

Brooklyn Hoegy
Mistreated and Misjudged: Great White Sharks

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Humane Education Network

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I remember coming downstairs when I was 10 years old to find my dad watching a documentary on shark attacks. I saw the blood stained water and heard the gruesome narrations before I closed my eyes, covered my ears, and ran back upstairs, my head full of disbelief in what I had just witnessed. Ever since then I've had a huge fear of open waters. I refuse to swim more than 10 feet from shore because I am convinced that I will end up like the girl in the documentary. When I found out that there are around 63 shark attacks a year (Liang, 2024) I was shocked. Sharks, especially great whites, are portrayed as bloodthirsty savages that will attack anything that moves, but that is definitely not the case. To prove this, a study in Carpinteria Beach in Santa Barbara, as well as Del Mar in San Diego, was done to see how often sharks and humans interact. Researchers would fly drones over those waters to catch shark and human interactions. They witnessed at least one human-shark interaction 97% of the time, with only 2 shark bites (Freedman, 2023).

Over the last few decades, this irrational fear that humans have of sharks has gotten out of hand, resulting in a decrease in great white shark population. Since 2006, the great white shark population in North America has decreased by 80%. If this trend continues, great white sharks could be extinct within this century (Ferruggiaro, 2020). It is one thing to be scared of sharks and never go in the water, but it is another thing to use fear as a way to justify killing an innocent animal. This is why I chose to write about the great white sharks. Although I have an intense fear of them, I can acknowledge that how humans treat them is unjust. Great white sharks are not as scary as we think, and it is important to bring awareness to this situation so that we can do as much as possible to protect them before it is too late.

Their Importance

As apex predators, sharks play a vital role in their ecosystem. They balance their ecosystem by eating lower species, which keeps the populations at healthy numbers and adds to the biodiversity (Smit, 2023). Sharks are also important for lessening the amount of carbon emitted into our atmosphere (Oceans Research, 2021).

Sharks are a keystone species, which means they are extremely important for their ecosystem. As a keystone species, sharks are responsible for keeping their prey at balanced numbers, which in return keeps species lower than their prey at balanced numbers as well (Smit, 2023). By preying on the already abundant fish, sharks give other, smaller species the opportunity to flourish. Giving the ecosystem good biodiversity. To be biodiverse is to have many different species in an ecosystem. An ecosystem that is biologically diverse is less likely to be affected by change. All of these species will have different tolerances to salinity, temperature, light, and resistance to disease. So when a change occurs, not every species will suffer, and the ecosystem can remain full (Chlebeck, 2022).

Sharks are carbon sinks. Carbon sinks are anything that absorbs more carbon than they emit (ClientEarth, 2020). When an animal dies in the ocean, all of the carbon in their body rises to the surface, contributing to the high numbers of carbon in our atmosphere. Great white sharks prevent this from happening because they are scavengers, and eat the carcasses at the bottom of the ocean. They are essential for combating climate change and scientists have said that great white sharks are responsible for removing half of the carbon from the atmosphere (Oceans Research, 2021). Not only do great white sharks remove a large amount of carbon, but all of the carbon that they absorb stays in the ocean. When great white sharks die, all of their carbon is released into the sediment of the ocean floor, where it will stay (Ricketts, 2023).

Why They Are Endangered

Great white sharks are endangered. It takes them a long time to mature (26 years for males and 33 years for females), and once they do, they do not have many offspring (NOAA Fisheries). Researchers have determined that less than 5% of sharks can be killed each year in order for their population sizes to remain stable (Nuñez del Prado Alanes, 2023). The great white shark population has been declining for years, which is due to bycatching (World Wildlife Fund, n.d. b). Sometimes, sharks get caught in nets and fishing gear meant for other fish. When this occurs, they will oftentimes be released back into the water. Still, some fishermen find it more profitable to cut off their fins and discard their bodies (International Fund For Animal Welfare, n.d. a). Shark products are very valuable. So even if they were not trying to catch a shark, many people will keep them to make money. Not having their fins cut off by fishermen does not guarantee their survival. The outcome of bycatching is usually death anyway. This is because the rapid change in pressure can cause great white sharks' internal organs to rupture (Dell, 2023).

Overfishing for shark fins and meat is another factor that has had a detrimental effect on the great white shark populations. As mentioned, shark meat and other products sell for high value, so everyone tries to catch them in extreme numbers. Unfortunately, there is not enough control on fisheries to prevent this from happening. This results in unsustainable fishing habits, and sometimes illegal fishing. Fisheries will use open ocean longlines with thousands of hooks to catch as many sharks as possible (World Wildlife Fund, n.d. b). Sharks are not the only ones that are overfished. Their prey is too. Commercial fishing has lowered great white shark's prey populations, meaning that there is less for them to eat. Many sharks will die of starvation because of this (SSI, 2021).

What You Can Do

There are many organizations that work towards raising awareness and collecting funds for great white sharks as well as shark sanctuaries where they are protected and fishing is banned. This is all great, but what can *you* do?

In order to protect great white sharks, we need to stand up for them. Donating is helpful, but the most beneficial thing you can do is educate elected officials on the issue as well as on how to make more sustainable choices in our oceans (Chlebeck, 2022). Laws and treaties are proven to be effective in conserving great white sharks. So push them to create more laws against overfishing and have them spread the message that sharks aren't as scary as Hollywood has made them out to be. There have been state laws for shark protection in California since the 1990s, and due to these laws, there has been an increase in the great white shark population of California (Pauda, 2023).

Your voice matters! Besides Asia, Canada was the largest importer of shark fins. But, there is now a law against shark fin importation and exportation. As of June 18, 2019, Bill S-238 has been incorporated into Canada's Fisheries Act. This is mainly due to the thousands of Canadians who signed the petition, emailed, and called the members of parliament to fight to protect great white sharks (Oceana Canada, 2019).

Another way to save the great white sharks is to stop consuming shark products. Multiple pet food brands have been exposed for containing endangered shark meat in their food (Nuñez del Prado Alanes, 2023). But it is not just food; shark cartilage can be found in lots of cancer, arthritis, psoriasis, and other inflammatory disease treatments, even though there is little evidence proving if it is beneficial (Nuñez del Prado Alanes, 2023). For this reason, it is important to pay attention to ingredient labels of products.

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Lastly, limit your seafood consumption overall. As mentioned earlier, bycatching has a huge effect on great white shark population numbers. Fishermen will have nets in the water to catch the smaller fish that we commonly eat, and then a shark will get caught in it. By cutting down on your amount of commercially caught fish, you will lower the risk of a great white being bycaught (Nuñez del Prado Alanes, 2023). Eating less fish is also good because it leaves more for the sharks. If humans continue overfishing and removing the prey of great white sharks from the water, sharks will soon not have a big enough food source to sustain their population size (SSI, 2021).

In Conclusion

Sharks play a key role in keeping their ecosystem balanced and fighting climate change. That is why it is critical that we take action to protect them from the harms of overfishing and bycatch. To save great white sharks, we must not only advocate for them, but also be more conscious about what products we buy and consume.

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