Turtles of Kingston and Area

About Turtles

Within the Kingston area we have many turtles as we have wetlands (many Provincially Significant Wetlands) and other water bodies that are perfect turtle habitats. However, turtle populations are declining and all 8 Ontario turtles are Species at Risk! They face many threats including loss/fragmentation of habitat, predation, and road mortality. The survival of adult turtles is essential to the survivability of turtle populations particularly because less than 1% of all turtle eggs survive to sexual maturity. It can take upwards of 20 years for some turtles to reach sexual maturity and research in Algonquin Park has determined that replacing just one lost adult turtle could take 59 year! This means that it is difficult for turtles to replenish their diminishing populations - they need our help.

Turtles of the Area

5 of the 8 Ontario turtle species are found in this area: Common Snapping (A), Midland Painted (B), Northern Map (C), Eastern Musk (D), and Blanding's (E). Each of these species will overwinter in a body of water before coming out in the spring to search for a mate and move within their habitats. Females will nest between May and July with eggs hatching between August and October. Most turtle hatchlings will emerge from their nests during this time but some from Painted and Map turtles will actually overwinter in their nests and emerge the following spring.

Importance of Turtles

Turtles are keystone species that are important to keeping water ecosystems healthy. Turtles are custodians of our waters that eat vast amounts of bacteria producing carrion (decaying animal flesh) and decaying vegetation, which in turn keeps the water clean.

Turtles inhabit aquatic (water) and terrestrial (land) ecosystems, transferring energy and nutrients between both ecosystems. When we help turtles, we are helping the environment!

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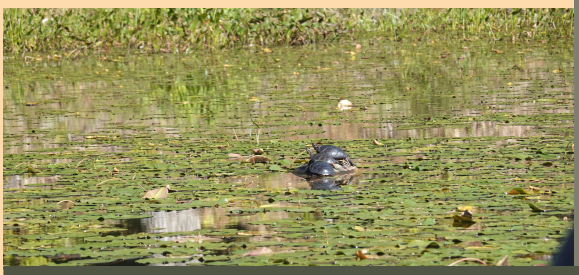
Turtles Kingston



Humans and Turtles

Landscapes and Shorelines

As both aquatic and terrestrial animals, turtles are impacted by our choices for landscaping and shoreline erosion control measures. Specifically our decisions to have mowed grass right to the waters edge eliminates riparian ecosystems that provide important basking habitat, while mowed grass puts turtles and hatchlings at risk of being hit by mowers. Our standard erosion control measures (rip-rap, armoured stones, gabion baskets) also impact turtles as they prevent them from accessing nesting habitat and can even trap turtles within their mesh/rocks, causing them to die from exposure. So, what can we do? Ensure woody debris and riparian buffers are present along water bodies. Ensure natural erosion control measures are used.

Development and Construction

Whether large scale development projects or outdoor home renovations, construction poses risks to species living in/passing through these areas. Turtles are impacted by construction near water bodies as they use the land to move within their habitat and to lay their eggs. Thus, construction projects can have impacts on their populations as both adults and eggs/hatchlings are at risk of being killed. So, what can we do? For large scale development projects near water it is key to install temporary exclusion fencing around the entire work area by May 1! This will help keep turtles out and ensure they don't nest there. For home improvement projects it is important to cover any exposed soil/gravel as it is a magnet for nesting turtles. If a turtle does nest in a construction area it is illegal to move or alter the nest without appropriate permits.

Road Mortality

Each year thousands of turtles are killed by vehicles as they move within their habitat. Turtle road mortality is a major factor in their population decline for several reasons: 1) the density of roads in Ontario is the highest in Canada and has caused major fragmentation of turtle habitat; 2) it can take upwards of 59 years to replace a single lost adult turtle. So, what can we do? The key is mitigation which involves installing exclusion fencing and crossing structures as well as alternative nesting sites. These 3 structures help to redirect turtles off roads to safe passages underneath the roadway and also to nesting sites that are not on road edges.

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