

The View from Heifer Hill, April 2019

April showers bring . . . salamanders?

I saw my first spotted salamander when I was about ten years old. It was in a swimming pool that had just been opened up for spring cleaning. As a nature-crazy kid, I had admired plenty of salamanders by then, all of them representatives of the two ubiquitous species of our region—red-spotted newts and red-backed salamanders, salamanders in the three- to four-inch range. The spotted salamander was a beast of a different magnitude, nine inches long and hefty. The size alone would have impressed even the most salamander-ambivalent kid (if there were such a thing), but when you added the yellow polka-dots . . . suffice it to say, I remember that event.

Since then, I have seen hundreds of them but only because I know where to look and when; you can find them reliably by heading out on a rainy night in April to a spotted salamander migration route.

Where are these showy salamanders the rest of the year? They live in cool, moist places like rotting logs, under leaf litter, and in tunnels made by small mammals or left behind by decomposed roots. They also roam the forest floor on rainy nights. Invertebrates beware! These giants hunt slugs, earthworms, centipedes, millipedes, spiders, and a wide variety of insects. In the laboratory, spotted salamanders have lived for more than twenty years. Skeletochronology found one Quebec spotted salamander had lived for 32 years. In summary, these are solitary animals that live in darkness, eating slugs and bugs, year after year after year—except for a short window each spring.

Warming soil and spring rains trigger their urge for aquatic social activity. Most head to vernal pools, small temporary bodies of water, for a wild pool party during which the business of procreation occurs. Many of them need to cross roads to get there. For creatures with legs less than an inch long and blood as cool as the April night, a simple road crossing is a slow and dangerous project. Fortunately for some amphibians, on such nights another colorful spectacle appears along

roadways in our area—groups of people in raincoats and reflective vests, kind-hearted folks who help the salamanders across the roads. One of my most rewarding and stressful tasks at the Bonnyvale Environmental Education Center is to keep track of where and when amphibians are likely to be moving to make sure the escorts are in position when they're needed.

Those of you who roll your eyes and think we must be crazy are partly right. Chances are good that most of us are a bit crazy but these crossing brigades may prove critical to the long-term survival of spotted salamander populations. The likelihood of an amphibian making it across a particular road can be calculated by knowing the speed of cars, the number of cars likely to pass, and the amount of time an amphibian spends crossing the "kill zones," those parts of the road that tires travel. A study of spotted salamanders in western Massachusetts projected a loss of many populations in that region over time. In their conclusion, study authors Gibbs and Shriver state that "if efforts are successful in limiting rates of traffic-caused mortality to less than 10% of individuals attempting to cross roads during their migration circuit to a particular pond, e.g., by tunnel construction, road closure, or physically transporting individuals, then those efforts are likely warranted to stave off local population extirpation."

If you are interested in helping these salamanders, please visit BEEC.org. You will find all of the information you need to become a salamander crossing guard.

If you can't help, please try to avoid driving on rainy nights in April. Spotted salamanders are very difficult to see from a moving vehicle. Should you be out driving on such a night, keep an alert eye for little sticks in the road. If you can safely pull over, a closer look might reveal a salamander bewildered by this world of asphalt and rushing tires. Give it a lift across the road and you will be helping to perpetuate a very old tradition and assuring one inhabitant of earthy darkness a great night at a vernal pool party.



Dave Huth