



Conserving Sharks and Rays: Now or Never



POSTCARDS

FROM THE
FIELD

GALA 2020



PHOTOS: JIM ABERNATHY/BRIAN SKERRY/THE MANTA TRUST

This is how most of us think of sharks: iconic but terrifying marine predators. That has led to decades of persecution, and no real efforts to conserve these ancient predators—even though they have topped marine food chains since before the age of the dinosaurs, and play a crucial role in ocean ecosystems.





PHOTO: WCS COLOMBIA



PHOTO: IUCN SSG



PHOTO: JIM ABERNATHY



PHOTO: WCS INDONESIA

But in fact there is a huge diversity of sharks and rays – over a thousand species, each uniquely adapted to its habitat. From (top left) the open ocean oceanic whitetip, to the (top right) amazon freshwater stingray, to the (bottom left) oceanic manta ray, and the critically endangered smalltooth sawfish (bottom right).



PHOTO: SHAWN HEINRICHS/LUKE WARWICK

Increasingly we are moving beyond fear. Iconic species such as the globally endangered whale shark, the largest fish in the sea, now drive huge ecotourism revenue—with shark and ray dive tourism worth over \$100 million to the economies of some countries, far more than they would be worth if killed for the product that has driven global shark declines: shark fins.





PHOTOS: SHAWN HEINRICHS/LUKE WARWICK

Because these ancient predators are now on the edge—with over 100 million sharks killed every year, for their meat, but predominantly for their fins, which can be worth over US\$1000 per kilogram when sold for use in shark fin soup, predominately in East Asia.

One in four species are at risk of extinction

Species assessed by the IUCN Red List



Amphibians

40%



Conifers

34%



Reef corals

33%



Sharks and rays

31%



Selected crustaceans*

27%



Mammals

25%



Birds

14%

*Assessed species include lobsters, freshwater crabs, freshwater crayfishes and freshwater shrimps

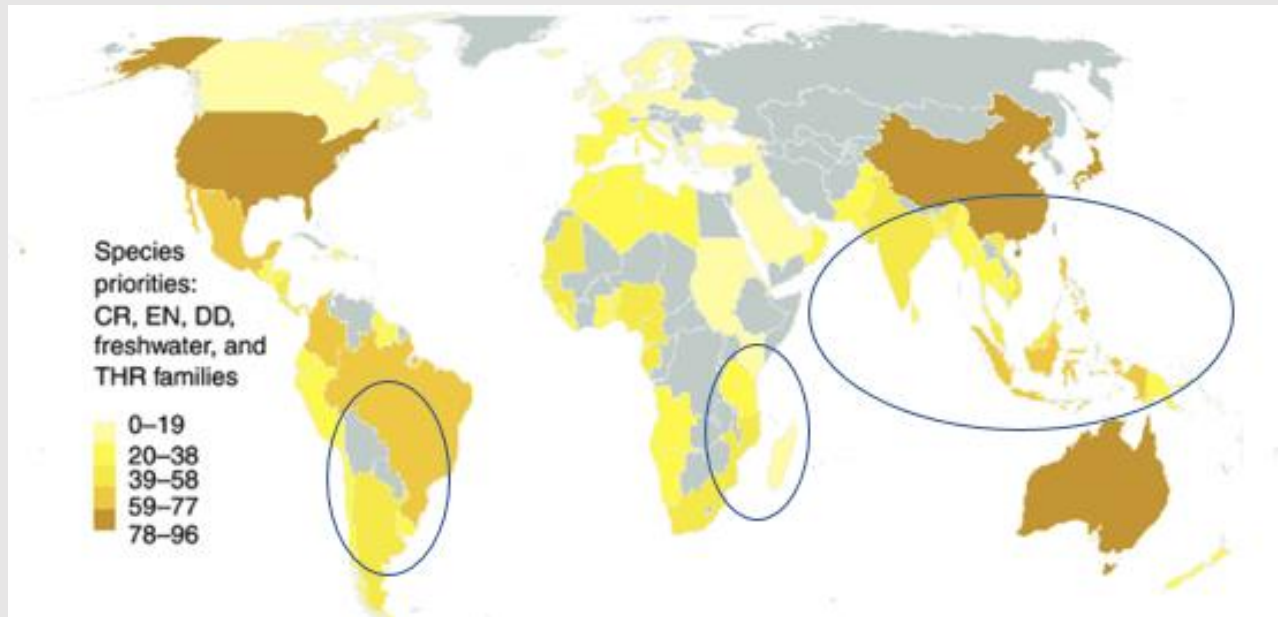
Source: IUCN Red List of Threatened Species

BBC

PHOTO: SHAWN HEINRICH

This fin trade has pushed sharks and rays to the edge with its scale and scope, and now 31% of sharks and rays have been assessed as at imminent risk of extinction, the second highest rate of all vertebrate groups on the planet. If we don't act now – these species will be lost forever.





GRAPHICS: DULVY ET AL 2014

WCS has developed our shark and ray conservation priorities by looking at where endangered species hotspots (top map) overlap with shark fishery hotspots (bottom map) --this shows us where our help is needed the most.



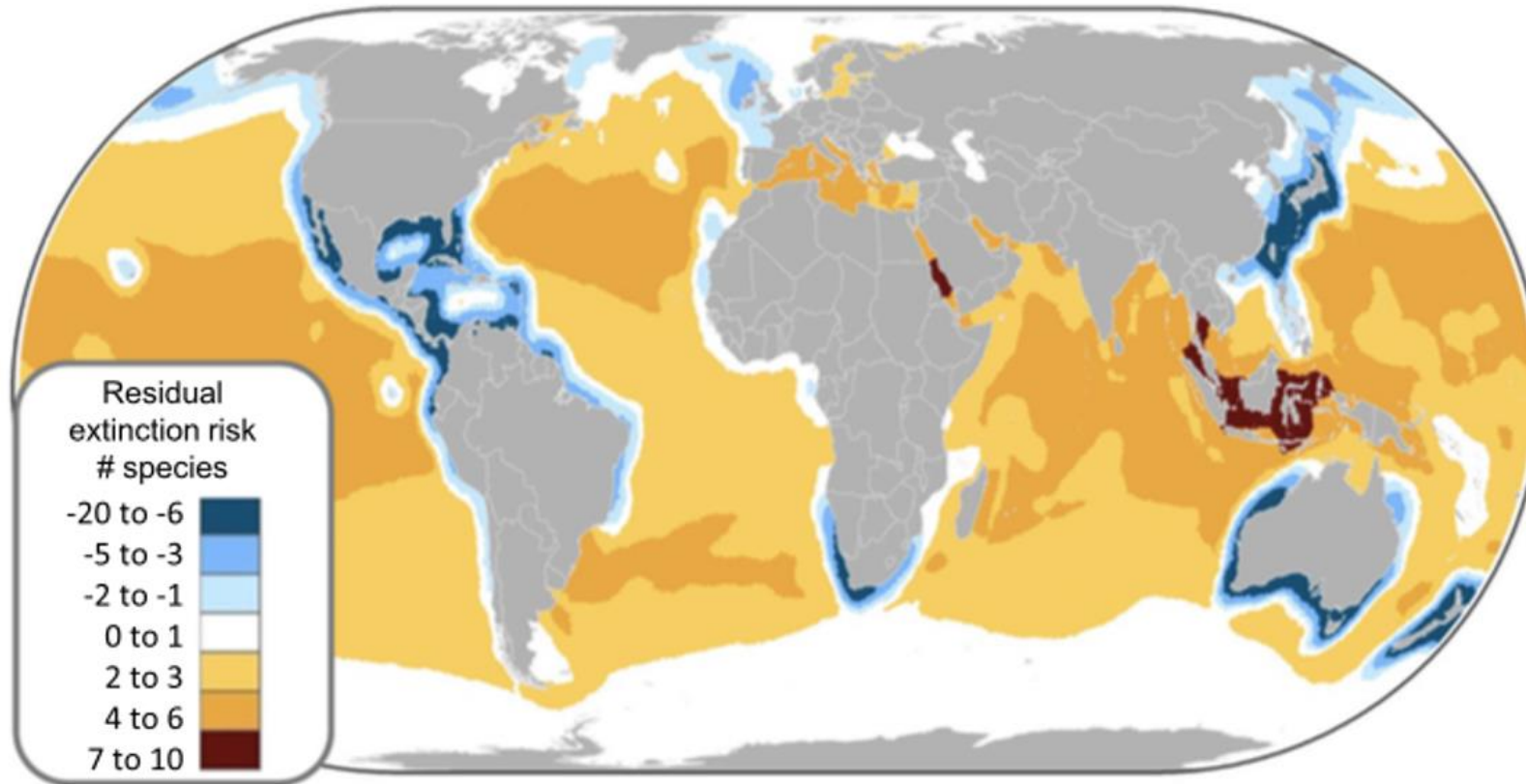


We now have over 10 dedicated shark and ray conservation programs in these shark diversity and fishery hotspots—in the Indian Ocean from Mozambique to Indonesia and Papua New Guinea, along with Gabon in West Africa, and Argentina in Latin America.



We are working where it matters most—engaging with fisher and ecotourism communities to understand how many sharks are caught, how, and why, in order to inform recommendations for strong policies that protect the most endangered species and manage the catch of those still found in larger numbers. This bottom up and top down approach is crucial to solve this critical conservation issue.





Source: Dulvy et al. 2014

Indonesia is a global priority for shark and ray conservation and management, as it's both a biodiversity hotspot and a threat hotspot. Indonesia sits at the heart of the Coral Triangle, a mega-diverse region for marine wildlife, including sharks. It is also the world's largest shark and ray fishery, and intense fishing pressure means that sharks are at very high risk for extinction in this region.



PHOTOS: WCS INDONESIA

Indonesia's shark fishery is huge, and employs lots of people, with an estimated annual export value of US\$125 million. At the same time, tourism is large and growing, with at least 10 million people visiting shark and ray dive sites around the world, with an estimated value of US\$200 million. We need to balance competing interests.





PHOTOS: WCS INDONESIA

We have collected comprehensive shark fisheries and socioeconomic data from key sites in focal provinces, which has been used to develop practical local- and national-level shark fisheries management measures, including catch limits and protected areas for hammerhead sharks and critically endangered wedgefish.





PHOTOS: WCS INDONESIA

WCS Indonesia has trained >500 law enforcement officers in techniques for preventing, detecting and investigating marine wildlife crime; supported enforcement agencies to gather and analyze intelligence and apprehend 38 illegal shark and ray traders. These cases led to >100 months of jail time, US\$50,000 levied in fines and >70% reduction in manta ray mortality at key sites.



WCS shark conservation vision

“Sharks and rays are effectively protected and sustainably managed, delivering ecological and socio-economic benefits to people and ecosystems”

A new 10 year WCS shark strategy is in development, to shape how we build on our work in locations like Indonesia, to save these iconic predators around the world, for launch before the end of 2020 – focusing on these key areas:



**Protecting
Endangered
Species**



**Conserving
Shark
Habitat**



**Managing
Shark
Fisheries**



**Enforcing
Trade
Measures**



**Research and
Community
Engagement**



What will this look like in practice? To end, this video shows what we are trying to create – in 10 priority sites around the world WCS will work with fishers and other communities to understand the science of shark fisheries and populations, to inform governments and aid in the setting of laws that protect species and regulate shark catches and trade, that we can help to enforce. These holistic programs, such as our growing work in Bangladesh can save sharks and rays before they disappear.

