

## Endangered Species Fact File: Sea Turtles

### Habitat Profile

Sea turtles are ancient creatures – the earliest fossil record dates back to 2.5million years ago! This means that they were here before the dinosaurs, survived mass extinction events and were present for the evolution of birds.

Today, all 7 species of marine turtles are either endangered or critically endangered. This means that it is absolutely crucial to the survival of the species that we protect and help them any way that we can.

Being reptiles, sea turtles are cold blooded and they rely on the sun for body warmth. For this reason, most do prefer the warmer tropical regions of the world, especially during their nesting seasons. Having said that, sea turtles can be found in most oceans around the world – with 5 out of the 7 different species being spotted in New Zealand waters!

Sea turtles travel incredible distances in their life time – some migrating across entire ocean basins in order to get between their feeding, breeding and nesting grounds.

### Adaptations

The sea turtle has some cool adaptations that help it to survive for millions of years. These include:

- 1. Armour plates** – The hard and rough shells provide turtles with protection. A green sea turtles shell is made up of keratin, the same as fingernails. Underneath the keratin shell is a fine network of capillaries that carry blood and heat to and from the turtle's body.
- 2. Sharp beak** – turtles have no teeth, their jaw is powerful and shaped like a bird's beak which helps them eat hard-shelled animals as well as their main diet of sea grass.
- 3. Forelimbs** – are modified into long, paddle-like flippers for swimming. This allows it to maintain its speed whilst traveling. The cruising speed for green sea turtles is about 1.5 to 9.3 km/h.
- 4. Body shape** – turtles are hydrodynamic, meaning their bodies are shaped to minimise drag and resistance when traveling through the water.
- 5. Lungs** – turtles have more than one lung located on the top of their shells for breathing. They also have 2 sets of muscles for breathing. One set of muscles is responsible for stretching the body outward from the shell. Which expands the body cavity of the turtle, allowing it to inhale, while the other set draws the body inward to exhale.

