

OUTCOMES OF THE FOURTEENTH SESSION OF THE SCIENTIFIC COMMITTEE

PREPARED BY: IOTC SECRETARIAT, 17 JULY, 2012

PURPOSE

To inform the Working Party on Ecosystems and Bycatch (WPEB) of the recommendations arising from the Fourteenth Session of the Scientific Committee, held from 12–17 December 2011, specifically relating to the work of the WPEB.

BACKGROUND

At the Fourteenth Session of the Scientific Committee (SC), the recommendations relevant to the work of the WPEB contained in [Appendix A](#) were adopted by the SC and provided to the Commission for its consideration.

In addition, the SC noted and endorsed the recommendations made by the WPEB in 2011, which included requests to address the deficiencies in data collection, monitoring and reporting by CPCs. The SC requested that the IOTC Secretariat communicate these recommendations to relevant parties so that they may address these matters in 2012 and provide progress updates to the WPEB at its next meeting.

The recommendations on the deficiencies in data collection, monitoring and reporting by CPCs in relation to ecosystems and bycatch will be discussed under agenda item 5 and in paper IOTC–2012–WPEB08–09 and are therefore not presented in this paper.

The complete report of the Fourteenth Session of the IOTC Scientific Committee may be downloaded from the following link to the IOTC website: [http://iotc.org/files/proceedings/2011/sc/IOTC-2011-SC14-R\[E\].pdf](http://iotc.org/files/proceedings/2011/sc/IOTC-2011-SC14-R[E].pdf) [11 mb].

DISCUSSION

In addition to the recommendations outlined in [Appendix A](#), the SC made several other comments and recommendations relevant to the WPEB, which participants are asked to consider:

Definitions of scientific terms

- The SC **AGREED** that the IOTC currently utilises the following definition for bycatch: All species, other than the 16 species listed in Annex B of the IOTC Agreement, caught or interacted with by fisheries for tuna and tuna-like species in the IOTC area of competence. (para. 56 of the SC14 report)

Status of catch statistics

- The SC **NOTED** that despite the adoption of IOTC Resolutions 05/05 and 08/01, recently superseded by Resolution 10/02, the levels of reporting of data on sharks and other bycatch species remains very poor and prevents useful analyses of that data. (para. 58 of the SC14 report)

Amendment of existing IOTC Conservation and Management Measures

- The SC **RECOGNIZED** that it is a subsidiary body of the Commission, and that its primary role is to provide scientific advice of relevance to the Commission. With the exception of Japan, the SC **RECOGNIZED** that, where appropriate, its advice may include the provision of recommendations for amendment of existing Resolutions. (para. 64 of the SC14 report)

Implementation of the regional observer scheme

- The SC **NOTED** the update on the implementation of the Regional Observer Scheme set out in Resolution 11/06 *on a Regional Observer Scheme* and **EXPRESSED** its concerns regarding the low level of implementation and reporting to the IOTC Secretariat of both the observer trip reports and the list of accredited observers since the start of the ROS in July 2010 (8 CPCs provided a list of accredited observers and 11 reports were submitted from 4 CPCs). (para. 138 of the SC14 report)

Recommendations from the Working Parties on data collection and reporting deficiencies

- Noting the wide range of recommendations from the IOTC Working Parties in 2011, which included requests to address the deficiencies in data collection, monitoring and reporting by CPCs, as well as recommendations to improve research, the SC **ENDORSED** the consolidated list of recommendations of the WP's on these matters as those of the SC (provided at Appendix VIII). The SC requested that the IOTC Secretariat communicate these recommendations to relevant parties so that they may address these matters in 2012 and provide progress updates to the IOTC Working Parties at their next meetings. (para. 117 of the SC14 report)

Status summary for shark species impacted by IOTC fisheries

As part of the Executive Summaries adopted for shark species, the SC also adopted a table summarising the status of the sharks species most frequently impacted by IOTC fisheries, as provided at [Appendix B](#).

RECOMMENDATION

That the WPEB **NOTE** the recommendations of the Fourteenth Session of the Scientific Committee and consider how to progress these issues at the present meeting.

APPENDICES

[Appendix A](#): Consolidated set of recommendations of the Fourteenth Session of the Scientific Committee (12–17 December, 2011) to the Commission, relevant to the Working Party on Ecosystems and Bycatch.

[Appendix B](#): Status summary for shark species impacted by IOTC fisheries.

APPENDIX A

**CONSOLIDATED SET OF RECOMMENDATIONS OF THE FOURTEENTH SESSION OF THE
SCIENTIFIC COMMITTEE (12-17 DECEMBER, 2011) TO THE COMMISSION RELEVANT TO
WORKING PARTY ON ECOSYSTEMS AND BYCATCH**

Extract of the Report of the Fourteenth Session of the Scientific Committee

(IOTC-2011-SC14-R; Appendix XXXVIII, PAGES 248-259)

Status of Marine Turtles, Seabirds and Sharks in the Indian Ocean

Marine turtles

SC14.04 (para. 134) 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:

- Marine turtles – [Appendix XXV](#)

Seabirds

SC14.05 (para. 135) 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:

- Seabirds – [Appendix XXVI](#)

Sharks

SC14.06 (para. 136) 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:

- Blue sharks (*Prionace glauca*) – [Appendix XXVII](#)
- Oceanic whitetip sharks (*Carcharhinus longimanus*) – [Appendix XXVIII](#)
- Scalloped hammerhead sharks (*Sphyrna lewini*) – [Appendix XXIX](#)
- Shortfin mako sharks (*Isurus oxyrinchus*) – [Appendix XXX](#)
- Silky sharks (*Carcharhinus falciformis*) – [Appendix XXXI](#)
- Bigeye thresher sharks (*Alopias superciliosus*) – [Appendix XXXII](#)
- Pelagic thresher sharks (*Alopias pelagicus*) – [Appendix XXXIII](#)

GENERAL RECOMMENDATIONS TO THE COMMISSION

Status of development and implementation of Nation Plans of Action for seabirds and sharks

SC14.09 (para. 18) The SC **NOTED** the current status of development and implementation of Nation Plans of Action for sharks and **RECOMMENDED** that all CPCs without an NPOA-Sharks expedite the development and implementation of their NPOA-Sharks, and to report progress to the WPEB in 2012, recalling that NPOA-Sharks are a framework that should facilitate estimation of shark catches, and development and implementation of appropriate management measures, which should also enhance the collection of bycatch data and compliance with IOTC Resolutions.

Status of catch statistics

SC14.11 (para. 57) The SC **RECOMMENDED** that the Commission note the status of catch statistics for the main species of sharks, by major fisheries (gears), for the period 1950-2010, as provided in [Appendix VI: Tables a-c](#). Although some CPCs have reported more detailed data on sharks in recent years, including time-area catches and effort, and length frequency data for the main commercial shark species, the SC expressed strong **CONCERN** that the information on retained catches and discards of sharks contained in the IOTC database remains very incomplete.

SC14.12 (para. 59) Noting that despite the mandatory reporting requirements detailed in Resolutions 05/05, 08/04, 09/06, 10/02, 10/03, and 10/06, bycatch data remain largely unreported by CPCs and the SC **RECOMMENDED** that the Compliance Committee and the Commission address this non-

compliance by taking steps to develop mechanisms which would ensure that CPCs fulfil their bycatch reporting obligations.

SC14.13 (para. 60) The SC **RECOMMENDED** that the current IOTC Resolution 08/04 concerning the recording of catch by longline fishing vessels in the IOTC area, Resolution 10/03 concerning the recording of catch by fishing vessels in the IOTC area and Resolution 10/02 mandatory statistical requirements for IOTC members and cooperating non-contracting parties be amended in order to include a clear list of shark and marine turtle species or group of species, that should be recorded and reported to the IOTC Secretariat as per the IOTC requirements for target species.

SC14.14 (para. 61) Noting that there is extensive literature available on pelagic shark fisheries and interactions with fisheries targeting tuna and tuna-like species, in countries having fisheries for sharks, and in the databases of governmental or non-governmental organizations, the SC **AGREED** on the need for a major data mining exercise in order to compile data from as many sources as possible and attempt to rebuild historical catch series of the most commonly caught shark species. In this regard, the WPEB **RECOMMENDED** that the Scientific Committee considers presenting a proposal to the Commission for this activity, including a budget.

Species identification cards – Sharks, seabirds and marine turtles

SC14.16 (para. 66) The SC **RECOMMENDED** that the Commission agree to allocate additional funds from the IOTC accumulated funds, or other sources, be allocated to print and distribute the identification cards for sharks, seabirds and marine turtles to developing coastal states.

Sharks – ERA

SC14.17 (para. 67) Noting the general lack of catch data on sharks, the SC strongly **RECOMMENDED** that an (Ecological Risk Assessment) ERA is conducted for sharks caught in fisheries targeting tuna and tuna-like species in the Indian Ocean before the next session of the WPEB. In order to do so, the SC **RECOMMENDED** that the Commission allocate specific funds for such an analysis. Should a Fishery Officer be recruited at the IOTC Secretariat, he/she may be in a position to coordinate this task.

Sharks – Wire leaders/traces

SC14.18 (para. 68) On the basis of information presented to the SC in 2011 and in previous years, the SC **RECOGNISED** that the use of wire leaders/traces in longline fisheries may imply targeting of sharks. The SC therefore **RECOMMENDED** to the Commission that if it wishes to reduce catch rates of sharks by longliners it should prohibit the use of wire leaders/traces.

Sharks – Resolution 05/05 concerning the conservation of sharks caught in association with fisheries managed by IOTC

Fin to body weight ratio

SC14.19 (para. 69) The SC **ADVISED** the Commission to consider, that the best way to encourage full utilisation of sharks, to ensure accurate catch statistics, and to facilitate the collection of biological information, is to revise the IOTC Resolution 05/05 *concerning the conservation of sharks caught in association with fisheries managed by IOTC* such that all sharks must be landed with fins attached (naturally or by other means) to their respective carcass. However, the SC **NOTED** that such an action would have practical implementation and safety issues for some fleets and may degrade the quality of the product in some cases. The SC **RECOMMENDED** all CPCs to obtain and maintain the best possible data for IOTC fisheries impacting upon sharks, including improved species identification.

Sharks – Resolution 10/02 Mandatory statistical requirements for IOTC Members and Cooperating non-Contracting Parties (CPC'S)

SC14.20 (para. 70) Noting that the collection and reporting of data on sharks as per the IOTC Resolution 10/02 *mandatory statistical requirements for IOTC Members and Cooperating non-Contracting Parties (CPCs)* is very poor at the moment, the SC **RECOMMENDED** that Resolution 10/02 is reinforced by including specific requirements in the provision of nominal catch data for a list of most commonly caught shark species ([Table 3](#)). The SC **NOTED** that nominal catch data can be derived from logbook data, observer data or port sampling scheme. Furthermore, the Resolution should be strengthened by amending the provision of catch-and-effort and size data to be applicable to sharks species as well as other bycatch, noting that these data can be derived from logbook or observer data.

Table 3. List of the most commonly caught elasmobranch species.

Common name	Species	Code
Manta and devil rays	Mobulidae	MAN
Whale shark	<i>Rhincodon typus</i>	RHN
Thresher sharks	<i>Alopias spp.</i>	THR
Mako sharks	<i>Isurus spp.</i>	MAK
Silky shark	<i>Carcharhinus falciformis</i>	FAL
Oceanic whitetip shark	<i>Carcharhinus longimanus</i>	OCS
Blue shark	<i>Prionace glauca</i>	BSH
Hammerhead shark	Sphyrnidae	SPY
Other Sharks and rays	–	SKH

Sharks – On Resolution 10/12 on the conservation of thresher sharks (family Alopiidae) caught in association with fisheries in the IOTC area of competence

SC14.21 (para. 71) Noting that Resolution 10/12 *on the conservation of thresher sharks (family Alopiidae) caught in association with fisheries in the IOTC area of competence* prohibits the retention of any part or whole carcass of thresher sharks and that the collection of biological samples on dead individuals would increase the scientific knowledge of these species, the SC **RECOMMENDED** that Resolution 10/12 be amended in order to allow observers to collect biological samples (vertebrae, tissues, reproductive tracts, stomachs) from thresher sharks that are dead at haulback.

Seabirds

SC14.22 (para. 79) The SC **RECOMMENDED** that the specifications for the design and deployment of bird scaring lines be amended in order to take into account different specifications depending on the size of the longline fishing vessel, as follows:

Bird-scaring line design

1. The bird-scaring line shall be a minimum aerial extent of 100 m in length for vessels that exceed 35 m in length and of 75 m in length for vessel less or equal to 35 m in length. If the bird-scaring line is less than 150 m in length, it will include an object towed at the seaward end to create tension to maximise aerial coverage. The section above water shall be a strong fine line of a conspicuous colour such as red or orange.

Deployment of bird scaring lines

1. The bird scaring line shall be deployed before longlines enter into the water.
2. The vessels exceeding 35 m in length should deploy two lines with an aerial extent of 100 m minimum. The vessels that are less or equal to 35 m in length could deploy a single line with an aerial extent of 75 m minimum. To achieve this coverage the line shall be suspended from a point a minimum of 5 metres above the water at the stern on the windward side of the point where the branch line enters the water.

SC14.23 (para. 81) The SC **RECOMMENDED** that Resolution 10/06 be strengthened in order to make the reporting of seabird interactions mandatory for vessels fishing for species under the IOTC mandate.

SC14.24 (para. 82) The SC **RECOMMENDED** that any amendment to Resolution 10/06 should allow sufficient time for orderly implementation, to allow training and redevelopment of gears and operations.

SC14.25 (para. 83) The SC **RECOMMENDED** that the Commission consider revising Resolution 10/06 *On Reducing the Incidental Bycatch of Seabirds in Longline Fisheries*, noting the technical specifications and other considerations outlined and agreed to by the SC in [paragraphs 73 to 82](#) of the report of the SC14.

SC14.26 (para. 84) The SC **AGREED** that seabird identification can be very difficult, even for trained scientific observers, and **RECOMMENDED** that observers take photographs of seabirds caught by fishing vessels and submit them to seabird experts, or to the IOTC Secretariat, for confirmation of identification.

SC14.27 (para. 85) As a matter of consistency and to increase the reporting of seabird interactions, the SC **RECOMMENDED** that the recording of interactions with seabirds (as a group) be included in the minimum requirements for logbooks or through observer programmes for all fleets.

SC14.28 (para. 86) The SC further **RECOMMENDED** the Commission consider that more research is conducted on the identification of hot spots of interactions of seabirds with fishing vessels.

Marine turtles

SC14.29 (para. 88) Noting the general lack of data on incidental catch of marine turtles, the SC **RECOMMENDED** that an ERA be conducted for marine turtles caught in fisheries targeting tuna and tuna-like species in the Indian Ocean before the session of the WPEB where marine turtles will be a priority. In order to do so, the SC **RECOMMENDED** that the Commission allocate specific funds for such an analysis.

SC14.30 (para. 89) Noting that reporting of interactions with marine turtles is already mandatory through Resolution 09/06 which states “*CPCs shall collect (including through logbooks and observer programs) and provide to the Scientific Committee all data on their vessels’ interactions with marine turtles in fisheries targeting the species covered by the IOTC Agreement*” (Res.09/06, para.2), and in order to increase the reporting of interactions, the SC **RECOMMENDED** that the recording of marine turtles caught as bycatch is included in the minimum requirements of logbooks or through observer programmes for all fleets fishing in the IOTC area.

SC14.31 (para. 91) The SC **RECOMMENDED** that current IOTC Resolution 09/06 *on Marine Turtles* be strengthened to ensure that CPCs report annually on the level of incidental catches of marine turtles by species.

SC14.32 (para. 92) Noting that paragraph 4 of Resolution 09/06 *on Marine Turtles* currently refers to “hard shelled turtles”, which could be read to exclude leatherback turtles, and noting the Scientific Committee’s previous recommendation to the Commission that the resolution should apply to leatherback turtles, the SC **RECOMMENDED** that the Commission revise Resolution 09/06 *on marine turtles* so that the term “hard-shelled” be deleted and replaced by “marine” to ensure application to all marine turtle species.

IOTC Observer Trip Report Template

SC14.35 (para. 99) Noting that in 2010, the SC requested that the WPDCS discuss collection and reporting by observers of the data items below:

- Information on the type and numbers of branch lines and wire leaders used (longline)
- Information on the number and type of electronic equipment used on board
- Area resolution (1 degree square at present)
- Information on the state of the sea and weather conditions
- Information on depredation
- Information on lost fishing gear
- Information on the number of hooks used by type and size.

and noting the difficulties that some observers may have in collecting and reporting of the data items that are requested in the observer trip report template (seven items listed above), and further noting that collecting this information may compromise access to other basic data on board longline vessels, the SC **RECOMMENDED** that the Commission allow for some flexibility in the collection and reporting of these data, until such a time where the CPCs concerned are in a position to collect and provide this information.

SC14.36 (para. 100) Noting that the use of monofilament leaders may allow sharks to escape by biting through the line (removing the hook), in contrast to wire leaders which are not prone to ‘bite-off’, the SC **RECOMMENDED** that, where possible for fleets that have not already prohibited the use of wire leaders, the number of ‘bite-off’ per leader type is added to the longline hauling information recorded by the observer (currently in the IOTC observer form FORM 4-LL – Fishing Event Longline).

SC14.37 (para. 101) Noting that the current observer trip reporting template includes summaries of catch and bycatch by 1° square as required in Resolution 11/04, and that there is no summary of the effort exerted during the trip at the same scale, the SC **RECOMMENDED** that a new table is added to the observer trip reporting template that would ensure effort during the trip is recorded, as follows:

Year	Month	Square (1°x1°)	Effort deployed
			Longline: number of hooks deployed Purse seine on free-schools: number of fishing sets Purse seine on associated schools: number of fishing sets, and number of new FADs deployed Gillnet: number of panels deployed Pole-and-line: number of fishing days Handline: number of fishing days Troll-line: number of fishing days

SC14.38 (para. 102) The SC **RECOMMENDED** that the observer trip report is submitted in an electronic format, where possible, noting that the forms/tables in the observer trip report template are for illustrative purposes and that the complete information required could be reported in a different format.

SC14.39 (para. 103) Noting that at present, the observer reporting template includes obligatory reporting of information concerning waste management on board the fishing vessel (International Convention for the Prevention of Pollution from Ships – MARPOL), the SC **RECOMMENDED** that the reporting of this information be made optional, as most fishing vessels are already bound by this international regulation.

SC14.40 (para. 104) Noting that the reporting of transshipment events have to be reported through the IOTC Transshipment Programme, and that the IOTC Transshipment Programme applies only where transshipments involve a fishing vessel with LOA 24 m or greater and carrier vessels, pointing out that transshipments between fishing vessels, in particular, fresh-tuna longliners, are very common, the SC **AGREED** that in order to avoid duplication, observers under the IOTC Regional Observer Scheme can refrain from reporting Transshipments when those events are recorded by observers under the IOTC Transshipment Programme, **RECOMMENDING** that this is incorporated into the observer report.

Increased workload and staffing at the IOTC Secretariat

SC14.45 (para. 114) The SC **RECOMMENDED** that an additional Fishery Officer (P3 or P4) be hired, or consultants contracted, to handle a range of issues related to bycatch, including those from the Commission relating to ecosystems and bycatch issues (see [para. 113](#)).

Implementation of the Regional Observer Scheme

SC14.47 (para. 139) The SC **RECOMMENDED** that all IOTC CPCs urgently implement the requirements of Resolution 11/04 on a Regional Observer Scheme, which states that: “The observer shall, within 30 days of completion of each trip, provide a report to the CPCs of the vessel. The CPCs shall send within 150 days at the latest each report, as far as continuous flow of report from observer placed on the longline fleet is ensured, which is recommended to be provided with 1°x1° format to the Executive Secretary, who shall make the report available to the Scientific Committee upon request. In a case where the vessel is fishing in the EEZ of a coastal state, the report shall equally be submitted to that Coastal State.” (para. 11), **NOTING** that the timely submission of observer trip reports to the Secretariat is necessary to ensure that the Scientific Committee is able to carry out the tasks assigned to it by the Commission, including the analysis of accurate and high resolution data, in particular for bycatch, which would allow the scientists to better assess the impacts of fisheries for tuna and tuna-like species on bycatch species.

SC14.48 (para. 143) The SC **AGREED** that such a low level of implementation and reporting is detrimental to its work, in particular regarding the estimation of incidental catches of non-targeted species, as requested by the Commission and **RECOMMENDED** the Commission to consider how to address the lack of implementation of observer programmes by CPCs for their fleets and reporting to the IOTC Secretariat as per the provision of Resolution 11/04 on a *Regional Observer Scheme*, noting the update provided in [Appendix XXXIV](#).

Implementation of the Precautionary approach and Management strategy Evaluation

SC14.49 (para. 146) Noting that the development of an MSE process will require management objectives to be specified, the SC **RECOMMENDED** that the Commission provide clear guidance in this regard, noting that the adoption of the Precautionary Approach, as defined in the Fish Stocks Agreement, may be the first step.

Data Provision Needs – by gear

SC14.52 (para. 169) The SC **RECOMMENDED** that the minimum recording requirements for handline and trolling provided in [Appendix XXXV](#) be incorporated into the revised proposal for minimum recording requirements as detailed in [para. 170](#).

SC14.53 (para. 170) The SC **RECOMMENDED** that IOTC Recommendation 11/06 be modified to include the elements as provided in [Appendix XXXV](#), noting that the lists of species to be recorded, as detailed in section 2.3 of Annex II, and makes collection of these data mandatory.

SC14.54 (para. 171) The SC **RECOGNISED** that not all CPCs attended the SC meeting and that some of these CPCs, especially coastal states, may have difficulties implementing new minimum data requirements immediately. The SC therefore **RECOMMENDED** that the Commission adopt a flexible approach to any further resolutions on minimum data requirements, e.g. through staged implementation over a period of two years.

Requests from the Commission

SC14.64 (para. 222) Noting that each year the Commission makes a number of requests to the SC without clearly identifying the task to be undertaken, its priority against other tasks previously or simultaneously assigned to the SC and without assigning a budget to fund the request made, the SC **RECOMMENDED** that these matters be addressed by the Commission at its next session.

RESEARCH RECOMMENDATIONS AND PRIORITIES**Working Party on Ecosystems and Bycatch (WPEB)**

SC14.78 (para. 215) The SC **AGREED** that sharks should be the priority for the next meeting of the WPEB in 2012, and seabirds, marine turtle, marine mammals and other bycatch should be reassessed as priorities at the next session of the SC. Thus, the SC **RECOMMENDED** the following core topic areas as priorities for research over the coming year.

- **Ecological Risk Assessment**
 - i. All sharks
- **CPUE analyses**
 - i. Oceanic whitetip shark
 - ii. Other sharks
- **Stock status analyses**
 - i. Oceanic whitetip shark
 - ii. Other sharks
- **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).



APPENDIX B

STATUS SUMMARY FOR SHARK SPECIES IMPACTED BY IOTC FISHERIES

Extract of the Report of the Fourteenth Session of the Scientific Committee

(IOTC-2011-SC14-R; Table 1, PAGES 9-11)

Table 1. Status summary for species impacted by IOTC fisheries

Stock	Indicators		Prev ¹	2010	2011	Advice to Commission
<p>Sharks: Although they are not part of the 16 species directly under the IOTC mandate, sharks are frequently caught in association with other species as bycatch, and for some fleets are often as much a target as tuna. As such, IOTC Members and Cooperating non-Contracting Parties are required to report information at the same level of detail as for the 16 IOTC species. The following are the main species caught in tuna fisheries, but the list is not exhaustive.</p>						
Blue shark <i>Prionace glauca</i>	Unknown	Unknown				<p>There is a paucity of information available for these species and this situation is not expected to improve in the short to medium term. There is no quantitative stock assessment and limited basic fishery indicators currently available. Therefore the stock status is highly uncertain. The available evidence indicates considerable risk to the stock status at current effort levels. The primary source of data that drive the assessment (total catches) is highly uncertain and should be investigated further as a priority. Click here for full stock status summary</p>
Silky shark <i>Carcharhinus falciformis</i>	Unknown	Unknown				
Oceanic whitetip shark <i>Carcharhinus longimanus</i>	Unknown	Unknown				
Scalloped hammerhead shark <i>Sphyrna lewini</i>	Unknown	Unknown				
Shortfin mako <i>Isurus oxyrinchus</i>	Unknown	Unknown				
Bigeye thresher shark <i>Alopias superciliosus</i>	Unknown	Unknown				
Pelagic thresher shark <i>Alopias pelagicus</i>	Unknown	Unknown				

Colour key	Stock overfished ($SB_{year}/SB_{MSY} < 1$)	Stock not overfished ($SB_{year}/SB_{MSY} \geq 1$)
Stock subject to overfishing ($F_{year}/F_{MSY} > 1$)		
Stock not subject to overfishing ($F_{year}/F_{MSY} \leq 1$)		
Not assessed/Uncertain		