Threatened Species of the Northern Territory

GREEN TURTLE

Chelonia mydas

Description

The green turtle is a marine turtle with a subcircular to heart-shaped carapace up to 1m in length. The carapace is olive-green, usually variegated with black, brown or red-brown. The carapace has four pairs of costal shields (those between the centre and outer margin of the shell).

Eggs are intermediate in size (mean diameter = 4.6 cm) compared with other marine turtles that breed in the NT. When ashore, green turtles move pairs of legs simultaneously, leaving symmetrical tracks (unlike the alternate gait of loggerhead and hawksbill turtles).

Distribution

Green turtles occur in tropical and subtropical waters throughout the world. In Australia, the main breeding distribution includes the Great Barrier Reef, the northwest shelf of Western Australia, Wellesley Island group in the southern Gulf of Carpentaria and the Top End coast.

Many nesting sites occur in the Northern Territory, mostly from the western end of Melville Island to near the border with Queensland (Chatto 1998). Nationally significant breeding sites in the NT include Cobourg Peninsula, the mainland from Gove to the northern edge of Blue Mud Bay, the southeast of Groote Eylandt, and the northern beaches of islands in the Sir Edward Pellew group (Chatto 1998).

Conservation reserves where reported: Casuarina Coastal Reserve, Garig Gunak Barlu National Park, Kakadu National Park, Nanydjaka Indigenous Protected Area.

Conservation status

Australia: Vulnerable
Northern Territory: Least Concern

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Ecology

Green turtles are primarily herbivorous, mostly eating seagrass and algae. Juveniles are carnivorous.

Green turtles undertake long-distance dispersal around feeding areas and to and from nesting beaches. Individuals tagged in the Kimberley have been recaptured in the Top End, and individuals tagged at breeding sites in the northern Great Barrier Reef have been recaptured in the southern Gulf of Carpentaria. Individuals tagged in northeastern Arnhem Land make complex and long movements around the western shores of the Gulf of Carpentaria (Kennett et al. 2004).

In the NT, green turtles nest mainly on wide beaches backed by large dune systems, and may occur at high densities in such sites (Chatto 1998).

Conservation assessment

A recent assessment of trends for this species in the southern Great Barrier Reef has shown that the overall population increased by 11% per annum over 8 years (1985-1992) and the female nesting population increased by 3% per annum between 1974 and 1998 (Chaloupka and Limpus 2001).

There are few population trend data for the NT. There is some anecdotal evidence of at least localised decline of marine turtles in general (Kennett et al. 2004). Given the indications of a population at least in the thousands in both the breeding and feeding segments with no evidence of substantial decline the species is considered as Least Concern for the Northern Territory.

Threatening processes

As with other marine turtles, there are a broad range of factors that threaten this species. These may include by-catch in commercial fisheries (Poiner and Harris 1996); Indigenous harvest; predation of eggs and young by dogs, pigs and goannas; marine pollution, including entanglement in ghost nets; and disturbance at main breeding sites.

Conservation objectives and management

A national recovery plan for this species, and other marine turtles, was implemented in 2003 (Environment Australia 2003).

This plan includes actions that: (i) aim to reduce mortality of turtles (principally through ameliorative actions within commercial fisheries, and maintenance of sustainable harvest by Indigenous communities), (ii) develop and integrate monitoring programs; (iii) manage factors that affect reproductive success (in this case, outside NT); (iv) identify and protect critical habitat (including sea grass beds); (v) enhance communication of information; and (vi) enhance international actions and cooperation.

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References


