



Spotted Salamander
Ambystoma maculatum

The Spotted Salamander is also known specifically as the Yellow Spotted Salamander because of the two rows of uneven yellow and orange spots running from its head to the tip of the tail.

The range of the Spotted Salamander is from south central Ontario to Nova Scotia in Canada and in the US from Lake Superior to Georgia and eastern Texas. They like to live near ponds and vernal pools in dense forests where there are dead leaves, shrubs and moist soil. They need to keep their skin moist in order to live. Spotted Salamanders spend most of their time underground. They are fossorial, that is, adapted for burrowing and digging; they live under logs and rocks and in crevices and burrows. They only come out after it rains or when looking for food or to breed. They hibernate for the winter.

Spotted Salamanders are members of the mole species of salamanders and their classification is amphibian, living both on land and in water. They can be black or a dark gray or dark green on the top of their body. The belly and abdomen are pink and gray. Their skin is smooth and shiny and they have wide snouts. The four legs have 4 toes on the front ones and 5 on the back ones, no claws. There are 12 costal grooves on both sides of their abdomen that increase the skin surface area and collect water to keep it moist. The

average length of the Spotted Salamander is 6 to 9 inches. The female is larger than the male. The average life span is 20 years.

Their diet consists of worms, spiders, crickets, centipedes and slugs. A sticky tongue aids them in catching their prey. They are nocturnal, meaning they come out at night to hunt for food.

These Salamanders defend themselves by excreting a toxic milky substance that comes from poison glands on the back and neck. If a predator injures them and they lose a body part such as a tail or leg they have the ability to grow a new one. Their predators are skunks, raccoons, turtles and snakes.

Spotted Salamanders hibernate until March and April, when temperatures rise and they awaken and travel to vernal pools* to mate. Thousands make the annual trip to the same pool to breed at the same time. The female lays 100 to 200 hundred eggs in a jelly-like mass that protects them until they hatch, in 3 to 7 weeks. The eggs may contain algae, which create a symbiotic relationship. The algae consume the carbon dioxide given off by the larvae and turn it into oxygen that the larvae can use. The adults return home a few days after breeding and laying eggs.

The Spotted Salamander has four life stages, egg, larval, juvenile and adult. When they hatch from the eggs Salamander larvae are green-yellow or brown-orange with tiny dark spots, and they are about a half-inch long. They have external gills for breathing underwater and a tail for swimming. For two to three months they feed on the larvae of beetles and mosquitoes while they are growing and developing into juveniles. Adults and juveniles have lungs and tails and live on land.

Conservation Status: Vulnerable

Spotted Salamanders require two habitats to complete their life cycle, and they are very sensitive to ecological change. Negative changes in their forest and breeding habitat—for example, to vernal pools—threaten their vital ecosystem, as do pesticides and pollution like acid rain.

*Vernal pool is a season body of water that forms in the spring from melting snow and runoff water. It dries out in the summer and may refill in the autumn. It provides an important breeding habitat for many terrestrial or semiaquatic species, such as frogs and salamanders.