



VERNAL POOLS

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What are they, and why are they important?

Vernal pools are isolated, forested depressions that temporarily fill up with rainwater, snowmelt, or some combination thereof (A). They can be relatively small or large, but their key feature is that they're temporary, meaning they dry up for a portion of the year. Having water only temporarily may seem problematic for wildlife, but it's actually beneficial for a select number of species.



A

In most aquatic environments, fish reign supreme, and organisms that coincide with them often have to worry about the prospects of being eaten. But a pool of water that consistently dries up is no place for a fish, and hence, vernal pools offer sanctuary to organisms who only require aquatic habitat for portions of the year. In fact, a handful of amphibian species have evolved to rely almost exclusively on vernal pools for breeding purposes. This includes Wood Frogs (B), Spring Peepers (C), and Yellow Spotted Salamanders (D). When the pools fill with water, thousands of the aforementioned species migrate to vernal pools where they mate and lay their eggs. The eggs eventually hatch into larvae who can swim about in the pool without any worry of being gobbled up by fish (not to say there aren't other predators to worry about). Just prior to the pools drying up in the summer, larvae go through metamorphosis and transform into their terrestrial forms, who then migrate upland into the surrounding forest. It's in this respect that inhabitants of vernal pools are not only reliant on the pools themselves, but the woodlands surrounding them as well.



B



C



D

Vernal pools provide habitat to more than just amphibians. Spotted Turtles, Wood Ducks, Fairy Shrimp, and many others make use of them too. It's important to remember that although these pools are isolated, protecting the land surrounding them is just as important as protecting the pools themselves. As is the case with anything in nature, vernal pools are pieces of an interconnected whole - the whole being a healthy thriving woodland.