



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

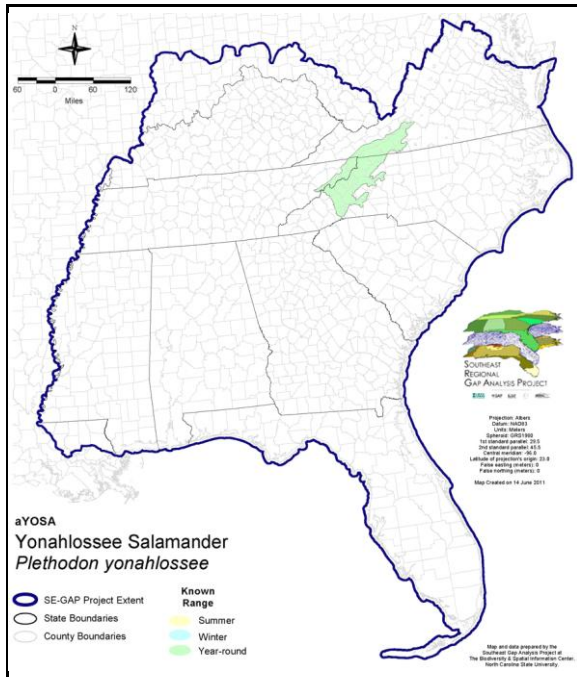
### Yonahlossee Salamander

*Plethodon yonahlossee*

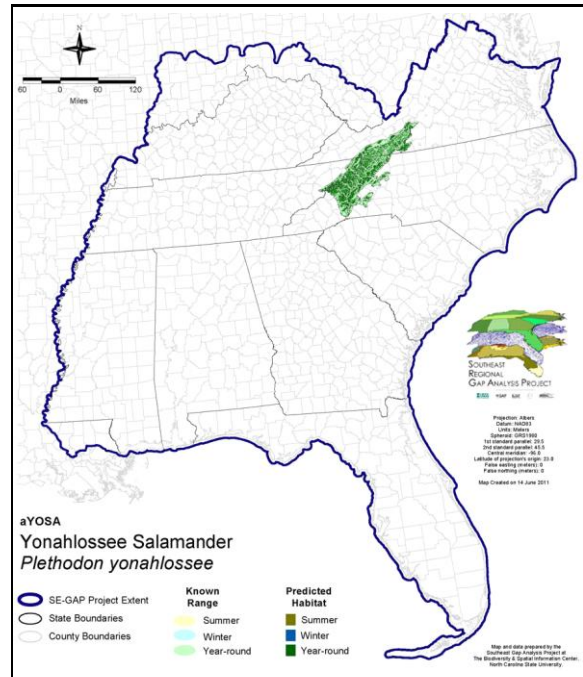
Taxa: Amphibian  
 Order: Caudata  
 Family: Plethodontidae

SE-GAP Spp Code: **aYOSA**  
 ITIS Species Code: 173676  
 NatureServe Element Code: AAAAD12240

#### KNOWN RANGE:



#### PREDICTED HABITAT:



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

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

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/aYOSA\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/aYOSA_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---  
 State Status: ---  
 NS Global Rank: G4  
 NS State Rank: NC (S4), TN (S3), VA (S3)

**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	10,484.4	< 1	0.0	0	0.0	0
Status 2	0.0	0	19,421.2	1	0.0	0	0.0	0
Status 3	0.0	0	198,612.6	15	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	228,518.2	17	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	0.0	0	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	14,925.9	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	14,925.9	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	8,229.7	< 1	0.0	0
Status 3	0.0	0	12,908.1	< 1	9,598.6	< 1	1,254.7	< 1
Status 4	0.0	0	0.0	0	913.7	< 1	0.0	0
Total	0.0	0	12,908.1	< 1	18,742.0	1	1,254.7	< 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	2,111.2	< 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	72.0	< 1	0.0	0
Total	0.0	0	2,111.2	< 1	72.0	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	10,484.4	< 1		
Status 2	0.0	0	0.0	0	29,762.1	2		
Status 3	0.0	0	0.0	0	237,299.9	33		
Status 4	844,459.9	64	11.3	< 1	846,370.6	64		
Total	844,459.9	64	11.3	< 1	1,123,916.9	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: In North Carolina, this salamander occurs in the mountains north and east of the French Broad River at nearly all elevations within its range (Martof et al. 1980). In Tennessee, the range of *P. yonahlossee* is strikingly coincident with that of *P. welleri* (Redmond and Scott 1996). *Yonahlossee* salamanders occur in mature, primarily deciduous woodlands (Redmond and Scott 1996, Petranka 1998). Found at elevations from 436 to 1737 m (Guttman et al 1978). Petranka (1998) suggests that they are most abundant in old growth forest. They are associated with wooded hillsides and ravines where rock slides are covered with mosses and ferns, damp, shaded, cracked rock outcrops, and grassy areas near woodlands. They can be found in and under rotting logs and other cover by day. All stages of *P. yonahlossee* are terrestrial. Stacy Smith, 15April05

Elevation Mask: > 436m and < 1737m

### Selected Map Units:

Functional Group	Map Unit Name
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood 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 Piedmont Mesic Forest

- CITATIONS:** Adler, K. 1965. *Plethodon longicrus*. Cat. Am. Amph. Rep. 18.1.
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- Guttman, S. I., A. A. Karlin, and G. M. Labanick. 1978. A biochemical and morphological analysis of the relationship between *Plethodon longicrus* and *Plethodon yonahlossee* (Amphibia, Urodela, Plethodontidae). J. Herpetol. 12:445-454.
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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.