



# Conserving South Carolina's At-Risk Species:

## *Species facing threats to their survival*

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### Green salamander

(*Aneides aeneus*)



Andrew Hoffman, 2007

Green salamander/Andrew Hoffman/Flickr  
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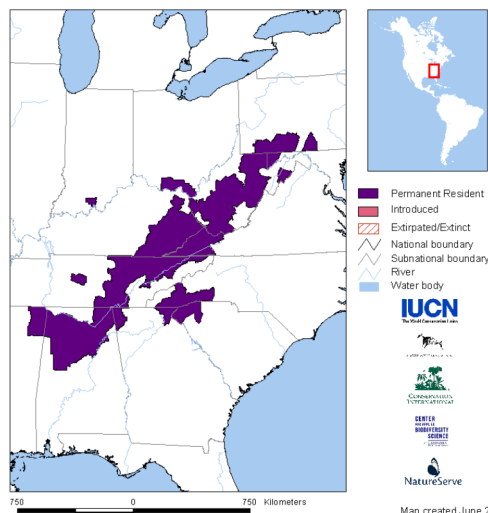
### Description

The green salamander is the only arboreal salamander in South Carolina. This species can reach lengths between 8 and 12 cm (3.1 to 4.7 in.) with a maximum length of approximately 14 cm (5.5 in.). This salamander is the only species in South Carolina with green coloration. It has a pattern that resembles the lichens and mosses found growing on rocks in its habitat. The green salamander is also the only salamander in South Carolina that has toe pads (much like those of a treefrog) to help it climb trees and rocky cliffs. Green salamanders represent the only member of the “climbing family” of salamanders east of the Rocky Mountains.

### Range

The range of the green salamander encompasses the Appalachian region but only exists in fragments of remaining habitat within that range. Nine counties in North Carolina, South Carolina, and Georgia make up the disjunct Blue Ridge portion of the range. These counties historically contained 37 populations of green salamanders, but the species has apparently disappeared from 78% of its known localities. In South Carolina, element occur-

rence records exist for the species from Greenville, Oconee, and Pickens counties.



### Habitat

The green salamander occupies damp (but not wet) crevices in shaded rock outcrops and ledges. Occasionally they are found on dry rock outcrops. Rock types include sandstone, limestone, dolomite, granite, and quartzite. Type of rock may be less important than crevice size and moisture. Green salamanders can also be found beneath loose bark and in cracks of standing or fallen trees, and sometimes in or under logs on the ground.

Previously, arboreal habitat was deemed secondary to rock outcrops as preferred habitat. However, recent studies indicate that woody and arboreal habitats play a much larger role in the life history than generally thought.

### Status

The green salamander is ranked as critically imperiled in South Carolina but has no official State protective status. The U.S. Fish and Wildlife Service (Service) was petitioned in July 2012 to list the species. A 90-day finding by the Service found that

listing may be warranted. Currently the species is undergoing a status review.

### Threats

Habitat loss and alteration is a primary threat to the green salamander. Habitat destruction and degradation can occur as a result of logging, mining, road construction, water impoundments, and chemical contamination. Over-collection by pet trade enthusiasts, climate change, and the newly discovered salamander-specific chytrid fungus (*Batrachochytrium salamandrivorans*) could greatly reduce their chance of long-term viability.

### Management/Protection Needs

Actions needed to manage and protect existing populations of the green salamander consist of: limiting or avoiding habitat disturbance; protecting known populations; supporting survey efforts; education and outreach.

### References

- Apodaca, J. J., et al., On the evolutionary history of green salamanders (*Aneides aeneus*): Implications for management and conservation, August 2015. Report submitted to North Carolina Wildlife Resources Commission.
- Center for Biological Diversity—Petition to List 53 Amphibians and Reptiles, July 2012.

South Carolina Department of Natural Resources—State Wildlife Action Plan: 2010-2015.

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