

THE RELEASE:

by J. Dan McAskill

Ben Hoteling phoned in this year's first report of wood frogs singing and, within 24 hours, spring peepers were also reported. Several days later, many of the ponds across the Island were awaking to the sounds of wood frogs and spring peepers.

This chorus heralds in spring for many of us. For the frogs and toads, it marks the end of winter hibernation and movement from their overwintering sites to the breeding ponds. Terrestrial species such as the American toad and wood frog tend to overwinter in holes in the ground and a heavy enough cover of snow to provide the level of insulation each species requires. Aquatic species such as green frogs and northern leopard frogs overwinter in the mud at the bottom of ponds and other bodies of fresh water that do not freeze right to the bottom. Frogs can withstand the freezing of up to 40% of their bodies.



When the frogs emerge, the most males migrate to ponds. As soon as the temperature hits the right level, the chorus begins as, depending on the species, they struggle to defend territories and/or attract females. The females and other males may be attracted from long distances to the singing area. The females will choose the tenor of the voice they prefer and, for territorial species, the quality of the breeding habitat.

Certain species such as wood frogs, which often use temporary bodies of water sing, breed for a shorter period than the northern leopard frog and the green frog which tend to use larger bodies of water and breed over a more prolonged period. In some sites, egg laying in wood frogs can be restricted to only one or two nights. Hence the term explosive breeder! In many species, the females will leave the breeding area shortly after breeding.

The Society would like to obtain more information on the breeding habitats and the duration of singing for northern leopard frogs and green frogs. If you would like to help us, please record their calls and, at the end of the summer, send them to me. Please include a good description of the ponds location so this can be plotted on maps and be summarized in a future article in the *Island Naturalist*. A survey form is included at the back of this issue.

References:

- Conant, Roger and Joseph T. Collins. 1991. *A Field Guide to Reptiles and Amphibians*. Houghton Mifflin Company, Boston.
- Cook, Francis R. 1984. *Introduction to Canadian Amphibians and Reptiles*. National Museum of Natural Sciences, Ottawa.
- Natalie Helferty. 1995. The Duration of Desire in Frogs and Toads. *Toronto Field Naturalist* 458 pp 19-20.

BIRDSEYE IN MAPLE:

The formation of the delicate birdseye pattern in the bark and wood of certain sugar maple trees has fascinated foresters and naturalists alike for many years. While this fascination has resulted in both speculation and hypotheses the definitive cause has yet to be determined. The following causes have been put forward:

- a) fungal infections induce a local deactivation of the cambium;
- b) viruses causing a condition which is called stem pitting in fruit trees;
- c) suppression of tree growth early in the tree's life;
- d) genetic factors; and
- e) environmental factors ranging from soil to climate.

The theories that bird pecks, adventitious buds, or adventitious root primordia cause this condition have been argued to be misinterpretations.

The presence of the birdseye pattern in other species of maple, yellow birch,