

IN THE SOURLANDS

Remember The Rain

by Jared Rosenbaum

March 2015

Mysterious Neighbors

You might live your entire life in the Sourlands region without *ever* seeing a spotted salamander, unless you go out walking on just the right night.

You probably won't be out walking on that night, though, because it will be cold and wet and dark.

Which is too bad, because spotted salamanders are spectacular neighbors, long lithe amphibians in midnight blue with golden spots. If you do see one, they might seem a bit improbable, so big and colorful that it's hard to imagine they remain nearly invisible the rest of the year.

The Migration

During the first warm rains of March-warm in a relative way, above 40 degrees or so-spotted salamanders emerge from deep dark places in the soil and begin an epic journey. They are returning to their natal pools-the place where they were born-to mate and lay eggs. They're guided by a small organ in the brain that reads the earth's magnetic field and directs them.

They are accompanied by other amphibians on the move - wood frogs, spring peepers and more - also migrating to pools in the woods. Together, the amphibian cohort crosses woods, meadows, and wetlands, seeking shallow inundated ponds known as vernal pools.

They also cross roads and driveways, and here the slower-moving of them-and all of them move slowly compared to a car-are often crushed into the roadbed. A study in Massachusetts showed close to 20% mortality rate of spotted salamanders during migration, per year. Salamanders have lifespans up to 20 years, but at that rate most will perish within five. That level of mortality can add up to local extinction quickly.

What Can You Do?

Drive with care. During March nights with precipitation, avoid driving or drive slowly on forested and rural roads, and watch the road for amphibians crossing.

The Sourland Conservancy mailing list (sign up at sourland.org) and the *Sourland Stewards* Facebook group page posts updates on upcoming migration nights.

Volunteer to chaperone. At hot spots for amphibian crossings in the Sourlands, volunteers and conservation professionals gather to help salamanders and frogs make it across the road. You'll witness a nature spectacle and save lives at the same time. To sign up, contact Jenn Rogers, Mercer County Naturalist, at jrogers@mercercounty.org or (609) 303-0706.

Learn more, outdoors. On April 12, from 1 pm- 3 pm, the Sourland Conservancy will be offering a *Vernal Pool Walk* at the Sourland Ecosystem Preserve on Mountain Road, East Amwell. On this walk, participants can explore several vernal pools while learning about their importance and some of the pools' amphibious occupants. The hike is led by Jenn Rogers, Mercer County Naturalist. Contact hikes@sourland.org to register and for more information.

On Warm Rainy Nights

It's not just during the migration rains in March that one can witness large numbers of amphibians moving across roads in the Sourlands and throughout the region. Many frogs and salamanders move on wet nights when their skins are less vulnerable to desiccation. It's typical to catch a glimpse of a hopping frog, illuminated in headlights, during warm rains from March to October. So please, drive with care.

Vernal Pools

Inundated pools in natural areas are known as vernal ("spring") pools if they dry up periodically and contain no fish. Those that remain wet throughout the spring months are ideal breeding sites for amphibians.

The Sourlands is rich in these pools because of its poorly-drained bedrock and soils, and expanses of undeveloped forest. The decay of leaves and other plant material in these wetland pools is at the base of a food chain that includes not just amphibians but numerous bird, mammal, and invertebrate species.

Remember The Rain

The Sourland Conservancy is creating a program called *Remember The Rain* as part of its Sourland Stewards initiative. To see more resources on amphibians, and stewardship in general, visit us at sourlands.org/stewardship.