

Wildlife Diversity Notebook: Red-spotted Newt

Common Name: Red-spotted newt

Scientific Name: *Notophthalmus viridescens*

West Virginia Status: Widely distributed throughout West Virginia; one of the most common salamanders in the state.

Description: The adult is a small aquatic salamander from 2-1/2 inches to 5 inches long. The color of the back is greenish brown with a scattering of black dots and a series of small, black-bordered red spots along each side. The belly is yellow with many scattered, small black spots. Two features which separate newts from other salamanders are the lack of costal grooves (vertical grooves on the sides of the body) and the presence of two ridges on top of the head. During the mating period, the male has enlarged, horn-like growths on the lower surface of the hind legs and a flattened tail with a sharp keel.

In West Virginia, there are three distinct stages during its life history: a larva, a terrestrial sexually immature subadult, and an aquatic sexually mature adult. The immature subadult, often called a red eft, has rough, granular skin that is bright orange-red with a row of black-bordered red spots along each side.

Habitat: Adult newts are found in a wide range of aquatic habitats, particularly in quiet pools, ponds and swamps. While they may occur in streams, they are seldom abundant there. The mature adults can be seen floating or drifting near the surface of the pond at any hour of the day or night. They are active throughout the year and may be observed swimming beneath the ice during winter months. During late summer and fall, when their ponds may dry up, they burrow into the mud and remain there until the water level is restored.

Red-spotted newts live out their adult life in water.



Steve Shaluta

The terrestrial subadult, called the red eft, is best seen after warm summer rains.

Diet: The food of the newt is limited only by size and availability. Throughout most of the season it consists of various worms, adult and larval insects, crustaceans, slugs, snails and small vertebrates. In the early spring, the cycles of the various animals in the area may determine the newt's diet. Thus it may feed on the eggs of the spotted salamander, then shift to the fairy shrimp as they increase in number, then to mosquito larvae, and finally to eggs of one of the frogs breeding at this season. They can often be seen foraging in shallow water.



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Life History: Most mating occurs in the spring, although there may also be a fall mating period. After mating, the female deposits the eggs one at a time, attaching them to leaves and stems of aquatic vegetation. She may lay 400 eggs or more. In West Virginia, eggs are deposited in April, and usually hatch within two or three weeks. Newly hatched larvae average 3/8-inch in length. They soon develop gills and limbs. In late summer or early fall they transform into the red eft (terrestrial) stage. The eft wanders over the forest floor and is most conspicuous following warm summer rains. After a period of up to two or more years, the subadult returns to the water and takes on the adult coloration. In the fall mating period, fertilization may occur but there is no evidence that the female lays eggs.

Newts secrete toxic substances through the skin and so are avoided by fish and other predators.

Range: The red-spotted newt is found from Nova Scotia in Canada west to the Great Lakes region and south to central Georgia and Alabama.

Threats and Prospects: none.

Information compiled by Art Shomo, editor.