



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

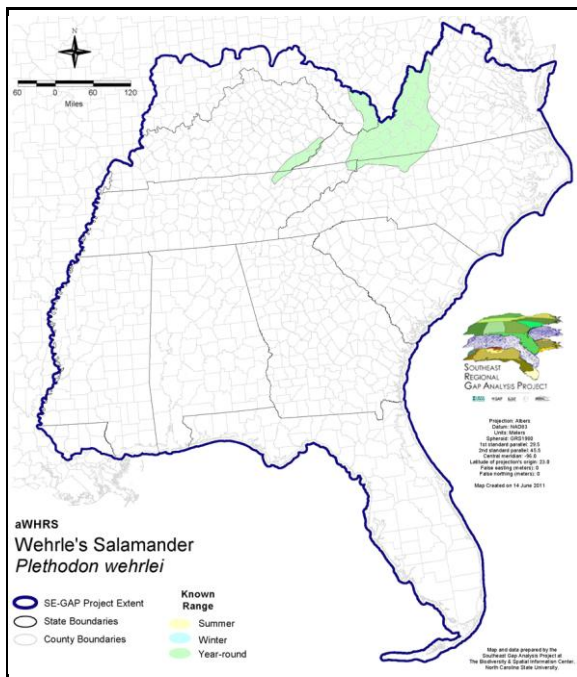
Wehrle's Salamander

Plethodon wehrlei

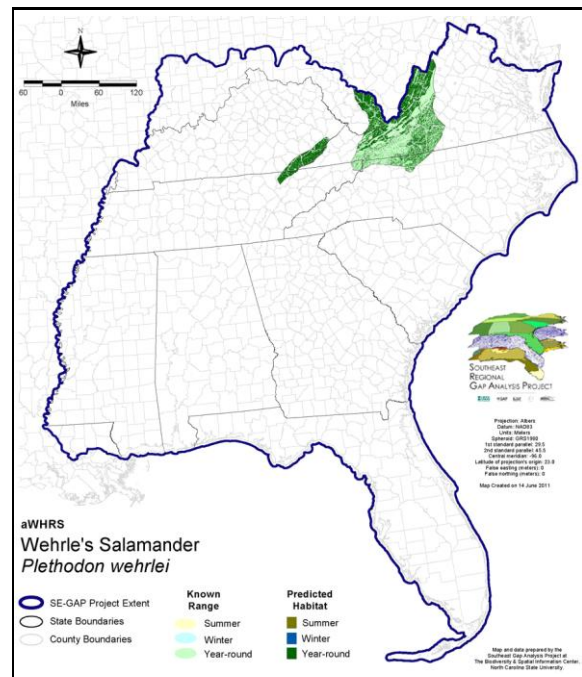
Taxa: Amphibian
 Order: Caudata
 Family: Plethodontidae

SE-GAP Spp Code: **aWHRS**
 ITIS Species Code: 173674
 NatureServe Element Code: AAAAD12220

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_aWHRS.pdf

Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_aWHRS.pdf

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aWHRS_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (E), MD (I), NC (T), NY (GN), OH (N), TN (D)

NS Global Rank: G4

NS State Rank: KY (S1), MD (S2), NC (S1), NY (S3), OH (SH), PA (S4), TN (S1), 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	740.6	< 1	0.0	0	0.0	0
Status 2	0.0	0	119,852.6	6	0.0	0	0.0	0
Status 3	0.0	0	295,110.4	14	29.3	< 1	432.2	< 1
Status 4	26.8	< 1	0.0	0	0.0	0	0.0	0
Total	26.8	< 1	415,703.6	19	29.3	< 1	432.2	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	7,603.7	< 1	0.0	0	0.0	0
Status 3	0.0	0	3,838.1	< 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	11,441.8	< 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	49,798.5	2	1,312.8	< 1
Status 3	0.0	0	6,995.6	< 1	17,381.1	< 1	5,865.8	< 1
Status 4	0.0	0	0.0	0	5,937.8	< 1	0.0	0
Total	0.0	0	6,995.6	< 1	73,117.4	3	7,178.7	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	2,730.2	< 1	0.0	0	0.0	0
Status 2	0.0	0	2,362.8	< 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	11.5	< 1	0.0	0
Total	0.0	0	5,092.9	< 1	11.5	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	3,470.8	< 1		
Status 2	0.0	0	0.0	0	180,930.4	8		
Status 3	0.0	0	0.0	0	329,652.5	29		
Status 4	1,318,000.1	62	65.9	< 1	1,329,953.1	62		
Total	1,318,000.1	62	65.9	< 1	1,844,006.8	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: Wehrle's salamander is found in upland forests near the entrances of caves and among rock outcrops (Martof et al. 1980). It is perhaps most frequently found in rocky gorges that are covered with mesic hardwood forest (Redmond and Scott 1996). They are found in rock crevices, under rocks, logs, and leaves, and in twilight zone of caves (at lower elevations). Courtship occurs in the fall and spring and eggs are laid in damp logs, moss, cave crevices, and other protected sites. The eggs are laid from March to April in New York and in January-March in Pennsylvania. Wehrle's salamander reaches sexual maturity in 4-5 years. Stacy Smith, 15April05

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	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Forest/Woodland	Central and Southern Appalachian Spruce-Fir Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
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 Piedmont Dry Oak-(Pine) Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Piedmont Mesic Forest
Rock Outcrop	North-Central Appalachian Acidic Cliff and Talus
Rock Outcrop	North-Central Appalachian Circumneutral Cliff and Talus
Rock Outcrop	Southern Piedmont Cliff

- CITATIONS:** Behler, J. L., and F. W. King. 1979. The Audubon Society field guide to North American reptiles and amphibians. Alfred A. Knopf, New York. 719 pp.
- Green, N. B., and T. K. Pauley. 1987. Amphibians and reptiles in West Virginia. University of Pittsburg Press, Pittsburg, Pennsylvania. xi + 241 pp.
- Highton, R. 1987. PLETHODON WEHRLEI. Cat. Am. Amph. Rep. 402.1-402.3.
- Martof, B. S., W. M. Palmer, J. R. Bailey, and J. R. Harrison, III. 1980. Amphibians and reptiles of the Carolinas and Virginia. University of North Carolina Press, Chapel Hill, North Carolina. 264 pp.
- Redmond, W. H., and A. F. Scott. 1996. Atlas of amphibians in Tennessee. The Center for Field Biology, Austin Peay State University, Miscellaneous Publication Number 12. v + 94 pp.

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