

SEA TURTLES



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A Hawai'i Wildlife Guide



It's important to give sea turtles space to reach the surface to breathe. Never block or attempt to ride on them.

Meet Hawai'i's Sea Turtles

Sea turtles have resided in our planet's oceans for more than 75 million years. These ancient reptiles are among the most fascinating of all ocean inhabitants.

Here in Hawai'i, we are fortunate to have many opportunities to watch sea turtles in the wild. You may encounter them as you snorkel, dive or travel by boat. In certain shoreline areas, you may even spot these marine turtles on land! Many people in Hawai'i have worked to protect and help restore our sea turtle populations.

Sea turtles have a large shell called a carapace and four strong, paddle-like flippers. They cannot draw their flippers or heads into their shells.

Green Turtles, called *honu* in Hawaiian, are seen frequently throughout the Hawaiian Archipelago.

Hawksbill Turtles, *honu 'ea*, are extremely endangered and less frequently encountered in the Hawaiian Islands.

Leatherback, Loggerhead & Olive Ridley Turtles are rarely seen here. Fishermen and boaters may observe them in deeper waters around the Hawaiian Islands. Leatherback turtles are critically endangered.

A Closer Look at:

Green Turtles

Honu • *Chelonia mydas*



You're likely to find green turtles gliding through the sea around reefs and in shallow waters near our island shores. Dive down and you may find them sleeping under ledges of lava rock and coral. Occasionally, green turtles sunbathe on coral heads or beaches.

They are named "green" turtles for their green-tinted body fat, colored by the algae and seagrass that they eat.

Green Turtle Facts:

- Weight: Up to 400 pounds at adulthood.
- Length (of carapace): About 40 inches long.
- Coloration (of carapace): Mottled dark brown top with radiating wavy and mottled markings of gold, olive and black.

Long Distance Travelers

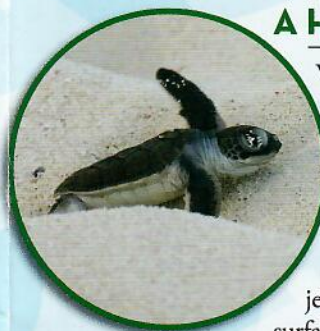
Green turtles undertake amazing journeys to their place of birth, where they mate and nest. For almost all of the green turtles that you see around the main Hawaiian Islands, this birthplace is 500 to 800 miles away in the remote French Frigate Shoals, located in the Northwestern Hawaiian Islands.

The sexually mature female turtle makes this long journey about every two to three years; males travel there every year or two. Nesting takes place primarily from May through August. The females drag themselves ashore

at night to nest. Each nesting female comes ashore to lay eggs as many as seven times, at 11 to 18 day intervals.

The female uses her hind flippers to sculpt a bottle-shaped egg chamber, where she deposits a clutch of 100 to 120 leathery eggs, each measuring about two inches in diameter. She pushes dirt and sand with her flippers to bury them. The eggs will hatch about 60 days later.

A Hatchling's Life



Working cooperatively, the tiny hatchlings dig upward to the surface, an effort that takes two to three days. The tiny turtles immediately crawl to the sea, attracted to light reflected off the water. Some become meals for crabs and fish. The surviving hatchlings subsist on plankton, jellyfish and fish eggs floating near the surface of the open ocean.

Until the honu are about four to six years old, it is unknown exactly where the young turtles go. The turtles then appear as larger juveniles along the shallow coastlines of Hawai'i's main islands. As larger juveniles, they become herbivorous vegetarians, feeding primarily on algae and sea grass – a pattern that continues through adulthood.

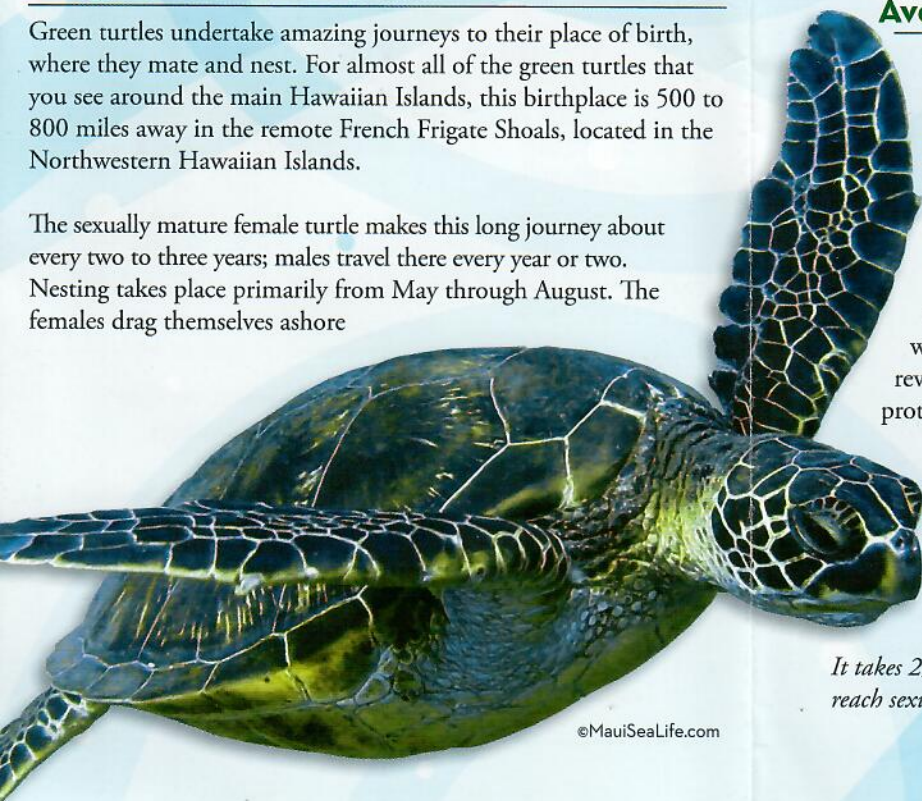
Avoiding Predators

Tiger sharks are the only natural predators of adult green turtles. Humans once caused a decline in the population of Hawai'i's green turtles, but thankfully, a dramatic increase has been documented in the turtles' numbers during the past 25 years. It's fascinating to look at the history of this turnaround.

In ancient Hawai'i, the hunting of turtles and turtle eggs was permitted, but the number of turtles taken was strictly regulated by ali'i or chiefs. Some families revered turtles as their *'amākua*, or personal family protectors, and wouldn't eat them at all.

Fishermen and sailors visiting the French Frigate Shoals hunted green turtles for their meat from the 1800s through 1959. This ended during the 1960s, thanks to the efforts of state and wildlife officials patrolling the area.

It takes 25 to 40 years for Hawai'i's green turtles to reach sexual maturity in the wild.



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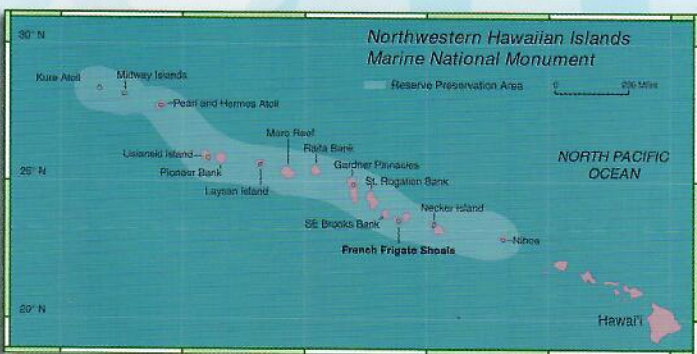
This turtle is making itself visible to attract "cleaner fish" who graze on the algae growing on its skin and shell.

However, turtle hunting continued to be legal around the main Hawaiian Islands until 1975, when the State of Hawai'i banned all commercial hunting and commercial use of turtles. In 1978, green turtles received protection under the U.S. Endangered Species Act. Thanks to this protection, green turtles are dramatically increasing in numbers. Under the U.S. Endangered Species Act, green turtles are listed as "threatened" in Hawai'i and "endangered" in other parts of the United States. Hunting, killing or harassing them is illegal.



©www.Turtles.org

The tumors on this green turtle are caused by an alpha-herpes virus specific to sea turtles, which is not contagious to humans.



Most of the green turtles that you see around the main islands of Hawai'i were born in the Northwestern Hawaiian Islands. The turtles migrate there to mate and nest.

A Closer Look at:

Hawksbill Turtles



Honu 'ea • Eretmochelys imbricata



Hawksbill turtles are famous for their beautiful carapace - often referred to as "tortoise shell" - which was exploited for many years by the fashion industry.

The hawksbill turtle gets its name from its sharp and pointed "beak." This beak is an excellent tool for foraging among coral crevices for sea sponges and other invertebrates, the hawksbill's primary food.

Hawksbill Turtle Facts:

- Weight: Up to 270 pounds at adulthood.
- Length (of carapace): About 36 inches long.
- Coloration (of carapace): Mottled brown with dark and light spots and streaks.

Each year, only 10 - 15 females hawksbills nest in the State of Hawai'i. About 90% of the nesting occurs along the Ka'u coast of Hawai'i Island (Big Island), with the remainder on Maui, Moloka'i and O'ahu. Nesting females come ashore from mid-May through November, to dig nests beyond the high tide line.

Hatchlings emerge at night and head toward the sea. Bright lights on land can send them in the wrong direction. Crabs, fish, birds, non-native mammals and cars on the beach pose threats. The surviving hatchlings live in the open ocean until they reappear in coastal waters as juveniles. Only a very small percentage survive to this stage.

Tiger sharks will attack these turtles, although humans have historically been the greatest predator. Today, loss of nesting habitat is a serious problem. Fortunately, volunteers work to protect hawksbill turtle nesting sites in Hawai'i.



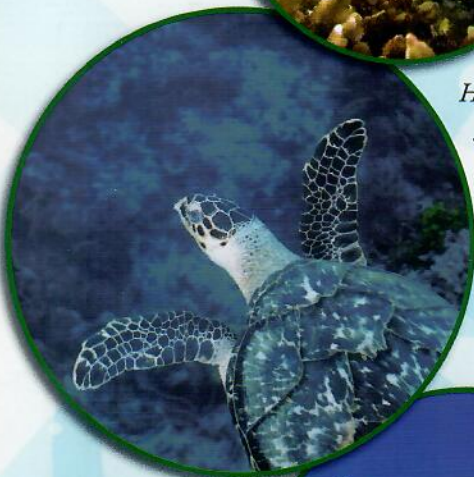
Photo by M&M Sweet

The coloration of the green turtle's carapace and skin helps to disguise it among coral and rocks.



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Hawksbill turtles are found year-round in Hawai'i, although their population is very small. Many people consider the hawksbill to be the most beautiful sea turtle in the world.



Leatherback turtles spend most of their lives in deep ocean waters. They are the world's largest species, measuring 4 to 8 feet in length and weighing up to 2,000 pounds.



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You Can Help Protect Hawai'i's Sea Turtles

As you observe Hawai'i's sea turtles, remember that they are protected under state law and the U.S. Endangered Species Act. It is illegal to kill, capture, take or harass sea turtles without state or federal permits. It is also illegal to import or export turtle products. You can also protect turtles by following these guidelines:

- Please do not approach turtles on the beach, or allow pets to approach. Avoid driving on beaches.
- Drive slowly on roads where hawksbill turtle crossing signs are displayed, especially at night in summer and fall.
- Pick up rubbish at the beach. Don't litter.



Help protect sea turtles; do not feed, touch, crowd or tease them.

- Do not cast fishing lines where turtles are seen. If you hook or entangle a turtle, do not lift the turtle above the water by pulling on the line; this will cause further injury. Cut away the line as close as possible to the hook. Remove the hook only if the turtle is lightly hooked.
- If you encounter a turtle with a serious cut, or with ingested or deeply embedded fishing line or hooks, keep the turtle in shade and seek medical care. Immediately call your local stranding assistance number (*see list below*).

If you encounter a stranded or injured sea turtle, call:

O'ahu: 983-5730

Maui: 278-3775 (in Kihei area); 893-3172 (in all other areas)

Big Island: 327-7780 (in Hilo area); 881-4200 (on west coast, Kohala-Kona)

Kaua'i: 645-0532

If you need assistance using these numbers, please call 1-808-983-5730

- To report harassment or killing of sea turtles, call: O'ahu: 587-0077
- Neighbor Islands: Dial O for operator and ask for Enterprise 5469 (toll-free)
- To report turtle tracks/nesting on Maui, call 243-5294 or 875-1582
- To volunteer with the Maui Hawksbill Recovery Project, call 808-385-5464

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