

Commission Internationale pour la Conservation des Thonides de l'Atlantique

Comisión Internacional para la Conservación del Atún Atlántico

Madrid, 15th of September 2022

SUBJECT: CITES PROPOSAL FOR THE INCLUSION OF CARCHARHINIDAE ON CITES APPENDIX 2

Ms. Ivonne Higuero, CITES Secretary General

The ICCAT Secretariat was informed by the CITES Secretariat about the proposal to amend Appendices II to include a proposal that would include Carcharhinidae species on the 29th of June 2022. In this correspondence, you indicated that CITES would also consult inter-governmental bodies having a function in relation to those species especially with a view to obtaining scientific data these bodies may be able to provide and to ensuring co-ordination with any conservation measures enforced by such bodies. The ICCAT Secretariat thanks CITES for their communication to this effect and for the opportunity to engage with CITES in this consultation.

In response to your request to obtain scientific data that we may be able to provide with an aim to ensuring co-ordination with any conservation measures enforced by intergovernmental bodies, we have prepared the attached document that includes ICCAT's available catch data for these species, references to assessments, other scientific activities pertinent to them, and a summary of ICCAT's applicable management measures.

Please accept the assurances of my highest consideration.

Executive Secretary



Camille Jean Pierre Manel

DISTRIBUTION:

-	Commission Officers:
	Commission Chair:
	First Vice Chair:
	Second Vice Chair:

SCRS Chair:

R. Delgado S. Depypere Z. Driouich G. Melvin

COC Chair: PWG Chair: STACFAD Chair: SCRS Vice Chair D. Campbell N. Ansell H.A Elekon R. Coelho

Head Delegates, Head Scientists
 Cooperating Parties, Entities, or Fishing Entities

Attachment: Notes on the Inclusion of the Carcharhinidae Sharks in Appendix II of CITES in Relation to the Stock Status, and Scientific Advice Provided To the Commission, and Relevant Shark Management Recommendations



COMMISSION INTERNATIONALE POUR LA CONSERVATION DES THONIDES DE L'ATLANTIQUE

COMISION INTERNACIONAL PARA LA CONSERVACION DEL ATUN ATLANTICO

NOTES ON THE INCLUSION OF THE CARCHARHINIDAE SHARKS IN APPENDIX II OF CITES IN RELATION TO THE STOCK STATUS, SCIENTIFIC ADVICE PROVIDED TO THE COMMISSION, AND RELEVANT SHARK MANAGEMENT RECOMMENDATIONS

by

The Chair and Vice-chair of ICCAT's Standing Committee of Research and Statistics (SCRS), Co-convener of the Sub-committee on Ecosystems and Bycatch, the Shark Species Group Rapporteur, and the ICCAT Secretariat

Below we provide comments about the inclusion of the family Carcharhinidae on CITES Appendix II from the perspective of the scientific work conducted and advice provided by the Standing Committee of Research and Statistics (SCRS) on Atlantic stocks to the International Commission for the Conservation of Atlantic Tunas (ICCAT).

Background Information

- (1) ICCAT is the tuna-RFMO (Regional Fisheries Management Organization) that is responsible for the management and conservation of tuna and tuna-like species in the Atlantic Ocean and adjacent seas. Under the new ICCAT Convention, not yet in force, the mandate of ICCAT will include migratory and oceanic shark species. Since 1994, ICCAT taken on this role to ensure the conservation and management shark species associated with its fisheries, given that no RFMO manages such species in the Atlantic Ocean. The ICCAT Contracting Parties undertake to collaborate with each other with a view to the adoption of suitable effective measures to ensure the application of the provisions of this Convention and in particular to set up a system of international enforcement to be applied to the Convention area. The ICCAT measures are considered the minimum; Contracting and Cooperating Parties may apply more stringent measures. ICCAT has 13 active binding management measures that are in effect specifically for shark species (see Appendix A), that include among other things catch limits for shark species (see Recs. 21-10 and 21-11) and the requirement for CPCs to take the necessary measures for their fisheries to fully utilize their entire catches of sharks (Rec. 04-10). Full utilization is defined as retention by the fishing vessel of all parts of the shark excepting head, guts and skins, to the point of first landing.
- (2) Within ICCAT, the Standing Committee on Research and Statistics (SCRS) is the scientific body responsible for providing scientific advice to the Commission. ICCAT has a specific Species Group dedicated exclusively to sharks that regularly carries out stock assessments and provides advice for pelagic, oceanic and highly migratory shark species. ICCAT also has a Sub-committee on Ecosystems and Bycatch that deals with Ecosystem Based Fisheries Management and provides advice for mitigation of the impact of ICCAT fisheries on vulnerable taxa, including sharks. ICCAT established a dedicated Sharks Research and Data Collection Programme in 2014, which has since been funded annually. The Programme focuses on all pelagic shark species. Since its inception multiple research projects have been carried out, focusing on issues such as stock structure (using satellite tagging and population genetics), population dynamics (ageing and reproductive biology), movement patterns, habitat use, and post-release mortality (also using satellite telemetry). All these studies and results have contributed to improve understanding of the dynamics of shark species in the Atlantic, and to provide improved scientific advice to the Commission with regards to the status of shark stocks and management and conservation measures.

Data and Conservation Measures Enforced by ICCAT



COMMISSION INTERNATIONALE POUR LA CONSERVATION DES THONIDES DE L'ATLANTIQUE

- (3) In addition to the regularly conducted stock assessment for porbeagle shark (*Lamnus nasus*), shortfin mako shark (*Isurus oxyrinchus*), and blue shark (*Prionace glauca*), in 2008 ICCAT conducted an <u>Ecological Risk</u> <u>Assessment</u> to define shark species at potential risks to sharks species in ICCAT waters, and ICCAT also developed an <u>Identification Guide</u> for *Carcharhinus* species, and other sharks so that its contracting parties could improve their shark statistics.
- (4) Recommendation <u>19-01</u> defines 24 species that are the responsibility of ICCAT. Appendix B defines the list of species for which ICCAT keeps statistics. This includes the major shark species (Porbeagle shark, shortfin mako shark, blue shark), other species that are the responsibility of ICCAT, and associated species.
- (5) Of the specific species listed in the section A(i) and (ii) of the listing proposal, ICCAT has received reports of catches only for *Carcharhinus obscurus, C. plumbeus* and *C. signatus* (see **Appendix C**).
- (6) Once the species list is expanded to include all other species in the family Carcharhinidae (section A (iii) of the proposal) then all species from the genera: *Carcharhinus, Isogomphodon, Loxodon, Nasolamia, Lamiopsis, Negaprion, Prionace, Rhizoprionodon, Scoliodon, Triaenodon* are included. It is worth to mention that there are capture records in ICCAT of species of the Genus *Glyphis, Lamiopsis, Loxodon, Scoliodon* nor *Triaenodon* in the Atlantic Ocean. In this case, 16 species have been reported in ICCAT fisheries (**Table C1** and **Figure C1**). For *C. leucas, C. acronotus, C. altimus, C. brevipinna, C. isodon, Negaprion brevirostris, Rhizoprionodon terraenovae, C. brachyurus, C. galapagensis* in the last ten years there have been no catches in ICCAT fisheries (see **Appendix C**). Other than for *P. glauca*, for which there is a commercial fishery (see below), *C. falciformis* and *C. longimanus*, there have been no reported catches of other species in the last 5 years (**Table C1**).
- (7) ICCAT has commercial fisheries for the blue shark *P. glauca*. The most-recent stock assessment conducted by ICCAT for blue shark took place in 2015 using catch data up to 2013. The range of stock assessment scenarios explored using a Bayesian Surplus Production (BSP) model showed that the stock was not overfished (B2013/B_{MSY}=1.50 to 1.96) and that overfishing was not occurring (F2013/F_{MSY}=0.04 to 0.50). While age-structured assessment model scenarios varied more widely, they still predicted that the stock was not overfished (SSF2013/SSF_{MSY}=1.35 to 3.45) and that overfishing was not occurring (F2013/F_{MSY}=0.15 to 0.75). For the South Atlantic stock, scenarios with the BSP model estimated that the stock was not overfished (B2013/B_{MSY}=1.96 to 2.03) and that overfishing was not occurring (F2013/F_{MSY}=0.01 to 0.11). The status of the stocks showed that blue sharks are managed sustainably in ICCAT waters. The SCRS has scheduled a new assessment for the North and South Atlantic stocks in 2023.
- (8) With respect to the look-alike issue identified in section A (iii) of the listing proposal, ICCAT requires; i) CPCs take the necessary measures to require that their fishermen fully utilize their entire catches of sharks and fishing vessels are required to retain all parts of the shark including fins and carcasses to the point of first landing (Rec. 04-10) (similar measures are in place in other RFMOs) and ii) Rec. 11-10 requires that CPCs collect data on dead and live discards in their domestic observer and logbook programs under the Recommendation by ICCAT on Information Collection and Harmonization of Data on By-catch and Discards in ICCAT Fisheries. Rec. 04-10 reduces the problems of identifying sharks by their fins alone and ii) Rec. 11-10 ensures that difficult-to-identify species are also monitored by trained observers thus allowing for the proper assessment and management of their catches. Moreover, according to the shark species identification tool iSharkFin, developed by FAO, fins of the 19 species do not morphologically resemble those of blue shark. Given the requirement to land whole sharks, the presence of onboard observers, and the ease of differentiating blue shark fins from other Carcharhinid shark fins, the 19 species are distinguishable even in a hypothetical case where they are caught together with blue shark.



COMMISSION INTERNATIONALE POUR LA CONSERVATION DES THONIDES DE L'ATLANTIQUE

- (9) Catch records show that in practice, there are small or non-existent bycatch for the species proposed in the CITES proposal in the ICCAT area. Furthermore, catches of target fishery for *P. glauca* are not positively correlated with catches of other Carcharhinid sharks (see Figure C3).
- (10) In summary, listing of blue shark (*P. glauca*) in CITES Appendix II will not contribute to the conservation of the 19 species for the following reasons:
 - (a) Most of the 19 species concerned are associated to coastal areas and the continental shelf, whose habitat does not overlap with that of blue shark. Blue shark is mainly harvested offshore in controlled fisheries. Therefore, it is unlikely that blue sharks are harvested and landed together with the 19 species (see the evidence for the absence of significant correlation above).
 - (b) Shark species can be identified when they are landed because in ICCAT, fishing vessels are required to retain all parts of the shark including fins and carcasses to the point of first landing. Blue shark and its parts (carcasses, fins) are clearly distinguishable from other shark species, so they are not confused with other species. Moreover, there are onboard observers to accurately identify the catch, and finally, according to the shark species identification tool <u>iSharkFin</u> developed by FAO, fins of the 19 species do not morphologically resemble those of blue shark.
 - (c) The 19 species are distinguishable from blue shark in trade because shark products (fins and meat) are internationally traded separately by species, portions, and products that have different prices.



COMMISSION INTERNATIONALE POUR LA CONSERVATION DES THONIDES DE L'ATLANTIQUE

COMISION INTERNACIONAL PARA LA CONSERVACION DEL ATUN ATLANTICO

Appendix A

ICCAT CONSERVATION AND MANAGEMENT MEASURES ADOPTED IN RELATION TO CARCHARHINIDAE AND SPHYRNIDAE

Below is a list of current active Recommendations (binding) and Resolutions (non-binding) by ICCAT:

- [95-02] Resolution by ICCAT on cooperation with the Food and Agriculture Organization of the United Nations (FAO) with regard to study on the status of stocks and bycatches of shark species
- [03-10] <u>Resolution by ICCAT on the shark fishery</u>
- [04-10] <u>Recommendation by ICCAT concerning the conservation of sharks caught in association with</u> <u>fisheries managed by ICCAT</u>
- [07-06] <u>Supplemental Recommendation by ICCAT concerning sharks</u>
- [10-07] Recommendation by ICCAT on the conservation of oceanic whitetip sharks caught in association with fisheries in the ICCAT Convention area
- [10-08] Recommendation by ICCAT on hammerhead sharks (family *Sphyrnidae*) caught in association with fisheries managed by ICCAT
- [11-08] Recommendation by ICCAT on the conservation of silky sharks caught in association with ICCAT fisheries
- [13-10] <u>Recommendation by ICCAT on biological sampling of prohibited shark species by scientific observers</u>
- [18-06] Recommendation by ICCAT to replace Recommendation 16-13 on improvement of compliance review of conservation and management measures regarding sharks caught in association with ICCAT fisheries
- [19-01]Recommendation By ICCAT on Fishes Considered to be Tuna and Tuna-Like Species Or Oceanic,
Pelagic, and Highly Migratory Elasmobranchs
- [19-07]Recommendation by ICCAT amending the Recommendation 16-12 on management measures byICCAT amending the Recommendation 16-12 on management measures for the conservation of the
North Atlantic blue shark caught in association with ICCAT fisheries
- [19-08] Recommendation by ICCAT on management measures for the conservation of South Atlantic blue shark caught in association with ICCAT fisheries
- [21-10] Recommendation by ICCAT amending Recommendation 19-07 amending the Recommendation 16-12 on management measures for the conservation of the North Atlantic blue shark caught in association with ICCAT fisheries
- [21-11] Recommendation by ICCAT amending Recommendation 19-08 on management measures for the conservation of South Atlantic blue shark caught in association with ICCAT fisheries



COMMISSION INTERNATIONALE POUR LA CONSERVATION DES THONIDES DE L'ATLANTIQUE

COMISION INTERNACIONAL PARA LA CONSERVACION DEL ATUN ATLANTICO

Appendix B Table B1 Summary of shark species on ICCAT species list. Nei indicated non-identified

CODE	Genus, species	Common Name (English)	Category	Taxon
SMA	Isurus oxyrinchus	Shortfin mako	4-Sharks (major sp.)	1-Species
POR	Lamna nasus	Porbeagle	4-Sharks (major sp.)	1-Species
BSH	Prionace glauca	Blue shark	4-Sharks (major sp.)	1-Species
ALV	Alopias vulpinus	Thresher	5-Sharks (other sp.)	1-Species
BSK	Cetorhinus maximus	Basking shark	5-Sharks (other sp.)	1-Species
BTH	Alopias superciliosus	Bigeye thresher	5-Sharks (other sp.)	1-Species
CCG	Carcharhinus galapagensis	Galapagos shark	5-Sharks (other sp.)	1-Species
CYW	Centroscymnus owstonii	Roughskin dogfish	5-Sharks (other sp.)	1-Species
ETU	Etmopterus bullisi	Lined lanternshark	5-Sharks (other sp.)	1-Species
EUP	Euprotomicrus bispinatus	pygmy shark	5-Sharks (other sp.)	1-Species
EUZ	Euprotomicroides zantedeschia	taillight shark	5-Sharks (other sp.)	1-Species
FAL	Carcharhinus falciformis	Silky shark	5-Sharks (other sp.)	1-Species
HXN	Hexanchus nakamurai	bigeye sixgill shark	5-Sharks (other sp.)	1-Species
ISB	Isistius brasiliensis	Cookie cutter shark	5-Sharks (other sp.)	1-Species
ISP	Isistius plutodus	largetooth cookiecutter shark	5-Sharks (other sp.)	1-Species
LMA	Isurus paucus	Longfin mako	5-Sharks (other sp.)	1-Species
LMO	Mitsukurina owstoni	goblin shark	5-Sharks (other sp.)	1-Species
LMP	Megachasma pelagios	Megamouth shark	5-Sharks (other sp.)	1-Species
OCS	Carcharhinus longimanus	Oceanic whitetip shark	5-Sharks (other sp.)	1-Species
PLS	Pteroplatytrygon violacea	Pelagic stingray	5-Sharks (other sp.)	1-Species
PSK	Pseudocarcharias kamoharai	Crocodile shark	5-Sharks (other sp.)	1-Species
QUL	Squaliolus laticaudus	Spined pygmy shark	5-Sharks (other sp.)	1-Species
RHN	Rhincodon typus	Whale shark	5-Sharks (other sp.)	1-Species
RMA	Manta alfredi	Inshore manta ray	5-Sharks (other sp.)	1-Species
RMB	Manta birostris	Giant manta	5-Sharks (other sp.)	1-Species
RMH	Mobula hypostoma	Lesser devil ray	5-Sharks (other sp.)	1-Species
RMJ	Mobula japonica	Spinetail mobula	5-Sharks (other sp.)	1-Species
RMM	Mobula mobular	Devil fish	5-Sharks (other sp.)	1-Species
RMN	Mobula rochebrunei	Lesser Guinean devil ray	5-Sharks (other sp.)	1-Species
RMO	Mobula thurstoni	Smoothtail mobula	5-Sharks (other sp.)	1-Species
RMT	Mobula tarapacana	Chilean devil ray	5-Sharks (other sp.)	1-Species
SDH	Deania histricosa	Rough longnose dogfish	5-Sharks (other sp.)	1-Species
SDU	Deania profundorum	Arrowhead dogfish	5-Sharks (other sp.)	1-Species
SPK	Sphyrna mokarran	Great hammerhead	5-Sharks (other sp.)	1-Species
SPL	Sphyrna lewini	Scalloped hammerhead	5-Sharks (other sp.)	1-Species
SPZ	Sphyrna zygaena	Smooth hammerhead	5-Sharks (other sp.)	1-Species
WSH	Carcharodon carcharias	Great white shark	5-Sharks (other sp.)	1-Species
SPN	Sphyrna spp	Hammerhead sharks nei	5-Sharks (other sp.)	2-Genus
THR	Alopias spp	Thresher sharks nei	5-Sharks (other sp.)	2-Genus
MAN	Mobulidae	Mantas, devil rays nei	5-Sharks (other sp.)	4-Family
MSK	Lamnidae	Mackerel sharks, porbeagles nei	5-Sharks (other sp.)	4-Family
RSK	Carcharhinidae	Requiem sharks nei	5-Sharks (other sp.)	4-Family
SPY	Sphyrnidae	Hammerhead sharks, etc. nei	5-Sharks (other sp.)	4-Family
STT	Dasyatidae	Stingrays, butterfly rays nei	5-Sharks (other sp.)	4-Family



COMMISSION INTERNATIONALE POUR LA CONSERVATION DES THONIDES DE L'ATLANTIQUE

COMISION INTERNACIONAL PARA LA CONSERVACION DEL ATUN ATLANTICO

Appendix C

Table C1. Summary of Atlantic-wide shark catches (in tons) in ICCAT fisheries for species of the Genus

 Carcharhinus, Negaprion, Prionace and *Rhizoprionodon*.

YearC	Carcharhinus falciformis	Carcharhinus limbatus	Carcharhinus longimanus	Carcharhinus obscurus	Carcharhinus plumbeus	Carcharhinus signatus	Prionace glauca	Carcharhinus leucas	Carcharhinus acronotus	Carcharhinus altimus	Carcharhinus brevipinna	Carcharhinus isodon	Negaprion brevirostris	Rhizoprionodon terraenovae	Carcharhinus brachyurus	Carcharhinus galapagensis
2000	93.5	18.5	4.1	48.3	174.3	91.0	36201	NA	NA	NA	NA	NA	NA	NA	NA	NA
2001	39.8	9.5	9.3	1.1	180.9	30.2	30458	0.4	NA	NA	NA	NA	NA	NA	NA	NA
2002	30.0	21.0	2.5	2.4	106.6	9.1	26419	NA	NA	NA	NA	NA	NA	NA	NA	NA
2003	6.2	14.4	3.7	0.1	119.9	0.2	31030	0.4	NA	NA	NA	NA	NA	NA	NA	NA
2004	8.2	201.5	1.6	0.0	49.0	0.1	29885	137.3	49.3	42.5	18.6	0.1	51.3	143.5	NA	NA
2005	13.5	6.2	3.4	NA	60.1	NA	30661	0.2	NA	NA	NA	NA	NA	NA	NA	NA
2006	1.6	9.2	0.7	NA	36.8	NA	33283	0.1	NA	NA	NA	NA	NA	NA	NA	NA
2007	214.5	1.1	21.8	19.2	11.0	12.7	38628	NA	NA	0.0	NA	NA	NA	NA	0.0	0.0
2008	26.4	0.0	5.9	1.8	2.5	41.9	45895	0.5	NA	0.1	NA	NA	NA	NA	0.6	NA
2009	67.4	0.3	49.8	12.8	22.2	35.2	52270	0.2	NA	0.0	NA	NA	0.1	NA	0.4	1.2
2010	1.1	6.6	117.0	0.0	5.2	47.3	57807	NA	NA	0.2	NA	NA	NA	NA	0.0	0.0
2011	103.8	0.8	4.0	8.2	8.4	11.9	62107	NA	NA	NA	NA	NA	NA	NA	NA	NA
2012	39.6	0.0	3.0	6.9	4.2	31.1	54869	NA	NA	NA	NA	NA	NA	NA	NA	NA
2013	18.8	0.0	1.0	2.5	5.8	21.3	48599	NA	NA	NA	NA	NA	NA	NA	NA	NA
2014	24.6	0.0	0.0	3.7	0.0	0.0	51854	NA	NA	0.0	NA	NA	NA	NA	0.0	0.0
2015	22.4	0.0	0.0	0.0	0.0	0.0	52894	NA	NA	0.0	NA	NA	NA	NA	0.0	0.0
2016	11.3	NA	1.4	NA	NA	NA	58973	NA	NA	NA	NA	NA	NA	NA	NA	NA
2017	90.0	NA	1.9	NA	NA	NA	58753	NA	NA	NA	NA	NA	NA	NA	NA	NA
2018	23.0	0.0	1.4	0.0	0.0	0.0	56047	NA	NA	0.0	NA	NA	NA	NA	0.0	0.0
2019	7.1	0.0	1.3	0.0	0.0	0.0	52470	NA	NA	0.0	NA	NA	NA	NA	0.0	0.0
2020	15.4	0.0	0.3	0.0	0.0	0.0	42690	NA	NA	0.0	NA	NA	NA	NA	0.0	0.0

The annual catch of blue shark by ICCAT CPCs is shown in the Tables C2 and C3

Table C2. Blue shark (north Atlantic) annual catches (unit: tons).

	2016	2017	2018	2019	2020
EU	37,269	33,209	27,014	20,956	16,282
Japan	4,217	4,444	4,111	3,855	2,328
Moroco	1,623	1,475	1,644	1,524	1,498
Total	44,797	39,766	34,052	27,271	20,899



COMMISSION INTERNATIONALE POUR LA CONSERVATION DES THONIDES DE L'ATLANTIQUE

COMISION INTERNACIONAL PARA LA CONSERVACION DEL ATUN ATLANTICO

Appendix C

Table C3. Blue shark (south Atlantic) annual catches (unit: tons).

	2016	2017	2018	2019	2020
EU	15,716	18,151	21,530	25,250	22,067
Namibia	2,775	1,357	3,290	0	4,120
Brazil	1,334	2,177	3,011	3,784	3,435
Japan	2,127	3,112	3,495	2,507	2,102
Chinese-Taipei	1,992	2,053	1,373	862	1,338
Total	25,415	28,374	34,382	34,732	33,652

Table C4. Status of blue shark Prionace glauca at ICCAT and other tRMFOs.

Management area	Year	Stock status*	Assessment institution	Reference
North/South Pacific	North:2022 South:2021	Not overfished, overfishing not occurring	North: ISC South: SPC/WCPFC	North: Finalizing a report South: <u>https://meetings.wcpfc.int/node/125</u> 52
Indian Ocean	2021	Not overfished, overfishing not occurring	ΙΟΤϹ	https://www.iotc.org/documents/sto ck-assessment-blue-shark-indian- ocean
North/South Atlantic	2015	Not overfished, overfishing not occurring	ICCAT	https://www.iccat.int/Documents/S CRS/DetRep/BSH_SA_ENG.PDF



COMMISSION INTERNATIONALE POUR LA CONSERVATION DES THONIDES DE L'ATLANTIQUE



Figure C1. ICCAT Task 1 catches (in tonnes, y axis) by year (x axis) for shark species of the Genus *Carcharhinus*, *Negaprion, Prionace*, and *Rhizoprionodon*.



COMMISSION INTERNATIONALE POUR LA CONSERVATION DES THONIDES DE L'ATLANTIQUE



Figure C2. Correlation plot for Task 1 shark species of the Genus *Carcharhinus*, the Genus *Negaprion*, the Genus *Prionace*, and the Genus *Rhizoprionodon*. Species codes are listed in Table 1. The lower left triangle shows plots of Loess smoothed fit in red, and linear fits in blue. The upper right triangle represents the correlation coefficients for each species pair. The statistical significance of the correlations are marked as: *** if the p-value is < 0.001, ** if the p-value is < 0.05, "." if the p-value is < 0.10.