Threatened species of the Northern Territory

Leatherback turtle

Dermochelys coriacea

Conservation status

Australia: Endangered

Environment Protection and Biodiversity Conservation Act

1999

Northern Territory: Critically Endangered
Territory Parks and Wildlife Conservation Act 1976

Description

The Leatherback Turtle is the largest marine turtle, weighing up to 500 kg and with a carapace length of up to 1.6 m. The shell is covered by leathery black skin, which has scattered light spots and five distinct longitudinal ridges. Hatchlings are black with white markings on the carapace ridges.

Distribution

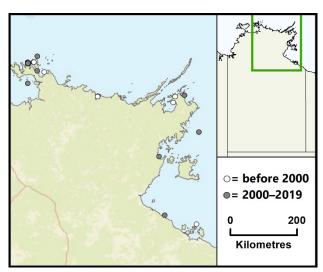
The Leatherback Turtle has a near-global distribution, though it nests mostly in tropical areas and feeds mostly in temperate seas and oceans. There are very few records of nesting in Australia.

In the Northern Territory (NT), the only places where breeding has been reported are the Sir Edward Pellew Islands, near Maningrida, Danger Point on Cobourg Peninsula and Palm Bay on Croker Island. Tracks of Leatherback Turtles are occassional recorded on the north coast and Gulf of Carpentaria.

NT conservation reserves where reported: Barranyi National Park and Garig Gunak Barlu National Park.



Credit: J. Isley/scubazoo.com



Caption: Known localities of the Leatherback Turtle in the NT (nrmaps.nt.gov.au)

Ecology and life-history

The Leatherback Turtle is typically an oceanic species. They forage within the water column, preying primarily on jellyfish, but seaweed, fish, crustaceans and other marine invertebrates are also consumed.

In Australia, Leatherback Turtles forage mostly in subtropical and temperate waters of Queensland, Western Australia, New South Wales, Victoria and Tasmania. They have also been recorded



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feeding off the NT coast¹. Major breeding sites occur in New Guinea and Malaysia. Some animals from these areas migrate to Australian temperate waters to feed.

Threatening processes

Threats in NT waters are bycatch from commercial fishing activities and possibly predation of eggs by domestic and feral Dogs *Canis familiaris* and monitors *Varanus* spp. In 1998, 18 Leatherback Turtles were captured by the northern prawn fishery in the northern Arnhem and western Gulf regions². This mortality was eliminated after 2000 by the legislated introduction of turtle exclusion devices on trawl nets³.

Outside NT waters, Leatherback Turtles suffer significant mortality from long-line fishing in the Pacific Ocean: this species can comprise 60% of total turtle bycatch^{4–5}. In southern Australian states, Leatherback Turtles are killed by being caught in crab pots^{4–5}. Hunting of Leatherback Turtles in Indonesia and predation of eggs by feral pigs *Sus scrofa* and dogs in West Papua (Indonesia) and Papua New Guinea also threaten the species⁵.

Conservation objectives and management

A national recovery plan for this species, and other marine turtles, was implemented in 2017³. This plan included actions that: (i) aim to reduce mortality of turtles (principally through mitigating impacts of commercial fisheries, and maintaining sustainable harvests by Indigenous communities), (ii) develop and integrate monitoring programs; (iii) manage factors that affect reproductive success (in this case, largely outside the NT); (iv) identify and protect critical habitat (including sea grass beds); (v) enhance communication of information; and (vi) enhance international actions and cooperation.

References

¹ Cogger, H.G., Cameron, E.E., Sadlier, R.A., Egler, P., 1993. The Action Plan for Australian Reptiles. Australian Nature Conservation Agency, Canberra.

- ² Australian Fisheries Management Authority, unpublished
- ³ Commonwealth of Australia, 2017. Recovery Plan for marine Turtles in Australia. Commonwealth of Australia, Canberra.
- ⁴ Limpus, C., 2009. A Biological Review of Marine Turtles. Environment Protection Agency, Brisbane.
- ⁵ Hamann, M., Limpus C., Hughes, G., Mortimer, Pilcher N., 2006. Assessment of the Conservation Status of the Leatherback Turtle in the Indian Ocean and South East Asia: IOSEA Species Assessment: Vol 1. IOSEA Marine Turtle MoU Secretariat, Bangkok, Thailand.