# BLANDING'S TURTLE STATE SPECIAL CONCERN, FEDERAL SPECIES OF CONCERN



### HABITAT: 1

Clean, shallow waters with abundant aquatic vegetation and soft muddy bottoms over firm substrate. Found in ponds, marshes, swamps, bogs, wet prairies, river backwaters, embayments, sloughs, slow-moving rivers, protected coves, lake shallows and inlets, and small lakes.

Also occupies terrestrial habitats in spring and summer, during mating and nesting seasons, and in the fall to a lesser extent.

Nesting occurs in open, sunny areas with moist but well drained sandy or loamy soil. This turtle may also use utility rights-of-way, lawns, gardens, plowed fields, or even gravel road edges, if suitable natural nesting habitat is not available. Females may travel close to a mile (1,200 m) to find suitable nesting sites, and typically exhibit nest site fidelity, meaning they return to the same nesting sites year after year.

## **IDENTIFICATION & LIFE HISTORY:** 1-3

Medium to large turtle with adult carapace (i.e., upper part of the shell) ranging from 6 to 11 inches (15-28 cm) in length. Females are smaller, 5 to 9 inches (13-23 cm).

The carapace is usually black with yellowish spots and streaks; it is dome-like, elongated, and smooth. The plastron (i.e., the underside of the shell) is typically yellow with a dark blotch at the outer corner of each scute, or scale.

Most adults have a flexible hinge at the plastron, which allows this turtle to withdraw its head and legs and close its shell tightly.

Very long neck with bright yellow chin and throat. The head is dark with brown or yellow spots, relatively flat with a short, rounded snout and a notched upper jaw, giving the appearance of a permanent "smile."

In Michigan, Blanding's turtle can be seen from April to late October or early November; they are most active during the mating and nesting season, typically in May and June. Males travel considerable distances in search of females during the mating season, and females travel in search of suitable nesting locations. This species is primarily diurnal and most active in the morning, but this can vary with temperature. Nesting occurs at night, from late-May to early or mid-June. Blanding's turtles typically enter overwintering sites in late October, buried underwater in organic substrate of deeper waterbodies.





# IF A BLANDING'S 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. Do not put your fingers near or in the shell, as it can close tightly. Blanding's turtle is gentle and rarely bites, but it is known to hiss when picked up or disturbed.<sub>3</sub> 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 Blanding's 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 active period (April-October), if possible, and especially 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 early June, preferably July).4

During the active season (April-October), use temporary wildlife barrier fences (i.e., 36" tall silt fence) to reduce movement of Blanding's turtle and other herpetofauna into the construction site. Barriers should be embedded 12" into the ground with 24" extending above ground 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).<sup>4</sup> 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 Emydoidea blandingii (Blanding's turtle). (1999).
- 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).
- Mifsud, D. A. Michigan Amphibian and Reptile Best Management Practices. (Herpetological Resource and Management Technical Publication, 2014).