

# [Sharks as useful and very interesting creatures](https://assignbuster.com/sharks-as-useful-and-very-interesting-creatures/)

[Environment](https://assignbuster.com/essay-subjects/environment/), [Nature](https://assignbuster.com/essay-subjects/environment/nature/)

Sharks get a bad name every summer for attacking people or being seen on beaches every year. What most people don’t understand is that they are very cool, interesting, and very gentle marine animals. Sharks are part of the Chondrichthyes class and are found mostly in marine, but some can be found in freshwater. Through the years scientist have researched sharks in many things and have learned a lot in the years. One thing that is still being researched is there migration with where and how they migrate.

Estuaries are important places for habitats for many species that live in fresh and saltwater. They produce a good place for nursing small marine life to adulthood. But with the changing in the salinity levels can cause an impact on the availability of habitats. For these special environments habitat selection is influenced by things such as temperature, salinity, and other factors like food availability and risk of predators (Bangley et al 2018). Most of the studies done on sharks have been completed on juvenile or small species of sharks but now wanting to research the increasing size of sharks but can be hard to get accurate data with the high mobility sharks have.

The studies have shown that juvenile and other small sharks find habitats with minimal to no predatory risk. A study was done from 2007-2014 to survey shark migration. A total of 2, 408 sharks were captured. The Rhizoprionodon terraenovae, Carcharhinus leucas, Carcharhinus isodon, Carcharhinus plumbeus, Mustelus canis, and the Carcharhinus brevipinna. All of the sharks in the study were identified by their sex, total length, and the species. Also, where they were found the depth, water temperature, salinity, and the dissolved oxygen was recorded to compare. For this study six season were picked, winter, spring, summer, and late fall.

One of the most important part of a shark is there skin. The skin is composed of cartilage that has mineralized denticles embedded inside. The dermal denticles on the skin of sharks help in the performance of their swimming. A study was done on the mineralized denticles by using a mechanical testing. This was done by dissecting hourglass shapes skin and muscle from 10 different marked places on each shark to compare. Bonnethead, scalloped hammerhead, and bull sharks were used in this study. The skin was tested in tension failure and stress strain. The research showed that the strongest and toughest part of a shark is near the head. When the density of denticles was double of the stiffness the toughness of the skin decreased but the strength did not.

When it comes to understanding how predators, prey, and competitors can affect other sharks is important because this could help see how the numbers change in the different species. To see how this affects sharks a study was done in nine nurseries form 2012-2013 . The study was done in Moorea in French Polynesia. Moorea has shallow lagoons that help protect the sharks from large predators and also serve as a nursery to raise to adult. Juvenile blacktip sharks and juvenile Sicklefin lemon sharks where used in this study. Using small gillnets at dusk and early evening the sharks were caught. When caught they were tagged and blood samples were taken. 99 juvenile blacktip reef sharks and 56 juvenile lemon sharks were sampled. The data showed that Lemon sharks had higher d15N but lower d13C then blacktip sharks.

Sharks are very complex and amazing maire animals to study. They do so much for the environment and the more scientist study these amazing animals the cooler discoveries are found. Sharks have a very strange migration pattern that is still being researched and tracked to this day. They also have a very interesting cartilages skin that helps them in many ways to survive in different environments. If more people would research and just see how amazing they are sharks would probably be understood more and not just thought of as a shark from Jaws.