



Marine turtles

First appearing more than 100 million years ago, marine turtles represent an ancient and distinctive part of the world's biological diversity. As recently as the 18th and 19th centuries, marine turtles were highly abundant, with some populations numbering well into the millions. In the last several hundred years, however, humans have overwhelmed the species' ability to maintain their numbers. We capture them intentionally for food, skin and shell. We capture them accidentally in fisheries. We destroy their foraging, nesting and resting habitats. Most recently, we have been polluting the environment in which they live, the oceans. Today, few populations of marine turtles are unaffected. Most are declining, often seriously. Many are extinct.

Marine turtles are an integral part of the traditional culture of many coastal indigenous peoples throughout the world.

Marine turtles serve important functions in the ecosystems in which they are found, although the details of those functions can be hard to clarify where populations currently are seriously depleted. For example,

seagrass beds where green turtles graze regularly are more productive, nutrients are cycled more rapidly, and the grass blades have a higher protein content, thus benefiting other species. Furthermore, some populations of marine turtles, whose feeding areas may be hundreds or even thousands of kilometres from their nesting beaches, serve an important role in nutrient cycling by transporting

massive quantities of nutrients from these feeding grounds to typically more nutrient-poor coastal and inshore habitats in the vicinity of the nesting beaches.

Without active intervention and management, marine turtle populations are expected to continue to decline to extinction. With the resulting loss of productivity within marine ecosystems, we can expect a resulting decline in quality of life for human populations dependent on coastal ecosystems.

Marine turtles migrate long distances between their feeding grounds and nesting sites. They have a large shell called a carapace, four strong, paddle-like flippers and, like all reptiles, lungs for breathing air. The characteristic beak-like mouth is used to shear or crush food.

All marine turtle species are experiencing serious threats to their survival. The main threats are pollution and changes to important

turtle habitats, especially coral reefs, seagrass beds, mangrove forests and nesting beaches. Other threats include accidental drowning in fishing gear, over-harvesting of turtles and eggs, and predation of eggs and hatchlings by foxes, feral pigs, dogs and goannas.

There are only a few large nesting populations of the green, hawksbill and loggerhead turtles left in the world. Australia has some of the largest marine turtle nesting areas in the Indo-Pacific region and has the only nesting populations of the flatback turtle.

In Australia, all species of marine turtles are protected under various State and Territory legislation and the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999*. Due to increasing threats to marine turtles, all the six species which occur in Australian waters are listed under the Australian Government's EPBC Act. The Act identifies the need to prepare a recovery plan and specifies the content of the plan.

In 1996, the IUCN Red List of Threatened Species classified the hawksbill turtle as critically endangered.

Marine turtles are recognised internationally as species of conservation concern. Five of the species found in Australia are listed in the 2000 IUCN (World Conservation Union) Red List of Threatened Animals.

In 2000, the IUCN listed the leatherback as critically endangered as it was estimated that there were less than 1,700 leatherbacks left on the planet. They are especially vulnerable to ingesting plastics because their only food source is jelly fish. Like any animal with a narrow habitat or range of food, it is clearly doomed.

Today, thousands of individuals in volunteer and government-supported management and conservation programs throughout the world are working to conserve marine turtles. Although marine turtles spend the majority of their time at sea, these programs primarily focus on nesting beach activities, an emphasis that has resulted in large gaps in our



Loggerhead turtle



Hawksbill turtle

Of the seven species of marine turtles in the world, six occur in Australian waters:

Common name	Species	Status
Flatback turtle	<i>Natator depressus</i>	Vulnerable
Green turtle	<i>Chelonia mydas</i>	Vulnerable
Hawksbill turtle	<i>Eretmochelys imbricate</i>	Vulnerable
Leatherback turtle	<i>Dermochelys coriacea</i>	Endangered
Loggerhead turtle	<i>Caretta caretta</i>	Endangered
Olive Ridley turtle	<i>Lepidochelys olivacca</i>	Endangered

knowledge about these animals. Furthermore, recent population modelling suggests that conservation of eggs and hatchlings, without concurrent conservation of the older life stages, might be of limited value. The lack of international coordination also hampers conservation efforts. This is unfortunate as marine turtles are under assault throughout their lives as they move from the waters of one nation to another.

All marine turtle species occurring in Australian waters are listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). In addition, all marine turtles occurring in the Indo-Pacific region are a priority for conservation under the Convention on the Conservation of Migratory Species of Wild Animals (the Bonn Convention or CMS).



Green turtles



Flatback turtle



Olive Ridley turtle



Leatherback turtle

The National President of the Society is calling for assistance in funding two new sea turtle tanks at the Cairns Turtle Rehabilitation Centre.

Our Scientific Advisor, Dr Jennie Gilbert, has asked for our assistance in providing the additional tanks to rehabilitate a number of sea turtles that have been rescued recently.

Marine sea turtles are categorised from threatened to critically endangered. They have mostly been hunted down for their meat, fat and shells (tortoiseshell). These days, the most significant threat for them is a commercial fishing technique called longline fishing that uses hundreds or even thousands of baited hooks hanging from a single line and causes accidental sea turtle deaths.

The Wildlife Preservation Society of Australia is now calling for donations to support the Cairns Turtle Rehabilitation Centre in their project to develop water holding facilities for the rehabilitation of turtles.

The turtle rehabilitation centre is the only one north of Townsville and is very much in demand for rehabilitation of turtles, particularly turtles coming into care from Cape York. Some of these turtles may be in care for 6 - 12 months depending on the nature of their injury or disease. Currently they are very busy with turtles in care and are in need of support by means of funding to purchase two water tanks.

The two new water tanks will act as primary settlement tanks removing a lot of the suspended solids from the incoming water before it reaches the filters on the current rehab tanks. Having the two tanks in place will provide backup water storage during interruptions to incoming pumping supply (eg power outages, routine maintenance and breakages). It will also allow the centre to quickly fill turtle rehab tanks when moving the turtles around or dropping the water out of their tanks for cleaning.

Our Society is hoping to raise the purchase price of the two new tanks - \$3,400 delivered to Cairns - and now appeals to members and friends for a small donation towards this appeal.



You can donate by phoning 02 9556 1537 with your credit card details or donate on line at <http://www.wpsa.org.au/donate.html>

The Wildlife Preservation Society of Australia is registered as an Environmental Organisation and has tax deductibility status under the Income Tax Assessment Act 1997 (Item 6.1.1, subsection 30-55 (1)) to receive tax deductible donations.

All donations are fully tax deductible and will be issued with a receipt immediately.

Thank you for your support.

Images on this page: Green sea turtles, Great Barrier Reef

