



New York Sea Turtles of New York

New York's largest turtles, sea turtles are graceful, amazing creatures that few people are privileged to see. Perfectly adapted to life in the ocean, sea turtles have streamlined bodies and flippers that aid them in swimming. They are excellent swimmers, capable of swimming long distances in a short time. In fact, green sea turtles have been known to travel as fast as 35mph for short distances.

Sea turtles inhabit the warm waters of oceans, bays and estuaries. In New York, they can be found in the waters off Long Island, including Long Island Sound and Long Island's eastern bays. They arrive here every year in late June as water temperatures rise. By mid-November, they migrate south in search of warmer waters.

Except for nesting adult females and newly hatched young, sea turtles remain in the sea their entire lives. Like all turtles, they breathe air. While actively swimming, they must surface every few minutes to breathe. When sleeping or resting, adult sea turtles can remain underwater for more than two hours.

Sea turtles use their sharp bill to eat a variety of things, including crustaceans, shellfish, jellyfish, seaweed, snails, algae and even small fish. While we don't know how long sea turtles live in the wild, biologists estimate that most live approximately 20 to 30 years, but may live as long as 80 years.

Worldwide, there are eight species of sea turtles. Of those, five species inhabit the waters off New York State: green; Atlantic hawksbill; loggerhead; Atlantic/Kemp's ridley; and leatherback.

Breeding

Sea turtles migrate up to 1,000 miles from their feeding grounds to their nesting grounds to reproduce. Mating

occurs in the water near nesting beaches. Only two species—the loggerhead and the green—nest in the U.S., primarily in Florida. The other species nest on tropical and subtropical beaches all over the world.

Nesting generally occurs at night on remote beaches. Males remain in the water, while pregnant females crawl up the beach to dig nests well above the high tide line and often near vegetation. Females use their flippers to dig nests, which consist of a broad pit with an egg chamber cavity.

After resting briefly, they lay the eggs, then gently cover them with sand, spreading sand over a wide area to hide the exact locations.

Depending on the species, females deposit between 60-200 golfball-sized leathery-shelled eggs per nest. Some individuals may nest up to 7 times in a single season. Females reach sexual maturity between 6 and 15 years old. With the exception of the Kemp's ridley that may breed every year, breeding generally occurs every 2 to 4 years. Female turtles typically nest on the same beach where they hatched.

Once eggs are laid, females reenter the water, leaving the eggs unattended. Six to ten weeks later, baby turtles break out of the nest and hurry down the beach into the sea.

Despite the fact that hatchlings often emerge under cover of darkness, many fall prey to ghost crabs, dogs, foxes, raccoons, opossums and gulls. Those that make it to the sea face another set of predators, including fish and seabirds. It is estimated that only 1% percent of baby turtles survive to become adult animals.

No one knows where young sea turtles spend their first year. Many speculate that they float in and among rafts of sargassum seaweed, feeding on the rich variety of small creatures found there.



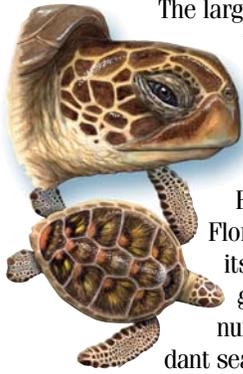
Turtles range in size from the tiny bog turtle to the huge leatherback.

Sea Turtle Strandings in New York

New York waters are primarily used as "nursery" waters for young sea turtles.

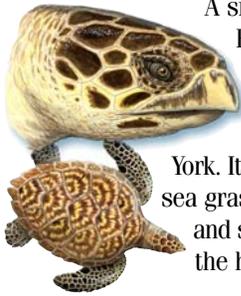
Rarely are adults found this far north. A sea turtle found on the beach in New York is not a female attempting to nest, but is a stranded animal, often dead, injured, sick, or stressed by the cold waters of the Atlantic. In the early 1980s, the organization Okeanos began a stranding network to recover dead or weakened sea turtles and sea mammals (seals, whales, dolphins). In the mid 1990s this work was taken over by the Riverhead Foundation. Both organizations have documented the cause of death for the animals they recovered and have been successful in rehabilitating some of the rescued animals and returning them to the wild.

Green Sea Turtle (*Threatened*)



The largest of the hard-shelled turtles, the green sea turtle can reach 4 feet long and 500 pounds, though the average is usually 3 feet and 250+ pounds. Usually found among sea grass in inlets, bays and estuaries throughout the tropical and subtropical Atlantic, Pacific and Indian oceans, it is known to nest on Florida beaches. It gets its name from the color of its body fat, which is green from the algae and grasses it eats. A popular food source in a number of cultures, populations of this once abundant sea turtle have drastically declined.

Atlantic Hawksbill Sea Turtle (*Endangered*)



A small- to medium-sized sea turtle, the Atlantic Hawksbill averages 3 feet long and 100-200 pounds. It gets its name from its hawk-like beak. Found in warm coastal waters throughout the tropics, this turtle is rarely seen in New York. Its preferred diet is sponges, but it also eats algae, sea grasses, soft corals, crustaceans, mollusks, jellyfish and sea urchins. Highly prized for tortoiseshell jewelry, the hawksbill has been hunted for its beautiful shell.

Loggerhead Sea Turtle (*Threatened*)



The most frequently seen sea turtle in NY waters, the loggerhead has a conspicuously large, block-like head, and averages 3 feet long and 300 pounds. Its powerful jaws are well suited to eating hard-shelled prey (crabs, crustaceans, mollusks), in addition to jellyfish, fish and eelgrass. It regularly nests on the U.S. Atlantic Coast, primarily in Florida. Though protected in the U.S., loggerhead turtles and eggs are hunted extensively in many parts of the world.

Atlantic/Kemp's Ridley Sea Turtle (*Endangered*)



The most endangered and smallest of the sea turtles, the Kemp's ridley averages 20-28 inches long and 80-110 pounds. It has a distinctive round to heart-shaped shell. Usually found in sheltered areas along the coastline in the Caribbean and North Atlantic, it is the second most commonly seen sea turtle in New York. It eats crabs, fish, jellyfish, squid, snails, clams, starfish and some marine vegetation. Its only known nesting ground is a single stretch of protected beach near Rancho Nuevo, Tamaulipas, Mexico. Kemp's ridley populations are endangered largely due to exploitation of their meat and eggs.

Leatherback Sea Turtle (*Endangered*)



The largest sea turtle, the leatherback can reach 6 feet long and weigh up to 1,300 pounds.

Unlike other turtles, it does not have a shell on its back, but rather leathery skin (hence, its name). The most pelagic sea turtle, its large front flippers and the ridges on its back aid it in swimming. It can swim for long periods and cover great distances. It has the largest range of any reptile and is found around the globe, except for the Arctic and Antarctic. Its ability to maintain a warmer core body temperature for longer periods allows this turtle to visit more northern regions. Jellyfish make up the bulk of its diet. The leatherback is endangered largely due to the collection of its eggs for food.

Note: Length measurements given are upper shell lengths only. Actual body lengths from tip to tip are much longer. (Example: Leatherbacks can measure 9 feet long tip to tip.)

Sea Turtle Populations

Despite the enormous number of eggs produced by a single female over her breeding lifetime, all sea turtle populations are either threatened or endangered. The decline in sea turtles is attributed to a number of factors, including: loss of nesting habitats to development; destruction of nests by predators and poachers; harvest of turtles for eggs, meat, leather, and tortoiseshell; and accidental killing by commercial fishing operations. In the U.S., all sea turtles are protected under the Endangered Species Act.

To stop sea turtle populations from dwindling further, there are numerous ongoing efforts to protect and study them. Across the world, a network of volunteers go to great lengths to return stranded turtles to the sea.

In some areas, known sea turtle nesting grounds are patrolled during the breeding season, in some instances by armed guards. To lessen turtle deaths caused by some shrimp trawling nets, the US Fish & Wildlife Service requires shrimp trawlers of the southeastern and gulf coasts to have a turtle excluder device on their nets, which enables turtles to escape. In New York, the waters off Long Island are critical habitat for the development of immature (2-5 year-old) Kemp's ridleys. To learn about the turtle's habits and movements, biologists attached radio transmitters to young turtles. Information collected helps biologists plan the best management approach to ensure those sea turtles are here for future generations to enjoy.

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Check out DEC's website at www.dec.state.ny.us for more information on sea turtles.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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New York State Conservationist, February 2005