Original: English

EXPLANATORY NOTE FOR A DRAFT RECOMMENDATION BY ICCAT TO ESTABLISH A REBUILDING PROGRAM FOR NORTH ATLANTIC SHORTFIN MAKO SHARKS CAUGHT IN ASSOCIATION WITH ICCAT FISHERIES

(a new proposal, previously discussed but not adopted as PA4-814/2019)

(Proposal by the United States)

To accelerate the rate of recovery of the North Atlantic shortfin mako shark and to increase the probability of success, the SCRS recommended in 2019 that the Commission adopt a non-retention policy without exception. However, due to at-vessel and post-release mortality, a simple non-retention requirement is not expected to reduce mortality enough to stop overfishing and rebuild the stock. Additional efforts are needed that focus on mortality reductions; the SCRS has suggested that gear modifications and time/area closures along with safe handling and release practices have the potential to further reduce mortality and support rebuilding.

Taking all of this into account, the U.S. proposal would generally prohibit retention of North Atlantic shortfin mako sharks. The proposal focuses on achieving the necessary reductions in mortality by including a requirement that longline vessels use nylon monofilament leaders and large circle hooks. Provided that a CPC has achieved the reductions in catches, inclusive of dead discards, that are necessary for rebuilding, that CPC may authorize its vessels to retain shortfin mako under very limited circumstances.

DRAFT RECOMMENDATION BY ICCAT TO ESTABLISH A REBUILDING PROGRAM FOR NORTH ATLANTIC SHORTFIN MAKO SHARKS CAUGHT IN ASSOCIATION WITH ICCAT FISHERIES

(a new proposal, previously discussed but not adopted as PA4-814/2019)

(Proposal by the United States)

RECOGNIZING that shortfin mako sharks are primarily caught in association with ICCAT fisheries and that the Commission has adopted management measures for shark species considered vulnerable to overfishing in ICCAT fisheries;

NOTING that the 2017 stock assessment found that there is a 90% probability of the North Atlantic shortfin mako stock being overfished and experiencing overfishing;

RECALLING measures adopted by the Commission to improve the status of shortfin mako sharks, including the *Recommendation by ICCAT on the Conservation of North Atlantic Stock of Shortfin Mako Caught in Association with ICCAT Fisheries* [Recs. 17-08 and 19-06], which implemented measures aimed at ending overfishing of the North Atlantic shortfin mako stock with a high probability, as the first step in the development of a rebuilding program;

CONSIDERING that the *Recommendation by ICCAT on the Principles of Decision Making for ICCAT Conservation and Management Measures* [Rec. 11-13] calls for the Commission to immediately adopt management measures designed to result in a high probability of ending overfishing in as short a period as possible and adopt a plan to rebuild the stock taking into account, *inter alia*, the biology of the stock and SCRS advice;

FURTHER NOTING that the Kobe II Strategy Matrix produced by the SCRS during a stock assessment update in 2019 indicates that a TAC of 700 t has a 69% probability of ending overfishing in 2020, while a TAC of 500 t has a 52% probability of rebuilding the stock by 2070;

ACKNOWLEDGING the need to establish an effective rebuilding program for North Atlantic shortfin mako, including immediate action to reduce fishing mortality to end overfishing;

UNDERSTANDING that the SCRS has further advised that to accelerate the rate of recovery and to increase the probability of success in rebuilding the stock, the Commission adopt a non-retention policy without exception;

KEENLY AWARE, however, that a reduction in fishing mortality, including dead discards, beyond what could be expected from a non-retention policy, is needed to increase the probability of successfully rebuilding North Atlantic shortfin mako shark;

ALSO RECOGNIZING SCRS advice on the need for Contracting Parties and Cooperating non-Contracting Parties, Entities, or Fishing Entities (hereinafter referred to as CPCs) to strengthen their monitoring and data collection efforts in support of future stock assessments, including but not limited to total estimated dead discards and the estimation of CPUE using observer data;

RESPONDING to the need for additional efforts to reduce the at-vessel mortality and increase post-release survivability of shortfin mako sharks that are incidentally hooked*;* and

FURTHER RESPONDING to the need for additional research on methods to reduce shortfin mako interactions in ICCAT fisheries, including identifying areas with high interactions.

THE INTERNATIONAL COMMISSION FOR THE
CONSERVATION OF ATLANTIC TUNAS (ICCAT) RECOMMENDS THAT:

1. A rebuilding program shall be implemented to end overfishing immediately and rebuild North Atlantic shortfin mako (*Isurus oxyrinchus*) to biomass levels sufficient to support maximum sustainable yield (MSY) by 2070, a time frame which takes into account the biology of the stock. The provisions of this Recommendation apply to North Atlantic shortfin mako sharks caught in association with ICCAT fisheries.

2. CPCs shall implement measures for North Atlantic shortfin mako to end overfishing and support rebuilding through an annual total allowable catch (TAC) of 700 t in 2021 with a reduction to a TAC level of no more than 500 t by 2022.

3. In order to achieve the reductions in total mortality established in paragraph 2, each CPC shall take measures so that its annual catch of North Atlantic shortfin mako is reduced as follows:

   - In 2021, by at least 80% from the average of the CPC's 2013-2015 levels, as reflected in the 2020 SCRS report, and,

   - by 2022, by at least 85% from those 2013-2015 levels.

4. CPCs shall require vessels flying their flag to promptly release North Atlantic shortfin mako in a manner that causes the least harm to the shark, while giving due consideration to the safety of the crew members.

5. Notwithstanding paragraph 4 above, and provided that the CPC achieves the annual reductions in catches as required in paragraph 3, CPCs may authorize their vessels to retain onboard, transship and land North Atlantic shortfin mako if one or more of the following conditions is met:

   a) the shark is dead at haulback, and the vessel has an observer or electronic monitoring system on board to verify the condition of the shark; or

   b) a CPC requires a minimum size of at least 180 cm fork length for males and of at least 210 cm fork length for females; or

   c) a CPC prohibits North Atlantic shortfin mako fisheries and requires that all dead fish be landed and that the fishermen shall not draw any profit from such fish.

6. CPCs shall report their number of dead discards and live releases of North Atlantic shortfin mako, estimated based on the total fishing effort of their relevant fleets, using data collected through observer programs or other relevant data collection programs.

7. CPCs should encourage the collection of biological samples, such as muscular tissues (for stock identification), reproductive organ with embryo (for identification of pregnancy cycle and reproductive output) and vertebrae (for estimation of growth curve), including through their observer programs. The biological samples collected by the observer should be analyzed by CPCs concerned and the result should be submitted to the SCRS by CPCs concerned.

8. To reduce North Atlantic shortfin mako mortality at the vessel and post-release, CPCs shall require that vessels in their longline fisheries use nylon monofilament leaders and large circle hooks, which are fishing hooks with the point turned perpendicularly back to the shank to form a generally circular or oval shape, and the point of the hook is not offset more than 10 degrees.

9. CPCs shall require that owners/operators/crew of vessels flying their flag take all reasonable steps to ensure the safe release of sharks by following the Best Practices for Safe Handling and Release of Sharks contained in the Appendix to this recommendation.

10. In 2023, the SCRS shall review and advise on the effectiveness of the measures contained in this recommendation and, as appropriate, its predecessors (Rec. 17-08 and Rec. 19-06), in particular with regard to stopping overfishing and initial rebuilding progress, and also provide the Commission with additional scientific information and advice on other measures, which shall include:

    a) a spatial/temporal analysis of North Atlantic shortfin mako catches in order to identify areas with high interactions;

    b) available information on growth and size at maturity by sex as well as any biologically important areas (e.g. pupping grounds); and

    c) the effectiveness of gear modifications as mitigation measures to reduce shortfin mako shark mortality.

11. Taking into account the information and advice provided by SCRS pursuant to paragraph 10, the Commission shall, in 2023 review the effectiveness of this rebuilding program, in particular in achieving the objectives of paragraphs 2 and 3, and, as needed, adopt additional measures to further ensure rebuilding.

12. This Recommendation repeals and replaces the *Recommendation by ICCAT on the Conservation of North Atlantic Stock of Shortfin Mako Caught in Association with ICCAT Fisheries* [Rec. 19-06].

Appendix

Best practices for the safe handling and release of sharks[1]

The following are best handling practices of sharks for both longline and purse seine fisheries. These best practices are appropriate for live shortfin mako sharks or live individuals of other shark species to be released under no-retention policies, as well as any live sharks of any species to be released voluntarily. For all gear types, keep animals in the water.

Safety First: These best practices should be considered in light of safety and practicability for crew. Crew safety should always come first. Crew should wear suitable gloves and avoid working around the jaws of sharks.

In longline fisheries, DO:

- Release all sharks while they are still in the water.
- If possible, use a dehooker to remove the hook or cut the hook with bolt cutters. If it is not possible to remove the hook, use a long-handled line cutter to cut the gear as close to the hook as possible (ideally leaving less than 0.5 meters of line attached to the animal).

In purse seine fisheries, DO:[2]

If in purse seine net:

- Release sharks while they are still free-swimming whenever possible (e.g. back down procedure, submerging corks, cutting net)

If in brail or on deck:

- For sharks that are too large to be lifted safely by hand out of the brailer, it is preferable they are released using a purpose-built large-mesh cargo net or canvas sling or similar device. If the vessel layout allows, these sharks could also be released by emptying the brail directly on a ramp held up at an angle that connects to an opening on the top deck railing, without need to be lifted or handled by the crew.
- Generally, small sharks are fragile and need to be handled very carefully. If this can be done safely, it is best to handle and release them with two people, or one person using both hands.
- When entangled in netting, if safe to do so carefully cut the net away from the animal and release to the sea as quickly as possible with no netting attached.

In longline fisheries and purse seine fisheries, DO NOT:

- Strike a shark against any surface to remove the animal from the line.
- Attempt to dislodge a hook that is deeply ingested and not visible.
- Try to remove a hook by pulling sharply on the branchline.
- Cut the tail or any other body part.
- Cut or punch holes through the shark's body.
- Gaff or kick a shark, and do not insert hands into the gill slits.
- Wait until hauling is finished to release sharks. Release them from the gear into the water as soon as possible.

Additional recommendation:

Tools should be prepared in advance (e.g., canvas or net slings or stretchers for carrying or lifting, large mesh net or grid to cover hatches/hoppers in purse seine fisheries, long handled cutters and de-hookers in longline fisheries).

[1] Consistent with Western and Central Pacific Fisheries Commissions (WCPFC) best handling practices, 2018. Best practices apply to sharks other than whale sharks and mantas/mobulids.

[2] For further information, see Annex 3 to Chapter 4 of the ICCAT Manual, *Good practices to reduce the mortality of sharks and rays caught incidentally by tropical tuna purse seiners*.