

# Green Salamander (*Aneides aeneus*)

## Pennsylvania Threatened Amphibian

State Rank: S1 (critically imperiled) Global Rank: G3G4 (vulnerable)

### Identification

Green salamanders are of average size (three to five inches) but no other Pennsylvania salamander has green lichen-like markings on a dark brown to blackish body. The toes are somewhat expanded and square-tipped; the body is flattened and the jaw muscles (of males particularly) are large and strong.

### Biology-Natural History

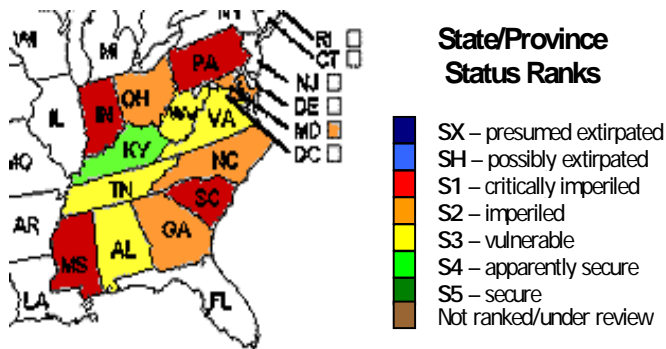
Courtship and breeding may be conducted anytime from May to September. Males use the strong jaws and projecting upper jaw teeth to bite and shove one another during territorial struggles. Following mating, females deposit an average of 17 eggs on the upper surfaces of sandstone rock crevices, and then remain with the eggs to defend them against intruders. The young (less than an inch) hatch 84 to 91 days later and soon seek mossy crevices. Both young and adults feed on various invertebrates inhabiting the rock crevices. Winter is spent deep within cracks and crevices below the frost line, where a number of individuals may hibernate together. Females mating in late summer carry fertilized eggs through the winter and deposit them the following spring.



Photo Credit: Robert T. Zappalorti Nature's Images

### North American State/Province Conservation Status

Map by NatureServe (August 2007)



### Habitat

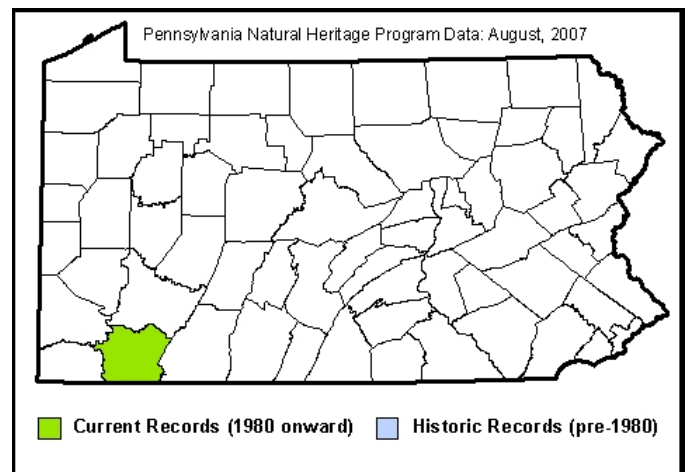
Green salamanders have been found in Pennsylvania only in certain crevices in sandstone rock cliffs or outcroppings of the Pottsville formation. These rocks are located on moist hardwood forest slopes or ravines, often near streams.

### Reasons for Being Threatened

Green salamanders historically occurred at one site in southern Fayette County, the northernmost known locality in their limited Appalachian range. Sand mining at this site may prove a threat to this species. Less than 12 additional sites have now been found as a result of further search.

### Management Practices

As new sites are discovered, monitoring of land-use becomes important. Removal of the forest cover at these sites eliminates the humidity levels the salamanders require, and is a greater threat to the colonies than the destruction or deterioration of rock outcroppings. Rock climbing activity at colony sites may prove detrimental if it is intensive.



### References:

- NatureServe. 2007. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.2. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: August 21, 2007).



Fact Sheet adapted from: Felbaum, Mitchell, et al. Endangered and Threatened Species of Pennsylvania. Harrisburg, PA: Wild Resource Conservation Fund, 1995.

