

Teacher Information Fact Sheet for  
Spotted Salamander *Ambystoma maculatum*

Kingdom: Animalia  
Phylum: Chordata  
Class: Amphibia  
Order: Caudata  
Family: Ambystomatidae - Mole Salamander

**Description:** Spotted Salamanders are black, dark grey or brown with 24 to 45 round yellow or sometimes orange spots. The belly is dark grey. The females may grow up to 10 inches (25cm) long. The males are usually 6 inches (15cm) or less. Glands on their backs and sides produce a mildly toxic nasty tasting liquid if the spotted salamander is grabbed by a predator.

**Habitat:** They usually live in shallow burrows they have found and only leave them during breeding season or when they cannot find enough food in their burrow. They are territorial and protect their burrows from other spotted salamanders. Each salamander only uses about 9 square yards (9 m<sup>2</sup> or 29 ft<sup>2</sup>) of forest floor.

**Life History:**

Eggs:

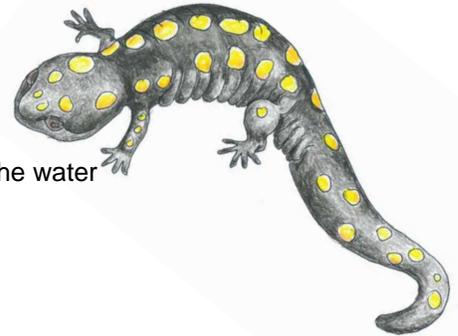
- laid in water in jell-covered groups of 100-300 eggs
- attached to vegetation or debris on bottom of pool
- take 28 to 49 days to hatch, depending on the temperature of the water

Larval stage:

- has gills and weak front legs when they hatch
- about 12 to 17 mm (1/2" to 2/3" inch) long when they hatch
- are dull olive green
- live in leaf litter on the bottom of vernal pool
- take 60-120 days to metamorphose into small adult (27 to 60 mm)

Adult:

- active only at night
- eats insects, worms, spiders, millipedes
- take two to three years to become an adult (or in the north, up to 7 years)
- may live up to 30 years



**Breeding behavior:** Vernal ponds are ponds that exist during rainy seasons but disappear during warmer dryer seasons. They lay eggs in vernal ponds because these ponds do not contain fish that would eat the salamanders' eggs. The pond where a salamander lays its eggs is usually the very same one from which it hatched. Salamanders return to the same pond year after year to breed. They will bypass closer ponds to find their home pond.

Their breeding routine starts with spring rains. They migrate en masse from their forest habitat areas to the ponds. They move to the ponds only on rainy nights. The males get to the ponds before the females and do a special "dance", bumping each other and coming up to the surface to gulp air.

Of the approximately 200 eggs laid, only about 40 survive to leave the pool. Of those 40, perhaps only one will survive to adulthood.

Information from: Pajerski, L., G. Hammond and N. Stout. "Ambystoma maculatum" (On-line), Animal Diversity Web. Accessed May 25, 2010 at

[http://animaldiversity.ummz.umich.edu/site/accounts/information/Ambystoma\\_maculatum.html](http://animaldiversity.ummz.umich.edu/site/accounts/information/Ambystoma_maculatum.html).