

Briefing note: European call for immediate implementation of a ‘No retention’ policy and effective bycatch mitigation measures for shortfin mako sharks (*Isurus oxyrinchus*) in the Atlantic

Summary: Urgent action is requested from the EU Commission and ICCAT to:

- Immediately **prohibit ALL shortfin mako retentions** in the Atlantic
- Ensure specific **scientific advice for minimising incidental mortality** is developed and implemented as a matter of urgency

Status of and outlook for shortfin mako sharks in the Atlantic

Shortfin mako sharks (Fig.1) were [classified by IUCN as ‘Endangered’](#) in 2019 and were listed in the same year on Appendix II under the Convention on International Trade in Endangered Species (CITES), as proposed by 27 countries and the EU.

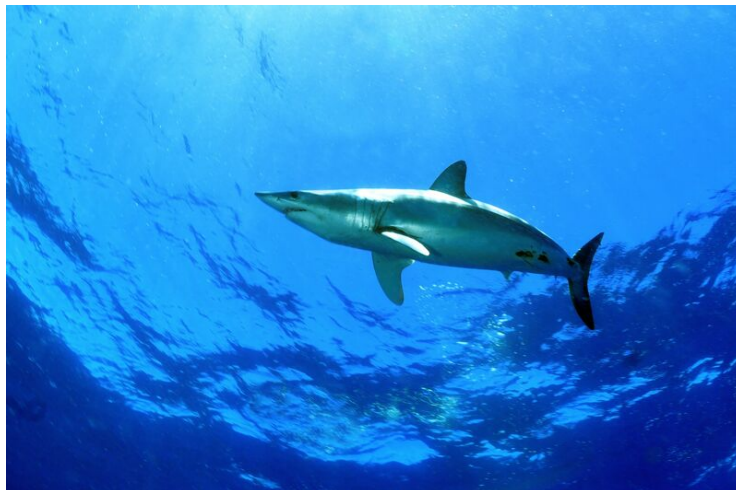


Figure 1: Shortfin mako shark (c) Heinz Topercer

Mako sharks in the North Atlantic are in a **state of emergency**, with the science committee of the International Commission for the Conservation of Atlantic Tunas (ICCAT) noting that it **could take around 25 years to rebuild stocks even if fishing mortality rates were cut to zero**. In the South Atlantic, the situation may appear less dire but is on a similar trajectory and will soon mirror the North if catches are allowed to continue.

ICCAT scientists have reported serious North Atlantic shortfin mako declines and have recommended a ban on retention, in addition to other measures, since 2017. Action is now long overdue.

- At the November 2019 ICCAT meeting, Canada joined Senegal and 14 other countries (Gambia, Gabon, Panama, Liberia, Guatemala, Angola, El Salvador, Egypt, Norway, Guinea Bissau, Uruguay, Japan, China and Taiwan) in urging the international adoption of scientific advice for makos. Competing, lenient proposals from the US and EU prevented consensus, thereby postponing decisions on international remedies to 2020.
- In April 2020, Canada announced a ban on the retention (dead or alive) of North Atlantic shortfin mako in any fisheries that interact with the species. This will be reflected in licence conditions for large pelagic fisheries beginning from the 2020/2021 fishing season.
- On 27th April 2020, the EU Commission recommended (A9-0089/2020) the adoption of the draft Council decision on the conclusion, on behalf of the European Union, of the protocol to amend the International Convention for the Conservation of Atlantic Tunas (13447/2019 – C9-0187/2019 – 2019/0225(NLE)) to include the management of targeted shark fisheries and to adopt a two-thirds majority of members for decision-making.

It could make a real difference for the protection of shortfin mako sharks in Atlantic waters if the EU Commission follows scientific advice and calls from NGOs to implement strong conservation measures.

Catch data in ICCAT waters

Mako sharks are fished for food, fins and sport, with no international catch limitations in place.

The total landings reported by ICCAT for 2017 and 2018 were 5902 t and 5547 t, respectively, which is about the same as annual catch quantities for 1994. However, as there has never been a quota or Total Allowable Catch (TAC) for mako sharks in place, annual landings have been almost doubled in some of the years between 1994 and 2018.

In a [2019 report](#), the ICCAT Scientific Committee noted that North Atlantic catches had increased from 2964 t in 2015 to 3347 t in 2016 and then decreased to 3116 t in 2017 and further to 2388 t in 2018. This data demonstrates the fluctuation of the catches at a rather high level, but it is unclear what the reason for the decline over the last two years has been.

The countries which reported landings of 10 t or more of mako shark in 2017 and / or in 2018 are listed below (Table 1). For those countries that fish in both the North and South Atlantic, catch data are also depicted as a total. The data shows that while there have been somewhat lower catches in some countries, catches have considerably increased (or, at least, reporting has improved) in other countries, such as Morocco and Namibia.

Table 1: Landings per country (red indicates landings around or above 100 t and yellow colouring indicates landings below 100 t per year. Canada is shaded grey as it has announced to ban retention of mako sharks from 2021 onwards.)

Mako shark landings in metric tonnes from						
North Atlantic			Total	South Atlantic		
Country	2017	2018	2018	2018	2017	Country
Spain	1784	1165	2269	1044	1049	Spain
Portugal	276	272	572	300	503	Portugal
Morocco	450	595		980	194	Namibia
USA	299	165		399	275	Brazil
Senegal	68	68	72	4	39	Senegal
Canada	109	53		244	305	South Africa
Japan	89	20	113	93	96	Japan
Belize	9	12	27	15	34	Belize
				64	85	Chinese Taipei
				4	161	Ivory Coast
				0	31	Angola

EU fishing vessels are responsible for 60% of North Atlantic and about 50% of all Atlantic shortfin mako catches reported for 2018.

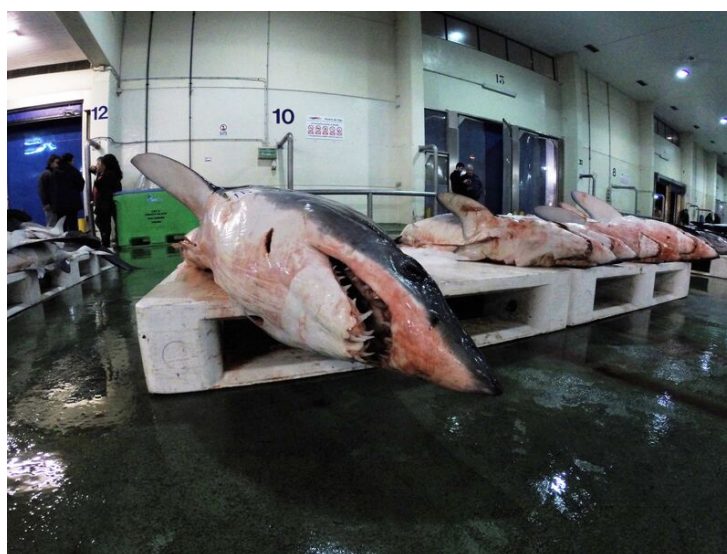


Figure 2: Mako sharks, Vigo fish market (c) Wolfram Koch

Overfished stock continues to experience overfishing

Mako sharks are slow growing with vulnerable biological characteristics, meaning rebuilding of the population will take decades. A 2019 report by ICCAT's scientific committee warned that F (fishing mortality) was overwhelmingly above F_{MSY} (Maximum Sustainable Yield), with a combined 90% probability from all the models of **being in an overfished state and experiencing overfishing**.

The Committee conducted new projections using two Stock Synthesis model scenarios that incorporated important aspects of shortfin mako biology. This was a feature that was not possible with the production model projections developed in the 2017 assessment (Anon., 2008a) meaning the Committee considers the new projections as a better representation of the stock dynamics.

The projection resulting from the combined models showed that:

- **The current catch will not allow the stock to rebuild by 2070 and overfishing will continue.**
- A TAC (Total Allowable Catch) of 500 t, including dead discards, has only a 52% probability of rebuilding the stock in 2070.
- To be in the green quadrant of the Kobe plot (indicating a stock which is not overfished) with at least 60% probability by 2070, TAC has to be 300 t or less.
- A zero TAC will allow the stock to be rebuilt and without overfishing by 2045 with a 53% probability. **That is – even if we stop catching shortfin mako sharks now, scientists predict only a 50:50 chance of rebuilding the population by 2045.**
- Regardless of the TAC (including a TAC of 0 t), the spawning stock fecundity will continue to decline until 2035 before any increases can occur, owing to the time it takes juveniles to reach maturity.
- The biomass that supports MSY (Maximum Sustainable Yield) is only reached by 2070 with at least 60% probability for the fishing mortality equal zero scenario.

The ICCAT scientific committee also indicated that additional measures such as reduction of soak time (that is, the time fishing gear remains in the water), time-area closures (temporary/seasonal restrictions on some fishing activity), safe handling and best practices for the release of live specimens (since post-release survival can reach 77%) can potentially further reduce incidental mortality.

ICCAT's scientific committee recommended that, given the vulnerable biological characteristics of this stock and the pessimistic predictions, to accelerate the rate of recovery and increase probability of success, the Commission **should adopt a non-retention policy without exception in the North Atlantic**.

Given that fishery development in the South Atlantic predictably follows that in the North and that the biological characteristics of the stock are similar, it was concluded that **there is a significant risk that this stock could follow a similar trajectory** to that of the North Atlantic stock. If this stock declines it would, like the North Atlantic stock, require a long time for rebuilding, even after significant catch reductions. To avoid this situation, and considering the uncertainty in the stock status, the committee recommended that, at a minimum, catches should not exceed the minimum catch in the last five years of the assessment (2011-2015), which was 2001 t.

What needs to be done?

In order to address the severity of the shortfin mako shark population collapse in the North Atlantic and the imminent risk of a similar trajectory in the South Atlantic, ICCAT must immediately prohibit ALL shortfin mako shark retentions in the Atlantic alongside measures to reduce incidental mortality.

Conclusions

Scientific advice shows that we can still change the fate of mako sharks, but any further delays would risk complete population collapse.

Therefore, you are urged to join a call to the EU Commission and ICCAT to:

- Immediately **prohibit ALL shortfin mako retentions** in the Atlantic
- Ensure specific **scientific advice for minimising incidental mortality** is developed and implemented as a matter of urgency

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