**AN INTRODUCTION TO THE TURTLES**

**OF THE CHARLESTON LAKE AREA**

The lands and waters of Charleston Lake and the surrounding area are blessed with healthy ecosystems, wonderful views and an amazingly diverse representation of waterbodies, wetlands, geology and wildlife. Amongst the many species of animals supported by this landscape are a number of turtles. They inhabit Charleston Lake and surrounding wetlands and other lakes and even venture onto the adjacent land sometimes. They have been living in this landscape for millennia and are, by definition, your neighbours. It is time to be properly introduced.

There are five species of turtle in your neighbourhood. Some are very tied to the water, while others are a bit more mobile within the landscape. Some are inhabitants of larger waterbodies. Others are less fussy and will take up residence anywhere there is a healthy, water-based ecosystem such as a pond, wetland or even abandoned gravel pit or quarry. All but one of the five are considered by the Province to be a species at risk. The fifth is considered to be at risk by a national body. They all could use our understanding, compassion and help. Let’s start with the introductions.

Possibly the one most often seen by residents on the lake is the Northern Map turtle, so called because the markings on the carapace (upper shell or ‘back’) resemble the contour lines on a topographic map. This is a turtle of larger lakes and rivers. They are often seen in the spring and summer basking in groups around the shore and islands of the lake on rocks, logs and deadheads. They are sensitive to water quality and the fact that they are in healthy numbers on Charleston Lake and associated aquatic ecosystems is a testament to the quality of these waters. The Map Turtle is probably the best swimmer of the five turtles in our area. It has large, webbed hind feet which propel it strongly through the water. As adults, females are much larger than males at nearly twice the size. Their diet consists of molluscs (clams, snails), crayfish and sometimes fish and invertebrates. The Northern Map Turtle is designated as a Special Concern Species.

Another species readily observed is the Midland Painted Turtle– often called a ‘painter’. A medium sized turtle, it is recognizable by the bright red markings along the margin of its shell and on its legs and lower neck. It will inhabit the shallower, quiet margins of larger lakes such as Charleston as well as smaller wetlands, streams, beaver ponds and even ditches. It is a bit of an omnivore – eating both plant and animal matter such as algae, insects, aquatic plants, fish and tadpoles. They prefer water with abundant, submerged vegetation. They too can be seen basking singly or in large numbers especially in the spring while waters are still cool. They can be seen basking with other species of turtles as good basking structures can be at a premium in some water bodies and wetlands. They tend to be less shy than our other turtles and are therefore spotted regularly while out boating, canoeing or hiking. While not considered to be a species at risk by the Province, the federal committee, COSEWIC, has determined this species to be of Special Concern.

Seen more often along a roadside than in the water is our largest turtle, the Snapping Turtle. Full grown it can reach 30-45 cm. and can weigh 16 kg. This is the one people often refer to as having a ‘mossy’ back. Because most of their time is spent in water the carapace supports a growth of algae giving it a greenish, ‘mossy’ look. A very aquatic turtle it is rarely seen basking except for early spring. The sight of one of these large turtles splayed out along a log or stump in what appears to be a purely blissful experience is an eyeful one does not forget readily. The Snapping Turtle has a very long tail with a number of triangular shaped scales that look like spikes on a dinosaur. They can be found in virtually all aquatic and wetland environments and prefer quiet, shallow waters with soft bottoms. You are most likely to see or encounter one when females are out along roadsides either trying to cross the road to reach suitable nesting habitat or attempting to lay her eggs in the gravelly substrate of the road shoulder. They are at high risk of being struck by a vehicle at these times and road mortality is one of the main threats to this and some of our other turtles. When out of the water the Snapping Turtle can be quite defensive. This is often interpreted as being aggressive but is simply a means of defense since the species has a very small plastron (lower shell) which does little to protect her from predation. When in the water the usual means of defense is to swim away to deeper water or get down into the muddy bottom. The Snapping Turtle eats both plant and animal matter and will even eat fresh carrion. This turtle is considered to be a species of Special Concern in Ontario.

Looking like a miniature Snapping Turtle is one of our smallest turtles, the Eastern Musk Turtle or ‘Stinkpot’. Both names refer to the strong odour it sometimes releases under stress. Although anyone who has handled a Snapping Turtle would consider a similar moniker to be applicable to it. The “Stinkpot” is full grown at about 9-12 cm or about 4”.

This species also has a very small plastron, narrow carapace, two yellow lines along the side of its head and little fleshy protuberances or tubercles on the underside of its chin. It is a poor swimmer, getting about by walking along the bottom and foraging often at night for insects and molluscs. During the day it can be found basking in shallow, heavily vegetated waters just below the surface often resting on top of submerged vegetation and under cover of a lily pad. The Musk Turtle lays a small number (2-5) of eggs in a variety of substrates including decaying vegetation, muskrat lodges or “push-ups”, or bare soil or even in shallow crevices on granite bedrock. They are never far from water since the species is extremely prone to desiccation and can’t venture for any length of time away from its aquatic environment. Look for it in the weedy, shallow bays of Charleston Lake. A good way to meet one is to go snorkeling with a mask on a warm day in such an area – perhaps around your dock. Peering into the weeds while kayaking quietly, with a good pair of polarized sunglasses, might prove successful. The Eastern Musk Turtle was at one time considered a Threatened Species but was recently reassessed as a species of Special Concern.

With some exceptions, all of the above turtles spend the majority of their time in one water body and other than for the purposes of laying eggs rarely or infrequently venture onto land. The last of the five species found in and around Charleston Lake, the Blanding’s Turtle, is a bit different in that regard. Blanding’s Turtles are found in a number of wetland types. They can be found in marshes, fens and swamps. The preference is for shallow, heavily vegetated wetlands with soft, organic bottoms. They have been reported for some of the shallow bays of Charleston Lake and some of the surrounding wetlands. An interesting fact regarding this species is that it is capable of and often makes overland trips from one wetland to another in a given year or from year to year. Some individuals utilize several wetlands within a year on a regular basis travelling across the terrain to get from one to another or using connecting watercourses as travel corridors. They have been known to travel in excess of 5 km. This is a large turtle reaching carapace lengths of up to 25 cm or more. It has a highly domed carapace which has been likened to a baseball cap in outline or an old World War II German helmet. They have a bright yellow throat and chin and the mouth shape gives it a ‘permanent grin’ look.

An extremely wary and shy species, the best way to get a peek at one is to haunt wetlands in April when the weather first starts to warm up and search stealthily with a pair of binoculars. Blanding’s Turtles are omnivorous eating frogs, crayfish, insects as well as plant material. The Blanding’s Turtle is considered a Threatened Species in Ontario.

Well, now that the introductions are over there are a number of neighbourly actions we can implement to help these species we share the lake with. There are a number of factors that have put these and other turtles in Ontario at risk. Some of these factors we can help with.

1. Road mortality. Possibly one of the most serious threats to many of Ontario’s turtles. What can you do? Be vigilant when driving particularly during the nesting season from late May to mid to late June. Watch for the turtles on the edge of, or crossing, the road. Slow down a bit along road stretches near wetlands, rivers and lakes. If you see a turtle attempting to cross a road you can assist it off the road to safety. Large snapping turtles can be challenging if not intimidating for most people but can be ushered gently (with considerable effort) in a safe direction with the help of a large stick. Smaller species can be handled with relative ease and safety by picking up by the rear margin of the carapace. Always consider the safety of yourself and other drivers before making this decision.
2. Water quality. The health of many of our turtles as well as other species in the ecosystem including us, are dependent upon clean and healthy water in their environment. Keep doing what you are doing in the Charleston Lake watershed. Engage in good practices and actions that keep our waters clean. Maintain natural shorelines. Avoid using chemicals and fertilizers that will affect water quality. Think about these sorts of things beyond just the scope of the lake but include this philosophy when conducting activities around wetlands and even surrounding lands. Everything winds up downstream eventually.
3. Habitat Loss. Draining of wetlands and removal of aquatic plants results in a direct loss of habitat not only for turtles but many species including fish and birds. It can also have major impacts on water quality of adjacent or downstream systems.
4. Maintain a natural shoreline. This provides habitat for foraging, basking, nesting and shelter for turtles and other fauna.
5. Keep an eye out for nesting turtles. If you have a turtle nest on your property, take note of where she nested and if possible avoid disturbing the site or permitting activities that would destroy the eggs through compaction other means. There are nest protectors that can be easily constructed and put into place to protect the eggs from predation by raccoons or other predators.

There is a wealth of information regarding our turtles if you want to learn more about them, what things affect them and how you can help or be a good neighbour. A couple of good sources of information are:

Ontario Nature at **ontarionature.org**,

Ministry of Natural Resources and Forestry at **ontario.ca**, or

Leeds Grenville Stewardship Council at **lgstewardship.ca**

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