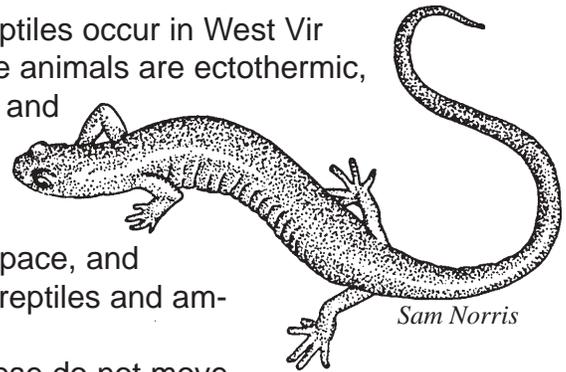


# Amphibians & Reptiles

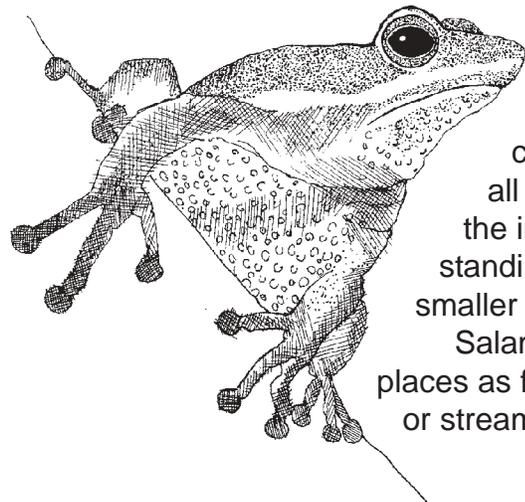
At least 85 species of amphibians and reptiles occur in West Virginia. Unlike mammals and birds, these animals are ectothermic, which means they use the environment and regulate their internal temperature. They use “shuttling” behaviors, moving in and out of cover, to keep their internal temperature at the perfect level. Therefore, providing the right kinds of cover, open space, and moisture can be particularly important for attracting reptiles and amphibians.



Remember that small terrestrial animals like these do not move about on the larger landscape as readily as birds, butterflies, bats and larger mammals. So providing habitat will not guarantee their presence. There **MUST** be populations of reptiles and amphibians in the vicinity, e.g. in nearby woodlands, streams, or pools prior to providing habitat for them. It is best to find out what is already in your area, and target those species. Also keep in mind that a neat and tidy yard, devoid of plant litter and other debris, is not the best environment for ground dwelling animals like reptiles and amphibians. Short, cropped lawns and other organized landscaping with no hiding places will not attract these types of animals in abundance. Hiding places are key for reptiles, and hiding places with moisture or standing water are key for amphibians. Imagine that you are small and are looking for places to hide!

## Amphibians

Frogs, toads, and salamanders, the amphibians in our midst, have very specific moisture requirements in addition to their thermoregulatory needs. All frogs and toads in West Virginia lay their eggs in water and have an aquatic larval (“tadpole”) stage during which they spend several months to several years in the water. Adults are “amphibious,” spending much of their time on land and returning to the water for a variety of reasons, including breeding, egg-laying, hibernation, and as a refuge from predators. Larvae are mostly herbivorous and require pools or ponds with lots of organic material for foraging, e.g. leaf litter and aquatic vegetation.



These pools should be free of predatory fish. Adult frogs and toads are carnivores and will eat almost any insect, worm, or even small mammal, reptile, or amphibian that they perceive to be the appropriate size. Provide lots of spaces with soft soil substrate and leaves where toads and frogs can hide. Old boards, logs, bricks, and debris piles can all be ideal hiding places for frogs and toads, and also for the insects they will eat. Holes in trees, snags (dead standing trees), or downed logs are used by some of the smaller species such as tree frogs and chorus frogs.

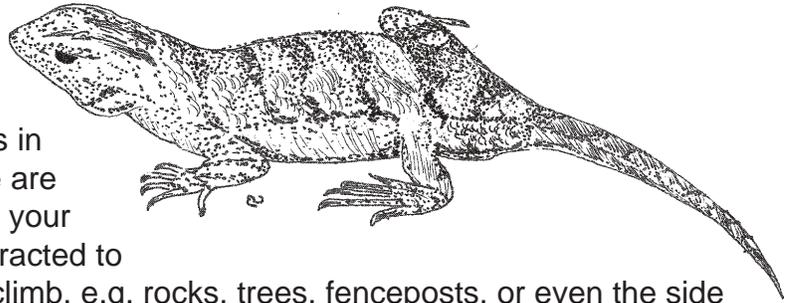
Salamanders will use many of the same pools and hiding places as frogs and toads. Some species will lay eggs in pools or streams and have a larval stage, though these are carnivorous.

rous larvae unlike the larvae of frogs and toads. The woodland salamanders have no aquatic stage outside the egg and lay their eggs in moist places under rotting logs or rocks and crevices. Many species of salamanders in West Virginia (not all) are lungless and conduct most of their respiration through their skin, increasing the need for moisture. Placing logs, rocks, boards, or other objects under which salamanders can hide and find a moist microclimate is important for attracting these diminutive animals. Adults eat a wide variety of insects, worms, and other small invertebrate prey.

## Reptiles

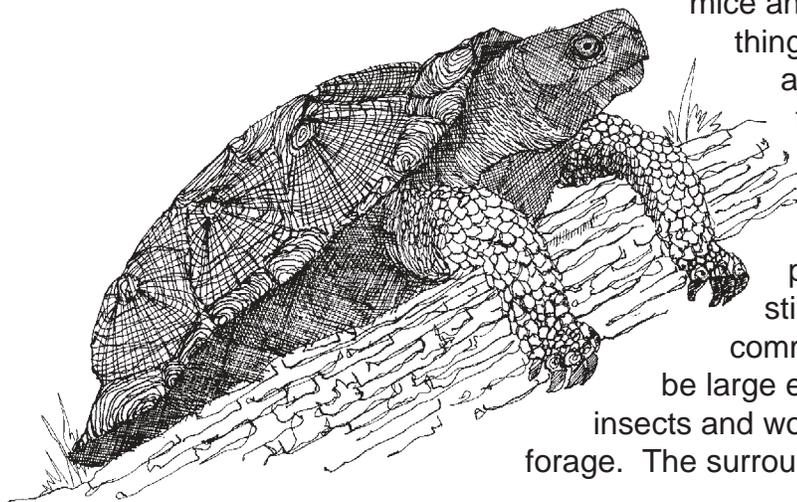
Reptiles are less restricted by moisture than amphibians because they have skin covered by tough, dry scales to prevent desiccation (drying out), and they either give birth to live young or lay eggs with shells which also prevent desiccation. As with the amphibians, a complicated landscape is best. Providing many logs, rocks, debris piles, old boards, etc. will attract these animals.

There are five species of lizards in West Virginia, and only two of these are likely to be seen with regularity near your home. Eastern fence lizards are attracted to dry places with plenty of objects to climb, e.g. rocks, trees, fenceposts, or even the side of your house or old barn. The Five-lined skink is a common woodland species which is attracted to abandoned barns and houses, as well as stumps, sawdust piles and rock piles. They are not climbers like fence lizards and will look for places to hide on the ground.



The most misunderstood reptiles you might attract to your yard are snakes. Our state has many species, most of which are nonvenomous and make fascinating and useful additions to your landscape. Debris piles, firewood stacks, crawl spaces under houses, old barns, and even ponds and streams can all attract snakes. Most importantly, there must be a good source of food such as insects, mice, rats, fish, crayfish, and even other amphibians and reptiles.

The most common snakes attracted to household landscapes with the right habitats are Black Ratsnakes, Gartersnakes, Ring-neck snakes, Brownsnakes, and if you are lucky, the small Smooth Greensnake. Ratsnakes (“black snakes”) are well-known for eating your mice and rats and will climb almost anything to get them. Garter snakes will be attracted to any source of worms, tadpoles or fish. Other snakes eat a variety of small insect prey.



Attracting turtles to your yard requires a rather large permanent pond or stream. Snapping turtles, stinkpots and painted turtles are all common in ponds, but the pond must be large enough to support the fish, aquatic insects and worms on which the turtles may forage. The surrounding landscape must also provide

soft, sandy soils and places to hide for egg laying.

Our only fully terrestrial turtle, the eastern box turtle, needs woodlands and grassy edges in which to bask; this is not a likely turtle for your yard unless it is adjacent to a woodland where box turtles are present. Do not pick up a box turtle and bring it to your yard, as it is not likely to survive even if its habitat area may seem perfect.

## Conservation Issues....

- Long-term human utilization of natural resources has resulted in numerous vertebrates requiring legal protection from further population decline. The primary cause of these declines is loss of natural habitat associated with the draining of wetlands, the creation of urban and suburban areas and the conversion of hardwood forests to pine plantations. There are several ways you can participate in the process to minimize the loss of our native amphibian and reptile fauna:

- Become educated about conservation issues, such as habitat loss, and become more aware of how your actions impact the natural landscape;

- Improve the wildlife habitats on your lands;

- Help with efforts to protect endangered and threatened species;

- Support inventory and research programs that survey private and public lands for amphibians and reptiles;

- Report illegal trapping or killing of reptiles and amphibians to your local Conservation Officer or WV DNR office.

