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LIVING

Turtle species at risk

Waterway asking for public's assistance in reporting sightings of five kinds of turtles

Biodiversity — a rich diversity of wild plants, animals and habitats — is a key contributor to our health and to our quality of life. Ontario has historically been very rich in the variety of species that make this



species that make this province home. However, more and more of these species are becoming endangered every year as a result of ever-increasing human activities. In fact, at least 170 of our wild plants and animals are at risk of disappearing from Ontario completely.

OUR CHANGING SEASONS Drew Monkman

pearing from Ontario completely. Reptiles are a group of particular concern. Almost all of our snake species, for example, are experiencing significant declines in their populations. Now, there is also a great deal of concern about the health of

Ontario's turtles. In light of this problem, Parks Canada and the Trent-Severn Waterway are undertaking a turtlespecies-at-risk program this summer. The project was initiated in 2005 and involves a combination of field inventory and public outreach activities. The species being targeted include map, musk, Blanding's, spotted, and wood turtles.

All of these turtles are designated at risk under both COSEWIC (Committee on the Status of Endangered Wildlife in Canada) and NHIC (Natural Heritage Information Centre) designation. Like COSEWIC, the NHIC maintains a data bank on the distribution and conservation status of critical flora and fauna in Ontario. It, too, has determined that all of the above turtle species are vulnerable to eventual disappearance from the province. The wood turtle is considered to be the most threatened of the five. The NHIC is a branch of the Ontario Ministry of Natural Resources and is actually located here in Peterborough. It brings together one of the finest teams of biologists to be found anywhere in Canada and is a great asset not only to the province but to the Kawartha Lakes region in particular.

Inventory work this summer on the turtle species at risk program is being concentrated within the Kawartha Lakes area with visual surveys by boat. Live traps are also being utilized at selected locations. Three students from Trent University and Sir Sandford Fleming College have been hired by the Trent-Severn Waterway to undertake the various components of the program. They are Jeff Park, the program leader,



Turtle team members Christina Rohe and Jeff Park measure a Blanding's Turtle.

Parks Canada photo

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general. In addition, the invasion of zebra mussels has caused serious declines in the map turtle's traditional mollusc prey

late May through early July when they travel over land to and from nesting sites. Because these migrations involve crossing United States and southeastern Canada. They are now very rare throughout their range, however. The extremely rough texture of the carapace, and the orange neck and limbs are the diagnostic features. Wood turtles are the most terrestrial of our turtle species. They be found on land in mixed, deciduous, and coniferous forests, cultivated fields and even hydro corridors. They appear to have an affinity for light, sandy soils. The Trent-Severn Waterway is asking for the public's assistance in reporting sightings of these five turtle species this summer while enjoying the waterway. Brochures, posters, and reporting cards have been displayed throughout the Kawartha Lakes region for guidance in identifying the turtles under study and to solicit information on sightings. If you have questions or would like to meet with the student researchers, they will be setting up a booth with replica display turtles on the following dates: July 15 at the Young's Point lock; July 19 at the Festival of Lights in Peterborough; July 22 at the Port Severn lock; July 29 at the Big Chute Marine Railway and Aug. 19 at the Buckhorn lock. There is also a turtle hotline at (705)875-2240 to report your sightings. Each sighting will be included in a monthly draw for a copy of The ROM Field Guide to Amphibians and Reptiles of Ontario by R. MacCulloch.

along with Christina Rohe and Meribeth Stott.

To date, the crew has completed its survey on Lovesick Lake and Upper and Lower Buckhorn Lakes. They have observed three map turtles and four Blanding's turtles. They are planning to survey Chemong and Pigeon Lakes over the next few weeks and will continue the study westward along the Waterway throughout the remainder of the summer.

Most of the species being studied are poorly known to the general public. This is especially true of the map turtle. If you are out on one of the larger kawartha Lakes this summer, watch for these large turtles basking on rocks and small islands in deep waters. Seen up close, the fine lines on their carapace resemble the contour lines on a topographic map. Map turtles from a wide area will often gather together at basking sites. In fact, they often do their sunbathing piled one on top of the other in a sort of turtle pyramid. This attractive reptile, however, tends to be quite shy. Any unusual sound or movement, even from a distance, will usually cause them to drop immediately into the water. Juniper Bay on Stoney Lake is one place to see this species.

Being somewhat elusive, the map turtle has not been well studied in Ontario. However, it seems likely that population declines are a result of increased shoreline development and greater human disturbance in species. Native mussels have been nearly eliminated from much of the Great Lakes as well as the Trent-Severn Waterway. Although these turtles do eat zebra mussels as well, these are not a preferred food source and are likely not as nutrient-rich.

The musk turtle, too, is a stranger to many people. It has a dark-coloured carapace that becomes algae-covered in older individuals. Two distinct yellow to white stripes are located on each side of the head. Also called the stinkpot, this small turtle often emits a musky, skunk-like smell when handled.

Musk turtles are denizens of shallow bays. They almost never climb out of the water but bask on half-submerged perches. I remember as a child inadvertently catching musk turtles while fishing for perch and sunfish in weedy bays on Clear Lake. This species' habit of taking bait probably results in many individuals being destroyed by fishermen. Loss or alteration of their aquatic habit is also a major threat.

Perhaps the most attractive of our turtles is the Blanding's. It can be distinguished from all other species by its lemon-yellow throat, large size and highly domed shell. The Blanding's is a widespread species of swamps and marshes throughout the Kawarthas. After the painted and snapping turtles, it is probably our third most abundant species. Unlike the painted turtle, the Blanding's does not seem to bask in the sun a great deal. They are most often seen in roads, vehicle related fatalities are a major cause of mortality to this species.

Since sex determination in turtles depends on temperature, it is feared that global warming might contribute to skewed sex ratios in some populations. In painted turtles for example, warmer temperatures produce females, while colder temperatures produce males. This variation in the sex ratio may create an unbalanced shift of one sex over the other and the eventual disappearance of some populations.

The final two species involved in the study, the wood and spotted turtles, are by far the least common. They are rare both locally and provincially. As its name suggests, the shell of the spotted turtle is covered with orange-yellow spots. Only two records of this species are known in Peterborough County, both from Shield locations. Like the musk turtle, its small size and secretive behaviour make it hard to detect. This species is best looked for in early spring (April and May) when it basks frequently, and the shorter vegetation makes it more conspicuous. Like all turtles, its main predators include raccoons, dogs, skunks, foxes, and other small mammals.

The wood turtle is our region's rarest turtle species. In fact, there are only two records for the Kawarthas, one from Peterborough County and the other from the City of Kawartha Lakes. Its historical range extended through most of the northeastern

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