

Description

Turtles are ancient reptiles ranging in size from 70cm in the Kemp's Ridley turtle up to 3m in length in the giant Leatherback turtle. They are all characterised by a protective shell known as the carapace, a mouth in the form of a beak, four strong paddle-like flippers and lungs for breathing air. Turtles have salt glands under their eyes to excrete excess salt. A turtle can remain under the water for half an hour before needing to come to the surface to breathe. These animals are known for their long lifespan, sometimes living to be over 100 years of age in certain species.

Distribution

There are 7 different species of marine turtles, 6 of which are found in Australian waters. The seventh species is the Kemp's Ridley, which is only found along a small restricted coastline in Mexico. Some species such as the Loggerhead can be found worldwide, whereas others are more restricted such as the Flatback turtle, found only in the northwestern, north and northeastern parts of Australian waters.

Diet

This is dependent on the species of turtle. Looking at the shape and design of the beak can give us clues to the diet of different turtle species. Loggerhead turtles have a strong, vice-like beak for crushing hard food items like shellfish, crabs and urchins, and will also feed on soft sea jellies. Green sea turtles get their name because they are herbivores that feed on sea grass and algae that turn their innards green, so their beak is designed like a pair of scissors for cutting the grass and algae. Hawksbill turtles feed on sponges, soft corals and shellfish; Leatherback turtles feed predominantly on sea jellies; Flatback turtles eat soft bodied prey like sea cucumbers and sea jellies; Olive Ridley's eat shellfish and crabs; and Kemp's Ridley's eat invertebrates. The fact that many turtles eat jellyfish poses a problem as plastic bags floating around the ocean resemble this food source and can either choke the animal or cause serious digestive and health problems, usually leading to the death of the animal.

Breeding

Turtles are reptiles so they lay eggs about the size of ping pong balls. Turtles only start breeding when they are 30-50 years of age, so they have an extremely slow life-cycle. Mating occurs in waters adjacent to the beach where the eggs are laid, which is usually the same place that turtle hatched from. Only the female ever goes back onto land where she digs the body pit and lays up to 150 eggs. One female may make up to 7 nests in one breeding season which occurs every three or more years. This means she lays a lot of eggs, but only 1 in 1000 of those eggs will survive to become an adult. Most young turtles are eaten by land and marine predators as soon as they hatch. The eggs are incubated for 7-11 weeks, and the sex is temperature dependent: warmer beaches = more females, cooler beaches = more males. The first 10-20 years of the turtles life are known as "the lost years", as scientists are uncertain as to where the turtles are or what they do during this period of their life.

Threats

The biggest threat to turtles are humans. Impacts such as loss of habitat, beach junk/pollution, feral predators, beach erosion/nourishment, artificial lighting, drowning in nets, harvesting of adults and eggs, trawling and boating, and collision with boats have all caused a large decrease in turtle populations of the past decades. Some species like the Loggerhead may be extinct within 40 years if they continue to decline at the present rate.