

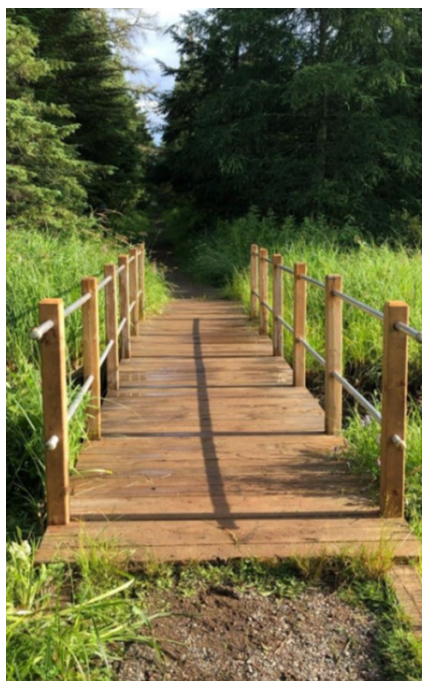


LAKEHEAD REGION
CONSERVATION AUTHORITY

AMPHIBIANS AND REPTILES



MILLS BLOCK FOREST



The rugged landscape of the Lakehead Region was formed by glaciers which left behind an abundance of forest, lakes and wetlands, providing ideal natural habitat for amphibians and reptiles. Let's find out more about these amazing creatures here at Mills Block.

Amphibians and reptiles are together named **Herps** and are all ectotherms, meaning they are cold-blooded or take on the temperature of their environment. Our cold-climate presents a challenge for these organisms and many of the species we see here are at the northern limit of their range.

Three adaptations and strategies that enable these hardy species to survive our harsh winters and short activity seasons here include:

- production of a natural antifreeze, or cryoprotectants, spread throughout their bodies and prevent tissue damage at temperatures will below 0 degrees Celsius.
- hibernation at the bottom of ponds, deep in the mud, and below leaf litter and snow, and
- overwintering of larvae before metamorphosis.

Their short activity season runs from about mid-April to late September and corresponds closely with hard frosts and melting of lake ice.

Amphibians live double lives, one in water with gills and the other on land with lungs as mature adults. They go through metamorphosis, have smooth moist skin and webbed digits. Some exceptions do occur such as the red-backed salamander.

Reptiles on the other hand have scales, have lungs their entire life and lay hard-shell eggs on land.

Did you know that turtles, which are reptiles, have been around for over 200 million years and look nearly the same today as they did then. Turtles are the only living vertebrates with a bony shell which is their main defense against predators.

All turtles must leave water to nest on land where the female digs a nest in the ground and deposits the eggs and then covers them.

Favourite foods of amphibians and reptiles include aquatic plants, slugs, snails, earthworms, crayfish, insects, and fish to name a few.

Common species you might find in or near water include; spring peeper, boreal chorus frog, gray tree frog, american toad, northern leopard frog, mink frog, green frog, wood frog, mudpuppy, blue-spotted salamander, eastern garter snake and painted turtle.





Have you ever heard the **chorus of frogs** calling from a wetland in the spring? Frogs may have been one of the first animals on earth to actually make any noise, and considering they are still croaking and trilling, it was obviously a very useful skill. Frogs croak for many reasons;

- Primarily male frogs croak during the mating season so that females know where they are. The louder he croaks the more likely he is to attract a female.
- They may call during mating
- Females may call in response to a male's call
- Males may call to say 'don't come here, this is my area'
- Or they may even vocalize to startle a predator

Many male frogs have special air sacs that act as a resonator to boost their volume.



Because amphibians exchange gases through their skin, they are highly sensitive **environmental indicators**. Any substance in the water or air that may clog an amphibians' gas exchanging pores will severely decrease the life span of that amphibian. For the past few decades scientists have been alarmed by a dramatic decline in amphibian populations due to habitat changes and pollutants on land and in water.

Frogs are like the energy conveyor belts of an ecosystem by connecting the invertebrate life to prey higher up the **food chain**. Tadpoles play an important role in controlling the abundance of aquatic plants in their nursery ponds, and are also themselves important food source for many animals.



How can you help make your yard more attractive to amphibians and a **healthier ecosystem**?

- No pesticides! If you want frogs, you need bugs, and you also don't want to harm them with damaging chemicals. Don't forget – the more frogs, the better they manage your bugs
- Provide some water. Some shallow, non-moving water is essential as they need water to survive. If you don't have a pond nearby try placing a large, shallow dish with clean rain water in shady spots around your yard. You'll need to change the water about once a week to keep it fresh.
- Give the frogs some shelter! The more plants there are the more bugs there will be for them to eat, and also places for them to hide from predators like birds, foxes and even cats. Native plants like ferns, grasses, shrubs and flowers are great to plant under trees. And no need to trim them or rake them up, amphibians need those hiding spots and loose soil. You can even put in some rocks where they can squeeze under.
- Now, you just have to be patient and wait for your amphibian friends to arrive so you can enjoy their ecological benefits, their calls and their bug eating capabilities.

You can also contribute to important **community science** by recording observations of amphibians and reptiles that you hear or see using iNaturalist and FrogWatch.