

Vermont Amphibians- Education and Citizen Science

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Our project

We have combined our interests in amphibian monitoring and citizen science for our Place-Based Landscape Analysis final project. We worked with about 40 7th graders in Sandy Fary's science classes from Camel's Hump Middle School in Jericho. Sandy has been teaching her students about amphibians and taking classes to several vernal pool sites for the last few years, and we partnered with the class to document and inventory what is known to be the largest and most actively used pool at UVM's Jericho Research forest. To our knowledge, this pool has been mapped, but has not been documented or inventoried by the Jericho Conservation Commission, Vermont Fish and Wildlife, or the Vermont Agency of Natural Resources.

During our first trip to the JRF vernal pool on April 8, 2011, we found it largely still covered with ice, with no sign of amphibian activity. Several days later, when we returned with the first half of Sandy's group on April 12, the pool had come to life and was filled with Wood Frogs and their eggs, as well as a variety of macroinvertebrates. While we did not find any of the mole salamander species, we did identify Spotted Salamander spermatophores. Lindsay returned to the site on the evening of April 13, after a cool, rainy day, hoping to find salamanders active, but the pool was generally quiet except for a few Wood Frogs.

We returned to the pool again on April 26 with the other half of Sandy's group to continue the inventory and documentation and to observe any changes that had taken place over the weeks. We observed many Wood Frog egg masses, as well as Spotted Salamander spermatophores and what we believed to be a Spotted Salamander egg mass. Spotted Newts were also plentiful in and around the pool, both in the juvenile Red Eft phase as well as the aquatic adult phase. Students from Sandy's class will be submitting their findings to the Jericho Conservation Commission, and may have the opportunity to present to community members at Jericho's Saturday Forest Walk on May 7, part of the UVM Green Forestry Education Initiative.

In addition to our direct work with students, we have also prepared some curriculum and activities for teachers about Vermont's amphibians and vernal pools. In general, activities are designed for middle-school aged students, but they can be easily adapted for use with younger or older grades. A list of resources for further ideas and information is also included.