

## Upcoming Bare Sand Island trip

The annual sea turtle research trip to Bare Sand Island is coming up. This will be the 10th year of research under a long-term research project on the nesting and foraging sea turtles. AusTurtle is a major supporter of this research. The annual trip to Bare Sand Island investigates the ecology and biology of foraging green and hawksbill turtles and nesting flatback turtles. This will be used to estimate population size, monitor abundance over time and determine any threats to their survival.

Bare Sand Island is located 50km west of Darwin. A relatively large population of flatback sea turtles nest on the island with 6 to 20 turtles coming ashore per night.

The waters around Bare Sand Island support significant numbers of foraging green and hawksbill turtles. Both species are vulnerable to extinction under Australian classification (EPBC Act 1999). Green turtles are internationally classified as endangered and hawksbill turtles are critically endangered internationally (IUCN Red List). Annually researchers monitor green and hawksbill turtle populations by capture of turtles while they are feeding on the reef. This research will provide population estimates, relative species abundance and identify threats.

### **Call for volunteers:**

Volunteers support the research by helping monitor and tag sea turtles as they come ashore at night and catch sea turtles in the surrounding reef environment. Volunteers are required for a 2-week commitment as transport to and from the island is limited. Research trips will run:

13 - 20 June 2005

20 June - 4 July 2005:

4 - 18 July 2005

For more information on volunteering see our website under "Supported Projects".

Locals with their own access to the island and welcome to join us for a night on the beach. This is a good opportunity to observe sea turtles in their natural environment.

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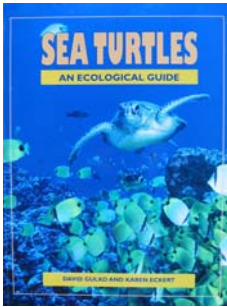


M.L. Guinea

Bare Sand Island, NT

## New merchandise

### Sea Turtle Ecology Book



An excellent reference on sea turtle ecology is presented in "Sea Turtles: An Ecological Guide" by David Gulko and Karen Eckert (2003).

Full colour pictures in an easy-to-follow guide.

Our price: \$40.95

### Kids T-shirts

Glow in the dark sea turtle print



T-shirts available in navy and beige colours. Sizes 2, 4, 6 and

Our price: \$15.00

For information on other merchandise visit our website at [www.austurtle.org.au](http://www.austurtle.org.au)

## Mindil Beach Markets

This is a quick reminder that AusTurtle will have a stall at the Mindil Beach markets this season. This is relying on enough people helping out at the market stalls. The night markets begin at the start of May. To volunteer to help man the stall please call Andrea on 0417 913 547.

**Help out at the AusTurtle stall for the Mindil beach markets. Please call Andrea on 0417 913 547.**

## Website update

Our website has been updated.

Our website contains:

- Our constitution
- Information on sea turtle biology
- Supported projects
- Bare Sand Island information for volunteers
- Membership pages
- Merchandise on sale

Check it out at: [www.austurtle.org.au](http://www.austurtle.org.au)





# Species Profile: The Green Turtle

## *Chelonia mydas*

### Species Description

The carapace of adult and juvenile turtles is highly variable and consists of greenish-brown background colour with orange, brown and blackish, streaks, blotches and spots. Adult females have an average curved carapace length of 107 cm and can weigh over 150kg. Hatchlings measure almost 5 cm in carapace length and weigh 23 g. Green turtles are characterised by four costal scales, one pair of pre-frontal scales, no preocular scales and 4 post ocular scales.

### Generalised Life Cycle

Green turtle hatchlings emerge from the nest, run down the beach and enter the sea. It is during this time that they are thought to be imprinted with the characteristics of the beach that enable them to return to nest when mature. For several days they swim directly out to sea guided by the direction of the on-shore waves. After this period they begin a planktonic phase, that may last 5-10 years, where they are carried by the ocean currents. When they reach about 40 cm in curved carapace length, they enter shallow benthic foraging habitat. This habitat includes coral or rocky reefs and inshore areas that support algae or seagrass. When mature both males and females migrate long distances to the breeding grounds. After mating the males return to the foraging area while the females return at the end of the breeding season. All of the hard shelled sea turtles have a similar life cycle.

### Population Distribution

Green turtles are found in tropical and subtropical waters throughout the world. In Australia, major nesting areas are found in the northern and southern Great Barrier Reef, the Gulf of Carpentaria and Western Australia. Australia's breeding population is estimated to be over 30 000 adult females.

### Reproduction

Females nest of sandy tropical and subtropical beaches. They lay an average of 5 clutches per season, at 14 day intervals, with each clutch containing approximately 115 eggs. Females nest at intervals of between 1 and 9 years and the time is affected by the Southern Oscillation Index. The incubation period is approximately 64 days. The sex of the hatchlings is determined by the temperature of the sand with warmer nests producing females and cooler nests producing males.

### Habitat

Foraging habitat includes coral and rocky reefs and inshore areas that support algae and/or seagrass. Nesting habitat includes tropical and sub-tropical sandy beaches. Most important nesting areas in Australia occur on islands.

### Diet

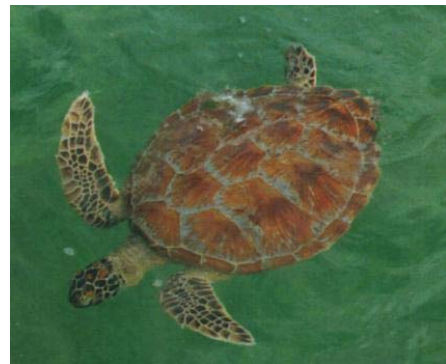
Green turtles are primarily herbivores with their diet dominated by seagrass and algae. They will take animal material when available.

### Threats

A variety of threats affect green turtles and include a number of commercial fishing activities, excess indigenous harvest of eggs and adults, destruction of nests by feral animals, marine litter, habitat destruction and boat strike.

### Status

Internationally they are listed as Endangered and nationally they are listed as Vulnerable.



*By Scott Whiting*

## Our aims...

- To support sea turtle research and conservation
- To support the objectives of the National Sea Turtle Recovery Plan through Research, Threat Abatement and Education
- To support the preservation of sea turtle habitat and their associated biota
- To engage in sea turtle education
- To engage in fundraising to support the above aims
- To support the continuation of a long-term research project at Bare Sand Island, Northern Territory
- To collaborate and form partnerships with other organisations and institutions to apply for funds to support the above aims
- To participate in discussions regarding sea turtle management, conservation and research at all levels including local, regional, national and international.



*Promoting sea turtle research and conservation in northern Australia*

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