

ON THE WILD SIDE

Visit a vibrant vernal pool near you

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In March and April my mind turns to signs of spring and I begin to notice the vernal pools that appear in many parts of town. I began to do online research on vernal pools to make sure I did justice to the topic when I came across the *Wildlife Habitat Evaluation of the Canoe River in Norton MA (2006-2008)* reported by the Open Space Committee of Norton. I could not find nor write a better description than the one they wrote:

The **Woodland Vernal Pool** is a common feature within the wetland community of Norton but typically contains little vegetation except for a ring of shrubs, overhanging tree branches and some grasses. Vernal pools are small depressions in the landscape that hold water for at least two months and provide the only breeding habitat for certain types of amphibians and reptiles. The pools are free of adult fish and typically dry completely in the fall.

Vernal pools act as little nightclubs where males and females meet. They also act as fast-food restaurants providing ample macro-invertebrate populations to feed larger animals. Vernal pools are some of the most diversely populated habitats found within the landscape. Species that may be observed using vernal pools include wood frogs, spring peepers, American toads (pictured), green frogs, gray tree frogs, bull frogs, spotted salamanders, blue-spotted salamanders, marble salamanders, fairy shrimp, whirligig beetles, predacious diving beetles, mayflies, many species of damselflies and dragonflies, amphipods, isopods, fishfly, fingernail clams, caddisflies and amphibious snails. Major threats to vernal pools are the habitat destruction caused by the filling of these wetland areas, and the clearing of all forested vegetation near the pools.



The American Toad is one of many creatures you can find in a vernal pool.

Some studies are showing that vernal pool species only use the pools for two weeks a year and spend most of their time in the adjacent uplands. Some species will travel over 1000 meters to reach a vernal pool. Therefore, it is especially important to maintain the forested connection between vernal pools and forested upland areas. Dead trees (snags) lying on the ground or standing should not be removed because they provide excellent cover and shelter for species migrating from the forested upland to the vernal pool.

Thanks to the Open Space Committee for a great job!

Continuing my research, I found the following good advice on the Land Preservation website:

If you find a vernal pool, [check it out] after a night when there has been a warm rain, and you will probably see some egg masses. These look like black dots surrounded by clear or whitish jelly, and are stuck together in a floating mass that may be attached to a branch or other growth in the water. Later, when the eggs have hatched, you will see tadpoles.

If the pond has bullfrogs, their tadpoles may eat those of smaller amphibians such as wood frogs. Some tadpoles change into land-dwelling frogs, toads or salamanders quickly, while bullfrogs may take two years to change.

Why do we care about these rather inconspicuous critters? Preserving diversity is always a good answer because each organism is part of a web, parts of which we do not understand at this point. But, they do have an important immediate impact on the quality of our lives because amphibians and other animals that live in vernal pools tend to eat insects (think mosquitoes!) at some stage of their lives. The American Toad (*Bufo americanus*) can eat up to 1000 insects a day! In addition, frogs and salamanders have long been thought of as indicators of the quality of water since they absorb water directly through their skin and are sensitive to water pollution. Protecting amphibians may very well translate into protecting ourselves.

The Land Preservation Society (LPS) of Norton has numerous vernal pools on its properties and there are many others in Norton. Look for LPS vernal pools in Woodward Forest, on Red Mill Road, on Union Road, in the Henrich Woods, in the Johnson Woods, and the Reinhard Pasture land. Maps of LPS land are available at the LPS website: www.nortonlandpreservation.org

Better go soon, vernal pools only last a short time. Spring passes much faster than winter does, don't you think?

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