

The Eastern Red-backed Salamander

New York's Most Abundant Forest Vertebrate

Scientific Name: *Plethodon cinereus*

Description: Small, slender salamander with a red stripe that runs down the middle of the back from the nape of the neck down onto the tail. The stripe is bordered by black, and the belly is mottled black and white, giving it a salt-and-pepper appearance. Occasionally, the stripe may be beige, cream or grey instead of red. Another color morph, the lead-back phase, has a dark grayish black body with no stripe and the characteristic salt-and-pepper belly.



Habitat: Primarily a woodland species that inhabits deciduous, mixed hardwood-conifer, and coniferous forests. They also may be found in disturbed areas at the borders of forests, along rocky road cuts and railroad rights-of-way. Red-backed salamanders require habitat that is not too dry or exposed, and will avoid areas of low soil pH. In the winter, redbacked salamanders hibernate in underground shelters such as cracks and crevices, abandoned ant mounds, and root channels.

Food: Small soil and leaf litter invertebrates including mites, springtails, millipedes, fly and beetle larvae, worms, flies, ants, and beetles.



Life Cycle: Females lay 3-11 eggs in cracks and crevices in or under logs, under flat rocks, and in burrows of other animals. The female guards the nest site and defends the eggs from predators. Development of the young is completed in the egg, so there is no larval stage and the young are fully developed upon hatching.

Interesting Facts:

- Red-backed salamanders are likely the most abundant vertebrate in forests of the northeast. In a New Hampshire study, researchers found that the biomass of red-backed salamanders equaled that of mice and shrews and was twice that of forest birds (excluding raptors).
- In New York, the red-backed salamander is the most abundant and widely distributed salamander in the state.
- Red-backed salamanders feed on small invertebrates that are not eaten by most other carnivores and they convert 60% of their food energy into salamander biomass, a very efficient percentage!