## National Threatened Species Day







## Flatback turtle

# Natator depressus



## CONSERVATION STATUS

### **Australian Government:**

**VULNERABLE** 

Environment Protection and Biodiversity Conservation Act 1999

Queensland:

**VULNERABLE** 

Nature Conservation Act 1992

Western Australia:

VULNERABLE

Wildlife Conservation Act 1950

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#### Introduction

Flatbacks only nest on northern Australian beaches. However they sometimes travel as far as the Indonesian archipelago and the Papua New Guinea coast to feed.

## Did you know?

Female flatback turtles lay approximately 50 eggs per nest, the fewest of any marine turtle, but the eggs are quite large compared to the species' body size.

## What do they look like?

The flatback turtle gets its name from its relatively flat, smooth shell – other marine turtles have a high domed shell.

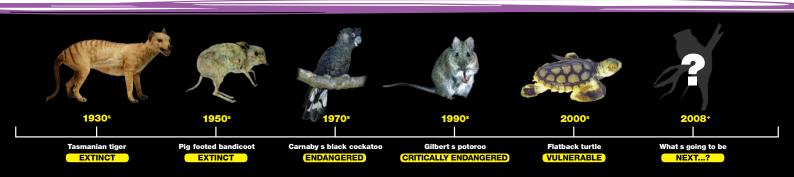
Flatback shells are wide with turnedup edges, covered by a thin fleshy skin and measure up to one metre long at adulthood. The colour is usually yellow-grey or olive-grey, with the underside a pale yellow. Flatbacks are a medium-sized marine turtle and can weigh up to 90kg.

Hatchlings are olive-green with scutes (the plates on the shell) outlined in black. When they emerge they are usually larger than other marine turtle hatchlings and weigh around 43 grams.

## Where do they live?

All recorded rookeries (nesting beaches) for flatback turtles occur in Australia. The largest flatback rookery is on Crab Island just off the Northwest coast of Cape York Peninsula, Australia. Annual nesting numbers in the order of 1000 to 2000 female turtles a year have been recorded. Mating in the shallow water adjacent to the island has been observed, and the waters are likely to be an important breeding location.

The turtles are unique in many ways. Unlike other sea turtle species flatbacks do not spend years out at sea and remain in the surface waters of the continental shelf. They prefer inshore waters and bays where their feeding ground is the shallow, soft-bottomed seabed.



## Flatback turtle life history and ecology

Flatback turtles nest on tropical beaches and offshore islands in Western Australia, the Northern Territory, the Gulf of Carpentaria and all the way round to Mon Repos in Queensland. The nesting season usually occurs between November and January, but in the Northern Territory it can be all year round with a peak season in August.

Flatbacks have the smallest migratory range of any marine turtle species, though they do make long trips to breed. While in the sea the turtles spend much of their time at the surface basking in the sun.

#### Threats to the flatback turtle

Generally the impact of threats remains unquantified and little information is available on the status of flatback populations outside of Queensland.

#### Feral predators

Flatback turtle eggs are eaten by a range of predators, including foxes, dogs and pigs.

Pigs have an excellent sense of smell and can easily find buried turtle eggs and dig them out of the sand. In particular feral pigs are responsible for high levels of flatback turtle nest predation on Cape York Peninsula beaches. On some beaches feral pigs are feeding on 90 per cent of the eggs laid.

### Bycatch and marine debris

Flatback and other marine turtles can be killed or injured when caught as 'bycatch' in commercial fishing operations, through getting tangled in discarded 'ghost' fishing nets and drowning and ingestion of marine debris.

Flatback turtles from the Gulf of Carpentaria and North West Shelf are affected by indigenous harvest for meat. Flatback turtles from Queensland have also been affected by boat strikes.

#### Coastal development

Increasing coastal development, particularly large oil and gas facilities, are likely to place increased pressure on important flatback habitat in the northwest of Australia. Light pollution is also a threat as it causes hatchlings to become disorientated and sometimes trapped.

#### Climate change

Increasing sand temperatures due to climate change are skewing the ratio between male and female hatchlings. The sex of a turtle hatchling is temperature dependant with warmer sands producing females and cooler sand producing males. In extreme temperatures baby turtles die.

## **Case Study** – Protecting the turtles of Cape York

Flatback and Olive Ridley turtles on western Cape York are in trouble. Adult turtles are being entangled and drowned in ghost nets and a large population of feral pigs are predating on 90 per cent of the nests found there.

A lack of knowledge about marine turtle ecology and biology, along with the remoteness of many of the beaches they nest on, is hindering the development of effective and culturally acceptable marine turtle conservation in the region.

In 2005, a TSN Community Grant funded the Western Cape York Turtle Conservation Project. Volunteers and community members worked with rangers to monitor nesting turtles. Night patrols along 42 kilometres of beach, traditional country of the Yupungathi people, identified nests which were then protected with feral pig exclusion devices.

The information collected will be used in the development of a sustainable management strategy for the region so that the future for these threatened turtles can be secured.

## What you can do

- If you have a feral pig problem in your area, contact your state or territory government agency for information about the most appropriate control technique.
- Make sure no nets, equipment or rubbish is lost overboard when fishing or boating.
- Be aware of turtles in the water and avoid excessive boat speeds that may result in turtle injuries.
- Don't drive on known nesting beaches.
- If you are on or near a nesting beach at night, be careful not to disturb nesting turtles especially as they are coming up the beach, as this may prevent them from laying eggs.
- Ensure appropriate lights are fitted around beaches used by turtles, or consider replanting vegetation to shade nesting beaches from light pollution.
- Contact your state or territory government conservation agency if you find a stranded, injured or entangled turtle.
- Help the flatback turtle by reporting any activities that you see that are likely to harm them or their habitat to the Department of the Environment, Water, Heritage and the Arts – Compliance Branch.
  Visit www.environment.gov.au/epbc/ compliance/index.html or freecall 1800 110 for more information.

## **Contacts**

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#### Reference