Sea turtles have roamed the oceans for more than 150 million years. During their wanderings, female sea turtles will return to the land only to lay eggs in a sandy beach.

Little is known about why sea turtles nest on some beaches and not others. This nesting distribution may reflect conditions that existed centuries ago, when temperature, beach characteristics or the lack of predators made some areas preferable to sea turtles.





## Beach and Dune Ecosystem

Florida contains nearly 1,200 miles of coastline. Coastal habitats are home to a wide variety of plant and animal species, including many endangered and threatened species. The beach and dune ecosystem covers approximately two-thirds of Florida's coastline and includes coastal strand and maritime hammock.

The coastal strand is a thin strip of fragile woody vegetation that lies between the beach and the maritime hammock. This community is found only along the east coast of Florida, providing dense vegetation and the perfect habitat for the southeastern beach mouse, gopher tortoise, indigo snake and other rare and endangered species.

The maritime hammock community is found just inland from the coastal strand. This community becomes established on older dunes that are stable enough to support the growth of trees, providing habitat for many species of animals including tree frogs, blue-tailed skinks and both resident and migratory song birds. These areas are popular for development, which is leading to their rapid decline.

Barrier islands make up more than 700 miles of Florida's coastline. They are naturally formed and provide a home for

the drifting seeds of beach plants. As the seeds grow and develop, their roots stabilize the soil, allowing the development

of coastal strand and maritime hammock communities. Barrier islands support more than 35 species of plants and animals that are listed as either rare, threatened or endangered.

## **Nesting Process**

Most female sea turtles return faithfully to the same beach each time they are ready to nest, often emerging within a few hundred yards of where they last nested. Nesting occurs

most often at night. Sometimes the female will crawl out of the ocean, but for unknown reasons decide not to nest. This is a "false crawl," and it can happen naturally or be caused by artificial lighting or the presence of people on the beach. When the female does find a suitable nesting site, she crawls to a dry part of the beach and begins constructing a "body pit" by digging with her flippers. She then digs an egg cavity using her cupped rear flippers as shovels. Once the egg chamber is dug out, she begins to lay between 80 to 120 eggs. Two or three eggs drop out at a time, with mucus being secreted throughout egg-laying.

Nesting sea turtles appear to shed tears, but the turtle is just secreting salt that accumulates in her body. Once all the eggs are in the chamber, the mother turtle uses her rear flippers to push sand over the top of the egg cavity and packs the sand down over the top. She then begins

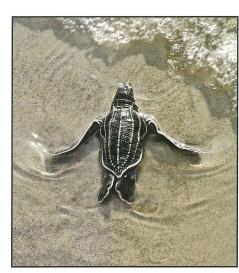
using her front flippers to refill the body pit and disguise the nest. By throwing sand in all directions, she makes it much

harder for predators to find the eggs. After the nest is thoroughly concealed, the female crawls back to the sea. Once a female has left she never returns to her nest.

After about 60 days the eggs hatch. The hatchlings dig out of the

nest in a group effort that can take several days. Hatchlings erupt from the nest cavity as a group. The little turtles orient them-

selves to the brightest horizon, and then dash toward the sea. If they don't make it to the ocean quickly, many hatchlings will die of dehydration in the sun or be



caught by predators like birds and crabs. The obstacles are so numerous for baby turtles that only about one in 1,000 survives to adulthood.

# Common Florida Sea Turtle Species

### Loggerhead

**Scientific name:** (Caretta caretta) Loggerheads derives their name from the size of its head, which may be up to 10" wide.

Appearance: Adults and subadults have a reddish-brown carapace (upper shell) and a dull brown to yellowish plastron (lower shell).

**Size and Age:** Most adults weigh between 250 and 350 pounds and have a carapace between 3 and 4 feet long. Loggerheads reach maturity in 20 to 30 years, and probably live to be at least 70 years old.

**Reproduction:** Loggerheads return to their nesting beach at intervals of 2 to 3 years. Nesting occurs from May through September. They lay 4 to 7 nests per season, about

14 days apart. Each nest has an average 100 to 126 eggs, which incubate about 60 days.

#### **Green Turtle**

**Scientific name:** (Chelonia mydas) The green turtle derives its name from the green color of the fat that lies just under its shell.

**Appearance:** A single pair of scales on the front of its head distinguishes the green turtle.

**Size and Age:** Adults weigh between 225 and 350 pounds and measure between 3 and 4 feet. Green turtles reach maturity in 30 to 50 years and probably live to be at least 70 years old.

**Reproduction:** Green turtles generally return to their nesting beach every 2 years. They lay an average of 3 to 5 nests during their nesting season, which runs from June through September. There are about 12 days between each nesting. Each nest has

an average of 115 eggs, which incubate about 60 days.

#### Leatherback

#### Scientific name:

(Dermochelys coriacea) Leatherbacks derive their name from the leather-like appearance of their shell.

**Appearance:** Adults and subadults have a carapace with dark grey or black with white or pale spots, while the plastron is whitish to black and marked by 5 ridges.

**Size and Age:** Most adults weigh between 500 and 1,100 pounds and have a carapace between 4 and 6 feet long. Leatherbacks reach maturity in 20 to 30 years, and probably live to be at least 70 years old.

**Reproduction:** Leatherbacks return to their nesting beach every 2 to 3 years. Nesting

is from March through June. They lay 4 to 7 nests per season, about 10 days apart. Each nest has an average of 80 eggs, which incubate for about 65 days.



This publication was funded through a grant agreement from the Florida Department of Environmental Protection, Florida

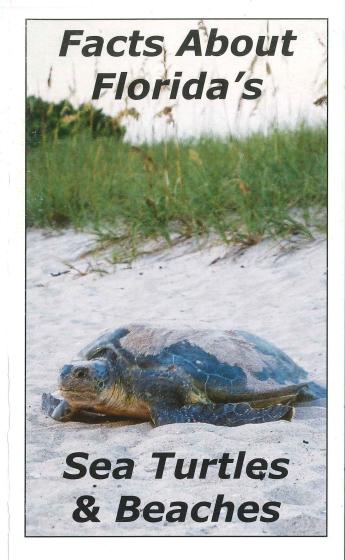
Coastal management Program, by a grant provided by the Office of Ocean and Coastal Resource Management under the Coastal Zone Management Act of 1972, as amended, National Oceanic and Atmospheric Administration Award NO. NA09NOS4190076. The views, statements, findings, conclusions, and recommendations expressed herein are those of the author(s) and do not necessal

those of the author(s) and do not necessarily reflect the views of the State of Florida, NOAA or any of its subagencies.

## How you can help

Today, humans are impacting coastal areas are destroying sea turtle nesting habitat, places where these ancient nomads have nested for thousands of years. Help protect Florida's sea turtles and coastal habitats!

- Adopt-A-Turtle to Support Sea Turtle Conservation. Join and support the Sea Turtle Conservancy by visiting www.conserveturtles.org or by calling 352-373-6441.
- Reduce the Amount of Plastic Garbage You Produce. Think about how you and others can get through each day using less plastic and find places that recycle plastic.
- Organize or Join a Beach Clean Up. Work with local groups or your school to organize a beach clean up day to clear the beach of trash that could harm wildlife.
- Tell People About the Dangers of Plastic Bags & Balloons in the Ocean. Sea turtles may die by mistakenly eating balloons or plastic bags that are floating in the ocean.
- Talk to Your Family and Friends
  About Helping Sea Turtles. When
  you go home or back to school, tell your
  family and friends what you learned
  about saving sea turtles and what it was
  like to see a nesting sea turtle.
- Reduce the Amount of Chemicals You Use. Chemicals and fertilizers used on lawns and gardens can wash into coastal waters, killing plants and animals. Find ways to use biodegradable products and correctly dispose of used toxic chemicals.







Sea Turtle Conservancy 4424 NW 13th St, Ste B-11 Gainesville, FL 32609 352-373-6441 www.conserveturtles.org