

July/August 2006

MARINE TURTLES MEDIA INFORMATION SHEET

Introduction

Marine turtles are beautiful, gentle and amazing reptiles that have roamed the oceans since the time of the dinosaurs. With their oval-shaped bodies, triangular-shaped heads and flippers as limbs, they glide effortlessly through water.

Marine turtles in South African waters

Four of the seven marine turtle species are often seen in waters off our coast. These are the Loggerhead, Leatherback, Green and Hawksbill turtles. The Olive Ridley turtle visits our waters occasionally. Scientists use satellite transmitters to study their migration routes and have found that they swim right around our coast, even as far as Namibia!

Leatherbacks

Leatherbacks are enormous, growing up to 1,8m and weighing more than 500kg. They differ from other turtle species in that they have thick, leathery skin instead of the hard shell, or carapace, of the other species. This allows them to dive to great depths to search for food. A unique blood supply system allows them to keep their bodies a bit warmer than the water.

Loggerheads

Loggerhead turtles have extremely powerful jaws that they use to crush molluscs. They grow to about 1m and weigh around 115kg. They often have encrusting organisms such as barnacles on their backs.

A marine turtle's diet

Green turtles are herbivores and feed on sea grass and algae. Others are carnivores and eat crabs, sea urchins, sponges, fish and molluscs such as snails and clams. Leatherback and Loggerhead hatchlings' favourite snacks are bluebottles, while adult Leatherbacks love to eat jellyfish.

Nesting turtles

During the summer (October to January), and only at night, Loggerhead and Leatherback turtles use the sandy beaches of northern KwaZulu-Natal to breed. A female slowly crawls ashore and digs a hole of about 50-70cm deep where she lays between 80 and 120 leathery-shelled eggs. Before heading back to water, she uses her hind flippers to cover the eggs with sand and front flippers to toss sand onto the nest as camouflage. She repeats this process between four and nine times per season! About 60 days later, the hatchlings dig themselves out of the nest and, after sunset, when the sand has cooled down, they crawl out and hurry to the water. They are guided to the sea by moonlight and starlight reflected off the water's surface. During this stage artificial light can disorientate them and cause them to head the wrong direction so that they never reach the ocean. Predators such as sea birds and sharks eat many of the small turtles. Those who make it, swim frantically for a few days, before being swept away with the current into the Indian Ocean. About 20 or more years later, females return to breed at the beach where they hatched.

Why are the turtles in danger?

Marine turtles are all endangered, and some even critically endangered. People are a major threat to survival of sea turtles, because:

- They drown on longline fishing hooks or in fishing nets.
- They drown in bather protection (shark) nets.
- People who disregard laws and drive on the beach could destroy nests and hatchlings.
- People harvest the eggs or kill turtles for their meat. People also sell the shells or use it to make ornaments and craft items.
- People sometimes kill turtles to use parts of the animal in the muti trade.
- They die after colliding with boats or when boat propellers injure them.
- They choke or their intestines get blocked from accidentally eating plastic or fishing line that people have dumped at sea. They often mistake plastic bags for jellyfish!
- Tourism developments destroy their nests and the beaches where they lay their eggs.

Marine turtle conservation

Sea turtles play an important role in marine ecology and, because they migrate over such long distances and inhabit different environments, they are good indicators of the general health of our oceans. South Africa's marine turtle conservation programme has been running for more than 40 years. We work with many other countries in the Indian Ocean and participate in the "2006 Year of the Turtle" programme to help protect marine turtles.

Here's what you can do to help turtles:

- **Never disturb a turtle on the beach or a turtle nest or eggs.**
- **Never buy any product made from turtle meat, shell or eggs.**
- **Never discard any plastic, nets or old fishing line on the beach or in the sea.**
- **Pick up any plastic or pieces of fishing line or nets that you find on the beach or rocks.**
- **Try to control any stray dogs that may destroy turtle nests.**
- **Ask boat owners to slow down and look out for turtles, especially in shallow waters.**
- **Ask fishermen to save live turtles they may find on their hooks or in their nets by returning them to the sea as soon as possible.**
- **Contact your local conservation agency or nearest aquarium if you find a stranded turtle that is still alive. They may be able to save it!**
- **Tell your teacher or parents if you find a dead turtle with a tag on its front or hind flipper, and return the tag to Ezemvelo KZN Wildlife.**
- **Encourage your friends and family to find out more about these amazing animals and how we can protect them.**

Did you know?

- Sea turtles can hold their breath for hours and can dive to depths of more than 900m.
- They can swim as fast as 50km/h.
- The sand temperature around the nest determines whether that nest will hatch male or female turtles.
- Only one or two out of every 1 000 hatchlings eventually reach adulthood.
- A marine turtle can live to be a 100 years old.
- Green turtles get their name from the colour of their body fat.
- The scientific name of the Loggerhead turtle is *Caretta caretta* and that of the Leatherhead turtle is *Dermochelys coriacea*.

Project managed by Marina Joubert (Southern Science). Scientific advice from Dr Ronel Nel, Nelson Mandela Metropolitan University in collaboration with Ezemvelo KZN Wildlife.

Funded as part of the Department of Science and Technology Biosciences Month 2006, via the South African Agency for Science and Technology Advancement.

Marina Joubert

marina@southernscience.co.za