



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Valley and Ridge Salamander

*Plethodon hoffmani*

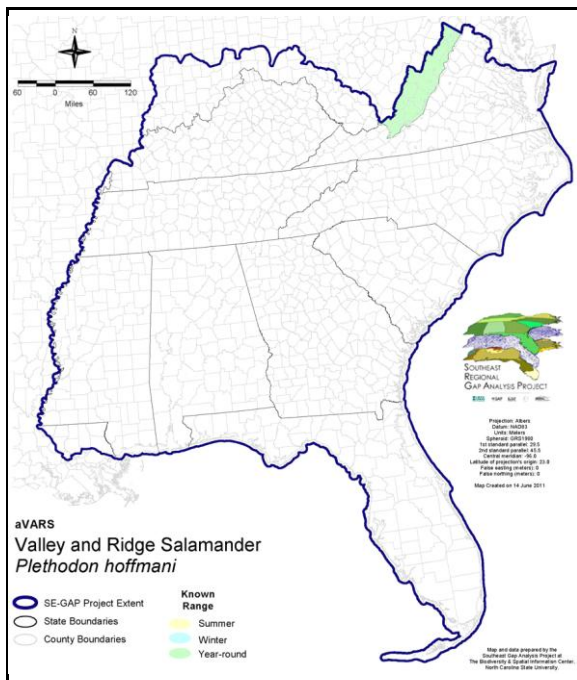
Taxa: Amphibian  
 Order: Caudata  
 Family: Plethodontidae

SE-GAP Spp Code: **aVARS**

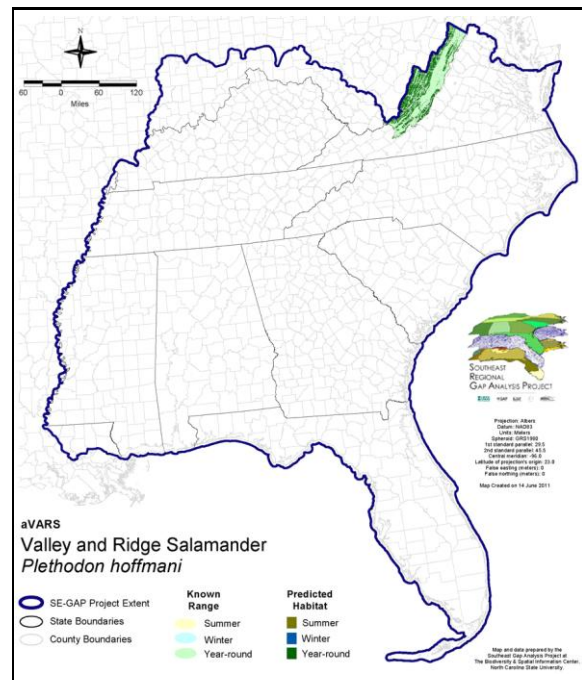
ITIS Species Code: 173657

NatureServe Element Code: AAAAD12080

#### KNOWN RANGE:



#### PREDICTED HABITAT:



Range Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Range\\_aVARS.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_aVARS.pdf)

Predicted Habitat Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Dist\\_aVARS.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_aVARS.pdf)

GAP Online Tool Link: <http://www.gapservice.ncsu.edu/segap/segap/index2.php?species=aVARS>

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/aVARS\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/aVARS_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: ---

NS Global Rank: G5

NS State Rank: MD (S5), PA (S4), VA (S4), WV (S4)

**SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:**

	US FWS		US Forest Service		Tenn. Valley Author.		US DOD/ACOE	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	387.9	< 1	0.0	0	0.0	0
Status 2	0.0	0	107,841.8	12	0.0	0	0.0	0
Status 3	0.0	0	244,323.0	26	0.0	0	43.7	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	352,552.7	38	0.0	0	43.7	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	4,381.7	< 1	0.0	0	0.0	0
Status 2	0.0	0	0.0	0	0.0	0	0.0	0
Status 3	0.0	0	3,817.8	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	8,199.5	< 1	0.0	0	0.0	0
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	0.0	0	19,512.5	2	0.0	0
Status 3	0.0	0	1,990.4	< 1	0.0	0	194.4	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	1,990.4	< 1	19,512.5	2	194.4	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	332.1	< 1	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	5.8	< 1	0.0	0
Total	0.0	0	332.1	< 1	5.8	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	4,769.6	< 1		
Status 2	0.0	0	0.0	0	127,686.4	14		
Status 3	0.0	0	0.0	0	250,369.3	53		
Status 4	308,155.1	33	0.4	< 1	308,161.3	33		
Total	308,155.1	33	0.4	< 1	690,986.6	100		

GAP Status 1: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a natural state within which disturbance events (of natural type, frequency, and intensity) are allowed to proceed without interference or are mimicked through management.

GAP Status 2: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a primarily natural state, but which may receive use or management practices that degrade the quality of existing natural communities.

GAP Status 3: An area having permanent protection from conversion of natural land cover for the majority of the area, but subject to extractive uses of either a broad, low-intensity type or localized intense type. It also confers protection to federally listed endangered and threatened species throughout the area.

GAP Status 4: Lack of irrevocable easement or mandate to prevent conversion of natural habitat types to anthropogenic habitat types. Allows for intensive use throughout the tract. Also includes those tracts for which the existence of such restrictions or sufficient information to establish a higher status is unknown.

## PREDICTED HABITAT MODEL(S):

### Year-round Model:

Habitat Description: The Valley and Ridge salamander is found in the physiographic region from which it gets its name and is associated with hardwood forest. They can be found under rocks, logs, and other surface cover along ravines and mountain slopes (Petranka 1998). They are sometimes found in the twilight zones of West Virginia caves (Petranka 1998). Courtship and mating probably occur in spring. A clutch of 3-8 eggs is laid in spring. The larval stage is passed in the egg and the female attends the clutch. Hatching occurs in August-September and sexual maturity is reached in 2-3 years. Stacy Smith, 15April05

Elevation Mask: < 1402m

### Selected Map Units:

Functional Group	Map Unit Name
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric

**CITATIONS:** Highton, R. 1986. *Plethodon hoffmani*. Catalogue of American Amphibians and Reptiles. 392:1-2.

Petranka, J. W. 1998. *Salamanders of the United States and Canada*. Washington DC: Smithsonian Inst. Press.

For more information:: SE-GAP Analysis Project / BaSIC  
127 David Clark Labs  
Dept. of Biology, NCSU  
Raleigh, NC 27695-7617  
(919) 513-2853  
[www.basic.ncsu.edu/segap](http://www.basic.ncsu.edu/segap)

Compiled: 15 September 2011

This data was compiled and/or developed by the Southeast GAP Analysis Project at The Biodiversity and Spatial Information Center, North Carolina State University.