Threatened species of the Northern Territory

Olive ridley turtle

Lepidochelys olivacea

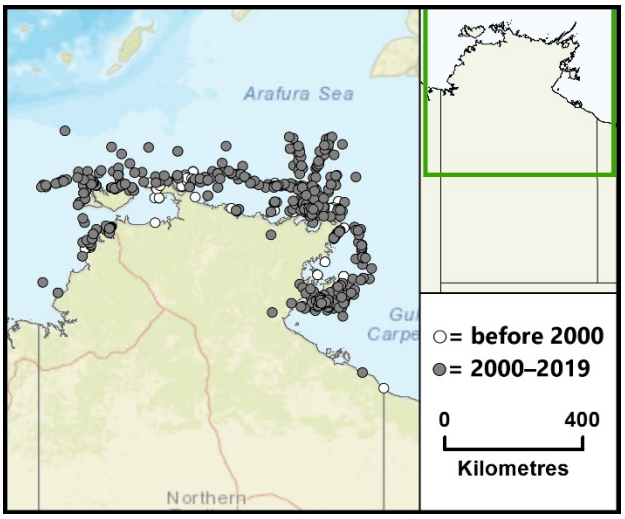
Conservation status

Australia: Endangered
Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Vulnerable
Territory Parks and Wildlife Conservation Act 1976

Credit: C. Limpus

NT conservation reserves where reported: Anindilyakwa Indigenous Protected Area, Casuarina Coastal Reserve, Dhimurru Indigenous Protected Area, Djelk Indigenous Protected Area, Garig Gunak Barlu National Park, Kakadu National Park and Laynhapuy Indigenous Protected Area.



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

Description

The Olive Ridley Turtle is the smallest marine turtle that occurs in Australian waters. The olive-grey carapace is not much wider than it is long and has at least six pairs of costal plates, which distinguishes this species from all other marine turtles. The average curved carapace length is 70 cm.

Like other marine turtles that nest in Australia, except for the Green Turtle *Chelonia mydas*, nesting Olive Ridley Turtles move on land using one front flipper at a time, creating an asymmetrical track in the sand. Eggs are smaller (mean diameter of 3.6 cm) than most other marine turtles that breed in Australia.

Distribution

Olive Ridley Turtles occur in tropical and subtropical waters of all oceans of the world. In Australia, the vast majority of the nesting sites occur in the Northern Territory (NT).

Nesting sites in the NT have been recorded from Melville Island to Groote Eylandt. The largest nesting colonies occur on Melville Island, islands to the east of Croker Island and some islands off north-east Arnhem Land[1].

Ecology and life-history

In the NT, Olive Ridley Turtles breed at a wide range of sites on islands and, less commonly, mainland beaches. Nests are often constructed just above the high-tide mark; consequently, they

may suffer more breeding losses through tidal inundation than do other species of marine turtle[1].

Olive Ridley Turtles typically occur in shallow protected waters, though studies outside the NT indicate that individuals may disperse widely from nesting beaches to feeding areas. The species is carnivorous and feeds on benthic molluscs, crabs, echinoderms and gastropods.

Threatening processes

As with other marine turtles, there is a broad range of factors that threaten the Olive Ridley Turtle. These include by-catch in commercial fisheries[2]; Indigenous harvest; predation of eggs and young by domestic and feral Dogs *Canis familiaris*, feral Pigs *Sus scrofa* and monitors *Varanus* spp.; marine pollution, including entanglement in ghost nets; and disturbance at breeding sites.

The NT Marine WildWatch program collates stranding records of marine fauna and indicate less than 10 Olive Ridley Turtles are killed annually, although this estimate is likely to be under-reported[3].

Conservation objectives and management

A national recovery plan for this species, and other marine turtles, was implemented in 2017[5]. 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] Chatto, R., 1998. A preliminary overview of the locations of marine turtle nesting in the Northern Territory, in: Kennett, R., Webb, A., Duff, G., Guinea, M., Hill, G. (Eds.). Marine turtle conservation and management in northern Australia. Northern Territory University, Darwin, pp. 33–40.

[2] Poiner, I.R., Harris, A.N.M., 1996. Incidental capture, direct mortality and delayed mortality of sea turtles in Australia's Northern Prawn Fishery. Mar. Biol. 125, 813–825.

[3] Mackarous, K., Griffiths, A.D., 2018. Northern Territory Marine Megafauna Strandings: January 2017 – December 2017. Report by Department of Environment and Natural Resources, Darwin.

[4] Kennett, R., Robinson, C.J., Kiessling, I., Yunupingu, D., Mununguritj, N., and Yunupingu, D. 2004. Indigenous initiatives for co-management of Miyapunu/sea turtle. Ecological Management & Restoration 5, 159-166.

[5] Commonwealth of Australia, 2017. Recovery Plan for marine Turtles in Australia. Commonwealth of Australia, Canberra.