOMMENDED that the potential for a similar workshop to be held in the Indian Ocean is explored with potential funding from the Commission and/or from the Common Oceans Tuna Project (ABNJ). The WPEB AGREED to include this in the WPEB workplan and REQUESTED the Chairperson work with the Secretariat to pursue this idea further with potential participants and funding sources.</p>		<p>Review of mitigation measures in Resolution 12/04</p> <p>(para. 67) Noting the findings of the Pacific workshop regarding the effectiveness of large circle hooks, finfish bait and the removal of the first and/or second hooks next to the floats for mitigating sea turtle interactions and mortalities in Pacific longline fisheries, the SC AGREED that further consideration of these mitigation techniques for Indian Ocean fisheries is warranted. Such a study should attempt to develop findings regarding the consequences of various mitigation techniques, primarily with regard to impacts on target and non-turtle bycatch species catch rates, to the extent possible based on data availability and quality. The SC therefore RECOMMENDED that the potential for a similar workshop to be held in the Indian Ocean is explored with potential funding from the Commission and/or from the Common Oceans ABNJ Tuna Project. The SC noted this is included in the WPEB workplan and REQUESTED the WPEB Chairperson work with the Secretariat to pursue this idea further with potential participants and funding sources</p>	<p>Update: Pending</p>
<p>WPEB13. 08</p>	<p>Joint analysis of marine turtle mitigation measures</p> <p>(para. 188) The WPEB NOTED Error! Reference source not found. (Table14 from the FAO Fisheries and Aquaculture Technical Paper #588t “Bycatch in Longline Fisheries for Tuna and Tuna-like Species: a global review of status and mitigation measures”) and, noting that IOTC’s current resolution calls for, inter alia, implementation of safe handling practices, encouraging the use of fish bait and reporting sea turtle interactions and mortality annually, AGREED that CPCs should review and report on the extent to which their fisheries have implemented this resolution. The WPEB RECOMMENDED the following table (Error! Reference source not found.) to be completed by CPCs and submitted to the Secretariat in order to review the effectiveness of Resolution 12/04 as requested by the Commission. This table was suggested as an appropriate format for summarizing the information for the consideration and discussion of the SC, based on the seabird data call carried out in 2016.</p>		<p>Joint analysis of marine turtle mitigation measures</p> <p>(para. 66) The SC noted paper IOTC-2017-SC20-INF03 and REQUESTED the IOTC Secretariat to send out the version of IOTC-2017-SC20-INF03 Rev_1 revised by the SC as a data call to inform a review of the mitigation measures for marine turtles in Resolution 12/04 as requested by the Commission.</p>	<p>Update: Ongoing</p> <p>Information paper IOTC-2018-WPEB14-INF01 has been provide for review by the WPEB14</p>

	papers submitted (~60) cannot be fully considered in the time available. The WPEB therefore RECOMMENDED that in future years when a stock assessment is planned, the meeting is extended in length by a number of days to more adequately accommodate the workplan, with some of the days dedicated exclusively to the stock assessment work.		successful, particularly in years when a stock assessment has been undertaken as the large number of papers submitted (~60) cannot be fully considered in the time available. The SC therefore AGREED that in future years when a stock assessment is planned, the meeting duration is extended by two days to more adequately accommodate the workplan, with some of the days dedicated exclusively to the stock assessment work. (para. 65) The SC further AGREED that when a stock assessment is planned, some of the agenda in the year prior to the meeting should be dedicated to data preparation and review.	
WPEB13.11	Update: Ecosystem Based Fisheries Management (EBFM) joint meeting of tRFMOs in 2016 (para. 218) The WPEB NOTED the need for training and capacity building as the first step to moving forward with developing goals and strategies for the implementation of EBFM and therefore RECOMMENDED that a workshop is held to explain the key elements of EBFM so that a plan for implementation of EBFM in the IOTC Area of Competence can be developed by 2019.		(para.70) The SC noted the need for training and capacity building as the first step to moving forward with developing goals and strategies for the implementation of EBFM and therefore RECOMMENDED that a workshop is held to explain the key elements of EBFM so that a plan for implementation of EBFM in the IOTC Area of Competence can be developed by 2019.	Update: [pending]
WPEB13.12	Election of a Chairperson and Vice-Chairperson for the WPEB for the next biennium (para. 226) The WPEB RECOMMENDED that the SC note the new Chairperson, Dr Sylvain Bonhommeau and Vice-Chairpersons, Dr Ross Wanless and Mr Reza Shahifar, of the WPEB for the next biennium.		The new Chair and Vice-Chairpersons were approved and confirmed in Appendix VII of IOTC-2017-SC20-R.	Update: [Completed]
WPEB13.13	Review of the draft, and adoption of the Report of the 13th Session of the Working Party on Ecosystems and Bycatch (para. 227) The WPEB RECOMMENDED that the Scientific Committee consider the consolidated set of recommendations arising from WPEB13, provided at Appendix XIX , as well as the management advice provided in the draft resource stock status summary for each of the		Sharks (para. 180) The SC RECOMMENDED that the Commission note the management advice developed for a subset of shark species commonly caught in IOTC fisheries for tuna and tuna-like species: <ul style="list-style-type: none"> Blue shark (<i>Prionace glauca</i>) – Appendix XXIII 	Update: [Completed]

	<p>seven shark species, as well of those for marine turtles and seabirds:</p> <p>Sharks</p> <ul style="list-style-type: none"> • Blue sharks (<i>Prionace glauca</i>) – Appendix IX • Oceanic whitetip sharks (<i>Carcharhinus longimanus</i>) – Appendix X • Scalloped hammerhead sharks (<i>Sphyrna lewini</i>) – Appendix XI • Shortfin mako sharks (<i>Isurus oxyrinchus</i>) – Appendix XII • Silky sharks (<i>Carcharhinus falciformis</i>) – Appendix XIII • Bigeye thresher sharks (<i>Alopias superciliosus</i>) – Appendix XIV • Pelagic thresher sharks (<i>Alopias pelagicus</i>) – Appendix XV <p>Other species/groups</p> <ul style="list-style-type: none"> • Marine turtles – Appendix XVI • Seabirds – Appendix XVII • Marine mammals – Appendix XVIII 		<ul style="list-style-type: none"> • Oceanic whitetip shark (<i>Carcharhinus longimanus</i>) – Appendix XXIV • Scalloped hammerhead shark (<i>Sphyrna lewini</i>) – Appendix XXV • Shortfin mako shark (<i>Isurus oxyrinchus</i>) – Appendix XXVI • Silky shark (<i>Carcharhinus falciformis</i>) – Appendix XXVII • Bigeye thresher shark (<i>Alopias superciliosus</i>) – Appendix XXVIII • Pelagic thresher shark (<i>Alopias pelagicus</i>) – Appendix XXIX <p>Marine turtles</p> <p>(para. 181) The SC RECOMMENDED that the Commission note the management advice developed for marine turtles, as provided in the Executive Summary encompassing all six species found in the Indian Ocean:</p> <ul style="list-style-type: none"> • Marine turtles – Appendix XXX <p>Seabirds</p> <p>(para. 182) The SC RECOMMENDED that the Commission note the management advice developed for seabirds, as provided in the Executive Summary encompassing all species commonly interacting with IOTC fisheries for tuna and tuna-like species:</p> <ul style="list-style-type: none"> • Seabirds – Appendix XXXI <p>Cetaceans</p> <p>(para. 183) The SC RECOMMENDED that the Commission note the management advice developed for cetaceans, as provided in the newly developed Executive Summary encompassing all species commonly interacting with IOTC fisheries for tuna and tuna-like species:</p> <ul style="list-style-type: none"> • Cetaceans – Appendix XXXII. 	
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WPEB13 Report	WPEB13 REQUESTS	Update/Progress
Para. 21	<p><i>Shark tagging project</i></p> <p>The WPEB REQUESTED that an update on project progress is provided at the WPEB14 meeting in 2018.</p>	Update: IOTC–2018–WPEB14–27
Para. 23	<p><i>Longline hook identification guide</i></p> <p>The WPEB THANKED the two participants that brought examples of hooks from their fisheries and REQUESTED other fleets to send photographs of hooks used in their fleets to the IOTC Secretariat to collate.</p>	Update: [pending]
Para. 27	<p><i>IOTC database</i></p> <p>The WPEB NOTED that information on the status of discards (dead/alive) is rarely provided and REQUESTED CPCs to record and report this information through their observer programmes</p>	Update: [pending]
Para. 31	<p><i>IOTC database</i></p> <p>The WPEB NOTED that the IOTC nominal catches comprise only retained catches. While the reporting of discarded blue sharks is currently very low, this is increasing with improved reporting and so the WPEB REQUESTED that these discarded catches are made available for use in the next stock assessment so that total catches (rather than simply retained catches) may be used.</p>	Update: [ongoing]
Para. 41	<p><i>NPOA implementation overview</i></p> <p>The WPEB NOTED that no requests were received by the IOTC Secretariat since the last SC meeting to apply a status of ‘Not applicable (n.a.)’ for an NPOA, in the ‘Table of progress in implementing NPOA-sharks, NPOA-seabirds and the FAO guidelines to reduce sea turtle mortality in fishing operations’. The Scientific Committee recently revoked two statuses of ‘not applicable’ due to insufficient evidence provided, so the WPEB REQUESTED CPCs to continue to review their status periodically and either update this or provide additional supporting information as necessary.</p>	Update: [ongoing]
Para. 42	<p>The WPEB REQUESTED that all CPCs without an NPOA-Sharks and/or NPOA-Seabirds expedite the development and implementation of a NPOA, and to report</p>	Update: [ongoing]

	progress to the WPEB and SC in 2017, NOTING that NPOAs are a framework that should facilitate estimation of shark catches, seabird interactions, and development and implementation of appropriate management measures, which should also enhance the collection of bycatch data and compliance with IOTC Resolutions.	
Para. 43	The WPEB REQUESTED that the IOTC Secretariat continue to periodically revise the table summarising progress towards the development of NPOA-Sharks, NPOA-Seabirds, and the implementation of the FAO guidelines to reduce marine turtle mortality in fishing operations, with information provided by each CPC for the consideration at the WPEB and SC meetings. The current status is provided in <u>Appendix VIII</u> .	Update: [Completed] Paper IOTC-2018-WPNT14-09
Para. 51	<i>Bycatch in Iranian tuna fisheries</i> The WPEB NOTED that 1810 t of whale shark was reported in the National Statistical Report as bycatch in the Iranian fisheries and requested the authors to clarify this point as this would imply a large number of individual whale sharks caught by the gillnets (e.g. around 100 assuming an individual average weight of ~18 t). The WPEB NOTED that it is difficult to estimate the weight of whale sharks and REQUESTED the authors report on the bycatch of whale shark by numbers with estimated lengths. After adoption, the authors provided a revised paper (IOTC–2017–WPEB13–12 Rev_1) clarifying that the 1810 t of milk shark (RHA) rather than whale shark (RHN) were caught by the Iranian fleet in 2016.	Update: [pending]
Para. 52	<i>Bycatch in Iranian tuna fisheries</i> The WPEB also NOTED that whale shark interactions, including the fate, are not currently reported through IOTC discard reporting forms, but that fishers make efforts to release incidentally caught whale sharks alive. The WPEB REQUESTED that information of the fate of whale shark once released from gillnets is collected and reported to the next WPEB and through the IOTC discard reporting forms.	Update: [pending]
Para. 59	<i>Bycatch in Iranian tuna fisheries</i> The WPEB NOTED that the Iranian historic shark catch estimation is not disaggregated to the species level and REQUESTED that the authors consider if it would be possible to produce estimates that are disaggregated by species.	Update: [pending]

	Nevertheless, the WPEB NOTED that this may be difficult due to a lack of sufficient data.	
Para. 76	<p>Comparison of E-monitoring and observer data: non-target species and discards</p> <p>NOTING that the development of minimum standards for EMS is currently part of the ROS Pilot Project as requested by the SC (IOTC-2016-SC19-R, para.164), the WPEB REQUESTED that the WPDCS consider also establishing standards for incorporating EMS data into the IOTC database. The WPEB REQUESTED document(s) be submitted to WPDCS from CPCs specifying the current data elements recorded in the EMS systems currently employed in the Indian Ocean and other Oceans, as appropriate, and that the Secretariat consult with the other t-RFMO Secretariats and report to WPDCS upon progress being made in this regard.</p>	<p>Update: [ongoing]</p> <p>(para. 113) The SC noted that EMS are intended to complement human observer programs and also collect other useful information, and encouraged that different – but mutually compatible EMS systems – conform to harmonized standards in terms of installation, data collection and reporting, and REQUESTED that purse seine fleets or CPCs wishing to voluntarily implement EMS in purse seiners follow the guidelines described in document IOTC–2017–WPDCS13–26 and IOTC-2016-SC19-15.</p>
Para. 82	<p>Ecosystem report card</p> <p>The WPEB NOTED the issues with data availability and the data mining that will be undertaken as part of this study and REQUESTED the authors provide specific recommendations about where new data collection initiatives may be required when key gaps are identified through the project.</p>	Update: [pending]
Para. 90	<p>Regional review of the data available for gillnet fleets operating in the Indian Ocean</p> <p>The WPEB NOTED that the results of the study exploring potential bycatch mitigation measures based on simple gear setting techniques are potentially very promising and REQUESTED the authors submit a paper detailing the full results next year so that the work can be fully reviewed by the WPEB.</p>	Update: [pending]
Para. 119	<p>Nominal and standardised CPUE indices</p> <p>The WPEB REQUESTED the authors investigate the assumption of linearity for the continuous variables and whether there might instead be any non-linearity in some of these (paper IOTC–2017–WPEB13–27).</p>	Update: [pending] EU,France
Para. 125	<p>Nominal and standardised CPUE indices</p> <p>The WPEB REQUESTED the authors provide more diagnostic plots to explore the effects of each covariate used in the model, such as fitted values vs residuals. The WPEB further REQUESTED the authors provide some exploratory plots of whether the model is sensitive to the specification of the explanatory variables, e.g. area and hooks between floats (IOTC–2017–WPEB13–29).</p>	Update: [pending] Japan

<p>Para. 160</p>	<p><i>Development of management advice for blue shark and update of blue shark Executive Summary for the consideration of the Scientific Committee</i></p> <p>The WPEB ADOPTED the management advice developed for blue shark, as provided in the draft status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary with the latest 2016 interaction data and the results from the MCMC projections in the Kobe II Strategy Matrix, and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration:</p> <ul style="list-style-type: none"> • Blue Shark (<u>Appendix IX</u>). 	<p>Update: Completed</p>
<p>Para. 165</p>	<p><i>Sharks, rays and chimaeras in the Arabian Sea and adjacent waters</i></p> <p>Given the number of species included in this report that are not listed as mandatory for data collection in logbooks for IOTC fisheries (Resolution 15/01), the WPEB REQUESTED that a small, remote working group is established to work intersessionally to prepare a document reviewing the appropriateness of the shark species lists in Resolution 15/01 (including rays. Given that a similar study is due to take place in 2018 for the southwestern Indian Ocean, this group should ideally meet in 2018 and prepare the document for submission to WPEB14. Any suggestions should be mindful of the practical difficulties fishers might have with species identification and avoid recommending requirements that could result in unreliable data reporting.</p>	<p>Update: pending</p>
<p>Para. 167</p>	<p><i>Sharks, rays and chimaeras in the Arabian Sea and adjacent waters</i></p> <p>There was some discussion regarding the potential for developing a retention ban for these species, however, given the lack of new information provided on fisheries interactions, the WPEB REQUESTED that a working paper on rays is produced next year for the WPEB to consider further.</p>	<p>Update: Completed three paper have been produced on rays for the current meeting: IOTC-2018-WPEB14-29 IOTC-2018-WPEB14-30 IOTC-2018-WPEB14-39</p>
<p>Para. 177</p>	<p><i>Development of management advice on the status of other shark stocks and update of other shark species Executive Summaries for the consideration of the Scientific Committee</i></p> <p>The WPEB ADOPTED the management advice developed for a subset of other shark species commonly caught in IOTC fisheries for tuna and tuna-like species, as provided in the draft resource stock status summaries and REQUESTED that the IOTC Secretariat update the draft stock status summary for sharks with the latest 2016 catch data, and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration:</p>	<p>Update: Completed</p>

	<ul style="list-style-type: none"> • Oceanic whitetip sharks (<i>Carcharhinus longimanus</i>)– Appendix X • Scalloped hammerhead sharks (<i>Sphyrna lewini</i>) – Appendix XI • Shortfin mako sharks (<i>Isurus oxyrinchus</i>) – Appendix XII • Silky sharks (<i>Carcharhinus falciformis</i>) – Appendix XIII • Bigeye thresher sharks(<i>Alopias superciliosus</i>) – Appendix XIV • Pelagic thresher sharks(<i>Alopias pelagicus</i>) – Appendix XV 	
Para. 191	<p><i>Development of management advice on the status of marine turtle species and update of the Executive Summary for the consideration of the Scientific Committee</i></p> <p>The WPEB ADOPTED the management advice developed for marine turtles, as provided in the draft status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary with the latest 2016 interaction data, and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration:</p> <ul style="list-style-type: none"> • Marine turtles (Appendix XVI). 	Update: [Completed]
Para. 200	<p><i>Development of management advice on the status of seabird species</i></p> <p>The WPEB ADOPTED the management advice developed for seabirds, as provided in the draft status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary with the latest 2016 interaction data, and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration:</p> <ul style="list-style-type: none"> • Seabirds (Appendix XVII). 	Update: [Completed]
Para. 204	<p>Marine mammals</p> <p>The WBEP NOTED that limited data indicate declines for several marine mammal species in the Indian Ocean (e.g. Indian Ocean humpback dolphins <i>Sousa plumbea</i>, Indo-Pacific humpback dolphin <i>Sousa chinensis</i>, Indo-Pacific bottlenose dolphin <i>Tursiops aduncus</i>) and that capture in tuna gillnet fisheries is an important source of mortality. The WBEP REQUESTED that CPCs collect data on the effectiveness of mitigation techniques intended to reduce bycatch in these fisheries and implement successful mitigation strategies.</p>	Update: [pending]
Para. 206	<p>Marine mammals</p>	Update: [ongoing]

	<p>The WBEP REQUESTED the Chair and the IOTC Secretariat begin discussions on the potential for collaboration with the International Whaling Commission and other national and international institutions to facilitate capacity building within CPCs regarding the establishment of marine mammal bycatch mitigation programs.</p>	
<p>Para. 208</p>	<p><i>Development of management advice on the status of marine mammal species</i></p> <p>Therefore the WPEB ADOPTED the management advice developed for cetaceans, as provided in the draft status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary with the latest 2016 interaction data, and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration:</p> <ul style="list-style-type: none"> • Marine mammals (Appendix XVIII). 	<p>Update: [Completed]</p>