



Distr, LIMITED

UNEP(DEPI)/CAR WG.42/INF.24 Add.1
12 March 2021

Original: ENGLISH

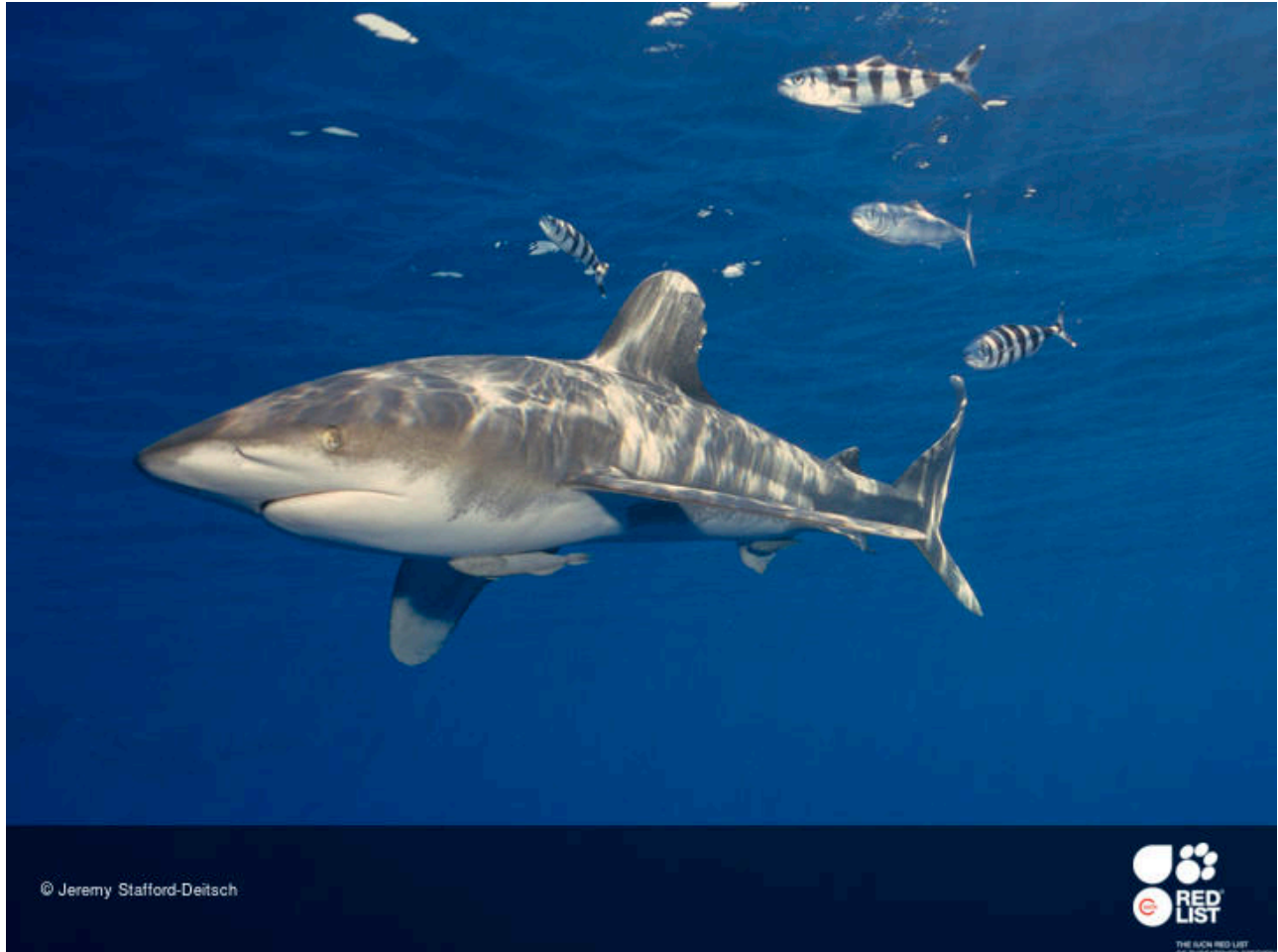
Ninth Meeting of the Scientific and Technical
Advisory Committee (STAC) to the Protocol
Concerning Specially Protected Areas and Wildlife
(SPA) in the Wider Caribbean Region

Virtual meeting, 17–19 March 2021

**PROPOSAL FOR THE UPLISTING OF OCEANIC WHITETIP SHARK
CARCHARHINUS LONGIMANUS FROM ANNEX III TO ANNEX II OF THE
SPA PROTOCOL**

For reasons of public health and safety associated with COVID-19, this meeting is being convened virtually. Delegates are kindly requested to access all meeting documents electronically for download as necessary.

Proposal for the uplisting of Oceanic whitetip shark *Carcharhinus longimanus* from Annex III to Annex II of the Protocol concerning Specially Protected Areas and Wildlife (SPA W Protocol)



From IUCN redlist website <https://www.iucnredlist.org/species/39374/2911619>

Table of Contents

I. Nomination Requirements and Justification	2
II. Substantiated Nomination Requirements to Support Inclusion in Annex II	3
A. Article 19(3) – Information to be included in reports relevant to protected species, to the extent possible	4
a. Article 19(3)(a) – Scientific and Common Names of the Species	4
a.1. Scientific and common name of the species	4
a.2 Biological data	5
a.3. Habitat	6
b. Article 19(3)(b) - Estimated Populations of Species and their Geographic Ranges	7
b.1. Size of Populations	7
b.2. Evidence of Decline	7
c. Article 19(3)(c) - Status of Legal Protection, with Reference to Relevant National Legislation or Regulation	9
c.3. Colombia	9
c.8. Kingdom of the Netherlands	9
c.9. Republic of France	9
c. 10 United States of America	10
c.15 Additional information	12
c.16 International protection status	12
d.1 Migration	15
e. Article 19(3)(e) - Management and Recovery Plans for Endangered and Threatened Species	16
e.1. Colombia	16
e.2. Republic of France	16
e. 3 United States of America	17
f. Article 19(3)(f) - Research Programs and Available Scientific and Technical Publications Relevant to the Species	18
g. Article 19(3)(g) - Threats to the Protected Species, their Habitats and their Associated Ecosystems, Especially Threats which Originate Outside the Jurisdiction of the Party	18
g.1. Harvesting threats	18
III. Discussion points and recommendations	21
IV. Conclusion	23
V. Annexes	23
VI. References	27

Authors

Andrea Pauly, Associate Programme Management Officer, Coordinator Sharks MOU

Twan Stoffers, Independent expert (sharks), Fish Ecologist, Wageningen University and Research

†**Paul Hoetjes**, Nature Conservation Policy Advisor at Dutch Ministry of Agriculture, Nature and Food Quality, Netherlands

Anne-Marie Svoboda, Senior Policy Officer bij Ministry of Agriculture, Nature and Food Quality, Netherlands

Irene Kingma, Strategy and Policy Lead, Dutch Elasmobranch Society

Susan Millward, Director, Marine Animal Program at Animal Welfare Institute

Heins Bent-Hooker, Directorate of Marine, Coastal and Aquatic Resources Affairs, Ministry of Environment, Colombia

Jean Vermot, SPAW Focal Point and European and International Coordinator Marine Environment, Ministry for an Ecological Transition, France

Elisabeth Fries, Support officer SPAW-RAC

Sandrine Pivard, Executive Director, SPAW-RAC, chair of the working group

with the contribution of :

Angela Somma, Division Chief, National Marine Fisheries Service, National Oceanic and Atmospheric Administration (NOAA)

Kristen Koyama, National Recovery Coordinator, Endangered Species Division, NMFS Office of Protected Resources, NOAA, USA

Océane Beaufort, French West Indies sharks network coordinator / Environmental consultant

V. Annexes

Annex 1. Criteria evaluation for the Oceanic whitetip shark

*Concerns Annexes I, II
and III*

Criteria evaluation for Oceanic whitetip shark the under the Annex II

SPAW Article	Criterion number	Criterion	Criterion details	Presence of information in the proposal report	Information quotes	Literature	1 is the criteria relevant for this species R/NR 2 is it possible to obtain the information O/NO)	If relevant Criteria validation Yes/ No
21	#1	The scientific evaluation of the threatened or endangered status of the species is to be based on these factors :	Size of population	Y	The oceanic whitetip shark was characterized historically as one of the most abundant oceanic sharks in tropical seas worldwide. Considering the biology of that highly pelagic species, it is almost impossible to gather data to have a global population size estimate available for the oceanic whitetip shark nor regional population size estimates	Backus et al. 1956; Compagno 1984). Young et al. 2018	NO	Y

SPAW Article	Criterion number	Criterion	Criterion details	Presence of information in the proposal report	Information quotes	Literature	1 is the criteria relevant for this species R/NR 2 is it possible to obtain the information O/NO)	If relevant Criteria validation Yes/ No
			Evidence of decline	Y	C. longimanus, once among the most abundant oceanic sharks, has experienced serious declines between 57% and 88% in the Atlantic and Gulf of Mexico. This species is assessed to be critically endangered in the Northwest and Western Central Atlantic (). The decline on the Oceanic White Tip has been well researched, the most recent IUCN assessment for the global population estimates a population decline of over 98%.	Baum et al., 2015, Rigby et al. 2019 Pacoureaux et al.; 2021	R	Y
			Restriction on its range of distribution	N			NR	
			Degree of fragmentation population	N			NR	

SPAW Article	Criterion number	Criterion	Criterion details	Presence of information in the proposal report	Information quotes	Literature	1 is the criteria relevant for this species R/NR 2 is it possible to obtain the information O/NO)	If relevant Criteria validation Yes/ No
			Biology	Y	<i>Carcharhinus longimanus</i> is a large-bodied shark species from the family Carcharhinidae (requiem sharks). This species can reach a maximum size of 325 - 346 cm, with most specimens measuring between 150 and 205 cm	Lessa <i>et al.</i> , 1999; D'Alberto <i>et al.</i> , 2016; Joung <i>et al.</i> , 2016	R	Y
			Other population dynamics	Y	<i>C. longimanus</i> is a large oceanic shark species, with active and strong swimming capabilities. It shows migratory behaviour			
			Conditions increasing the vulnerability of the species/ major threats	Y	<i>C. longimanus</i> mainly inhabits the top 20 meters of the water column, which increases its overlap with ? Evidence of overfishing and by-catch	Rigby <i>et al.</i> 2019	R	Y
			Importance of the species to the maintenance of fragile or vulnerable ecosystems and habitats	Y				

SPAW Article	Criterion number	Criterion	Criterion details	Presence of information in the proposal report	Information quotes	Literature	1 is the criteria relevant for this species R/NR 2 is it possible to obtain the information O/NO)	If relevant Criteria validation Yes/ No
	#2	Precautionary principle (when criteria 1 gives indication that the species is threatened or endangered, the lack of full scientific certainty about the exact status of the species is not to prevent the listing of the species on the appropriate annex)		Y	see criteria 1 and in particular 1b (evidence of decline and		R	Y
	#4	Application of the IUCN criteria in a regional (Caribbean) context will be helpful if sufficient data are available		Y	The IUCN defines the oceanic white tip shark's conservation status as critically endangered and its trend 'decreasing'.	Rigby et al. 2019	R	Y
21	#5	Is the species the subject of local or international trade AND is the international trade regulated under CITES or other instruments ?		Y	The oceanic white tip shark was listed under Appendix II of CITES in 2013. Young et al. (2018) note that <i>C. longimanus</i> is a preferred and highly valuable species in the international shark fin trade in Hong Kong, the largest international fin market (Clarke et al. 2006b). A study	CITES 2014	R	Y

SPAW Article	Criterion number	Criterion	Criterion details	Presence of information in the proposal report	Information quotes	Literature	1 is the criteria relevant for this species R/NR 2 is it possible to obtain the information O/NO)	If relevant Criteria validation Yes/ No
					from Cardeñosa (2018) suggests that oceanic whitetip sharks remain among the top species in the contemporary fin trade, despite CITES listing.			
21	#6	Importance and usefulness of regional and cooperative efforts on the protection and recovery for species		Y	see note dedicated to sharks and rays management		R	Y
21	#7	Endemism of the species (and importance of regional cooperation for its recovery)		N			NR	
21	#8	Listing as a taxonomic unit. Higher taxa (than species) can be utilized in listing when there are reasonable indications that the lower taxa are similarly justified in being listed, or to address problems of misidentification caused by species of similar appearance. In the case of Annex III, higher taxa can also be used to simplify the list.		N			NR	

SPA W Article	Criterion number	Criterion	Criterion details	Presence of information in the proposal report	Information quotes	Literature	1 is the criteria relevant for this species R/NR 2 is it possible to obtain the information O/NO)	If relevant Criteria validation Yes/ No
21	#10	listing as an "appropriate measure to ensure the protection and recovery" of fragile ecosystems/habitats where they occur		N			NR	
11 (a)	#	Presence of the species in another annex of the SPAW Protocol		Y	Already listed in Annex III for regulation - continued decline indicates more stringent measures necessary.		R	Y
11 (4,a) – 19 (3)	#	Information demonstrating the applicability of the appropriate SPAW listing criteria		Y	enough information to justify regulation, and for uplisting for complete protection		R	Y
	#	Does the species benefit from another protection tool ?		Y	Section 2 of the ICCAT Convention Area Article 22 - 4. states that retaining on board, transshipping or landing any part or whole carcass of oceanic whitetip sharks taken in any fishery shall be prohibited. The Sharks MoU listed <i>C. longimanus</i> on its Annex 1 in 2018 and this year (2020) CMS listed <i>C. longimanus</i> on its Appendix I. It was listed on CMS Annex 1 in 2020	NOAA, 2018	R	Y

SPAW Article	Criterion number	Criterion	Criterion details	Presence of information in the proposal report	Information quotes	Literature	1 is the criteria relevant for this species R/NR 2 is it possible to obtain the information O/NO)	If relevant Criteria validation Yes/ No
					In 2018, the United States listed the oceanic white tip shark as a threatened species under the U.S. Endangered Species Act (ESA). The United States is developing a recovery plan for this species and has developed a recovery outline to guide recovery efforts until a recovery plan is developed.			

VI. References

- Backus, R., Springer, S., & Jr, E. A. (1956). A contribution to the natural history of the white-tip shark, *Pterolamiops longimanus*. *Deep Sea Research* (1953), 3(814) Retrieved from <http://www.sciencedirect.com/science/article/pii/0146631356900028>
- Baum, J. K., Myers, R. A., Kehler, D. G., Worm, B., Harley, S. J., & Doherty, P. A. (2003). Collapse and conservation of shark populations in the Northwest Atlantic. *Science* (New York, N.Y.), 299, 389–392. <http://doi.org/10.1126/science.1079777>.
- Baum, J. K., Kehler, D., & Myers, R. A. (2005). Robust estimates of decline for pelagic shark populations in the northwest Atlantic and Gulf of Mexico. *FISHERIES-BETHESDA-*, 30(10), 27.
- Baum, J., Medina, E., Musick, J.A., & Smale, M. (2006). *Carcharhinus longimanus*. In: IUCN 2012. IUCN Red List of Threatened Species. Version 2012.1. <www.iucnredlist.org>. Consulted on August 8 2012.
- Baum, J., Medina, E., Musick, J.A., & Smale, M. (2015). *Carcharhinus longimanus*. The IUCN Red List of Threatened Species 2015: e.T39374A85699641. <http://dx.doi.org/10.2305/IUCN.UK.2015.RLTS.T39374A85699641.en>. Downloaded on 10 May 2018.
- Bonfil, R., Clarke, S., & Nakano, H. (2008). The biology and ecology of the oceanic whitetip shark, *Carcharhinus longimanus*. *Sharks of the Open Ocean: Biology, Fisheries and Conservation*. Blackwell Publishing, Oxford, UK, 128-139.
- Bullis, Jr, H. R. (1961). Observations on the feeding behavior of white-tip sharks on schooling fishes. *Ecology*, 42(1), 194-195.
- Burgess, G. H., Beerkircher, L. R., Cailliet, G. M., Carlson, J. K., Cortes, E., Goldman, K. J., Grubbs, D., Musick, A., Musyl, K. & Simpfendorfer, C. A. (2005). Is the collapse of shark populations in the Northwest Atlantic Ocean and Gulf of Mexico real? *Fisheries*, 30(1), 10–17. [http://doi.org/10.1577/1548-8446\(2005\)30](http://doi.org/10.1577/1548-8446(2005)30).
- Caldas, J.P. & Correa, J.L. (2010). Shark captures associated to industrial fishing activity with oceanic longline in the Colombian Caribbean sea. Libro de Resúmenes II Encuentro de Colombiano sobre Condrictios. Cali, Colombia. P 35.
- Cardeñosa, D., Fields, A., Babcock, E., Zhang, H., Feldheim, K., Shea, S., Fischer, G., & Chapman, D. (2018). CITES-listed sharks remain among the top species in the contemporary fin trade. *Conservation Letters*. 11. 10.1111/conl.12457.
- Clarke, S., McAllister, M.K., MilnerGulland, E. J., Kirkwood, G. P. Michielsens, C., Agnew, D., Pikitch, E., Nakano, H., & Shivji. M. (2006). Global estimates of shark catches using trade records from commercial markets, *Ecology Letters*, Volume9, Issue10, October 2006, Pages 1115-1126
- Compagno, L.J.V. (1984). *Sharks of the World. An annotated and illustrated catalogue of shark species to date. Part II (Carcharhiniformes)*. FAO Fisheries Synopsis No. 125, Vol. 4, Part II. FAO, Rome.
- Convention on International Trade in Endangered Species of Wild Fauna and Flora CITES. (2013). Consideration of Proposals for Amendment of Appendices I and II. Sixteenth Meeting of the Conference of the Parties, 1–10. Retrieved from <http://www.newsits.com/goto/http://www.cites.org/eng/cop/16/prop/E-CoP16-Prop-43.pdf>
- Cortés, E. (1999). Standardized diet compositions and trophic levels of sharks. *ICES Journal of Marine Science*, 56(May), 707–717. <http://doi.org/10.1006/jmsc.1999.0489>
- Cortés, E. (2008). Comparative life history and demography of pelagic sharks. *Sharks of the Open Ocean*, 309-322.

Cortés, E., Brown, C. A., & Beerhircher, L. R. (2007). Relative abundance of pelagic sharks in the western North Atlantic Ocean, including the Gulf of Mexico and Caribbean Sea. *Gulf and Caribbean Research*, 19(2), 37-52.

Cortés, E., A., Domingo, P., Miller, R., Forselledo, F., Arocha, S., Campana, R., Coelho, C., Da Silva, F.H.V., Hazin, F., Mas, H., Holtzhausen, K., Keene, F., Lucena, K., Ramirez, M.N., Santos, Y., & Semba, M. (2015). Expanded Ecological Risk Assessment of Pelagic sharks caught in Atlantic pelagic longline fisheries. ICCAT Collect. Vol. Sci. Pap. ICCAT, 71(6): 2637-2688

D'Alberto, B. M., Chin, A., Smart, J. J., Baje, L., White, W. T., & Simpfendorfer, C. A. (2016). Age, growth and maturity of oceanic whitetip shark (*Carcharhinus longimanus*) from Papua New Guinea. *Marine And Freshwater Research* (January). <http://doi.org/http://dx.doi.org/10.1071/MF16165>

Domingo, A. (2004). Adonde fue el longimanus? ELASMOVISOR. Boletim informativo da SBEEL. Fundação Universidade Federal do Rio Grande, Rio Grande, Brazil.

Dulvy, N.K., Fowler, S.L., Musick, J.A., Cavanagh, R.D., Kyne, P.M., Harrison, L.R., Carlson, J.K., Davidson, L.N., Fordham, S.V., Francis, M.P., Pollock, C.M., Simpfendorfer, C.A., Burgess, G.H., Carpenter, K.E., Compagno, L.J., Ebert, D.A., Gibson, C., Heupel, M.R., Livingstone, S.R., Sanciangco, J.C., Stevens, J.D., Valenti, S., White, W.T. (2014). Extinction risk and conservation of the world's sharks and rays. *Elife*. 3:e00590. doi: 10.7554/eLife.00590. Epub 2014 Jan 21. PMID: 24448405; PMCID: PMC3897121.

Ebert, D., Fowler, S., & Compagno, L. (2013). *Sharks of the World: a fully illustrated guide*. Wild Nature Press. FAO (2012) Report of the fourth FAO expert advisory panel for the assessment of proposals to amend Appendices I and II of CITES concerning commercially-exploited aquatic species. In: FAO Fisheries and Aquaculture Report No. 1032 Rome. p. 169.

FAO Fisheries and Aquaculture Department, FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (2012). *The State of World Fisheries and Aquaculture*

Gallagher, A.J., Orbesen, E.S., Hammerschlag, N. & Serafy, J.E. (2014). Vulnerability of oceanic sharks as pelagic longline bycatch. *Global Ecology and Conservation*, 1, 50-59.

Gelsleichter, J., Sparkman, G., Howey, L.A., Brooks, E.J., & Shipley, O.N., (2020). Elevated accumulation of the toxic metal mercury in the Critically Endangered oceanic whitetip shark *Carcharhinus longimanus* from the northwestern Atlantic Ocean. *Endangered Species Research*, 43, pp.267-279.

Howey-Jordan, L. A., Brooks, E. J., Abercrombie, D. L., Jordan, L. K. B., Brooks, A., Williams, S., & Chapman, D. D. (2013). Complex Movements, Philopatry and Expanded Depth Range of a Severely Threatened Pelagic Shark, the Oceanic Whitetip (*Carcharhinus longimanus*) in the Western North Atlantic. *PLoS ONE*, 8(2). <http://doi.org/10.1371/journal.pone.0056588>

Joung, S. J., Hsu, H. H., & Liu, K. (2016). Estimates of life history parameters of the oceanic whitetip shark, *Carcharhinus longimanus*, in the western North Pacific Ocean. *Marine Biology*, 1000(August). <http://doi.org/10.1080/17451000.2016.1203947>

Kohler, N. E., Casey, J. G., & Turner, P. A. (1998). NMFS cooperative shark tagging program, 1962-93: an atlas of shark tag and recapture data. *Marine Fisheries Review*, 60(2), 1-87.

Lessa, R., Santana, F. M., & Paglerani, R. (1999). Age, growth and stock structure of the oceanic white tip shark, *Carcharhinus longimanus*, from the southwestern equatorial Atlantic. *Fisheries Research*, 42(1-2), 21-30. [http://doi.org/10.1016/S0165-7836\(99\)00045-4](http://doi.org/10.1016/S0165-7836(99)00045-4)

Madigan, D. J., Brooks, E. J., Bond, M. E., Gelsleichter, J., Howey, L. A., Abercrombie, D. L., ... Chapman, D. D. (2015). Diet shift and site-fidelity of oceanic whitetip sharks *Carcharhinus longimanus* along the Great Bahama Bank. *Marine Ecology Progress Series*, 529, 185-197. <http://doi.org/10.3354/meps11302>

Mejuto, J., García-Cortés, B., & de la Serna, J. (2002). Preliminary scientific estimations of by-catches landed by Spanish surface longline fleet in 1999 in the Atlantic Ocean and Mediterranean Sea. *Collective Volume of*

Scientific Papers, ICCAT, 54(4), 1150–1163.

NOAA (2018). Oceanic Whitetip Shark Recovery Outline

<https://www.fisheries.noaa.gov/resource/document/oceanic-whitetip-shark-recovery-outline> Downloaded on 29 January 2021.

Pacoureau, N., Rigby, C.L., Kyne, P.M. et al. (2021). Half a century of global decline in oceanic sharks and rays. *Nature* 589, 567–571 <https://doi.org/10.1038/s41586-020-03173-9>

Rigby, C.L., Barreto, R., Carlson, J., Fernando, D., Fordham, S., Francis, M.P., Herman, K., Jabado, R.W., Liu, K.M., Marshall, A., Pacoureau, N., Romanov, E., Sherley, R.B. & Winker, H. (2019). *Carcharhinus longimanus*. *The IUCN Red List of Threatened Species* 2019: e.T39374A2911619.

<https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T39374A2911619.en>.

Downloaded on 28 January 2021.

Rose, D.A. (1996). An overview of world trade in sharks and other cartilaginous fishes. A TRAFFIC Network Report. 112pp.

Santana, J. C., Molina, A. D. De, Molina, R. D. De, Ariz, J., Stretta, J. M., & Domalain, G. (1998). Lista faunística de las especies asociadas a las capturas de atún de las flotas de cerco comunitarias que faenan en las zonas tropicales de los océanos Atlántico e Índico. *Collect. Vol.Sci. Pap. ICCAT*, 48(3), 129–137.

Seki, T., Taniuchi, T., Nakano, H., & Shimizu, M. (1998). Age, growth and reproduction of the oceanic whitetip shark from the Pacific Ocean. *Fisheries Science*, 64(1), 14–20.

Senba, Y., & Nakano, H. (2005). Summary of Species Composition and Nominal CPUE of Pelagic Sharks based on Observer Data from the Japanese Longline Fishery in the Atlantic Ocean from 1995 to 2003. *Collective Volume of Scientific Papers ICCAT*, 58(3), 1106–1117.

Strasburg, D. (1958) Distribution, abundance, and habits of pelagic sharks in the Central Pacific ocean. . *Fishery Bulletin* 138 Washington, U.S. Govt. Print. Off., 58, 335-361.

Tolotti, M.T., Bach, P., Hazin, F., Travassos, P., & Dagorn, L. (2015) Vulnerability of the Oceanic Whitetip Shark to Pelagic Longline Fisheries. *PLoS ONE* 10(10): e0141396. <https://doi.org/10.1371/journal.pone.0141396>

Young, C.N., Carlson, J., Hutchinson, M., Hutt, C., Kobayashi, D., McCandless, C.T., & Wraith, J. (2018). Status review report: oceanic whitetip shark (*Carcharhinus longimanus*). Final Report to the National Marine Fisheries Service, Office of Protected Resources. December 2017. 170p

Young, C., & Carlson, J. (2020). “The biology and conservation status of the oceanic whitetip shark (*Carcharhinus longimanus*) and future directions for recovery.” *Reviews in Fish Biology and Fisheries* 30: 293 - 312.