

**ADDENDUM 1
In-Session Version**

SCIENTIFIC COUNCIL COMMENTS
(arising from ScC-SC4)

**PROPOSAL FOR THE INCLUSION OF
THE TOPE SHARK (*Galeorhinus galeus*)
IN APPENDIX II OF THE CONVENTION
UNEP/CMS/COP13/Doc.27.1.10**

ScC-SC4 Agenda Item 11.1.10

RECOMMENDATIONS TO COP13

- ~~– The Council supported the proposal for some populations, but not at a global scale;~~
- ~~– The Council recognized the concerns raised by Australia and New Zealand that the criteria for inclusion in Appendix II were not met for their population;~~
- ~~– The Council recommended that the proponent should reconsider the scope of the proposal to address regional populations which are threatened, and exclude the population in Australia and New Zealand;~~
- ~~– The Council recommended that comments provided by the Shark MOU Advisory Committee, New Zealand and Australia be shared with the proponent for consideration.~~
- ~~– The Council did not support the proposal in its current state as it considers the criteria for inclusion in Appendix II were not met for the population shared by The Council identified Australia and New Zealand;~~
- ~~– The Council recommended that the proponent may should reconsider the scope of the proposal to addressing regional populations which are threatened and specifically excluding the population in Australia and New Zealand;~~
- ~~– The Council recommended that comments provided by the Shark MOU Advisory Committee, New Zealand and Australia be shared with the proponent for consideration.~~

GENERAL COMMENTS ON THE DOCUMENT

The Council commended the EU for the well-developed proposal but expressed its disappointment regarding the lack of Range State consultation in advance of the submission of the proposal to COP13.

The Council noted that in some regions the species is commonly known as the School Shark. It welcomed the comprehensive management measures undertaken by Australia for the species

a) Conservation status:

The Council was generally concerned about the quality of data referred to in the proposal regarding the conservation status of the species.

It noted that the population in Australia was depleted but that comprehensive management measures were in place. It was further noted that the population in New Zealand was not in an unfavorable conservation status.

The Council noted that an IUCN re-assessment of the species would be published within the next weeks.

Furthermore, the Council noted the extensive review of the ~~two~~ proposals which was prepared by the Advisory Committee to the CMS Sharks MOU, which has been provided in Inf.4. and which concluded the following:

“Tope Shark is listed as Vulnerable globally on the IUCN Red List (Walker et al. 2006). However, there are regional variations in the assessments, ranging from Least Concern (eastern North Pacific) to Critically Endangered (Southwest Atlantic). The scientific basis for the listings varies between regions.

There should be concern over the exact status of Tope Shark in the south-west Atlantic, given the (2006) Critically Endangered listing. However, whilst both the IUCN Red List and the proposal refer to “drastic declines” the underlying evidence to support this is unclear. For example, whilst Elias et al. (2005) reported a decline in Catch per Unit Effort (CPUE), this was between periods of different fishing practices (‘experimental’ and ‘commercial’ fishing). More recently, Bovcon et al. (2018) noted that “These [Tope Shark] fisheries have been described as over-exploited, although their status has not been properly evaluated (Chiaramonte, 1998; Nion, 1999; J. A. Peres, unpublished data, 1998)”. The Red List assessment for Tope Shark (from 2006) is currently being updated and the regional listing for the southwest Atlantic could usefully be better substantiated in any future Red List assessment.

The status of Tope Shark elsewhere in their range is mostly uncertain, but the species is regarded as Vulnerable by the IUCN. In terms of whether “population dynamics data indicate that the migratory species is maintaining itself on a long-term basis as a viable component of its ecosystems”, the only assessed stock is that occurring in Australian waters, where it is classed as ‘overfished’. It may be noted, however, that there are conservative management measures in place and Patterson et al. (2018) reported some positive signs in stock recovery, though this should be treated with caution given the large uncertainty associated with the trend data. The Australian National Threatened Species Scientific Committee assessed this species for listing as a threatened species in 2009 (<https://www.environment.gov.au/biodiversity/threatened>). Their assessment recommended the species (in Australian waters) was eligible for listing as Endangered. This assessment remains current.

In terms of “there is and will be in the foreseeable future sufficient habitat to maintain the population of the migratory species on a long-term basis”, the AC note that Tope Shark typically give birth to their pups in the outer reaches of large estuaries and bays. Such habitats are often subject to a range of anthropogenic activities that may impact on both habitat and water quality.”

a) Migratory status:

The Council noted that recent genetic work confirmed that there were five separate populations of Tope/School shark around the world and that the population occurring in Australian and New Zealand waters were considered as a single population.

However, it was noted that both genetic and tagging work demonstrated limited connectivity and that therefore the Australian-New Zealand population did not meet the definition of migratory as a significant proportion of the population did not undertake predictable and cyclical movements across national jurisdictional boundaries.

Hence, the Council agreed that the Australian-New Zealand population should be excluded from further consideration for listing.

Both countries offered to share information regarding their management approaches with other Range States, to facilitate improved management of the other four separate populations.

The Council welcomed the review and additional information provided by the Sharks MOU Advisory Committee ([available in Inf.4](#)) regarding the migratory behavior of the species, which stated:

“There is evidence of seasonal, latitudinal migrations that indicate Tope Shark move southwards from the British Isles to north-west Africa. The movements from EU waters to north-west Africa would cross jurisdictional boundaries. There is also evidence of Tope Shark moving between the national waters of Argentina, Uruguay and southern Brazil, thus crossing national jurisdictional boundaries, with this relating to a seasonal migration of Tope Shark that move north (to off Brazil) in winter, and south in spring and summer (to off Argentina), with preferred water temperatures 12–17°C (Jaureguizar et al., 2018).

Recent genetic studies indicate that while Tope Shark are unlikely to migrate across ocean basins in the Southern Hemisphere, the species does move across national boundaries such as between Australian and New Zealand waters (Hernandez et al., 2015; Bester-van der Merwe et al., 2017). The high level of connectivity within both New Zealand and Australian waters is supported by intensive tagging efforts (Hernandez et al., 2015). These studies consider the Australian-New Zealand Tope Shark population a single clade (Hernandez et al., 2015; Bester-van der Merwe et al., 2017). These movements appear to be linked to reproduction events (Hernandez et al., 2015; Delvoo-Delva et al., 2019; McMillan et al., 2018).

Suggestions are that Tope Shark in Australia demonstrate “partial migration” (some individuals are migrants, some are residents), some tagged pregnant females were found to swim large distances from the Great Australian Bight to find nursery grounds, one tagged female swimming as far as New Zealand (McMillan et al., 2019).

The AC considered that available evidence indicates that Tope Shark is a regionally migratory species that will cross national jurisdictional boundaries within each of the various parts of their biogeographic range. However, it could not be determined if this was a significant portion of the population among all regional populations.

The AC also considered that Tope Shark should not be referred to as ‘highly migratory’ in the Overview section of the proposal, given that Tope Shark from the five areas have been reported to be genetically distinct. In addition, the latest indications from Australian/New Zealand waters is that this population is “partially migratory” (some individuals migrate, some remain residents). (see McMillan et al., 2018).

The AC also noted that when some of the longer distances are recorded from tagging studies (e.g. from the British Isles to the Mediterranean), it should be recognized that these may be based on limited observations (sometimes individual fish) and so would be better referred to as ‘longer-distance movements’. There is no evidence that these longer-distance movements are ‘migrations’, given that there is no evidence that a significant proportion of the population display that behaviour, or that these are cyclical.”