Sharks

Sharks were swimming in the sea before the dinosaurs – that's over 40 million years! Today there are over 465 species of known sharks. They live in a wide range of ocean habitats, including deep waters, the ocean floor, the open ocean and shallow, coastal regions. Some shark species - like the Bull Shark - are even known to swim in salt, fresh and brackish (slightly salty) waters.

"The shark is the apex predator in the sea. Sharks have molded evolution for 450 million years. All fish species that are prey to the sharks have had their behavior, their speed, their camouflage, their defense mechanisms molded by the shark" Paul Watson- Founder, Sea Shepherd Conservation Society

Sharks vary greatly in size. The smallest known species are deepwater sharks, growing to only about 25cm. The largest—also the largest of all fish—grow to 12 metres in length and weigh up to about 20 tonnes.

As an apex predator at or near the top of their marine food chains, sharks play an important part of marine ecosystems by helping to regulate populations of species below them. Most sharks prefer to munch on small fish and invertebrates, although some of the larger (and more fearsome) sharks will also eat seals, sea lions and other larger mammals.

Of the hundreds of species of known sharks in the oceans today, only about 12 of those have been involved in attacks on humans. Turns out most sharks are just interested in doing their own thing and are not particularly interested in us! Phew! Sharks are simply opportunistic feeders, meaning that if they see something splashing around in the water, they will investigate it, which can unfortunately mean a chomp.

The fact is that sharks have far more to fear from us than we from them. Humans hunt sharks for their fins, organs and skin, or just because they are scary. Some of the reasons sharks are facing rapid and serious drops in numbers include:

- **Meat:** Shark meat is eaten in most, if not all, countries around the world. In Australia, we often find shark on the menu as 'Flake'. The name 'flake' only refers to two species of gummy shark.
- **Fins:** Finning is the process of cutting off the fins of a shark and discarding the body at sea. It is both a cruel and wasteful practice.
- **Bycatch:** Many different species of sharks are caught in Australian shark fisheries, but they are also caught as bycatch when catching other fish. Shark species often captured as bycatch include Gummy, School, Mako, Blacktip, Dusky, Sandbar and Gulper (commonly called Dogfish) sharks.
- **Marine debris, pollution and habitat loss:** As with many other marine species, marine debris poses significant risks to sharks. For example, plastic bait straps, used to hold cartons of fishing bait together and often discarded at sea, are known to cause problems for sharks, including the severing of fins and destruction of gills, vertebral deformation and asphyxiation. Many shark species use coastal and estuarine areas as a safe place for sourcing food, breeding and protecting young from predators and competitors. Increasing coastal development threatens these areas.

The real problem with all this is that we really have no idea how shark numbers for many species are faring. We know they are lower than they have been in the past. But without a clear understanding of shark numbers or of shark biology, the impacts of fishing on shark species are very concerning, particularly when you consider the important role sharks play in the health of marine ecosystems. Studies undertaken by the IUCN (International Union for the Conservation of Nature) show that a quarter of all shark and ray species are threatened with extinction as a direct result of poorly regulated fishing.

The International Union for Conservation of Nature is the global authority on the status of the natural world and the measures needed to safeguard it.

The sad reality is that sharks are likely to be in the first round of marine extinctions caused by human behaviour.

What can you do?

Cut back on waste. Think about what you're buying and ask yourself, "Do I really need this?" and "Is there a waste-free alternative to this thing I want or need?" This means considering what the product is made from and packaged in. Cut back on plastics where you can – especially single-use plastic products and those that can't be recycled. With any waste that you do create, make sure it gets into the correct bin (e.g. recycling or landfill) and stays there.

Keep waste out of the sea. This means keeping waste off the land and out of waterways, as waste will blow from the land into waterways and then into the sea. If you see some waste at the beach or the park or when just walking down the street, pick it up and put it in the bin.

Buy sustainable seafood. The most important thing you can do to help fish is to buy sustainable seafood. Look for the blue MSC logo when purchasing wild-caught seafood and the green ASC logo when purchasing farmed seafood. Make a commitment to only buy and eat seafood that has been harvested and produced to the highest sustainability standards.

You could also download the Australian Sustainable Seafood Guide to use when you go shopping: https://www.msc.org/en-au/what-you-can-do/eat-sustainable-seafood/sustainable-seafood-guide

You can also use the Good Fish sustainable seafood guide app: https://goodfish.org.au/resource/app-download/

Take only what you need. If you go fishing don't be a fool with fish. Only catch what you can eat and release the rest. And take your rubbish (including old fishing line and hooks) with you.

Support the creation of more marine sanctuaries. Write to your local member of parliament calling for greater protection of marine areas in your area or of those that you love.

Adopt a beach (or creek). If you live close to the coast, then volunteer your time to help keep your local beach clean or to help protect coastal habitats (including turtle nesting sites). If you don't live near the coast, then volunteer to clean up your local waterway. Improving the health of local waterways improves the health of the sea.

Help change climate change. The only way to address climate change is to dramatically cut our greenhouse gas emissions. While it is true that this requires governments and big businesses to take the biggest steps, there are steps we can all take. You can try increasing your energy efficiency by switching off your lights when you don't need them, choosing energy-efficient appliances, and taking the bus instead of the car. You could also try shifting to renewable energy sources (like solar, wind and hydropower).

Become an Ocean Guardian and join the global movement now!

Go to the Blue website to become an ocean guardian and take action for our ocean (https://bluethefilm.org/take-action/)

Reference list

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- Explore the issues - https://bluethefilm.org/explore/