

BCT Stewardship Journal: April 2024

Species spotlight: Spotted Salamander (Ambystoma maculatum)

Spotted salamanders are one of the eleven species of salamanders that inhabit Massachusetts. This species has a dark gray body with bright yellow spots running down its back. They are considered large salamanders and can grow up to nine inches in length.

These wiggly critters thrive in woodlands near bodies of fresh water, particularly residing underground in the dark, damp leaf litter. Every year they journey to a wetland or vernal pool to spawn. These salamanders will start their trip to the vernal pools when the air temperatures rise above 45-50 degrees on the first rainy spring night. They will return to the same site yearly, spawning in their familiar oasis. A vernal pool is a perfect location for these salamanders to lay their eggs because there are no predatory fish in the water. Since vernal pools completely dry up for most of the year, fish cannot survive in these temporary wetlands; therefore, the eggs are relatively safe once laid.

Spotted salamander eggs masses are clear, jelly-like, spherical in shape, and hatch within 30 to 60 days, depending on water temperature. The larvae have external gills and spend their first 2 to 4 months swimming, feeding, and growing in the water. Once they leave the water as juvenile salamanders, they are off to spend most of their time underground, only emerging to forage after rainfall or to breed once a year.



Spotted salamander climbing over damp leaf litter. Photo by Lissy Perna.

To observe these fascinating amphibians, visit the Vernal Pool Trail, located behind the Eddy Elementary School off Route 6A. This walking trail encircles two vernal pools and is a shining example of what a



Spotted salamander found on conservation land.
Photo by Lissy Perna.



Spotted salamander egg mass found in vernal pool on BCT land. Photo by Katie Spengler.

preserved vernal pool habitat should look like. *Please note that this trail is only accessible after school hours.* Other species that thrive in these protected vernal pools are fairy shrimp, wood frogs, eastern spadefoot, garter snakes, and spring peepers.