

#### **NOAA** FISHERIES

Southeast regional Office

## **Oceanic Whitetip Shark**

Carcharhinus Iongimanus 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





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# 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	Ļ	Ļ	<b>80-95%</b> (since 1990s)	Declines in tropical purse seine fishery (Hall and Roman 2013; IATTC observer database)
Western & Central Pacific	Ļ	Ļ	<b>86 - &gt;90%</b> (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	Ļ	Likely stable	<b>57-70%</b> (1992-2005;1992-2000) <b>88%</b> (1950s-1990s)	Declines in pelagic LL fishery (Baum et al. 2003; Baum & Myers 2004; Cortés 2007)
South Atlantic	Ļ	Uncertain, but likely	<b>50-85%</b> (since 1990s)	Declines in Brazil LL fishery (Hazin et al. 2007; ICCAT database; Santana et al. 2004)
Indian Ocean	Ļ	Uncertain, but likely	<b>25-90%</b> (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)









Considering a foreseeable future of ~30 years:



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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