



## **Creature Feature: Fall 2017**

By W. Scott Douglas

### **Northern Watersnake (*Nerodia sipedon*)**



The beautiful photograph of the snake with a brook trout in its mouth on our cover prompted me to write this article. While many people are afraid of snakes, only three of the more than 20 snake species in Pennsylvania are venomous (Copperhead, Timber Rattlesnake, and Massasauga Rattlesnake). However, all

snakes bite when cornered and deserve our respect. The northern watersnake, *Nerodia sipedon*, does have a particularly powerful bite, and its saliva contains anticoagulant properties that make the bite bleed profusely. While this snake is NOT venomous, its aggressive behavior and thick bodied aspect often confuses people into thinking it is another species. The northern watersnake is light to dark brown with brownish red bands. It is often mistaken for a copperhead, but that snake has a distinctive coppery colored triangular head and is lighter in color overall. As northern watersnakes age they darken considerably and the bands all but disappear. It is at this stage that they begin to look like the infamous water moccasin or cottonmouth. Fortunately, that very dangerous reptile does not live in Pennsylvania. As with all snakes, venomous or not, it is best to observe them at a safe distance and never harass them.

The northern watersnake is an important part of the riparian ecosystem and they are quite common throughout Pennsylvania. It is an adept swimmer, and can often be found swimming or sunning itself on mid stream rocks or logs. Northern watersnakes eat a variety of aquatic animals including crayfish, frogs, minnows, worms, salamanders and sick or dying larger fish. They also climb trees to take bird eggs or even baby birds. Large game fish like bass and pickerel take young watersnakes, as do herons, hawks, foxes, snapping turtles and raccoons. Northern watersnakes are mature at two years, and give birth to live young. The mother does not care for or defend the young. Watersnakes grow rapidly in their first two years, doubling in size until mature. While their growth slows in adulthood, they continue to grow throughout life and have been recorded to reach 55 inches in length. No one is sure how long they live in the wild, but captive northern watersnakes have lived for more than

10 years. The northern watersnake overwinters in crevices, old animal dens or rootballs, but will often venture out if the weather warms enough, even in winter.

When researching for this article, I discovered an interesting fact about these reptiles. In the 1930s and 40s it was believed that the northern watersnake was such a voracious predator of fish that game fish like trout were in danger of being wiped out. The Pennsylvania Fish and Boat Commission embarked on a campaign to reduce the snake population by asking fishermen to kill as many as they could. They even went so far as to offer bounties for skins or other proof of taking, and offered medals to Boy Scouts who could prove having killed at least ten watersnakes! While it is unknown how this campaign impacted the snake's populations in the State, there appears to have been no long lasting impact as they are still quite common. Obviously, this type of action is wholly unjustified and, in fact, harmful to the very animals they were designed to protect. Not only are these snakes \_incapable of taking large healthy fish, the culling of the sick or dying is beneficial to any population.

If you want to see these animals in the wild, visit any stream bank, especially on warm spring days. Snakes are sensitive to vibrations, so a quiet approach is essential. Northern watersnakes can be found hunting among the shoreline vegetation, or swimming easily from bank to bank. If you are lucky, you may be able to see them in action, doing their part in the ecosystem of our beloved Watershed.