



Creature Feature: Fall 2008

By W. Scott Douglas

Northern Red Salamander



I was walking along the Creek behind my house in early August, on my way to download the stream gauge, and caught sight of a creature that I knew existed in the Watershed, but had yet to see. The bright red-orange salamander was a good 5-6 inches long, and it scooted under a rock as I walked along the stream edge. Now, red amphibians are not something you see every day, so I carefully picked up the rock to see what had hidden there. What I saw was a young Northern Red Salamander, looking exactly like

the one in the picture above. He was not a willing observation subject though, and when I went to pick him up to examine him, he scooted into the creek and swam downstream. I took the hint and left him alone.

Red Salamanders live in clear cold streams, seeps and headwaters throughout the eastern US. They are predators, feeding on small insects, worms and other invertebrates, and even small salamanders. They have a sticky projectile tongue, like a frog, that they use to capture prey. Red Salamanders are preyed upon by birds, skunks and raccoons, so they like to remain hidden during the day and hunt primarily at night (probably another reason why the one I saw was so anxious to get away). Had I been a predator, I might not have eaten him though, as he actually secretes a mild toxin, called pseudotritotoxin that tastes bad. Perhaps due to the toxin, Red Salamanders can actually live quite a long time, up to 20 years! In the fall, females lay between 30 and 130 eggs under rocks in and near the water. When the eggs hatch, the larva, which will have gills, lives in the water for 3-4 years before molting into the adult form. Young Red Salamanders are bright red-orange, as they get older the spots tend to blur together and the color darkens to a salmon or even purple color.

While any amphibian is fun to find and watch, I was particularly happy to find this one as it is an indicator of high water quality, healthy riparian buffers, cool water temperatures and low siltation- all the qualities that we want to see in our beloved Creek. Finding salamanders is always a tricky proposition. Their skin has to stay moist, so they can be found under rocks, moss, leaves and logs. Some will utilize burrows dug by other forest denizens. Red Salamanders are typically terrestrial in the spring and summer, but are more aquatic in the fall and winter when they will crawl into bunches of leaves caught between rocks and logs.

You can try to rout one out of its hiding place, but it is easier to find one by looking for them when they are hunting. After (or during) a good soaking rain, walk along a forested stream bank at night, and shine a flashlight on the ground as you go. You may be surprised at what is out and about.