



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Southern Gray-cheeked Salamander

Plethodon metcalfi

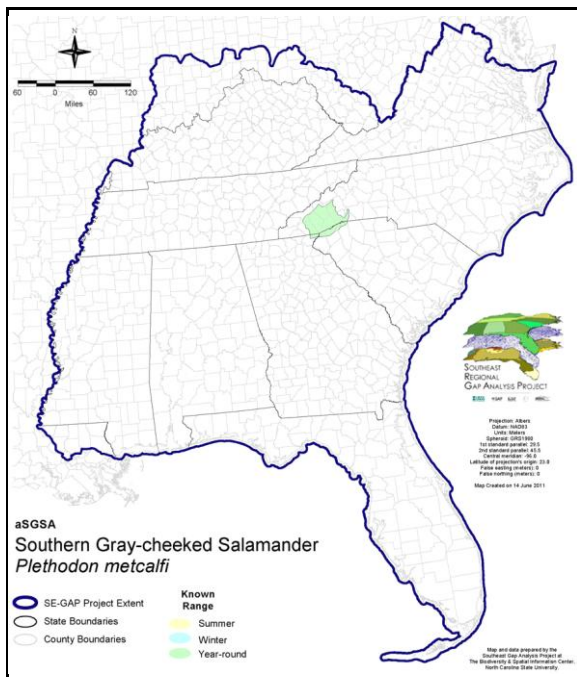
Taxa: Amphibian
 Order: Caudata
 Family: Plethodontidae

SE-GAP Spp Code: **aSGSA**

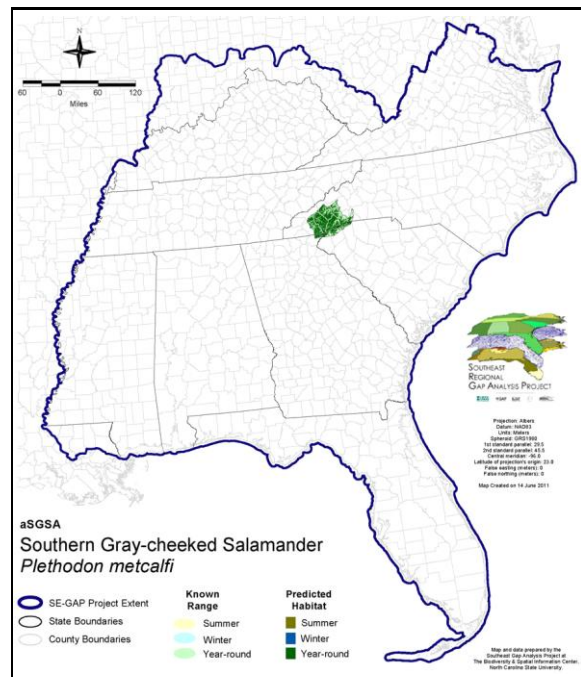
ITIS Species Code: ---

NatureServe Element Code: AAAAD12440

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aSGSA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: ---

NS Global Rank: G3

NS State Rank: GA (S2), NC (S3?), SC (SNR)

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	1,794.1	< 1	0.0	0	0.0	0
Status 2	0.0	0	5,936.0	< 1	0.0	0	0.0	0
Status 3	0.0	0	140,192.0	22	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	147,922.0	23	0.0	0	0.0	0
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	5,972.8	< 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	3,098.3	< 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	9,071.0	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	12,157.3	2	2,894.3	< 1	0.0	0
Status 3	12,143.7	2	3,609.5	< 1	1,289.8	< 1	3,482.3	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	12,143.7	2	15,766.8	2	4,184.1	< 1	3,482.3	< 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	2,338.7	< 1	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	28.9	< 1	0.0	0
Status 4	0.0	0	0.0	0	114.6	< 1	0.0	0
Total	0.0	0	2,338.7	< 1	143.5	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	7,766.8 1			
Status 2	0.0	0	0.0	0	23,326.3 4			
Status 3	0.0	0	0.0	0	163,844.5 48			
Status 4	297,331.9	47	12.8	< 1	297,459.3 47			
Total	297,331.9	47	12.8	< 1	492,396.8 100			

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: The southern gray-cheeked salamander is found in the Cowee, Balsam (except the extreme northern part), and the Blue Ridge (except the extreme northeastern part) ranges of North Carolina, South Carolina, and possibly Georgia (Highton and Peabody 2000). They are found at elevations of at least 256-1,295 m (usually above 800 m) (Highton and Peabody 2000). They have been observed at elevations up to 1,658 m in the Great Smoky Mountains National Park, where it likely occurs higher than 1,768 m (Dodd 2004). They may be found in moist woodland habitats, taking refuge by day under rotting logs, burrows, leaf litter or rocks, and prowling the forest floor by night. Red-legged salamanders may also inhabit crevices in shaded rock outcrops. Populations near and into Georgia may be restricted to deep moist gorges and high annual precipitation belts (Petranka 1998). Eggs are probably laid in underground cavities. Stacy Smith, 19April05

Elevation Mask: > 256m and < 2500m

Selected Map Units:

Functional Group	Map Unit Name
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	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland

CITATIONS: Dodd, C. K., Jr. 2004. The Amphibians of Great Smoky Mountains National Park. Univ. Tennessee Press, Knoxville. 283 pp.

Highton, R. and R.B. Peabody. 2000. Geographic protein variation and speciation in salamanders of the *Plethodon jordani* and *Plethodon glutinosus* complexes in the Southern Appalachian mountains with the description of four new species. Pages 31-94 in Br

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

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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.