

Sounds of Spring

By Bob Hester
Photos by Paul James

As I began writing this article, the winter wind was blowing wisps of snow across our front yard. It was sunny and minus 14°C outside; the wind chill took the temperature down to minus 23°C. Walking across the hard-packed snow in the driveway sounded like treading on styrofoam. Truly a winter day. It is hard to think of spring on such a day but, by the time you read this, spring will be here and winter's cold days will be a fading memory.

One of the surest signs of spring each year is the sound of the frogs and toads that mate in our local wetlands. They call to attract females and, in some cases, to warn off rival males. I have heard and/or seen 5 of Ontario's 13 species of frogs and toads in the Rouge Marsh: American Toad, Northern Leopard Frog, Wood Frog, Green Frog and Gray Treefrog. While my experience is mainly with the Rouge Marsh, there are other local wetlands where some or all of the species described above may be heard each spring. For example, also along the shore of Lake Ontario, Petticoat Creek Marsh, Frenchman's Bay, Hydro Marsh and Duffin Creek Marsh are good spots for listening on spring evenings. The wetlands in Altona Forest are also excellent locations to hear frogs and toads in spring.

The timing of breeding varies between species and depends on temperature. Breeding is earlier in warmer springs and later in cooler springs. Wood Frogs are the first to breed each year, possibly as early as late March, followed by Northern Leopard Frogs and American Toads in April and May. Last are the Green Frogs and Gray Treefrogs in late May and June. Each species has a distinctive call that, with a few hearings, is easily recognizable. The calls can sometimes be heard during the day, but the best time to hear them is at, and a few hours after, dusk. Recordings of the calls of all the frogs and toads in Ontario can be found at www.ontarionature.org/protect/species/reptiles_and_amphibians. Click on the name of each species to learn more about it and to hear what it sounds like.

Frogs and toads are important members of our local wildlife population and have complex life histories. All species hibernate during the winter, either on land or underwater. In spring, the males arrive at the breeding sites prior to the females. The females deposit their eggs in the water. Larvae (tadpoles) emerge from the eggs and, like fish, use gills to breathe in their aquatic habitat. Transformation from tadpoles to adults involves development of lungs for air breathing, and a total change in body shape that involves growth of limbs and disappearance of the tail.

The first frog to breed in the spring is the **Wood Frog**. Its breeding call is a duck-like quacking that can be heard in the very early spring, often when ice is still on the water. The Wood Frog prefers ponds in woodlands for breeding. I have heard Wood Frogs in

the drowned woodland area in the Rouge Valley beyond the east end of Island Road in Scarborough and in Petticoat Creek marsh. The adult hibernates under leaf litter or burrows into soil. It has a sugary antifreeze in its blood and cells that enables it to survive freezing, allowing its distribution in Canada to reach almost to the Arctic Ocean, much further north than any other frog or toad. The Wood Frog remains a tadpole for 8 to 9 weeks. The small (3 to 6 cm) adult frog has a brown unpatterned back and a distinctive dark brown bar behind each eye. The adult spends the spring and summer on the forest floor. I have occasionally seen Wood Frogs on my lawn at the edge of the Rouge Valley.

The breeding call of the **Northern Leopard Frog** is like the sound of wet hands slowly rubbing a balloon. Individual breeding males can be heard in many local wetlands. The Northern Leopard Frog typically breeds in April and remains a tadpole for about 10 to 13 weeks. The adult frog spends the summer in fields and meadows. It is a medium-sized frog (5 to 9 cm), usually green but occasionally light brown, with a back covered with dark spots outlined in yellow. The Northern Leopard Frog spends the winter at the bottom of a body of water.

The **American Toad** breeds in April and May. Its breeding call is a long trill that can last for 15 to 20 seconds and can be heard in many local wetlands, often as a chorus of many toads. Transformation from tadpole to toad takes 8 to 10 weeks. The adult American Toad is about the same size as the Northern Leopard Frog (5 to 9 cm). It is light to dark brown in colour with prominent raised brown bumps covering its body. Apart from the brief breeding season, the American Toad spends its time on land, often in gardens where it is invaluable in controlling garden pests such as slugs, earwigs and other insects. A toad will typically spend the day in an underground burrow, emerging to feed at dusk. Gardeners can build or purchase Toad Abodes to attract toads to their gardens. The American Toad hibernates by burrowing into the ground where it must get below the frost line.

The **Green Frog** has a breeding call that resembles the sound of a banjo string being plucked. It can typically be heard in local wetlands in late May and June. After growing to a length of 6 to 8 cm, the tadpoles transform to the adult form in the summer following their hatch year. An adult Green Frog is green or dark brown in colour; black spots may or may not be present on the back. The adult frog spends its time in or near permanent water, either along a shoreline or, in the case of a larger frog, in water away from shore. The Green Frog hibernates on the bottom mud of a water body.

The **Gray Treefrog** is a small (3 to 5 cm) frog that, as its name implies, spends much of its time in trees and shrubs where it feeds on a variety of insects. Breeding typically occurs from late May through June in woodland ponds. The breeding call of the Gray Treefrog is a bird-like trill that lasts for about 2 seconds. I have heard these breeding calls in the woods off the east end of Island Road in Scarborough. One spring night a couple of years ago, I found a Gray Treefrog on the front wall of my house below the porch light. An adult of this species has a mottled gray or brown back with a rough appearance due to numerous small bumps on its body. Large discs on the tips of the

toes are used for climbing. The Gray Treefrog spends the winter in leaf litter or buried in soil.

We are fortunate to have these wetlands on our doorstep so that, close to home, we can hear these unmistakable sounds of spring.

The Royal Ontario Museum published an excellent book in 2002 (The ROM Field Guide to Amphibians and Reptiles of Ontario) which contains much information about our local frogs and toads. Bob Johnson, Curator of Amphibians and Reptiles at the Toronto Zoo wrote an informative book in 1989 (Familiar Amphibians and Reptiles of Ontario) that is also a useful reference. Much of the information in this article came from these sources. More information on the frogs and toads of Ontario can also be found at www.torontozoo.ca/AdoptAPond/frogs.asp