What you can do to help protect Hawksbill Sea Turtles

Keep your distance

If you see a nesting female, don't shine any lights at her - any type of motion, light, or elevated noise could lead her to abandon her nesting attempt. Don't use flash photography. Stay behind her, out of view. Don't touch her or help her return to the sea.

Stick to the road

Please don't drive on the beach. Vehicles compact the sand over nest sites, which lowers hatching success and prevents hatchlings from emerging.

Remove beach litter

Do not drop, burn, or bury garbage on the beach. It contaminates beach sand, increasing bacterial and fungal infections in turtle eggs. It also obstructs the emergence of hatchlings from their nests. Place garbage in bins or take it with you.

Share the beach

Sea turtles need to nest in the dry sand above the high water mark. Beach chairs should be stacked in the evening to free up more beach space for nesting turtles. Pointed drink stands and sun umbrellas can destroy turtle eggs buried under the sand.

Report all sightings

Please report any sightings of nesting females, nests, or disorientated hatchlings to the Barbados Sea Turtle Project. Hatchlings that are disorientated by lights or are wandering in day light should be placed in a dry container with slightly damp sand, and kept cool. Hatchlings should not be placed directly into the sea, or kept in a container filled with water! Please inform the Barbados Sea Turtle Project as soon as possible.

Lights Out!

Lights that are visible from the beach will discourage females from nesting, and attract hatchlings inland. Hatchlings usually emerge from the sand after dusk and instinctively orientate towards the brightest horizon. On undeveloped beaches, the brightest horizon is over the sea. In Barbados, beachfront and street lighting cause a major problem for hatchlings. Every year thousands are attracted inland by lights where they are subject to high levels of predation from creatures such as crabs. Hatchlings can also die from dehydration or can be run over by vehicles on the road. Lights that shine on the beach should be lowered, shielded or redirected away from the beach. Other solutions include hiding lights behind vegetation, or using low pressure sodium vapor bulbs which are somewhat less visible to sea turtles.

Activities of the Barbados Sea Turtle Project

Nightly patrols of nesting beaches - monitoring the populations of Hawksbills and Leatherbacks in Barbados.

A satellite telemetry programme - tracking the movements of adult Hawksbills between Barbados and their feeding grounds off the coasts of other Caribbean countries.

Genetic analyses - investigating the countries of origin of the Green and Hawksbill turtles found in the waters of Barbados.

An in-water tagging programme - monitoring the home ranges and movements of juvenile hawksbill turtles residing on the offshore bank reefs of Barbados.

An educational outreach programme - talks, slide shows and hatchling releases for schools, clubs and hotels.

The Barbados Sea Turtle Project operates a 24-hr "Turtle Hotline". Coastal property residents, staff and visitors are encouraged to report any sea turtle nesting or hatching activity to the BSTP. Public calls are greatly appreciated and are valuable aids in conservation and research efforts.

Turtle Hotline Phone Number

(24-hour): 230-0142

BARBADOS SEA TURTLE PROJECT

UNIVERSITY OF THE WEST INDIES

Please contact the BSTP for additional information.

People wishing to help the conservation of sea turtles can make donations to:

The Barbados Sea Turtle Project
Dept. of Biological and Chemical Sciences
University of the West Indies, Cave Hill Campus
St. Michael, Barbados
Tel: (246) 417-4320
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www.barbadosseaturtles.org

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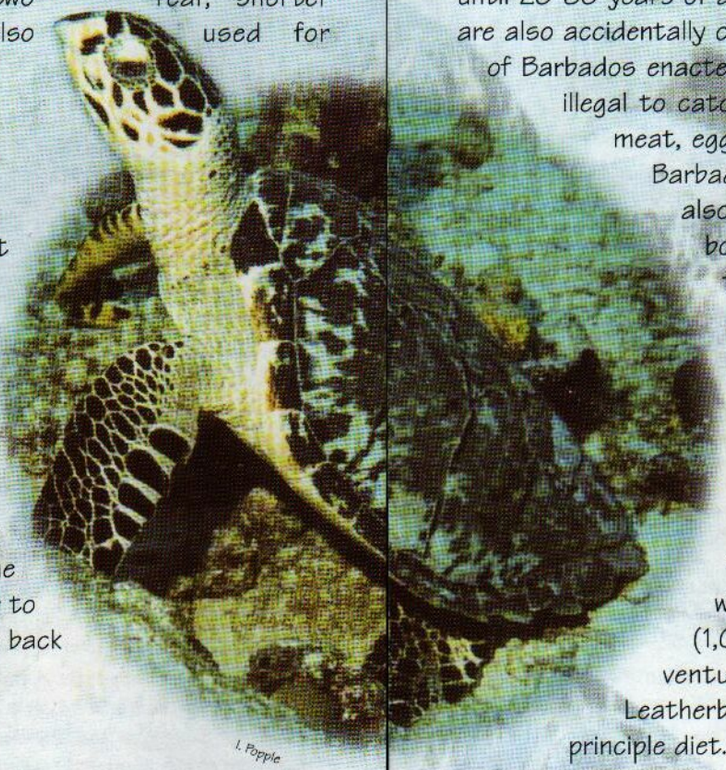
The Sea Turtles of Barbados

What does a Hawksbill look like?

The Hawksbill (*Eretmochelys imbricata*) has a narrow, beak-like mouth which enables it to feed primarily on sponges that grow on the reef systems in the Caribbean. The shell, or carapace, consists of mottled (brown, yellow and black) scutes that overlap, similar to shingles on a roof. Adult Hawksbill turtles range from 150 - 220 lb (68-100 kg) and can reach a length of about 3 feet (1 metre). Paddle-like flippers allow it to move easily through the ocean. The two front flippers are used for propulsion through the water. The two rear, shorter flippers are used for steering. In females, the rear flippers are also used for nest digging.

What about nesting?

Hawksbill sea turtles nest primarily on the west and south coast beaches of Barbados, with the peak season between June and September. An adult female will nest every 2 - 4 years, coming up on shore between 3 - 5 times per season to lay eggs. She will nest on or near the same beach where she was born 20 - 30 year earlier. Hawksbills prefer to nest at night, well above the high water mark, and near or in natural beach vegetation. A nesting female deposits an average of 150 leathery, ping-pong ball sized eggs into a nest cavity that is about half a metre in depth. She then covers the nest by compacting sand on top of the eggs. Using her front flippers she throws sand behind her in order to disguise her nesting area. Once completed, she will make her way back to the sea.



I. Popple

What about the hatchlings?

The eggs take between 55 - 75 days to incubate. After hatching, a cooperative effort from all of the hatchlings over several days is needed to dig their way to the surface. Emergence onto the beach is triggered by the cooling sand temperature as night falls. The hatchlings orientate to the brightest horizon, which under natural conditions is seawards. Once in the water, the hatchlings will swim frantically offshore, where they will be picked up and carried by the major currents of the North Atlantic. For the first several years, young turtles float in open water, travelling wherever the currents take them, before returning to nearshore waters as small juveniles. While on the surface, hatchlings feed on floating algae and plankton.

Why are Hawksbills threatened?

Hawksbill sea turtles are Critically Endangered due to over-harvesting by man, primarily for the shell, but also for their meat and eggs. Tortoiseshell jewellery is made from the Hawksbill shell. Over the last century, the Hawksbill population has significantly declined due to over-exploitation. Population recovery is an extremely slow process. It is estimated that only 1 in 1,000 hatchlings will survive to adulthood, which is not reached until 20-30 years of age. It is only then that turtles can begin to reproduce. Turtles are also accidentally caught and drowned in fishing nets. As of 1998, the Government of Barbados enacted a total moratorium on sea turtle harvesting. It is completely illegal to catch any species of sea turtle, or possess any turtle product (i.e. meat, eggs, shell) in Barbados. Penalties include fines of up to $50,000 Barbados dollars and/or 2 years in jail. Hawksbill nesting beaches are also under threat. Beachfront developments, including sea walls and boulders, limit the space available for nesting females. This forces them to nest in sub-optimal areas of the beach, where entire clutches may be washed away by high tides.

The Leatherback Turtle

G. Gaze

The Leatherback is the largest of all the sea turtles. Females weigh from 600 - 1100 lb(270 -500 kg) with males reaching up to 2,200 lb (1,000kg)!! They are primarily an open ocean species, seldom venturing near to shore, except when breeding and nesting. Leatherbacks navigate the open ocean currents in search of jellyfish, their principle diet. A small number of Leatherbacks nest on the rugged east coast beaches of Barbados.

The Green Turtle

M. Campbell-Pedersen

The Green Turtle feeds on sea grasses and algae particularly on the south and east coasts. Green turtles do not nest on Barbados, but return to their own breeding grounds in places as far afield as Costa Rica and Ascension Island!

Background photo: M. Murray