

Oceanic Whitetip Shark

NOAAFISHERIES

Southeast regional Office

Carcharhinus longimanus
March 6, 2017



Background & Timeline

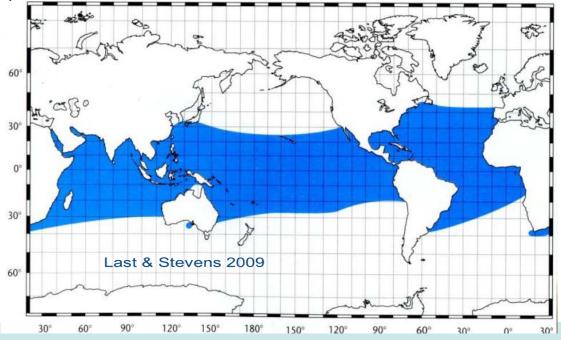
- September 21, 2015 Defenders of Wildlife submitted petition to list global species OR 2 Distinct Population Segments (DPSs; Atlantic & Indo-Pacific)
- Positive 90-day finding on global species in January 2016
- Convened ERA Team in July 2016 comprised of 6 members from OPR, HMS, NEFSC, SEFSC, SWFSC, PIFSC
- Sent Status Review Report for peer review in August 2016: received 5 peer reviews and 2 regional reviews (PIRO; HMS)
- Proposed rule published December 29, 2016



Global Distribution

- Distributed worldwide in epipelagic tropical and subtropical waters between 30° North latitude and 35° South latitude
 - In the western Atlantic, oceanic whitetips occur from Maine to Argentina, including the Caribbean and Gulf of Mexico.
- Clear preference for open ocean waters between 10°S and 10°N
- Depth distribution = upper mixed layer (1-152 m) but considered surface-dwelling shark

• Temperature preference = >20 °C







Life History Parameters

- Long lived (up to 20 years)
- Late age of maturity
 - 6-7 years (both sexes; SW Atlantic)
 - 8-9 years (females; N. Pacific)
- Lengthy gestation (9-12 months)
- Low fecundity (1-14 pups with average of 5-6 every 2 years)

Region	Historical	Current	% decline	Source
Eastern Pacific		↓	80-95% (since 1990s)	Declines in tropical purse seine fishery (Hall and Roman 2013; IATTC observer database)
Western & Central Pacific			86 - >90% (since 1995)	Declines in LL and purse seine fisheries (Rice and Harley 2012; Brodziak et al. 2013) Rice et al. 2015)
NW Atlantic Gulf of Mexico		Likely stable	57-70% (1992-2005;1992-2000) 88% (1950s-1990s)	Declines in pelagic LL fishery (Baum et al. 2003; Baum & Myers 2004; Cortés 2007)
South Atlantic		Uncertain, but likely	50-85% (since 1990s)	Declines in Brazil LL fishery (Hazin et al. 2007; ICCAT database; Santana et al. 2004)
Indian Ocean		Uncertain, but likely	25-90% (various; mainly since 1990s)	Longline and purse seine fisheries (Ramos-Cartelle et al. 2012; Semba and Yokawa 2012; Anderson et al. 2011; Tolotti et al. 2015)

Threats

Overutilization in commercial fisheries

- Bycatch
 - Caught in large numbers globally in longline and purse seine fisheries (among others) Large majority are juveniles
 - At-vessel mortality rates 23-58% in longlines; >85% in purse seines
 - Unknown post-release mortality
- Fin Trade
 - Considered "preferred" species for fins
 - Obtains US \$45-85 per kg = main economic driver for retention
 - Comprises approximately 2% of global fin trade



Threats

Inadequate regulations

- Recent retention bans
 - Only shark species that has a noretention measure in every RFMO
 - Does not prevent capture/mortality
 - Variable implementation/enforcement
 - Partially effective
- Finning bans/regulations
- CITES Appendix II listing
 - Several confiscated shipments to Hong Kong since 2014 listing
 - Colombia, Seychelles, UAE
- IUU fishing and trafficking
 - Illegal fins seized from Indonesia, Costa Rica, Taiwan (in Marshall Islands)









Conclusions

Considering a foreseeable future of ~30 years:



Significant historical and ongoing abundance declines in all three ocean basins

+

slow growth, late maturity, low fecundity, and low genetic diversity

+

ongoing threats of overutilization and largely inadequate regulatory mechanisms

_

Moderate risk of extinction and proposed threatened listing under the ESA