



WORKING  
TOGETHER TO  
CONSERVE  
SHARKS AND RAYS

**TRAFFIC**  
the wildlife trade monitoring network



# SHARKS: RESTORING THE BALANCE

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A JOINT INITIATIVE OF WWF AND TRAFFIC TO CONSERVE SHARKS AND RAYS

## SHARKS

Mythologized,  
feared, revered.  
These ancient  
predators capture  
our imaginations. But  
sharks are in trouble –  
victims of irresponsible  
and unsustainable fishing  
practices. The decline of sharks  
spells trouble for the ocean.  
Removing these key predators from  
the food chain has serious consequences  
for marine ecosystems, which in turn has  
repercussions for people everywhere.

WWF is one of the world's largest and most respected independent conservation organizations, with over 5 million supporters and a global network active in over 100 countries. WWF's mission is to stop the degradation of the Earth's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

TRAFFIC, the wildlife trade monitoring network, works to ensure that trade in wild plants and animals is not a threat to the conservation of nature. TRAFFIC is a strategic alliance of IUCN and WWF.

**Front cover:**

Caribbean reef shark (*Carcharhinus perezi*).  
Bahamas, Atlantic Ocean.

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# WHAT'S DRIVING THE DECLINE?

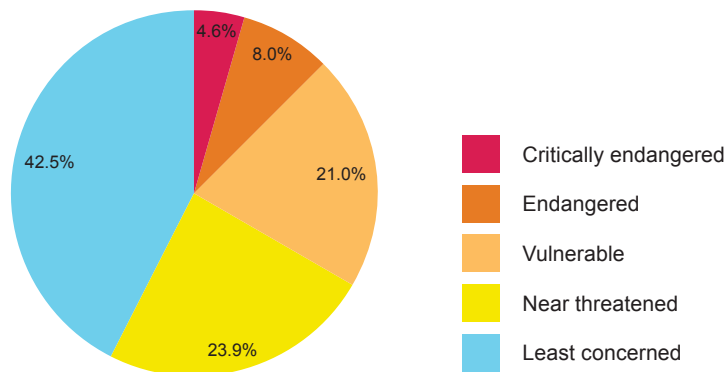
Sharks are the last of Earth's top predators to be hunted commercially around the world. The scale is massive – approximately 100 million sharks and their relatives are taken annually.

While highly profitable for a few people in the short-term, most shark fishing occurs with little or no management or oversight, and with scant regard for the health of the marine environment, livelihoods and food security for millions in coastal communities. Rays and skates are also fished in vast quantities, and some populations have plummeted, yet receive far less attention.

Overfishing is the single greatest threat to sharks and rays. From the coasts to the high seas, they are deliberately targeted, taken as secondary catch while targeting other species, or accidentally caught. In some regions, such as the East Coast of the United States, populations of some sharks have crashed by more than 95 per cent.

Sharks are sought for fins, meat, leather, liver oil and cartilage. However, it is the demand for shark fins in Asia that is the greatest driver of overfishing and population declines.

Conservation status of sharks, skates and rays in 2014



Note: Of the 1,041 known species of sharks, skates and rays, the conservation status of 539 has been assessed. The remaining 502 were data deficient.

In Hong Kong, the centre of the fin trade, shark fin soup is a luxury item served at wedding banquets and other celebrations; it symbolizes power, wealth and generosity. Bolstered by the China-led economic boom, the global trade in shark fin products grew massively. In the case of manta rays and devil rays, the gill plates are used in China to make a detoxifying health tonic.

Some species, such as spiny dogfish, porbeagle, shortfin mako, deep water dogfish, skates and rays are targeted primarily for their meat. With only one

independently certified sustainable fishery for any shark or ray anywhere in the world, the vast majority are caught outside well-managed fisheries. While the demand for shark, ray and skate meat isn't given as much attention as shark fin, the trade has been increasing since the early 1990s and the sheer volume from fisheries that are not well managed is a serious threat to the survival of these species.

Fisherman holding dorsal fin cut from scalloped hammerhead shark (*Sphyrna lewini*). Cocos Island, Costa Rica.



LOSING SHARKS CAN IMPACT OUR FAVOURITE SEAFOODS.

MASSIVE DECLINES IN LARGE PREDATORY SHARKS OFF THE EASTERN SEABOARD OF THE U.S. RESULTED IN INCREASED NUMBERS OF SMALLER SHARKS AND RAYS, AND SUCH LARGE INCREASES IN COWNOSE RAYS THAT THEIR PREDATION ON SCALLOPS COLLAPSED A CENTURY-OLD SCALLOP FISHERY.




# WHAT CAN BE DONE?

The WWF/TRAFFIC shark and ray initiative will capitalize on the increased global attention on sharks and maximize the benefits from the 2013 CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) Appendix II listing of five sharks and two manta rays. The CITES listings provide a prime opportunity to achieve transformational change in the management and conservation of sharks and rays, as most of the nations of the world are now committed to the sustainable management and trade of some important species.

*“We have the know-how to conserve ocean health and bring these magnificent creatures back from the brink of disaster. Now we need the will to take action.”*

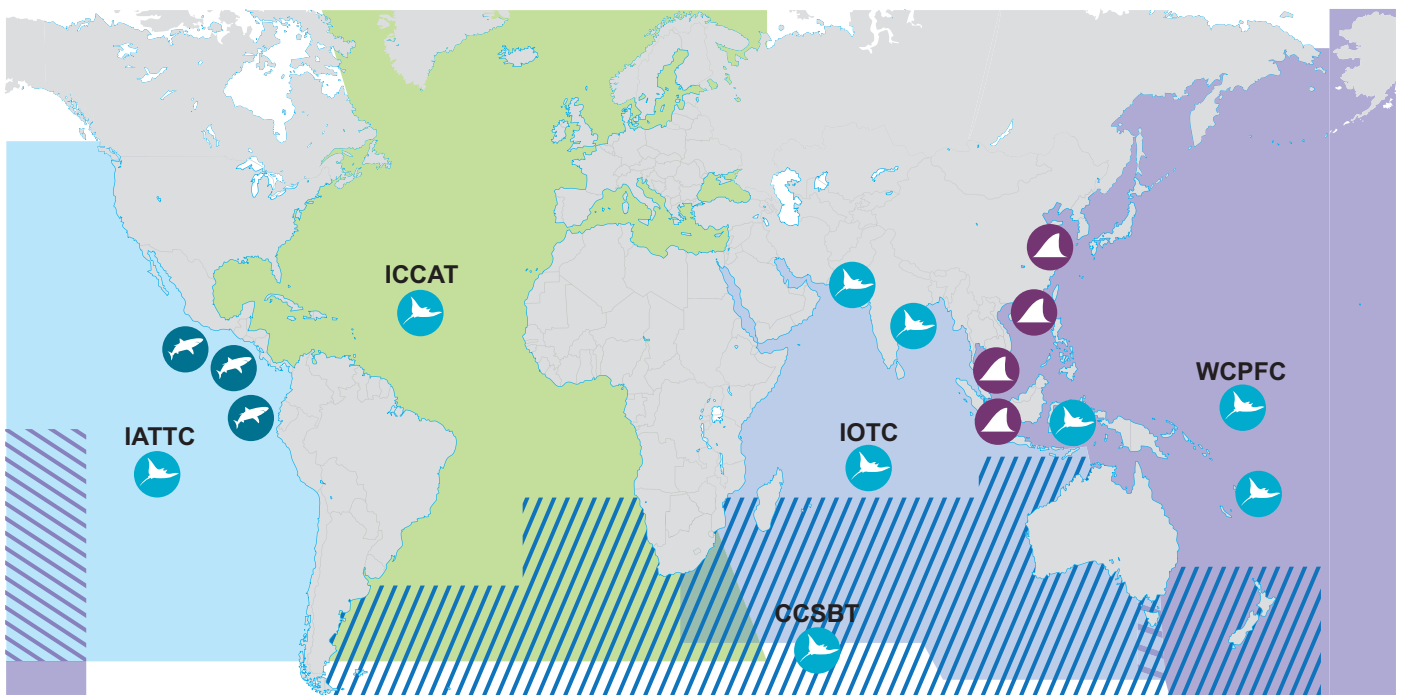
Andy Cornish, Sharks: Restoring the Balance Leader

## Where will we operate

-  Reducing demand for shark fin
-  Reducing demand for shark meat
-  Improving management of shark and rays

## Regional fisheries management organizations

- IATTC – Inter-American Tropical Tuna Commission
- ICCAT – International Commission for the Conservation of Atlantic Tunas
- IOTC – Indian Ocean Tuna Commission
- CCSBT – Commission for the Conservation of Southern Bluefin Tuna
- WCPFC – Western and Central Pacific Fisheries Commission



## Responsible use

WWF and TRAFFIC aim to ensure that shark and rays can be used sustainably to provide practical benefits to people, while maintaining or enhancing the marine ecosystem. In places where populations have sunk too low to be fished sustainably, complete protection may be the only answer.

However, by focusing on the positive aspects of the sustainable exploitation of sharks – whether through fishing and/or tourism – our strategy aims to demonstrate to policymakers how shark conservation can enhance food security and job creation, particularly in the developing world.

WWF and TRAFFIC are coming together to catalyse a formidable force for change. We will use our recognized strengths – the ability to work at different scales, from local projects to global advocacy; our solutions-oriented approach; and our commitment to using the best

available data to guide recommendations – to generate broad support for conservation and responsible use of sharks and rays.

The initiative focuses on the seven commercially exploited shark and manta species listed by CITES: oceanic whitetip, porbeagle, three species of hammerhead and two species of manta rays. The conservation benefits, however, will extend to a much broader range of sharks caught in the same fisheries, and traded and consumed along the same supply chains.

**A 2014 STUDY REVEALED THAT AROUND 25 PER CENT OF THE MORE THAN 1,000 SPECIES OF SHARK, RAY AND CHIMERA ARE THREATENED WITH EXTINCTION DUE TO OVERFISHING, WHETHER TARGETED OR INCIDENTAL. COASTAL POPULATIONS OF LARGE-BODIED SPECIES ARE MOST AT RISK, AND THE WORST DECLINES HAVE BEEN IN THE CORAL TRIANGLE AND MEDITERRANEAN.**

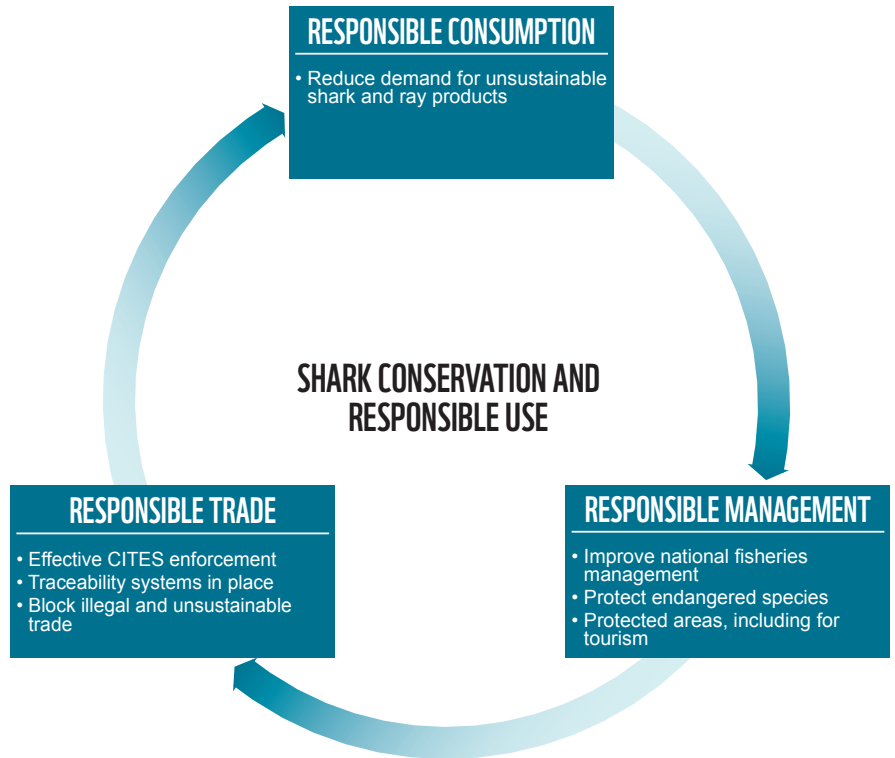
Manta ray (*Manta birostris*).  
West Papua, Indonesia.



## Vision and strategy

Our vision is to build a future where the world's shark and ray populations are thriving around our coasts and in the high seas, valued for their contribution to ecosystem, cultural and economic well-being.

We will achieve this by pursuing three strategies focused on improving management, reducing demand, and moving the international trade in sharks and rays toward sustainability.



WWF-Pakistan fisheries observer collects data on Mako sharks.

## Strategy 1

### Responsible Consumption

Shark fin soup, a cuisine popularized in southern China, is a traditional luxury item with little nutritional value; however, in the coastal communities of many developing nations, shark and ray meat provide a cheap source of protein. It is important that both consumption drivers be understood and tackled, as the root causes are very different.

- The sale of shark fin by the catering sector will be significantly reduced in the major cities of Hong Kong, Singapore, Malaysia and Indonesia.
- The source of shark and ray products (particularly meat) in Mexico, Colombia and Ecuador from domestic catch and imports will be analysed to develop a targeted strategy to reduce demand of the least sustainable products.

## Strategy 2

### Responsible Management

WWF and TRAFFIC will focus our efforts on three countries that collectively land one quarter of the world's sharks, rays, and chimeras: Indonesia and India, the two largest shark-catching nations in the world, as well as Pakistan. As their catches of sharks and rays are largely not controlled, we will work from the ground up to understand their fisheries and work with the authorities to build national action plans to increase monitoring, protect vulnerable species and reduce population declines to levels where they eventually can be rebuilt.

In addition to this Indian Ocean focus, more than a quarter of the global tuna harvest occurs in the Exclusive Economic Zones of Pacific Island nations. This fishery also catches many sharks. We will create partnerships with regional bodies and academic institutions, and create tools to allow interested countries and territories to conserve and sustainably manage their shark and ray populations, whether their motivation is to increase access to seafood markets demanding sustainability, or to brand themselves as world-class shark or ray tourism destinations.

- The major shark-catching countries of India, Indonesia and Pakistan, which collectively land 25 per cent of the world's shark catches, will significantly improve their management of sharks and rays.
- The Pacific Shark Heritage Programme will support improved management in eight Pacific Island Nation Territories.
- Ten new shark/ray tourism sites in WWF's priority areas will be created with the full engagement of local stakeholders following WWF's best practice guidance.

## Strategy 3

### Responsible Trade

If demand for sustainable seafood is to drive improvements in fisheries management, we must be able to trace shark products from sea to plate. While progress has been painfully slow in achieving sustainable shark fisheries, the CITES listings should motivate fishing nations to accelerate fisheries improvements. Still, considerable scrutiny is needed to ensure that credible and transparent sustainability assessments are undertaken, and that importing nations have sufficient measures in place to prevent shark fin and meat, and manta gill plates being imported illegally.

- The members of all relevant regional fishery management organizations will contribute to improved shark and ray fishery management by, as a minimum, implementing measures to ensure compliance with the provisions of CITES.
- A shark product tracking mechanism that delivers traceability and transparency in the trade of shark products from fishery to market will be developed and tested.

# Sharks and rays facts

100M

It is estimated that over 100 million sharks are killed annually, with around 10 million of those being blue sharks killed for their fins only

400M

The first great sharks evolved around 400 million years ago



314M

Global shark tourism generates revenue of around US\$314 million annually

25%

Indonesia, India and Pakistan land around 25 per cent of the global catch of sharks, rays and chimera



#### Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

[panda.org](http://panda.org)

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