

WOOD TURTLE

STATE THREATENED, FEDERAL SPECIES OF CONCERN



HABITAT: 1

Prefer clear, medium-sized (7 to 100 feet wide), hard-bottomed streams and rivers with sand and/or gravel substrates and moderate flow. Require partially shaded, wet-mesic herbaceous vegetation along or near the river for foraging. Forested floodplains with numerous sunlit openings and a dense mixture of low herbs and shrubs seem to provide ideal habitat for this turtle.

They also have been found in non-forested habitats, such as willow and alder thickets, sphagnum bogs, swamps, wet meadows, and old fields within or near the floodplain.

Nesting occurs in sandy or sandy-gravelly areas along rivers. This turtle may also utilize gravel pits, railroad crossings, clearcuts, roadways, utility rights-of-way, and residential yards and gardens, if natural nesting habitat is not available. Females may travel long distances to find suitable nesting sites, and they may use the same nesting sites year after year.

IDENTIFICATION & LIFE HISTORY: 1-3

Medium turtle with adult carapace (i.e., upper part of the shell) ranging from 6 to 10 inches (15-25 cm) in length.

The carapace is brown or grayish brown, often with radiating yellow and black lines on the ridges; it is broad, low, and usually has a central keel (i.e., a raised ridge running down the center of the shell), and raised, often pyramidal ridges of well-defined concentric growth rings on each scute or scale.

The plastron (underside of shell) lacks a hinge, and is yellow with dark, oblong blotches along the outer edge. The plastron also has a V-shaped notch at the base of the tail. The highly "sculptured" carapace and unhinged, patterned plastron distinguish this species from other turtles in the state.

The head and upper surfaces of the neck, legs, and tail are black; the rest of the body is yellow or yellowish orange.

In Michigan, wood turtle can be seen from late April to mid-October; they are most active during the mating and nesting season, primarily in June, and less commonly in September. They typically occupy aquatic habitats from fall through late spring and move into adjacent or nearby terrestrial habitats during the summer. Wood turtle movements of up to a third of a mile inland and several miles along a river have been documented. Most nesting occurs in June in the late evening, often after sunset. Wood turtles typically enter overwintering sites in mid-October. Overwinters in streams where water flows all winter. Most wood turtles hibernate underwater beneath overhanging roots or logs, in pools or along the stream bottom under the ice, or in beaver lodges or muskrat burrows.



Wanted Alive!



IF A WOOD TURTLE IS OBSERVED:

Stop all vehicles and heavy machinery.

Move turtle away from mowing/construction area to a safe zone outside of the limits of work, preferably in suitable habitat within ~200m. In areas where barrier fencing has been installed, place turtle on the other side of the fence. With clean hands, gently pick up the turtle gripping the lower and upper shell between the front and hind legs. Never handle a turtle by its tail or legs.

Note the number of individuals found, their approximate location, and where the individual(s) was/were relocated. Take photographs and submit sightings to Michigan Natural Features Inventory (<https://mnfi.anr.msu.edu/species/report>) or your state's wildlife department/rare species inventory.



BMPS TO AVOID IMPACT:

Provide pre-mobilization training to employees and contractors to understand wood turtle key characteristics, life history, and habitat requirements.

Equipment speeds must remain <15 mph within suitable habitat areas; drivers should be vigilant for turtles basking or walking on the sides of or across roads, ponds, wetlands/wet prairies, and/or stream banks.

Complete walk-downs each day and after any significant breaks in activity prior to the start of vegetation management activities/construction work. Working in teams of two or more people, meander through the work area looking for individuals.

Mowing should be timed to avoid turtle's active period (April-October), if possible, and especially the nesting season. To avoid impacting turtles, set mower decks to 8" or more from the ground and mow during the turtle's hibernation period or prior to or preferably after turtle nesting season (i.e., after June, preferably July, or late fall).⁴

During the active season (April-October), use temporary wildlife barrier fences (i.e., 36" tall silt fence) to reduce movement of wood turtle and other herpetofauna into the construction site. Barriers should be embedded at least 12" into the ground with 24" extending aboveground and angled away from the construction site in a J-shape that is a minimum of 25' in length to prevent turtles and other herpetofauna from burrowing under or crawling over. Barriers should be placed to funnel herpetofauna to areas that provide passage (e.g., culverts, bridges, streams, wetlands not crossed by the project).⁴ Remove barriers as soon as the project is complete. Alternatives to wildlife barrier fencing include placement of timber matting to enhance visibility of turtles, or biologists clearing the ground surface immediately ahead of construction equipment.

Use wildlife-safe materials for erosion control and site restoration. Do not use erosion control products containing plastic mesh netting or other similar material that could entangle this turtle species.

thank
you!

References:

1. Lee, Y. Special animal abstract for *Glyptemys insculpta* (wood turtle). (1999).
2. MNFI. Michigan Natural Features Inventory - Michigan's Rare Plants & Animals (Online Database). (2019). Available at: <https://mnfi.anr.msu.edu/species>.
3. Tekiela, S. Reptiles & Amphibians Field Guide - Minnesota, Wisconsin, and Michigan. (Adventure Publications, 2014).
4. Mifsud, D. A. Michigan Amphibian and Reptile Best Management Practices. (Herpetological Resource and Management Technical Publication, 2014).