

# **Sharks – A Real Shark’s Tale**

Blue Reef Aquarium is home to a number of native and tropical sharks and rays. We have a native display where you will discover the range of species living in UK waters. This low lying, floor to top glass tank provides an ideal view for learning about specific adaptations such as senses, body design and reproduction (egg laying/live birth). Blue Reef also houses tropical sharks and rays in our underwater tunnel tank. This provides us with another ideal area to discuss shark attacks and conservation. We will also show school groups a real sharks jaw and a piece of sharkskin for a hands on look at sharks.

Sharks have been around for over 400 million years. They have adapted to be the top predators in the worlds oceans. There are roughly 350 species of shark. The largest being the whale shark (Over 14m Long) and the smallest being the pygmy shark, (the size of an adults thumb).

## **UK Species**

There are 33 species of sharks found in the UK waters. The largest is the Basking Shark (over 10m long), which can be seen round our coasts in the summer months. The Basking Shark is a gentle giant feeding on plankton, microscopic plants and animals found in the surface waters. Other species include Blue Sharks, Short Fin Mako Sharks and Thresher Sharks. The most common UK species is Dogfish which have been successfully bred at Blue Reef.

## **Senses**

Sharks share the same senses as most fish but their sensitivity is heightened. They have an amazing sense of smell – sharks can detect a single drop of blood in an Olympic size swimming pool. Sharks can detect tiny vibrations in the water through their lateral line – jelly filled holes along the sides of their bodies. Importantly, sharks also have an extra sense – the ability to detect electrical signals given off by muscles to find prey. They do this by using specialised cells around their nose and mouth.

## **Body design**

The position and shape of fins make sharks very hydrodynamic. They have special skin covered in teeth which slice through the water reducing the drag over their body. The children will have a chance to touch some real sharkskin on the tour.

## **Reproduction**

Sharks have varied methods of producing young – some species give birth to live young, however some species lay eggs called Mermaids Purses. The children will have a chance to see baby sharks in the nursery display, and touch a real shark egg.

## **Shark attacks**

Most attacks are a case of mistaken identity. Mistaking humans for normal food items such as seals or turtles. There are 3 species responsible for the majority of shark attacks – Tiger, Great White and Bull sharks. World wide, roughly 100 shark attacks a year takes place, but only about 12 are fatal.

## **Conservation**

In comparison, humans kill 100 million sharks a year. Due to over fishing by humans, some species are almost near to extinction. As sharks are top predators in food chains, this will have a knock on effect further down the food chain. Shark populations need our help to prevent this from occurring. We hope that this tour will give children a deeper understanding and respect for these magnificent creatures.