



# HAWAIIAN GREEN SEA TURTLES

Recovering yet still protected





## UNIQUE TO HAWAI‘I

*The global green turtle population is classified into 11 threatened and endangered Distinct Population Segments (DPS). Green turtles in Hawai‘i belong to the Central North Pacific DPS, which are genetically distinct and spatially isolated from all other populations, making them unique to Hawai‘i.*

### **Protections**

Green turtles in Hawai‘i are protected under state and federal laws, including the Inter American Convention for the Protection and Conservation of Sea Turtles (IAC Treaty). They are listed as “threatened” under the federal Endangered Species Act (ESA) and Hawai‘i state laws (HRS 195D and HAR 13-124-11). Green turtles were once part of the Native Hawaiian diet. While there has been some discussion about the resumption of cultural harvest, this is prohibited under these laws and the IAC Treaty.

### **Status**

As a result of protections, the nesting population has increased over the last two decades by 5% per year, with almost 500 females nesting annually (compared with 67 turtles in 1973).

***If the population is recovering, why is it still protected?***

***Reasons include:***

- Small isolated population in the Central North Pacific (less than 4,000 total nesting females) with low genetic diversity
- Anticipated climate-induced impacts
- Extremely limited spatial distribution—the majority of the population nests at one low-lying atoll that is very susceptible to erosion and habitat loss from sea level rise
- Accidental catch in shore-based fisheries

# PRIMARY THREATS

- **Increasing temperatures and sea level rise** may affect nesting and foraging habitats, alter sex ratios, and affect nesting success and hatchling survival.
- **Bycatch** in shore-based fisheries (hook and line, crab trap, and gillnet) can entangle, injure, or kill turtles.
- **Disease** such as fibropapillomatosis (FP) can cause debilitating and sometimes life-threatening tumors. Although FP has declined over time, it persists in the population and may be related to poor or degraded habitat quality.
- **Boats or jet skis** can strike turtles that live near small boat harbors or in shallow reef habitats.
- **Coastal development and pollution**, beach armoring, erosion, and urban/agricultural runoff can damage or reduce the quality of habitats.
- **Other threats** include entanglement in marine debris, predators (cats and sharks), and illegal hunting.



**Top image:** Scientists apply a temporary number to a sea turtle's shell to help track and study the population. Google Honu Count for more information.

**Bottom image:** Deceased green turtle entangled in a fishing line.



# YOU CAN HELP!

- **View turtles from a distance of 10 feet (3 meters).** Give turtles space. Human disturbance can disrupt normal behavior and cause stress.



- **Never feed directly or indirectly.** Do not unintentionally feed turtles when cleaning fish at harbors or from your boat.
- **Post a look-out on your boat** to watch out for marine wildlife and prevent vessel collisions. Drive slowly. Ensure “turtle safe” transit (5–10 knots) near harbors, boat ramps, and in shallow reef habitats. Wear polarized sunglasses.
- **Avoid beach driving.** Off-road vehicles crush nests, create tire ruts that trap hatchlings, and degrade coastal habitats.
- **Prevent debris and rubbish from entering the ocean.** Participate in beach and reef cleanup activities.
- **Get involved in research!** Report sea turtles seen with an alpha-numeric number on its shell to the Honu Count project.
- **Report injured or dead turtles, nesting activities, or baby hatchlings** to NOAA’s statewide hotline: (888) 256-9840.

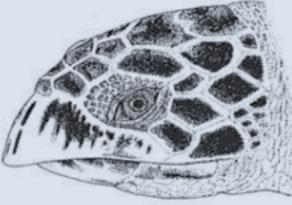


# HAWKSBILL OR GREEN?

Both species occur in Hawaiian waters but hawksbill turtles are rare. Learn to identify the difference (as shown below) and email any hawksbill sightings to [RespectWildlife@noaa.gov](mailto:RespectWildlife@noaa.gov).

## Hawksbill / Honu`ea

*Eretmochelys imbricata*



- Narrow head and pointed beak



- 4 pre-frontal scales (between eyes)



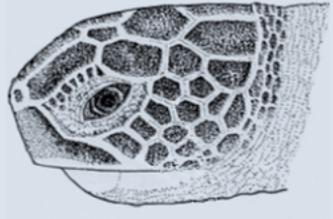
- Shell: serrated edges



- Hatchlings are all brown

## Green / Honu

*Chelonia mydas*



- Rounded head



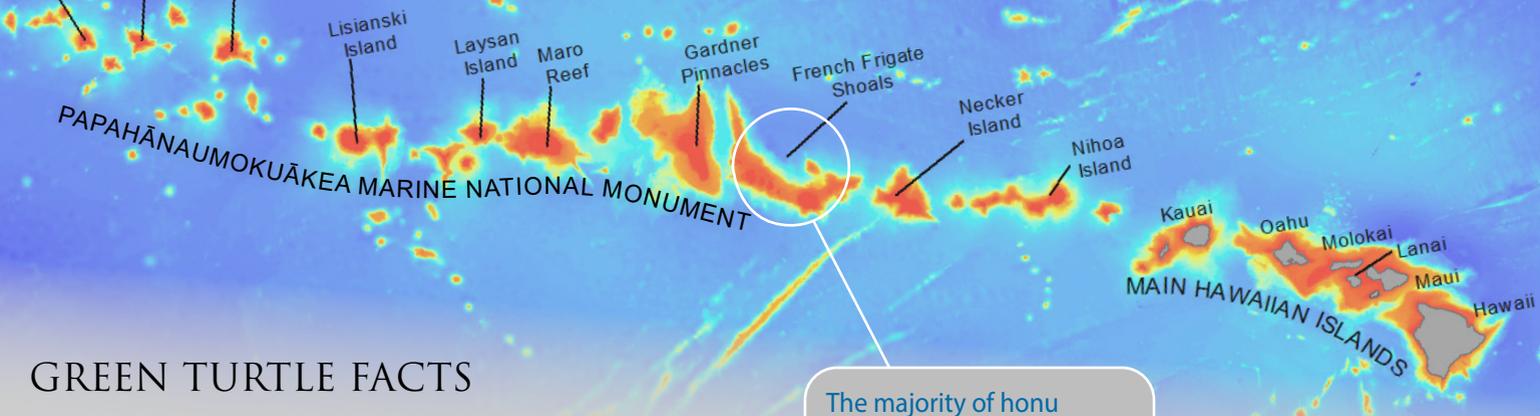
- 2 pre-frontal scales (between eyes)



- Shell: smooth edges



- Hatchlings are dark gray with a white trim on flippers



## GREEN TURTLE FACTS

- They are air-breathing marine reptiles that depend on healthy land, sea, and reef habitats.
- Named for the color of their body fat, caused by their herbivorous (vegetarian) diet.
- Feed primarily on red and green algae (known as *limu*), seagrass, and invertebrates (such as jellyfish).
- Adults grow to 3 to 4 feet in shell length and weigh upwards of 350 pounds.
- Adults can hold their breath for up to 3 hours while resting, but typically surface every 15 to 30 minutes to breathe.
- The age of first reproduction (sexual maturity) is 25 to 35 years old.
- Nesting and hatching season spans May to December.
- Adult females typically nest every 4 years. They return to the same geographic location where they hatched to nest.

The majority of honu nesting occurs at Lalo (French Frigate Shoals) in the Papahānaumokuākea Marine National Monument, with sporadic nesting activity occurring throughout the archipelago.

- Incubation temperature of the nest determines a hatchling's sex—warmer nests produce females, and cooler nests produce males.
- Each female lays an average of four nests in a season.
- Each clutch (nest) of eggs contains an average of 100 eggs that incubate for about 2 months, depending on temperature.
- Hatchlings typically emerge from the nest at night and find the ocean by crawling towards the brighter, open horizon.



## VIEW TURTLES RESPECTFULLY

View sea turtles on land and in the water from a respectful distance of at least 10 feet (3 meters). It is common for honu to rest (bask) on the beach in Hawai'i.



## SEA TURTLES IN HAWAIIAN CULTURE

As indigenous species in Hawai'i, sea turtles play an important role in Hawaiian cultural traditions and mo'olelo (stories).

Honu (green turtle) or honu'ea (hawksbill turtle) are mentioned in the fourth verse of the Kumulipo, the Hawaiian creation chant. Some families continue to revere sea turtles as their 'aumākua, spiritual guardian.

Traditionally, sea turtles were incorporated into native practices, religious ceremonies, and diet. Shells, bones, and oil were used to make fish hooks, tools, jewelry, and medicine. Harvest was tightly regulated by traditional management practices of the kapu system (cultural rules, code of conduct) enacted by Chiefs or Ali'i.



# SEA TURTLE REPORTING INFORMATION

**NOAA's state-wide marine wildlife  
hotline for sea turtles, monk seals,  
dolphins, and whales:**

**(888) 256-9840**

**For illegal or suspicious activity that may  
result in turtle injury or death, contact:**

**DOCARE: (808) 643-DLNR (3567)**

**NOAA OLE: 1-800-853-1964**

**RespectWildlife@noaa.gov**

**Accidental Fishery Interaction?**

Know what to do:



**NOAA  
FISHERIES**