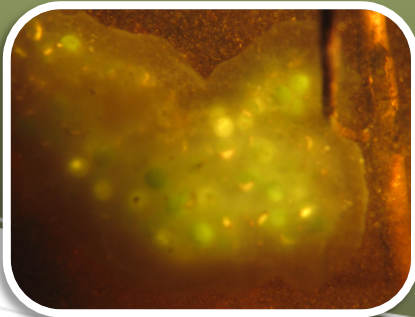


# What makes a pool “Vernal”?

The word “vernal” means: *of or having to do with spring*. These pools are filled by snowmelt and spring rains, dry completely or partially during the heat of summer, and may be filled again in autumn.<sup>2</sup>

Vernal pools are ecologically characterized for their lack of fish and for their usage by certain “obligate species” of amphibians, which need them to survive.



## What is a Vernal pool?

“Vernal pools are temporary bodies of fresh water that provide important habitat for many vertebrate and invertebrate species.”

<sup>2</sup> These important features of the Massachusetts forests act as a breeding ground for multiple species of endangered amphibians. Vernal pools are so vital to their ecosystems because the organisms that live in them provide food for birds, mammals, reptiles, and insects.



# Vernal Pools: A Guide



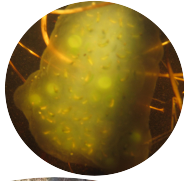
**TOWN OF TOPSFIELD**

**Conservation Commission**

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**Topsfield Conservation Commission**

Created 2016 by B. Gallagher,  
Summer Intern



# Vernal Pools and You

Do you think you may have a vernal pool on your property? Are you wondering where you can find more information to help you understand what they are? Learn more about these valuable ecological resources at: <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/vernal-pools>. Are you attempting to certify a vernal pool? Read the certification guidelines (where most of the information for this guide was found) at:

<http://www.mass.gov/eea/docs/dfg/nhesp/vernal-pools/vpcert.pdf>

## The Inhabitants:

Without a “reproducing fish population”<sup>2</sup>, several species of amphibian have evolved to exploit the lack of predators and reproduce in these safe waters. However, this means that these “obligate species” are **obligated** to use only vernal pools to reproduce. A few of these species are currently endangered due to development and erosion destroying their habitat. Some others, “facultative species”, use the vernal pools but could survive without them.

### Obligate Species:

- Spotted Salamander
- Blue-spotted Salamander
- Marbled Salamander
- Jefferson Salamander
- Wood Frog
- Fairy Shrimp

“Vernal pools constitute a unique and increasingly vulnerable type of wetland.”<sup>2</sup>

## Certification:

The town of Topsfield has been certifying vernal pools with the Natural Heritage & Endangered Species Program (NHESP) since 1992.

Using the certification guidelines mentioned above, members of the Topsfield Conservation Commission (TCC), the Conservation Administrator, and various Interns have conducted site visits and filled out observation forms so that, with the property owner's permission, pools can be certified.



### Works Cited

- <sup>1</sup> Gula, Tom. Spotted Salamander. Digital image. *Study of Northern Virginia Ecology*. Fairfax County Public Schools, n.d. Web. 2 Aug. 2016.
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- <sup>3</sup> Painter, Theresa. Wood Frog. Digital image. *Study of Northern Virginia Ecology*. Fairfax County Public Schools, n.d. Web. 2 Aug. 2016.