

## NATURALLY: Wood turtles fight to survive in Indiana County



- By ED PATTERSON Special to the Gazette
- Jul 13, 2024

“Rounding a sharp curve in the road, I slam on the brakes; fortunately there are no other cars behind me. It’s a turtle crossing the road, not just any turtle but a female wood turtle making its way from Crooked Creek to a nearby field. I pick her up and move her to the other side of the road and maybe, just maybe, she will successfully nest, and her offspring will survive their own perilous journey later this summer to continue their existence along the Crooked Creek.” – Ed Patterson’s Journal, Aug. 11, 2016 — 10:30 a.m.

Turtles, an ancient species first appearing more than 200 million years ago, face ever-increasing challenges of survival in the modern world. Indiana County is not a haven for turtles. Yes, we have turtles here, but not in the variety or numbers found in other areas of the state with larger rivers and better habitats.

Nonetheless, turtles do live along Crooked Creek, and I occasionally encounter them when roaming the area. Wood turtles, box turtles, spiny softshell turtles, snapping turtles, and painted turtles live in various locations along Crooked Creek.

The first turtle I encountered at our home was a wood turtle (*Glyptemys insculpta*) crossing our driveway in the fall of 1990, the very first morning we were starting construction of our home. Eighteen years later

at our pond, I encountered what may have been the same turtle. Wood turtles can live up to 50 years in the wild.

Other than box turtles, wood turtles are our most land-based turtles. From April through late fall, they spend their time in floodplains, wetlands, old fields, and forests. During dry, hot weather they will seek out mud puddles or soft wet earth where they bury themselves to stay cool. In the late fall, they migrate back to a stream where they hole up in log jams or a bank of tangled roots. In Pennsylvania, courtship occurs in both spring and fall with mating mostly occurring in the water. Between May and early July, the female will move on land to lay four to 12 eggs. Eggs hatch in 40 to 65 days.

Females travel farther from streams, sometimes spending weeks on land and returning to water for brief periods until fall. According to researcher Kiley Briggs of the Orianna Society, “males tend to stick closer to streams, travel extensively up and down river channels, sometimes covering miles in a single year. The reason for this difference is simple and not unique to turtles: females look for food and males look for females.”

Nest predation is a serious problem for wood turtles; nests are lost to scavenging raccoons, skunks, opossums, crows and foxes. Chipmunks have also been documented feeding on small wood turtle hatchlings. Female wood turtles do not mature until they are at least 10 years old, and many wood turtles do not survive long enough to reach sexual maturity — another reason populations are threatened.

Wood turtle hatchlings, about the size of a ping pong ball, make a perilous journey to avoid predators to reach the nearby creek. The distance of the nest from the creek can influence a hatchling’s survival as it can sometimes take a week for them to reach the safety of the creek.

Sometimes I encounter dead wood turtles flattened by vehicles while crossing nearby roads along Crooked Creek, which contains broad, undeveloped forested flood plains, ideal habitat for wood turtles. As many as seven adult wood turtles can live in ideal habitat.

Most land along Crooked Creek is not open to fishing, which helps protect the population. As streams open to fishing, wood turtle populations are known to decline due to habitat loss, foot traffic, and people capturing turtles to take home as pets.

Unfortunately, wood turtles are in high demand in the illegal pet trade because they are an alert, active and intelligent species that people find appealing. Collecting just a few adult wood turtles in an area can cause the population to decline or be lost forever. For this reason, the specific location of any wood turtle find should never be released publicly.

Meandering streams like Crooked Creek provide slow water channels during floods, keeping wood turtles from being washed away, and gentle sandy curves provide places for wood turtles to lay eggs. Forested floodplains protect them from floods, and log jams and tangled roots along the streams provide suitable hiding places to nest. Keeping forested floodplains along Crooked Creek helps lower water temperatures, benefiting wood turtles and other aquatic species. Any efforts to protect and improve Crooked Creek’s water quality would help their future survival.

In Indiana County, the wood turtle count during the 2013-2021 PARS survey was 46, and their range within the county seems to have declined.

Encountering a wood turtle is an “out of the ordinary” experience, and a hopeful sign that somehow they will continue to survive.

Ed Patterson is director of Indiana County Parks & Trails. The Naturally columns are brought to you each month by the Indiana Gazette and Friends of White’s Woods to showcase the wonders of nature in our area.