

DISTURBING A SEA TURTLE NEST IS A VIOLATION OF STATE AND FEDERAL LAWS.

What To Do If You See A Turtle

If you observe an adult sea turtle or hatchling sea turtles on the beach, please adhere to the following rules and guidelines:

1. It is normal for sea turtles to be crawling on the beach on summer nights. DO NOT report normal crawling or nesting (digging or laying eggs) to the Florida Marine Patrol unless the turtle is in a dangerous situation or has wandered off the beach. (on a road, in parking lot, etc.)
2. Stay away from crawling or nesting sea turtles. Although the urge to observe closely will be great, please resist. Nesting is a critical stage in the sea turtle's life cycle. Please leave them undisturbed.
3. DO REPORT all stranded (dead or injured) turtles to the Florida Marine Patrol.
4. NEVER handle hatchling sea turtles. If you observe hatchlings wandering away from the ocean or on the beach, call:
Florida Marine Patrol 1-800- DIAL-FMP (3425-367)

MIAMI-DADE COUNTY SEA TURTLE CONSERVATION PROGRAM



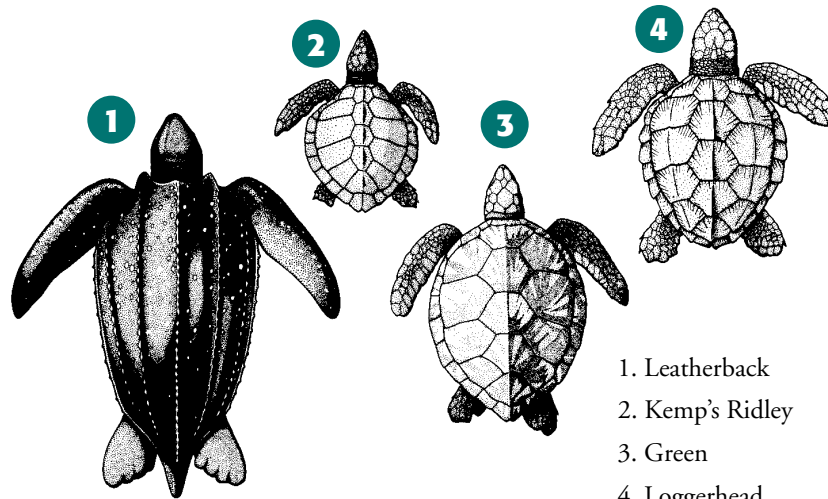
Josef Azei

"To Protect Endangered or Threatened Marine Turtles for Future Generations"

Before 1980, there was no documented sea turtle activity in Miami-Dade County, due mainly to the lack of an adequate beach-nesting habitat. In 1979, the Parks and Recreation Department's Sea Turtle Conservation Program began a comprehensive beach re-nourishment project and in 1980, with the advent of our newly re-nourished beaches, sea turtle activity started to prosper. Today, the program has documented over 3,886 nests, which has resulted in the release of over 356,414 hatchlings.

10800 Collins Avenue
Miami Beach, Florida 33154
(305) 947-3525

• Save and See a Sea Turtle Friend •



1. Leatherback
2. Kemp's Ridley
3. Green
4. Loggerhead

U.S. GOVERNMENT PRINTING OFFICE: 1999-557-736

This information is a cooperative effort on behalf of the following organizations to help residents of Miami-Dade County learn about sea turtle conservation efforts in this coastal region of the state.



**NATIONAL
SAVE THE SEATURTLE
FOUNDATION**



4419 West Tradewinds Avenue
Fort Lauderdale, Florida 33308
Phone: 954-351-9333
Fax: 954-351-5530
Toll Free: 877-Turtle3

Information has been drawn from "Sea Turtle Conservation Program", a publication of the Broward County Department of Planning and Environmental Protection, Biological Resources Division. Photos have been provided courtesy of Miami-Dade County Parks and Recreation Department.

For further information, please contact the Florida Sea Grant Marine Extension Agent at:

Florida Sea Grant College Program
RSMAS
4600 Rickenbacker Causeway
Miami, FL 33149-1098
(305) 361-4017

Florida Sea Grant is the only statewide, university-based coastal research, education, extension/outreach and communications program in Florida.

www.FlSeaGrant.org

SGEF-141

• Save Our Sea Turtles • Be A Lifesaver Friend •

TURTLE TRACKS

SEA TURTLE CONSERVATION IN MIAMI-DADE COUNTY



Mike Severus



Bill Ahern

Florida Sea Grant College Program

Sea turtles are marine reptiles that have existed since their giant land turtle ancestors returned to the sea sometime during the Age of Dinosaurs. Scientific study places sea turtles back in time as far as 150 million years ago.



New hatchlings making their trek toward the sea.

Seven species of sea turtles have managed to survive to the 21st Century. Three of these species, the Loggerhead Sea Turtle (*Caretta caretta*), the Green Sea Turtle (*Chelonia mydas*), and the Leatherback Sea Turtle (*Dermochelys coriacea*), nest on the beaches of Miami-Dade County from March to early September.

The Loggerhead is the most common, but Greens and Leatherbacks have also been documented in small numbers. In fact, Florida is responsible for 90% of nesting Loggerheads, making this state the largest nesting area in the Western Hemisphere for Loggerhead Sea Turtles.

Sea Turtles are Endangered or Threatened Species

Sea turtle populations have been seriously reduced worldwide through a number of human influences. Overdeveloped coastal areas have eroded natural nesting habitats. Breeding populations of adult turtles have been diminished by capture for eggs, meat, leather, oils, and tortoise shell, or mortality from long line fishing, discarded nets, fishing line, pollution, plastic products and motorboat injuries. Incidental captures of adults in fishing nets and shrimp trawls have brought one species, the Kemp's Ridley (*Lepidochelys kempi*), right to the brink of extinction. At one time, many feared the Kemps would vanish completely from our ecosystem.

For these reasons, the Marine Turtle Protection Program protects ALL sea turtles. Sea turtles in Florida are protected through Florida Statutes, Chapter 370.12(11-c-1) and by the United States Endangered Species Act of 1973. Briefly these laws state that: "No person may take, harass, harm, hunt, pursue, shoot, wound, kill, trap, capture or attempt to engage in any such conduct to marine turtles, turtle nests, and/or turtle eggs." Any persons who knowingly violate any provision of the act may be assessed civil penalties up to \$25,000 or a criminal penalty up to \$50,000 and up to one (1) year imprisonment.

Of the species that nest in Miami-Dade County, the Green and the Leatherback sea turtles are listed officially as endangered. The Florida population of Loggerheads is considered threatened.

Sea Turtle Nesting Behavior

Nesting begins in Miami-Dade County in late February. If undisturbed, the female leaves the ocean and crawls up the beach to a point well above the high tide line. There, using her rear flippers, she digs an egg chamber about 9 inches in diameter. Loggerheads and Greens will dig a chamber from 18 to 24 inches deep; a Leatherback's nest chamber can be as deep as 36 inches. After resting briefly, she deposits from 60 to 180 eggs that are soft and range from the size of a ping-pong ball to, in the case of a Leatherback, the size of a tennis ball. After she has deposited her eggs in the chamber, she uses her rear flippers again to cover the eggs with sand. She then energetically throws sand backward with her front flippers to cover and disguise the exact location of the nest chamber. She then leaves the nest site and returns to the sea.



Rick Poley

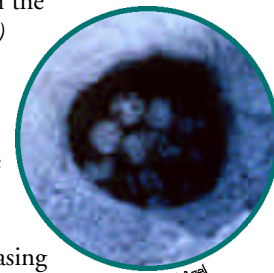
Since sea turtles do not nurture their hatchlings, the female never returns to the nest site. A single female may nest several times during a season and then not nest again for one or two years. Sometimes the female emerges from the sea without digging a nest chamber. These are called "false crawls" and usually occur because the turtle was disturbed or could not find a suitable nest site. The tracks left on the beach by the nesting turtle resembles marks left by a tractor tire. Male sea turtles rarely come ashore, unless they are injured or dead, which is why little is known about them.

The nesting season for the Leatherback in Miami-Dade County begins in late February and runs through late May; for the Loggerhead, from mid-April through late August; and for the Green sea turtle, from late May through mid-August.

Sea Turtle Hatchlings

Hatchlings start emerging from nests in mid-July to Mid-October. Here in Miami-Dade County, the eggs that are deposited in the chamber are either left to incubate naturally (*insitu*) or relocated to a fenced hatchery or a safer area of the beach. Because of the extent of the development on our beaches and associated bright lights from hotels, condominiums, streets and highway traffic, most of the nests in Miami-Dade County are moved by authorized and permitted personnel.

There are two types of hatchery systems – self-releasing and restraining hatcheries. The self-releasing hatchery allows the



José Azel

emerging hatchling to crawl out of the hatchery and traverse the beach toward the water's edge on their own unencumbered. Restraining hatcheries require the collection of hatchlings and manually releasing them at the water's edge.

Incubation of the nests takes about 50 to 60 days. After this period, the hatchlings emerge from the nest en masse, and in the case of insitu nests, using various environmental and inherited cues, quickly migrate to the water's edge. If artificial lights are lighting the beach, the hatchlings become disoriented, travel in the wrong direction, and possibly never make it to the water.

Once in the water the hatchlings swim directly out to sea, facing a perilous struggle to survive to adulthood. The best scientific estimates available indicate that only approximately one percent of the hatchlings will survive to adulthood.

The maximum age of adult turtles is unknown, but some have been kept in captivity longer than fifty years.

How You Can Help

Without the support of the public, the survival of sea turtles on our planet is doubtful. Here are some ways you and other citizens of Miami-Dade can help:

- As much as possible, refrain from walking on the beach at night during the summer months (March through mid-September.). No matter how quiet, humans will often – and unknowingly – frighten nesting sea turtles back into the sea.
- Never keep baby or newly hatched sea turtles in aquariums. They may survive for short time, but with out proper chemical treatment of the aquarium they will perish.
- Keep bright lights from shining onto the beach. If you have security or safety lights near the beach, build shades around the light so the beach is not directly illuminated. The bright lights will disorient hatchlings.
- If you see someone harassing a sea turtle or poaching a nest, call the local police or the Florida Marine Patrol (1-800-DIAL-FMP).
- Do not dispose of plastic bags or trash in the ocean. Plastic bags very closely resemble a favorite food of sea turtles, jelly fish, and will cause illness or death to turtles and other marine life that eat them.
- Stay clear of marked sea turtle nests on the beach.