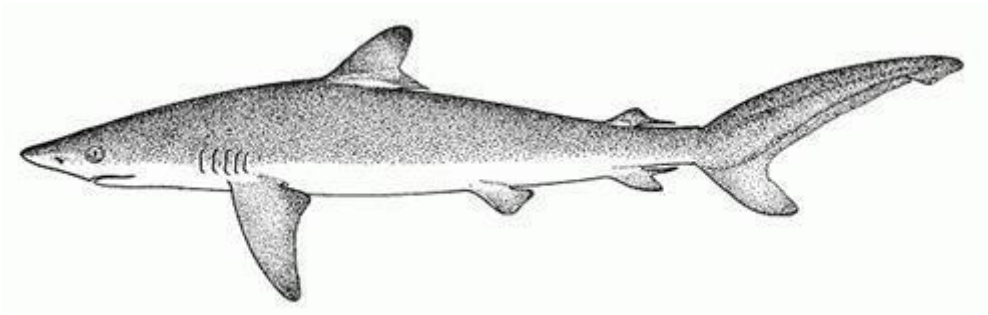
New Zealand non-detriment finding for silky shark

Carcharhinus falciformis



Hugh A Robertson

New Zealand Scientific Authority for CITES
Biodiversity Group
Department of Conservation
PO Box 10-420
Wellington
NEW ZEALAND

1. Introduction

In October 2016, the 17th Conference of the Parties (CoP16) of the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES) listed four commercially-important species of sharks and a commercially-important genus of rays on Appendix II of the Convention. The species were: silky shark *Carcharhinus falciformis*, big-eyed thresher shark *Alopias superciliosus* and its two congeneric look-alikes, the common thresher shark *A. vulpinus* and the pelagic thresher shark *A. pelagicus*, and the whole of the *Mobula* genus of devil rays. Because these new listings were likely to require considerable work before the listings could be implemented, the date of entry onto CITES Appendix II was delayed by 6 months until 4 April 2017 for the *Mobula* rays, and by 12 months until 4 October 2017 for the sharks.

The CITES convention has three Appendices (I, II and III), based largely on the level of risk that international trade could have on the viability of wild populations of the species. Trade in plant or animal species listed in Appendix II has three requirements that must be fulfilled before permits are issued:

1. The CITES Management Authority of the exporting country (or equivalent recognised authority in the case of countries that are not Parties to the CITES Convention) must verify that the species was obtained legally;

2. In the case of live specimens, the CITES Management Authority must verify that specimens will be transported in a humane manner, and

3. The CITES Scientific Authority of the exporting country must advise that such export will not be detrimental to the survival of the species (known as a non-detriment finding (NDF)).

At CoP16 of CITES, Parties adopted Resolution 14.6 (Rev. CoP16) which specifies procedures associated with trade in CITES-listed species obtained on the high seas (i.e. marine areas beyond national jurisdiction and outside the 200 nautical mile jurisdiction of any State). In the case of specimens of Appendix II species, the Scientific Authority (usually from the State where the specimen will be landed, but this can vary depending on particular chartering arrangements) must issue an NDF before the specimens are actually taken (i.e. caught at sea).

The listing of silky shark on Appendix II of CITES from 4 October 2107 therefore requires an NDF to be issued in three situations:

- before the export of silky shark products that were obtained within the New Zealand Exclusive Economic Zone (EEZ),
- before the take of silky shark on the high seas by a New Zealand vessel and landed at a New Zealand port, and
- before the take of silky shark on the high seas by a New Zealand vessel and landed at a foreign port.

2. Distribution and ecology

Silky sharks C. *falciformis* are a requiem or whaler shark found circumglobally in tropical and subtropical oceanic and coastal-pelagic waters (Figure 1), living from near the surface to depths of 500 metres. In the CITES listing proposal presented at CoP17 and in a number of international references, New Zealand is listed as a range state of silky sharks, but there is no definite record of the species within our EEZ; however, it is possible that vagrants reach waters around the Kermadecs or the northern North Island.

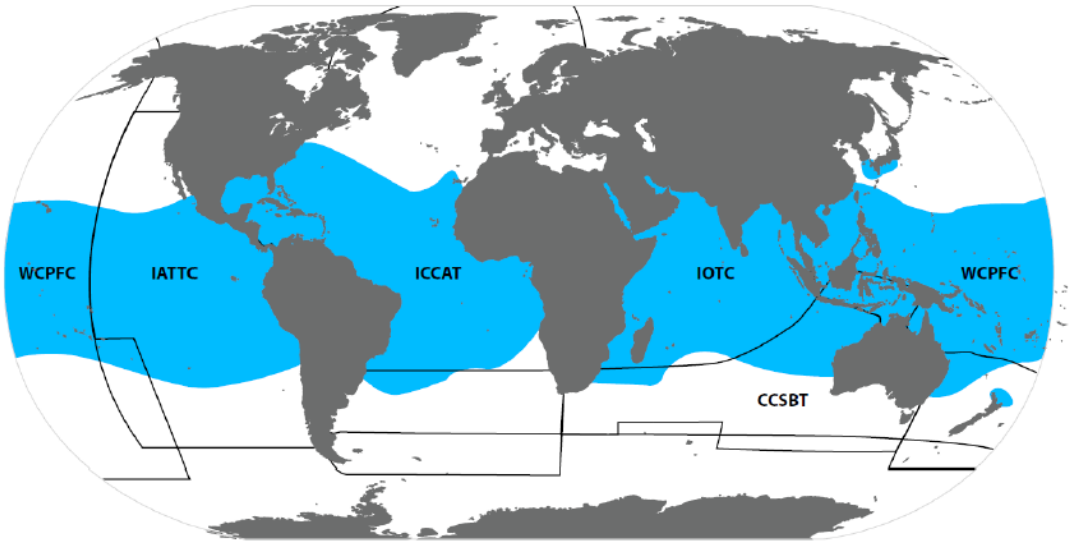


Figure 1: World distribution map for *C. falciformis* (IUCN Red List) and RFMO convention areas (from COP17 Proposal 42).

Silky shark is a low productivity species that mature at 12+ years old and has an average of 6 pups per litter after 9-12 months gestation, with one or more resting years between litters.

Globally, the silky shark is taken in very large numbers in target and bycatch fisheries and is an economically-important retained and used catch of large tropical oceanic pelagic fisheries. Until a retention ban was imposed in 2008 (see Section 3.2 below), in the western and central Pacific Ocean they were taken mainly as bycatch from the tuna longline fishery, but there were also significant impacts from the associated purse seine fishery which captured predominately juveniles that often congregate at fish aggregation devices.

Products from these silky shark fisheries supply international market demand for shark fins. Fresh silky shark fins are distinctive (Marshall & Barone 2016), and generally accurately identified at species level (by the name *wu yang*) by the dried marine products industry in Hong Kong (Clarke et al. 2006). They are of high quality and value.

3. Silky shark fisheries provisions

3.1 New Zealand

No specific provisions or regulations exist for catching and landing silky sharks in the New Zealand EEZ beyond those of the Western and Central Pacific Fisheries Commission (see 3.2 below). Silky sharks are not even definitely found in our EEZ and are not part of the Quota Management System managed by the Ministry for Primary Industries.

3.2 Regional Fisheries Management Authorities

The Western and Central Pacific Fisheries Commission (WCPFC) was established by the Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPF Convention) and entered into force on 19 June 2004. The WCPFC Convention addresses problems in the management of high seas fisheries resulting from unregulated fishing, over-capitalisation, excessive fleet capacity, vessel re-flagging to escape controls, insufficiently selective gear, unreliable databases and insufficient multilateral cooperation in respect to conservation and management of tuna and other highly migratory fish stocks (WCPFC 2017a).

New Zealand is a member of WCPFC, and is legally bound by the provisions of the WCPFC Convention, and is also bound by Conservation and Management Measures (CMMs) decisions of WCPFC. All of the New Zealand EEZ falls within the area of jurisdiction of WCPFC, as do the high seas well to the west, east and north of New Zealand. The southern limit of jurisdiction of WCPFC is 60ºS, which is well outside the known latitudinal range of the species.

Due to concerns that the highly depleted stocks of the low productivity silky shark were due to overfishing, and that overfishing was still occurring, at the 10th regular session of WCPFC in December 2013, the Commission adopted a Conservation and Management Measure for silky sharks (CMM 2013-08). The measure requires that Commission Members, Cooperating Non-Members and Participating Territories (CCMs) prohibit vessels flying their flag and vessels under charter arrangements to the CCM from retaining on board, trans-shipping, storing on a fishing vessel, or

landing any silky shark caught in the Convention Area, in whole or in part, in the fisheries covered by the Convention. The measures promote the live release of silky sharks as soon as possible, and collection of data about the numbers released alive or discarded dead. An exception is made in Paragraph 5 of CMM 2013-08 whereby observers shall be allowed to collect biological samples from silky sharks caught in the Convention Area that are dead on haulback, provided that the samples are part of a research project approved by the WCPFC's Scientific Committee (WCPFC 2017b).

4. Conclusion

As long as Conservation Management Measure 2013-08 of the Western and Central Pacific Fisheries Commission remains in force, **it is not possible to issue a non-detriment finding for any silky shark products being commercially traded**, whether obtained from the New Zealand EEZ or from the high seas to the north of New Zealand, because such product would not be legally acquired.

If silky shark products being traded are from dead landings and are **entirely for scientific purposes**, as part of a research project approved by the Scientific Committee of Western and Central Pacific Fisheries Commission, then **a non-detriment finding will be issued**.

5. References

Clarke, S.C.; Magnussen, J.E.; Abercrombie, D.L.; McAllister, M.K.; Shivji, M.S. 2006. Identification of shark species composition and proportion in the Hong Kong shark fin market based on molecular genetics and trade records. *Conservation Biology* 20: 201-211.

Marshall, L.J.; Barone, M. 2016. *SharkFin Guide: identifying sharks from their fins*. FAO, Rome.

WCPFC. 2017a. https://www.wcpfc.int/about-wcpfc (accessed 6 December 2017).

WCPFC. 2017b. https://www.wcpfc.int/conservation-and-management-measures (accessed 6 December 2017).