

HAWAIIAN



HAWKSBILL SEA TURTLES

SEA TURTLES IN HAWAIIAN CULTURE

As indigenous species in Hawai`i, sea turtles have historically played an important role in Hawaiian culture. Honu (green turtle) and `ea (hawksbill turtle) are mentioned in the Kumulipo, the Hawaiian creation chant. Hawksbills are also called honu`ea in some parts of Hawai`i.

Sea turtles were utilized in traditional ceremonies, and their use was controlled by the kapu ('taboo' or prohibition) system.

Honu meat and eggs were consumed and oils were used for skin treatments. `Ea meat was also consumed, although it is sometimes poisonous because a hawksbill's diet can include toxic sponges. `Ea shells were prized for the making of fish hooks, tools, medicine, and jewelry ("tortoiseshell").

Sea turtles appear throughout Hawaiian lore and legend in hula, petroglyphs, chants, and tattoos. Some families highly revere sea turtles as their `aumākua, or personal gods.



HAWKSBILL TRIVIA

- Hawksbill sea turtles are listed as "Endangered" under the 1973 Endangered Species Act.
- Adults can be ~3 feet in carapace (shell) length and weigh ~250 lbs.
- Hawksbills feed on sponges, invertebrates, and algae in the crevices of coral reefs.
- Adult hawksbills can hold their breath for up to three hours while resting.
- Between 1989 and 2007, 86 individual nesting females have been tagged on the islands of Hawai'i and Maui through limited monitoring activities.
- Results from satellite tracking show that hawksbill foraging grounds are within the Main Hawaiian Islands, primarily off the northeastern side of the island of Hawai'i along the Hāmākua coast.



HAWKSBILL NESTING

- It may take anywhere from 15 to 40 years for a hawkbill to begin reproducing.
- Regular nesting occurs on Maui, Moloka'i, and Hawai'i. Over 90% of documented nests have occurred along the Ka'ū coast on the island of Hawai'i.
- Between 5 and 15 individuals nest each year in Hawai'i.
- Adult females return (to the same region where they hatched) to nest every 2 to 8 years.
- Each female can lay 1 to 6 nests in a season, approximately 18 to 22 days apart.
- Each clutch (group of eggs) contains an average of 180 eggs that will incubate for approximately two months.



HATCHLINGS (KEIKI)

- Sex determination is temperature-related; cooler temperatures within the nest chamber produce males and warmer ones produce females.
- Hatchlings emerge from the nest when the sand is cool, usually at night.
- Hatchlings find the ocean by crawling toward the brighter, open horizon.
- Hatchlings face a variety of predators on their way to the sea like crabs, birds, mongooses, cats, dogs, pigs and others. Once they reach the ocean, sea creatures like fish and sharks also eat them.
- Although unknown, it is assumed that a very small percentage of hatchlings survive to adulthood.

"THE LOST YEARS"

The first few years of a Hawaiian hawkbill's life are a mystery. Once they leave the nesting beach, their movement patterns, growth rates, and diet are unknown. Eventually, they navigate back to Hawaiian nearshore coral reef habitats as juveniles and continue to mature.



THREATS TO SURVIVAL

Because hawksbills and humans share the Hawaiian Islands, our actions affect their survival.

Coastal development and beach walls damage or reduce nesting habitat.

Fires and artificial lights visible from the beach or shoreline may scare away nesting females and disorient hatchlings.

Non-native predators like mongooses, cats, pigs, and rats are a threat to eggs and hatchlings.

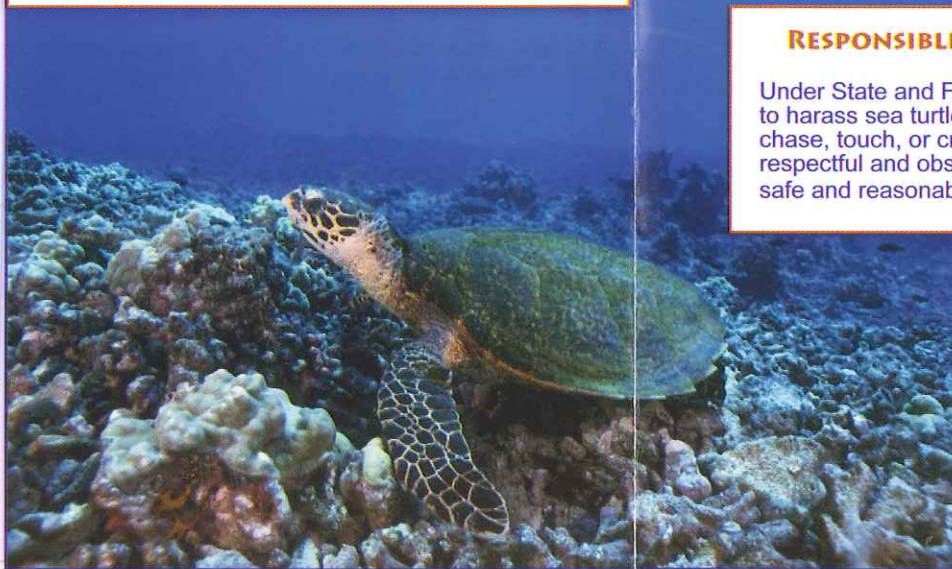
Some dune plants and grasses have thick roots that make nesting difficult. They also trap and entangle hatchlings.

Nighttime activity on nesting beaches can discourage nesting.

Beach driving can crush nests and creates tire ruts that trap hatchlings.

Trash or debris left on the beach can block hatchlings from reaching the sea.

Other threats include boat strikes, marine debris, urban run-off, invasive algae, fisheries interactions, poaching, and climate change.



RESPONSIBLE TURTLE VIEWING

Under State and Federal law, it is illegal to harass sea turtles. Please do not feed, chase, touch, or crowd them. Be respectful and observe sea turtles from a safe and reasonable distance.

Photo Credits: Hawaii Island Hawksbill Project, C. King, A. Hebard, D. Bramwell, J. Baker, S. Eckert. Sea turtle illustrations by Tim Gunther, www.gunthergraphics.biz. Sea turtle diagnostic drawings by T. McFarland, courtesy of WIDECAST. Used with permission.

HAWAIIAN HAWKSIBILLS NEED YOUR KŌKUA!

Several agencies and organizations are collaborating in the on-going Hawaiian hawksbill research and recovery effort. Residents and visitors of all ages can get involved by volunteering or contributing in other ways. Mālama (protect) Hawaiian sea turtles by reporting tagged turtles, nesting activity, and in-water hawksbill sightings to the following.

Hawksbill Information Island Contacts:

O'ahu: NOAA's Pacific Islands Regional Office
808-944-2278, www.fpir.noaa.gov

Maui: Hawai'i State Division
of Aquatic Resources
808-243-5294,
<http://www.hawaii.gov/dlnr/dar/index.html> or
Hawai'i Wildlife Fund
808-385-5464, <http://wildhawaii.org>

Hawai'i: Hawai'i Hawksbill Turtle Recovery
Project 808-985-6090

To report stranded sea turtles please call the sea
turtle stranding hotline: 808-983-5730

Report illegal or suspicious activity
involving sea turtles to:

DOCARE: 808-643-3567 or

NOAA OLE: 1-800-853-1964

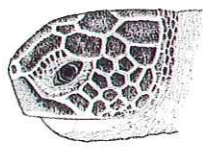


HAWKSBILL OR GREEN?

How to tell the difference

Hawksbill / `Ea / Honu`ea
(*Eretmochelys imbricata*)

Green / Honu
(*Chelonia mydas*)



- Narrow head and pointed beak
- 4 pre-frontal scales (between eyes)

- Rounded head
- 2 Pre-frontal scales (between eyes)



- Overlapping scutes on carapace (like shingles)
- Carapace has serrated edges (juveniles)
- Two claws per flipper

- Adjoining scutes on carapace (like tiles)
- Carapace has smooth edges
- One claw per flipper



- Hatchlings are all brown

- Hatchlings are dark gray with a white trim and underside.