

Natural History

The critically endangered Central American river turtle (*Dermatemys mawii*), known in Belize as the *hicatee* or *Tortuga blanca*, is the largest freshwater turtle in Belize and the only living species in the Dermatemydidae family. Adults have a smooth, grayish-green shell (carapace) connected by a broad bridge to a cream-colored belly (plastron).



Adult female *Dermatemys mawii*.
Credits: Thomas Rainwater.

Females grow larger than males and can attain a weight of 22 kg (48 lbs), although today they rarely exceed 10–15 kg (22–33 lbs). Adult sizes range from 32–64 cm (12–25 in) long. Males have bright yellow heads and very large tails. Females have grayish-brown heads and much smaller tails.



Female (left) and male (right) hicatee.
Credits: Mallory Clark.



Juvenile hicatee inside shell of adult.
Credits: Sergio Gonzalez.

Hatchlings are 5–5.8 cm (2–3 in) long and weigh 18–35 g (0.03–0.08 lbs). The tips of their nostrils are bright orange. They have a yellow eye stripe and a groove-edged shell with a keel (or ridge) running down the center.

Reproduction

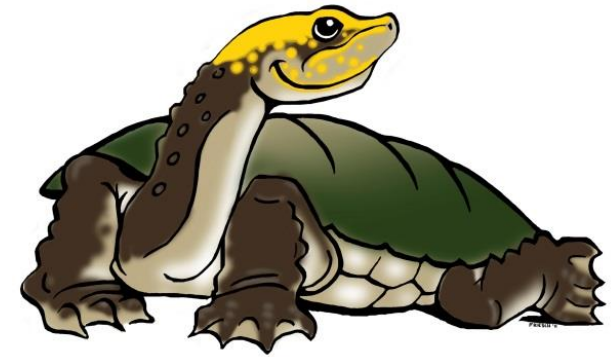
Hicatees grow slowly and take about 10 years to reach adulthood. Females reach sexual maturity between 34–40 cm (13–16 in) long, and males at 32–38 cm (12–15 in). They nest during the rainy season (September–December) when water levels are highest and lay 6–16 eggs in wet soil along riverbanks, which hatch in 9–10 months (June–July). Colder temperatures produce more males and warmer temperatures more females.



Hatchling hicatee emerging from egg.
Credits: Belize Foundation for Research & Environmental Education

Ecology

Hicatees are herbivores. They eat aquatic grasses, fallen leaves, and fruit. They are fast swimmers and live in large deep rivers and oxbow lakes throughout the year. During the rainy season, hicatees swim into flooded forests and marshlands to forage and build nests. In the dry season they congregate in deep pools. Hicatees are fully aquatic and are never seen basking.



Why Hicatees Are Critically Endangered

The hicatee is one of the 25 most endangered turtle species in the world. Over-hunting for meat, eggs, and shells is driving them toward extinction. Hunting of prized egg-bearing females quickly depletes the population. Wild hicatees have been decimated in Mexico and Guatemala, and previously healthy populations in Belize have drastically declined. Given a 10-year generation time, hicatee populations will likely decline by about 80% in 30 years.

Conservation

Hicatees (*Dermatemys mawii*) are listed as **Critically Endangered** on IUCN's Red List, as **Endangered** according to the United States Endangered Species Act, and in **Appendix II** of CITES.

In Mexico, it is illegal to hunt and exploit hicatees, and in Guatemala the species is legally protected.

In Belize, it is illegal to buy or sell hicatee meat, eggs, and shells. Use of nets is prohibited, and size and catch limits are imposed year-round. It is illegal to hunt hicatees during the closed season of May 1–31. Hunting hicatees is prohibited in parts of the Belize River, New River, Rio Bravo, Cox Lagoon, Muckleheny Lagoon, Mussel Creek, Northern and Southern Lagoons and tributaries, and Sibun River. There is a \$2000BZ fine and/or imprisonment for any hicatee-related offence.



Eight confiscated hicatee turtles held by Belize Fisheries Department.
Credits: Jacob Marlin

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Save the Hicatee bumper sticker.
Credits: National Hicatee Conservation Monitoring Network

For more information:

- Belize Fisheries Department
www.agriculture.gov.bz/Fisheries_Dept.html
- Lamanai Field Research Center
<http://www.lamanai.org/projects/hicatees/>
- University of Florida Croc Docs
crocdoc.ifas.ufl.edu/currentprojects/
- Save the Hicatee River Turtle
<https://www.facebook.com/hicatee>

Biology of the Hicatee: A Critically Endangered River Turtle of Belize



Central American river turtle (*Dermatemys mawii*)
Credits: Dustin Smith.

