

### Which Sea Turtles do we find around the Windward Islands?

Out of the seven known species of sea turtles, as much as four are commonly found around the Windward Islands.

#### The Leatherback turtle - *Dermochelys coriacea*

The Leatherback, the largest living turtle, is named after its slightly flexible, leather-like skinned shell. Leatherbacks only eat soft-bodied preys like jellyfish; anything else would damage their fragile scissor-like jaw. Leatherbacks often mistake floating plastic bags for jellyfish, which cannot be digested and become stuck in their intestines. This makes pollution a serious threat. Leatherbacks live mostly in open waters and often travel many thousands of miles to reach tropical nesting beaches. Leatherback turtles are excellent divers; they can reach depths exceeding 1200 m (about 4000 feet!) in order to escape an orca whale or other large predator.

#### The Hawksbill turtle - *Eretmochelys imbricate*

The Hawksbill turtle gets its name from its narrow head and pronounced "over-bite", giving the animal a bird-like appearance. The beak allows the Hawksbill to get food from crevices in coral reefs, where they can be found most of the time. They eat mostly sponges, some of which are poisonous; however, they can handle the poison without getting sick. The Hawksbill's highly specific diet and habitat make it vulnerable to the worsening conditions on coral reefs.

#### The Green turtle - *Chelonia mydas*

The streamlined Green sea turtle is browner than green, but it's named for the green color of the fat under its carapace, which gives flavor to turtle soup. In the Antilles, this sea turtle is also named 'Turtuga Blanco', for its white meat. This is the only adult sea turtle that is strictly herbivorous. Using finely serrated jaws, Green turtles graze underwater vegetation, preferring sea grasses in our part of the world.

#### The Loggerhead turtle - *Caretta caretta*

The Loggerhead turtle is a large sea turtle, named for its exceptionally big head. With its strong jaws it crushes shellfish, its main source of food. As young juveniles, Loggerheads migrate far distances. When the time is there to lay their own eggs, they finally return to the general area of their birth beach. Like other sea turtles, Loggerheads inhabit areas that are heavily fished, making incidental capture (and drowning) a serious threat.

*Sea turtles don't have teeth. Diets vary greatly among the different species and the jaw of each sea turtle is adapted to its favorite dish.*



Leatherback



Hawksbill turtle



Green turtle



Loggerhead

### When I see a sea turtle, which one is it?

The species can be identified by looking at the turtlehead, the shell (carapace) and the number of plates (scutes) on the side of the carapace (shown highlighted).

#### Leatherback turtle

- Black leather-like carapace with white spots
- No scutes
- 5 distinct ridges
- Size: 4 to 8 feet
- Weight (female) 450 to 1,400 pound



#### Hawksbill turtle

- Bony carapace with 4 pairs of scutes on the side
- Size: 30 to 36 inches
- Weight: 80 to 120 pounds
- Distinct over-bite jaw



#### Green turtle

- Bony carapace with 4 pairs of scutes on the side
- Size: over 40 inches
- Weight: 460 pound
- Round face
- Serrated jaw



#### Loggerhead turtle

- Bony carapace with 5 pairs of scutes on the side
- Size: 46 inches
- Weight: up to 400 pound



### Sea turtles are threatened around the world.

While sea turtles have survived major changes and witnessed the evolution and extinction of many other life forms, now it is themselves that are threatened.

Some 500 years ago the number of sea turtles living in the oceans could be counted in the millions. Today only a few hundred thousand remain. People have gone too far in exploiting and polluting the seas and in coastal development. Therefore sea turtles need protection.

Today most countries protect sea turtles to some degree, and we are proud to say that they are completely protected by local nature ordinances here in the Netherlands Antilles. Internationally, they are protected in various ways by the CITES Convention, the UNEP SPAW, and the Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC).

In the Windward Islands you may not take, kill or have a sea turtle or any part of a sea turtle in your possession. It is also illegal to damage or destroy sea turtle nests or to take sea turtle eggs (or hatchlings) from their nests. Support the local Sea Turtle Watch Group and always report illegal activities to the local Sea Turtle Watch Group, or Fisheries Department, on your island.

(source: this information is adapted from standardized diagnostic materials available from WIDECAS.T. Credits images: Tom McFarland/ WIDECAS.T)



## What can you do to help?

Threats sea turtles face today...and ...simple solutions:

### **Nesting beach becomes recreation beach:**

Coastal development, lights, noise, pollution, beach driving and general harassment chase sea turtles away.

### **Education and protection:**

When people stick to rules, recreation and sea turtle protection can go hand in hand. Be aware that sea turtles must share our environment!

### **Trash kills:**

Garbage left in the sea or on the beach can be mistaken for food, obstruct nesting grounds, and trap emerging hatchlings. Almost half of the sea turtles found dead have plastic in their intestines, which they couldn't digest.

### **Keep the sea and beach clean.**

Take all litter, as well as larger objects like chairs and food coolers, home. Don't drive on the beach, or dump toxins such as oil or pesticides. Don't remove sand!

### **Soup and shield:**

Sea turtles have always been prized for their shell, meat, oil and eggs. More than one-quarter million Caribbean Hawksbills were exported to Japan for to make ornaments in the 1970-80s.

**National laws and international agreements** are critically important in the protection of sea turtles. Please don't eat sea turtle meat or eggs, or purchase sea turtle products when you travel.

### **Accidental death in fishnets:**

Sea turtles breathe air, just like us. They easily drown when entangled in a fishing net. Many scientists believe that this is the single biggest threat to sea turtles.

Fishermen should **not leave nets unattended**, and should make every attempt to release turtles alive. The use of special openings in nets can allow sea turtles to escape; these are required by law in some countries.

It is up to us to ensure that there will always be a place for our beautiful sea turtles on these islands and in our world!

Please contact us if you would like more information on the status of sea turtles on the Windward Islands.

Nature Foundation SXM – tel: (599) 54-20267 / [www.naturefoundationsxm.org](http://www.naturefoundationsxm.org)

Saba Conservation Foundation - tel: (599) 416-3295/ [www.sabapark.org](http://www.sabapark.org)

St Eustatius National Parks - tel: (599) 318-2884 / [www.statiapark.org](http://www.statiapark.org)

For general information on sea turtles, visit WIDECAST: [www.widecast.org](http://www.widecast.org)

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## Protect our sea turtles

### **Kings of the sea**

Sea turtles are ancient reptiles that lived in the world's oceans for more than 150 million years. They are adapted to their environment; a streamlined light shell and long flippers help move them gracefully through the water. Although living in the water, sea turtles do breathe air. Therefore they need to surface for air every couple of minutes. At that time they are vulnerable to boat traffic, gillnets, and other threats.

### **Nesting habits**

All reptiles, e.g. lizards, snakes etc, reproduce by laying eggs. In our part of the Caribbean, peak nesting occurs from April through November. This is the only time that female sea turtles come ashore and they return to the same area they once hatched themselves. They dig a hole in the beach, deposit the eggs, cover them with sand and then leave the eggs alone to hatch. A female lays between 85 and 160 eggs per nest. Incubation generally takes 55 to 75 days. Only 2-3.5 inches long, the hatchlings break free of the egg, make their way to the surface of the sand, and scramble to the water. For about 30 hours they swim to get into deeper, safer water. Only 1 out of 1000 hatchlings finally makes it to adulthood.

### **Nesting sites**

St. Maarten, Saba and St. Eustatius have a few nesting sites left, which are the home of many sea turtles. On St. Maarten the most important beaches are Mullet Bay Beach, Maho Beach, Simpson Bay Beach, Guana Bay, Gibbs Bay, Red Pond Beach and Dawn Beach. On Saba, sea turtles nest on Cove Bay. On St. Eustatius they nest mainly on Zeelandia Beach, Lynch Beach, Crooks Castle, Kay Bay and Oranjestad Bay.

### **Research**

Several institutes in the Caribbean work on sea turtle research. For instance the Nature Foundation St. Maarten has initiated several projects and documented more than 100 sea turtle nests since 1999. They found out that the Leatherback turtle, which was not known to live here, actually visits the island quite often! St. Eustatius National Parks (STENAPA) have been regularly monitoring their beaches since 2002. In 2004, there were over 60 nesting events recorded and over 140 hatchlings released from relocated nests. The majority of nesting turtles were Green turtles. On Saba, although having a rocky seashore, turtles do come ashore to lay eggs. In 2003 the Saba Conservation Foundation saved some 80 hatchlings at Cove Bay from being trapped between rocks.