



Sea Turtles

Sea Turtles: There are seven species of sea turtle in the world, three of which are seen in the Virgin Islands National Park; the green sea turtle (*Chelonia mydas*), hawksbill (*Eretmochelys imbricata*) and leatherback (*Dermochelys coriacea*). The loggerhead turtle (*Caretta caretta*) is rare, with only one sighting in the VI National Park, but does nest infrequently on Buck Island, St. Croix. Sea turtles are reptiles that evolved from land turtles and made their way into the sea about 150 million years ago. Sea turtles spend most of their lives in the ocean, coming ashore, as adults, only to lay eggs, sun themselves (very rare) or as hatchlings leaving the nest. Turtles are migratory and may travel hundreds or thousands of miles between hatching, feeding, mating and nesting sites.

Adapted for ocean life, sea turtles have flippers instead of feet. The muscular front flippers quickly propel the turtle through the water, while hind flippers act as rudders to steer the turtle. Sea turtles are fast swimmers and rely on their speed to avoid predators. Unlike land turtles, sea turtles cannot pull their head and flippers into their shell to avoid predation.

Like other reptiles, sea turtles have lungs and breathe air. Sea turtles must swim to the surface in order to breathe. A turtle at rest may hold its breath for up to five hours while an active turtle needs to breathe every 5-10 minutes. Sea turtles are ectothermic (cold blooded), meaning they do not use metabolism to control their body temperature. Instead, they absorb heat from their surroundings and have an internal body temperature the same as



Green sea turtle feeding on turtle grass (*Thalassia testudinum*) in Leinster Bay, St. John.
Photo by Caroline Rogers.

their environment. Consequently, all sea turtles, except leatherbacks, are found in warm tropical and temperate waters. Leatherbacks have special adaptations that allow them to live in colder waters.

Sea turtles are egg layers. Depending on the species, turtles may not start reproducing until they are 15 – 30 years old.

The female must come ashore to dig a nest and lay her eggs. The tracks she makes while heading to and from the sea are called a turtle crawl. She digs a nest cavity using her rear flippers and deposits the eggs. Once she has deposited the eggs the female covers the nest with sand in an attempt to camouflage it and the eggs from predators. Each batch of eggs laid is called a clutch. Females lay between 4 and 11 clutches in a nesting season depending on the species. Typically

the female will nest every 10 days. Each nest may contain between 80-200 eggs depending on the species of turtle. Once a nest is laid the female returns to the sea. Sea turtles offer no maternal care to their young. Once laid the eggs develop in about 55 to 70 days depending on the temperature of the sand. Hotter nests produce females while cooler nests produce males. After the eggs hatch, the baby turtles, called hatchlings, make their way to the surface as a group and emerge from the nest together. The hatchlings then crawl across the sand and head to the sea where they must survive on their own. Hatchlings spend their early years offshore, drifting with the ocean's currents while floating on algal mats. The turtles return after a couple of years as juveniles, where they feed in near shore waters until they are mature and ready to reproduce.

Green Sea Turtle
(*Chelonia mydas*)

Description:

- Oval or heart shaped body with slightly scalloped edge of carapace. Scutes do not overlap
- Adults may reach 4.5 ft in length and weigh up to 500 lbs
- Color: Brownish gray to green with lighter striations
- Named for the green color of their fat acquired by a diet of marine plants

Diet:

- Carnivorous when young, feeding on fish eggs, small invertebrates and mollusks
- Predominantly herbivorous as adults, feeding mostly on seagrass

Distribution:

- Throughout the world in tropical to temperate waters
- Often seen feeding in shallow nearshore waters
- Most common turtle in Virgin Islands' waters

Nesting:

- Peak nesting season in the Virgin Islands, August-October
- Lay between 100-140 eggs per nest
- Nest approximately every two weeks, laying between 2-6 nests per nesting season
- Typically nest every 2-3 years
- Nest mid-beach on sandy beaches

*** Due to nest predation and poaching, Green turtles no longer nest on St. John



Hawksbill Sea Turtle
(*Eretmochelys imbricata*)

Description:

- Oval shaped shell with serrated margin. Scutes (scales) overlap like tiles on a roof
- Adults may reach 3 ft in length and weigh up to 200 lbs
- Color: brown, gold and mahogany striations
- Get their name from the hawk-like shape of their beak

Diet:

- Use their hawk-like beak to scrape sponges and invertebrates from the reefs

Distribution:

- Throughout the world in tropical and sub-tropical waters
- Feeds on shallow and deep coral reefs

Nesting:

- Peak nesting season in the Virgin Islands, July-November
- Lay between 120-160 eggs per nest
- Nest approximately every two weeks, laying between 1-5 nests per nesting season
- Typically nest every 2-3 years
- Nest in the beach forest behind the berm



Right: leatherback sea turtle nesting during the day, Hawksnest Beach, St. John. NPS photo by Carrie Stengel.

Left: Example of a leatherback crawl (flipper tracks). NPS photo by Carrie Stengel

Leatherback Sea Turtle
(*Dermochelys coriacea*)

Description:

- Largest sea turtles in the world. Adults may reach 6 ft long and weigh 2000 lbs with a flipper span of 8 ft.
- Only turtle without a hard shell. Instead they have a black, shiny, leatherlike skin with seven ridges
- Each leatherback has a pink spot on its forehead, which, like a fingerprint, is unique, allowing turtles to be identified

Diet:

- Feed primarily on jellyfish and other soft-bodied organisms

Distribution:

- Live and feed in temperate waters worldwide where jellyfish are plentiful
- Nest on tropical beaches
- Migrate thousands of miles between, feeding, mating and nesting areas

Nesting:

- Although rare, leatherbacks still nest on St. John
- Peak nesting May-July
- Lay 60-110 eggs approximately every 10 days. Laying between 4-11 nests per season
- Nest every 2-3 years
- Nest mid-beach, on wide gently sloping, sandy beaches

Left: hawksbill sea turtle swimming over reef in Leinster Bay, St. John. Photo by Caroline Rogers.

