## Green Turtle

COMMON NAME: Green Turtle, Green Sea Turtle

HAWAIIAN NAME: Honu

SCIENTIFIC NAME: Chelonia mydas

LEGAL STATUS: Threatened (Federal/State). Endangered (IUCN Red List). Protected under CITES.

APPEARANCE: Green sea turtles are the largest hard-shell sea turtle, averaging three feet in length and weighing 300 to 350 pounds. They have a heart-shaped shell.

HABITAT: Green sea turtles utilize ocean beaches for nesting and open ocean and coastal areas for feeding. Female green sea turtles migrate between foraging areas and nesting beaches. Basking can occur on both nesting beaches and non-nesting areas.

**DIET**: Adult green sea turtles are omnivores and feed on a wide variety of plant and animal life, including insects, crustaceans, seagrasses, worms and algae (*limu*).

**REPRODUCTION:** Green sea turtles nest primarily in the Northwestern Hawaiian Islands (NWHI), but frequent the main Hawaiian Islands (MHI) for much of the year feeding on *limu*. Females nest every 2 to 4 years after approximately 22 years of age. They return to the same beaches where they hatched.



Nesting may occur May 15 - September 30. Females lay an average of 5 nests (or clutches) of 135 eggs each at approximately two week intervals. Eggs incubate for 65-80 days before hatching. Hatchlings emerge almost exclusively at night.

**THREATS:** Threats to all of Hawai'i's sea turtles include: loss of foraging and nesting habitat due to climate change (sea level rise), development, and pollution; recreational beach use (including nest damage by recreational vehicles); predation of eggs and hatchlings; coastal development; beach erosion; artificial lighting; boat collisions; entanglement in fishing gear and marine debris; incidental take in sport and commercial fisheries; poaching; military testing and training activities on beaches; and the fibropapilloma virus.

## MCBH CONSERVATION MEASURES

Green sea turtles are frequently seen in MCBH Kaneohe Bay's marine buffer zone and are, on rare occasions, seen basking along the Pu'uloa RTF shoreline. The first known nesting by a green sea turtle at MCBH occurred in June 2015 at MCBH Kaneohe Bay. Although the turtle was not sighted, six holes were detected and hatchling tracks and dead hatchlings were observed.

Predator Control.

Sea Turtle Monitoring. Natural Resources staff monitor for and record occurrences of sea turtle activity. Ability to monitor more frequently is constrained by personnel availability, vehicle

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availability, and the fact that there are miles of shoreline to monitor, much of which is currently accessible only by foot. Information collected during monitoring includes: survey date, turtle activity (e.g., nests, false crawl, non-nesting excavation, observation of adults), general location of nests, and other noteworthy observations (e.g., tumors, tag).

- MCBH Kaneohe Bay Shorelines: Pyramid Rock, 2,000 ft; North Beach,
  5,300 ft; Fort Hase, 6,300 ft with (3,100 ft within Wildlife Management Area)
  - Efforts will be made to enlist support from volunteers, water safety personnel, and NOAA monk seal volunteers to gain more visual coverage of Mōkapu Peninsula beaches.
  - Monitor all beaches at least 1x/week year-round for green sea turtles coming ashore to bask. Opportunistic monitoring will supplement routine monitoring.
  - During nesting season (May 15-Sep 30), monitor Fort Hase Beach (site of 2015 nesting) 2-3x/week.
  - Monitor any discovered nests 2-3x/week. Within 2 weeks of eggs hatching, monitor every other day or daily if personnel availability and time permits.
- o MCTAB Shoreline [5,000 ft]
  - Will seek to enlist the support of Bellows Air Force Station (AFS) to help monitor MCTAB's shoreline.
  - Monitor once a week for green sea turtles coming ashore to bask.
  - Monitor 1-2x a week if a nest is discovered, more frequently if conditions allow.
- o Pu'uloa RTF Shoreline [2,950 ft]
  - The Range's beach guards monitor Pu'uloa's restricted beach almost daily to prevent unauthorized access.
  - The beach is highly eroded, very narrow, and inland movement is restricted by impact berms.
  - On the rare occasions a green sea turtle comes ashore on the beach at Pu'uloa, it would be reported.

Wildlife Friendly Lighting.

Beach Management/Shoreline Protection.

**Sea Turtle Protection Zones**. Any incidences of basking or nesting sea turtles should be reported to the military police at (808) 257-2123.

Marine Debris Removal.

Access Restrictions.

Protocols for Military Maneuvers and Large-scale Recreational Events.

Injured/Dead Response.

Educational Outreach.

For more information: MCBH Integrated Natural Resources Management Plan. 2016. Sections 4, 6, 7.4, 7.6, 7.7, 8, Appendix C & D.

## **PHOTOS**

- 1. Andy Bruckner. NOAA. <a href="http://www.nmfs.noaa.gov/pr/species/turtles/photos.htm#green">http://www.nmfs.noaa.gov/pr/species/turtles/photos.htm#green</a>
- 2. Green Sea Turtle Nesting Attempt at Fort Hase Beach, MCBH

