

Threatened Species of the Northern Territory - Grey Nurse Shark

Grey Nurse Shark

Carcharias taurus

Conservation status

Australia: Critically Endangered/Vulnerable
(east and west coast populations listed separately)
Environment Protection and Biodiversity Conservation Act 1999

Northern Territory: Data Deficient
Territory Parks and Wildlife Conservation Act 1976

Description

The Grey Nurse Shark is a large shark with a maximum length of 3.2 m for females and 2.6 m for males. The body is grey-brown to bronze above and off-white below. This countershaded, cryptic colouration is typical of species that swim in open water. Juveniles tend to have reddish or brownish spots on the posterior half of the body. The Grey Nurse Shark has a relatively short, almost conical, snout. A distinctive character of this species is that both dorsal fins and the anal fin are of a similar size. The top lobe of the caudal fin is distinctively larger than the bottom lobe.

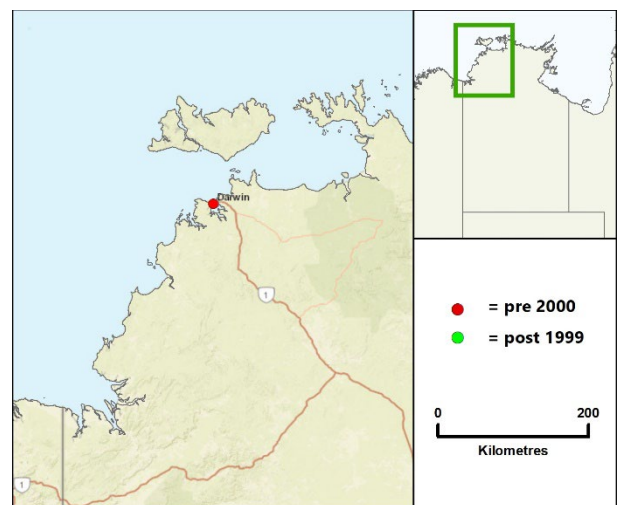
Distribution

The Grey Nurse Shark is found primarily in sub-tropical to cool-temperate inshore waters around the main continental landmasses, except in the eastern Pacific¹. In Australia, the species is primarily recorded in waters off the New South Wales, south-east Queensland and Western Australian coasts.

The species is rare in the Northern Territory (NT). Although there are records in NT waters – albeit limited – specific details of the locations are not able to be provided due to the privacy provisions



Photo: S. Han-de-Beaux



Known localities of the Grey Nurse Shark in the NT
(nrmaps.nt.gov.au)

of the NT's *Fisheries Act 1988*. One record in nearby seas is that of an individual collected from near Lynedoch Bank, about 300 km north-north-east of Darwin.

NT conservation reserves where reported: None

Ecology and life-history

Grey Nurse Sharks occur in habitats ranging from rocky inshore reefs to continental-shelf waters up to ~200 m deep². The species is solitary or occurs in small schools, though large aggregations may occur around breeding time.

The Grey Nurse Shark is a predator of a range of teleost (bony) fishes, as well as sharks, rays, squid,

crabs and lobster. Individuals sometimes hunt cooperatively.

Female Grey Nurse Sharks have a low reproductive rate. They tend to reproduce once every two years and produce only one or two pups per litter. Gestation length is 9–12 months.

Threatening processes

The most likely potential threat in the NT is incidental capture by commercial fishing operations or by illegal fishers. The number of Grey Nurse Sharks elsewhere in Australia has declined dramatically due to fishing (spearfishing, commercial fishing and recreational fishing) and entanglement in beach safety nets.

Conservation objectives and management

A national recovery plan for the Grey Nurse Shark was established in 2002. This plan includes a range of research and management measures, including habitat protection, development of monitoring programs, and ameliorative measures for fisheries³.

Research priorities for the Grey Nurse Shark in the NT are to: determine whether Grey Nurse Shark in the NT comprise a distinct population or are connected to either the east or west coast populations; and determine the status of the Grey Nurse Shark in the NT.

Although there is currently no conservation program specifically for the Grey Nurse Shark in the NT, priorities for the species in the NT are to: reduce bycatch in commercial fishing operations; and enhance the control and policing of Illegal, Unreported and Unregulated (IUU) fishing within the Australian Fishing Zone.

References

- ¹ Pollard, D.A., Lincoln-Smith, M.P., Smith, A.K., 1996. The biology and conservation status of the Grey Nurse Shark (*Carcharias taurus* Rafinesque 1810) in New South Wales, Australia. *Aquat. Conserv.* 6, 1–20.
- ² Pogonoski, J.J. Pollard, D.A., Paxton, J.R., 2002. Conservation Overview and Action Plan for Australian Threatened and Potentially Threatened Marine and Estuarine Fishes. Environment Australia, Canberra.
- ³ Environment Australia, 2002. Recovery plan for the Grey Nurse Shark (*Carcharias taurus*) in Australia. Environment Australia, Canberra.