

REVISION OF THE WORKING PARTY ON ECOSYSTEMS AND BYCATCH WORKPLAN

PREPARED BY: IOTC SECRETARIAT, 19 AUGUST 2013

PURPOSE

To ensure that the participants at the Working Party on Ecosystems and Bycatch consider, revise and develop a detailed work plan for the WPEB for the coming years, for provision and potential endorsement by the Scientific Committee.

BACKGROUND

Scientific Committee

At the 15th Session of the SC, the SC **NOTED** the following:

(para. 236) The SC **NOTED** paper IOTC–2012–SC15–35 which outlined the proposed priorities for IOTC Working Parties and SC meetings for 2013 and tentatively for 2014.

(para.237) The SC **NOTED** the proposed workplans and priorities of each of the Working Parties and **AGREED** to the revised workplans as outlined in [Appendix XXXV \[of the SC15 Report\]](#). The Chairs and Vice-Chairs of each working part shall ensure that the efforts of their working party is focused on the core areas contained within the appendix, taking into account any new research priorities identified by the Commission at its next Session.

(para. 238) The SC **ADOPTED** a revised assessment schedule for the tuna and tuna-like species under the IOTC mandate, as well as the current list of key shark species of interest, as outlined in [Appendix XXXVI \[of the SC15 Report\]](#). Following the uncertainty remaining in the bigeye tuna assessment carried out for the previous WPTT meetings in 2010 and 2011, the WPTT **AGREED** that bigeye tuna would be the priority species for stock assessments in 2013. Only stock status indicators (i.e standardised CPUE series) should be updated for skipjack tuna and yellowfin tuna.

Commission

At Sessions of the Commission, Conservation and Management Measures adopted contained elements which call on the Scientific Committee, via the WPEB, to undertake specific tasks. These requests need to be incorporated into a revised work plan:

Resolution 13/04 On the conservation of cetaceans

(para. 6) The Commission requests that the IOTC Scientific Committee develop best practice guidelines for the safe release and handling of encircled cetaceans, taking into account those developed in other Regional Fisheries Management Organisations, including the Western and Central Pacific Fisheries Commission, and that these guidelines be submitted to the 2014 Commission meeting for endorsement.

Resolution 13/05 On the conservation of whale sharks (*Rhincodon typus*)

(para. 6) The Commission requests that the IOTC Scientific Committee develop best practice guidelines for the safe release and handling of encircled whale sharks, taking into account those developed in other regional fisheries management organisations including the Western and Central Pacific Fisheries Commission, and that these guidelines be submitted to the 2014 Commission meeting for endorsement.

Resolution 13/06 On a scientific and management framework on the Conservation of sharks species caught in association with IOTC managed fisheries

(para. 7) Scientific observers shall be allowed to collect biological samples (vertebrae, tissues, reproductive tracts, stomachs, skin samples, spiral valves, jaws, whole and skeletonised specimens for taxonomic works and museum collections) from oceanic whitetip sharks taken in the IOTC area of competence that are dead at haulback, provided that the samples are a part of a research project approved by the IOTC Scientific Committee (SC)/the IOTC Working Party on Ecosystems and Bycatch (WPEB). In

order to obtain the approval, a detailed document outlining the purpose of the work, number of samples intended to be collected and the spatio-temporal distribution of the sampling effort must be included in the proposal. Annual progress of the work and a final report on completion shall be presented to the SC/WPEB.

- (para. 9) The provisional measures stipulated in this Resolution shall be evaluated in 2016 by the IOTC Scientific Committee to deliver more appropriate advice on the conservation and management of the stocks for the consideration of the Commission.

Resolution 13/08 *Procedures on a fish aggregating devices (FADs) management plan, including more detailed specification of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species*

- (para. 7) The IOTC Scientific Committee will analyse the information, when available, and provide scientific advice on additional FAD management options for consideration by the Commission in 2016, including recommendations on the use of biodegradable materials in new and improved FADs and the phasing out of FAD designs that do not prevent the entanglement of sharks, marine turtles and other species. When assessing the impact of FADs on the dynamic and distribution of targeted fish stocks and associated species and on the ecosystem, the IOTC Scientific Committee will, where relevant, use all available data on abandoned FADs (i.e. FADs without a beacon).

Resolution 12/04 *On the conservation of marine turtles*

- (para. 11) The IOTC Scientific Committee shall request the IOTC Working Party on Ecosystems and Bycatch to:
- Develop recommendations on appropriate mitigation measures for gillnet, longline and purse seine fisheries in the IOTC area;
 - Develop regional standards covering data collection, data exchange and training;
 - Develop improved FAD designs to reduce the incidence of entanglement of marine turtles, including the use of biodegradable materials.

The recommendations of the IOTC Working Party on Ecosystems and Bycatch shall be provided to the IOTC Scientific Committee for consideration at its annual session in 2012. In developing its recommendations, the IOTC Working Party on Ecosystems and Bycatch shall examine and take into account the information provided by CPCs in accordance with paragraph 10 of this measure, other research available on the effectiveness of various mitigation methods in the IOTC area, mitigation measures and guidelines adopted by other relevant organizations and, in particular, those of the Western and Central Pacific Fisheries Commission. The IOTC Working Party on Ecosystems and Bycatch will specifically consider the effects of circle hooks on target species catch rates, marine turtle mortalities and other bycatch species.

- (para. 17) The IOTC Scientific Committee shall annually review the information reported by CPCs pursuant to this measure and, as necessary, provide recommendations to the Commission on ways to strengthen efforts to reduce marine turtle interactions with IOTC fisheries.

Resolution 12/06 *On reducing the incidental bycatch of seabirds in longline fisheries*

- (para. 8) The IOTC Scientific Committee, based notably on the work of the WPEB and information from CPCs, will analyse the impact of this Resolution on seabird bycatch no later than for the 2016 meeting of the Commission. It shall advise the Commission on any modifications that are required, based on experience to date of the operation of the Resolution and/or further international studies, research or advice on best practice on the issue, in order to make the Resolution more effective.

Resolution 12/09 *On the conservation of thresher sharks (Family Alopiidae) caught in association with fisheries in the IOTC area of competence*

- (para. 7) Scientific observers shall be allowed to collect biological samples (vertebrae, tissues, reproductive tracts, stomachs, skin samples, spiral valves, jaws, whole and skeletonised specimens for taxonomic works and museum collections) from thresher sharks that are dead at haulback, provided that the samples are part of the research project approved by the IOTC Scientific Committee (or IOTC Working Party on Ecosystems and Bycatch (WPEB)). In order to obtain the approval, a detailed document outlining the purpose of the work, number and type of samples intended to be collected and the spatio-temporal distribution of the sampling work must be included in the proposal. Annual progress of the work and a final report on completion of the project shall be presented to the IOTC WPEB and the IOTC Scientific Committee.

Resolution 11/04 *On a regional observer scheme*

- (para. 15) The elements of the Observer Scheme, notably those regarding its coverage, are subject to review and revision, as appropriate, for application in 2012 and subsequent years. Basing on the experience of other Tuna RFMOs, the IOTC Scientific Committee will elaborate an observer working manual, a template to be used for reporting (including minimum data fields) and a training program.

Resolution 05/05 *Concerning the conservation of sharks caught in association with fisheries managed by IOTC*

- (para. 2) In 2006 the IOTC Scientific Committee (in collaboration with the IOTC Working Party on Ecosystems and Bycatch) provide preliminary advice on the stock status of key shark species and propose a research plan and timeline for a comprehensive assessment of these stocks.
- (para. 5) The ratio of fin-to-body weight of sharks described in paragraph 4 shall be reviewed by the IOTC Scientific Committee and reported back to the Commission in 2006 for revision, if necessary.

DISCUSSION

Participants at the WPEB09 are requested to consider the priorities set by the SC and the Commission, via Conservation and Management Measures, and revise its work plan to match those priorities.

RECOMMENDATION/S

That the WPEB:

- 1) **NOTE** paper IOTC–2013–WPEB09–11, which encouraged the WPEB to further develop and refine its work plan for 2014 and future years to align with the requests and directives from the Commission and Scientific Committee.
- 2) **RECOMMEND** a revised work plan for 2014 and future years to the Scientific Committee for its consideration and potential endorsement.

ATTACHMENT

Attachment A: Previous work plan for the Working Party on Ecosystems and Bycatch

APPENDIX A

PREVIOUS WORK PLAN FOR THE WORKING PARTY ON ECOSYSTEMS AND BYCATCH

Extract of the Report of the Fifteenth Session of the Scientific Committee

(IOTC–2012–SC15–R; Appendix XXXV, PAGES 263, 266–268)

The WPEB may wish to develop and recommend a revised work plan, including priorities, for 2014 and tentatively for future years:

Working Party on Ecosystems and Bycatch (WPEB)

Core topics for research

The SC **RECOMMENDED** the following core topic areas as priorities for research over the coming two years, taking into account data gaps, capacity among CPCs, and areas for implementation:

- ***Ecological Risk Assessment***
 - i. Sharks – interpretation of consultant report
 - ii. Marine turtles – interpretation of consultant report
- ***Shark stock status analyses (development of abundance indices)***
 - i. Develop/improve accurate CPUE indices for analysis
 - ii. Develop methods to estimate historical catch series by gear.
 - iii. Develop life history and biological patterns for the species (namely migration patterns and distribution patterns).
- ***Depredation***
 - i. Longline fishery depredation
- ***Bycatch mitigation***
 - i. Sharks
 - ii. Seabirds – line weighting
 - iii. Marine turtles
 - iv. Marine mammals
- ***Capacity building***
 - i. Scientific assistance to CPCs and specific fleets considered to have the highest risk to bycatch species (e.g. gillnet fleets and longline fleets).

Extract of the Report of the Fifteenth Session of the Scientific Committee

(IOTC–2012–SC15–R; Appendix XXXVI, PAGE 269)

Table 1. Schedule of stock assessments for IOTC species and species of interest in 2013 and tentatively for 2014–2017, and for the WPM priorities.

Species	2013	2014	2015	2016	2017
<i>Working Party on Ecosystems and Bycatch</i>					
Bigeye thresher sharks	Indicators				
Blue sharks	Indicators				
Silky sharks	Indicators				
Oceanic whitetip sharks	Indicators				
Pelagic thresher sharks	Indicators				
Shortfin mako sharks	Indicators				
Scalloped hammerhead sharks	Indicators				