

# BERMUDA TURTLE PROJECT 50th Anniversary • 1968 - 2018



Bermuda's connection with sea turtles goes back to the first arrival of humans on our shores at a time when turtles were a valuable resource for early settlers. Despite legislation adopted in 1620 to protect against the taking of juvenile turtles, by the end of the 1700's, the adult green turtle population was decimated. The law failed to halt the destruction of our breeding colony. If our forefathers had understood the complex migrations of sea turtles, effective conservation measures would have been possible.

For more than half a century the research of the **Bermuda Turtle Project** has focused on the understanding of sea turtle biology so that successful protection can be afforded these animals in Bermuda and throughout their range.

With esteemed scientific directors, effective longstanding partnerships, excellent science, innumerable volunteers and donors, and a lot of passion, the mark and recapture study has examined and analysed information from some 4000 green turtles and 138 hawksbill turtles living in our inshore waters between 1968 and 2016. More than 1,500 recaptures of tagged green turtles provide one of the largest data sets in the world on growth rates, habitat use and movements of free-ranging, immature green turtles.

Green turtles arrive in Bermuda a few years after hatching on distant nesting beaches and may stay as long as 20 years in what is called developmental habitat, leaving before they mature. They come from all over the North Atlantic making conservation decisions here relevant to numerous rookeries, including Florida, Mexico, Cuba, Costa Rica, Aves Island, and/or Surinam, and probably Guinea Bissau and Cyprus. Once in Bermuda young green turtles choose a sea grass bed to which they exhibit strong fidelity. Some individuals demonstrate daily shuttling behavior between their feeding site and adjacent resting sites. They slow down physiologically in cold months and may move into slightly deeper water. Green turtles tagged in Bermuda have been recaptured as far away as Texas, Cuba, Nicaragua and Venezuela, and have emerged on nesting beaches in Florida, Costa Rica and Mexico. There is a long time between departure from Bermuda and emergence on distant nesting beaches for these long-lived reptiles.

Despite complete legal protection from exploitation in Bermuda's waters, entanglement in marine debris such as monofilament line or abandoned fishing nets, plastic ingestion, incidental capture in fisheries, disturbance, and boat strikes are among the many threats to Bermuda's sea turtles.

Although Bermuda's nesting sea turtles were extirpated almost a century ago, a few isolated nesting events in recent decades offer hope for nesting by sea turtles in Bermuda's long-term future.

Five species of sea turtles are known in Bermuda waters. The green turtle is by far most common, but hawksbills are also regularly seen, usually on coral reefs. Loggerheads and leatherbacks occasionally occur in the deeper waters around Bermuda but are rarely seen on the platform. Kemp's ridley is very rarely seen in Bermuda waters.

Bermuda Turtle Project A collaboration between the Bermuda Zoological Society and the Sea Turtle Conservancy Scientific Directors: Dr. Anne Meylan and Dr. Peter Meylan Bermuda Director: Jennifer Gray https://conserveturtles.org/bermuda/



# BERMUDA





## Green Turtle – *Chelonia mydas*

This is the largest of the hard-shelled sea turtles and can grow to 230 kg. in weight in some parts of the world. It is sought after in many countries for its meat. Post hatchlings live at the surface of the open ocean where they eat both plant and animal matter. Older green turtles are unique among sea turtle species in being strongly herbivorous, feeding almost exclusively on sea grasses and algae. The green turtle is the most common sea turtle species on the Bermuda reef platform and is often seen feeding on shallow sea grass pastures. A green turtle nest observed in Bermuda in 2015, was the first in almost a century. Green turtles are listed as endangered in Bermuda.

#### Hawksbill Turtle – Eretmochelys imbricata

The endangered hawksbill turtle has a hawk-like beak from which it gets its name. It uses its beak primarily to pry sponges off the reef, but the diet may also include other invertebrates. Immature hawksbills are a regular inhabitant of the coral reefs in Bermuda. As adults, they can grow to 85 kg. but those found in Bermuda waters are immatures in developmental habitat. The shell of this species is termed "tortoise shell", a highly prized commodity. The hawksbill has been exploited worldwide for most of recorded human history. The species is listed as critically endangered in Bermuda.

#### Loggerhead Turtle – Caretta caretta

This species has a large, broad head and powerful jaws, which it uses to dine on shellfish; they are even capable of crushing very thick-shelled conchs. This species grows to 135 kg. Hatchling loggerheads spend their first months well camouflaged in floating rafts of *Sargassum* weed. During the winter months, small juvenile loggerheads are found stranded on Bermuda shores after heavy storms. They are typically found tangled in small clumps of Sargassum weed. Large juveniles use open ocean waters near Bermuda, but are rarely observed on the Bermuda reef platform. In 1990 and again in 2005, single nests constructed by loggerhead turtles were discovered on beaches at the eastern end of Bermuda. These are the first records of loggerheads nesting in Bermuda. In Bermuda the Loggerhead is listed as endangered.

### Leatherback Turtle – Dermochelys coriacea

The leatherback is a species with a bizarre shell that is quite unlike that of all other turtles. It is an adaptation to its pelagic, deep-diving lifestyle. This is the largest living turtle, growing to 909 kg. Because most of the leatherback's life is spent in the open ocean, its life history remains largely a mystery. It feeds almost exclusively on jellyfish. Leatherbacks are only occasionally seen offshore around Bermuda, passing by our oceanic island on their migrations. In Bermuda, the leatherback is considered to be critically endangered.

### **TECHNICAL DETAILS**

Sheila Semos
Cartor Security Printing
Lithography
35.00 mm X 35.00 mm
13.25 Per 2 cms
50 (2 X 25)
CASCO Crown Watermarked
50¢, \$1.15, \$1.35, \$1.55
22 March 2018
101.6 mm X 95.25 mm, .10c. & \$1.20

#### Photo credits

Green Turtle Mario Cisneros Hawksbill Turtle Ron Lucas Loggerhead Turtle Chris Burville Leatherback Turtle Brian Skerry

#### **Souvenir Sheet**

Seagrass Bed Green Turtle Hawksbill Turtle Anne Glasspool Jennifer Gray Ron Lucas