

Habitat Conservation Area

A Self-Guided Interactive Tour Activities

TURTLE WATCH

Materials: Binoculars, camera (both optional)

Upon entering the Habitat Conservation Area (HCA) you will notice a map with sites marked. Head towards post 2, turn left and walk down the berm. As you look to the right, across the dugout area, you will most likely see Western Painted Turtles sunbathing on the shoreline on a nice sunny day!

Western Painted Turtles are native to North America with Regina falling in the northern part of their range. However, in 2015 the largest ever recorded in North America was found here in Wascana Lake. Her name is Olga and her carapace shell (top shell) is 27.2 cm long, which is comparable to a school ruler!

While you're taking a closer look at the turtles, did you know that the carapace (upper, dorsal shell) evolved to protect turtles from predators and was formed from their ribs fusing together, forming a shell 240 million years ago? Turtles are also known as wetlands janitors since they eat insects, fish, and plants along the bottom of the lake floor, creating pathways throughout the plants that fish and aquatic invertebrates can swim through. These actions are very important in maintaining the health of the wetland.

In the cold winter months, some turtles hibernate at the bottom of the lake under a thin layer of mud. In order to breathe during hibernation, they take in oxygen around their cloaca, their butt. The cloaca has specialized blood vessels that absorb oxygen from the water, allowing turtles to breathe without coming up to the surface. In addition to "cloacal respiration" Painted Turtles have another unique adaptation that allows them to survive overwintering successfully in hypoxic conditions (low oxygen levels) over the winter. They will switch their metabolism to one that doesn't require oxygen. This can be dangerous if done for too long because lactic acids build up in their tissues as a result. To combat this, they will bask in the sun to increase their body temperature which will jumpstart their metabolism and eliminate the acidic by-products.