



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

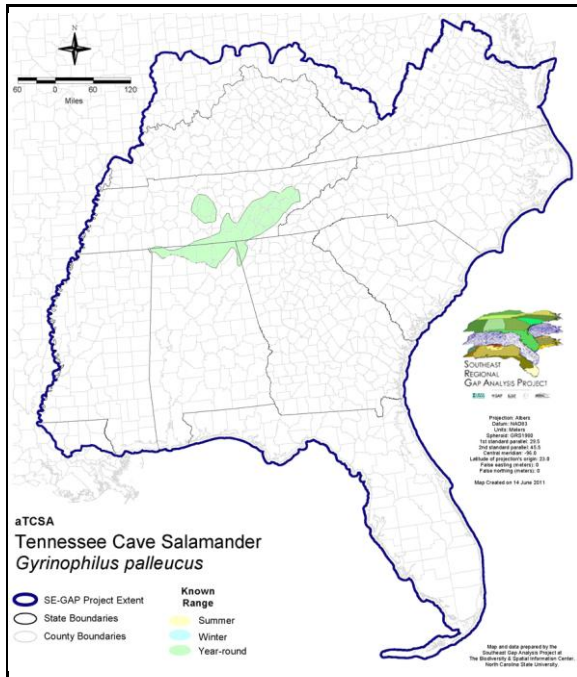
### Tennessee Cave Salamander

*Gyrinophilus palleucus*

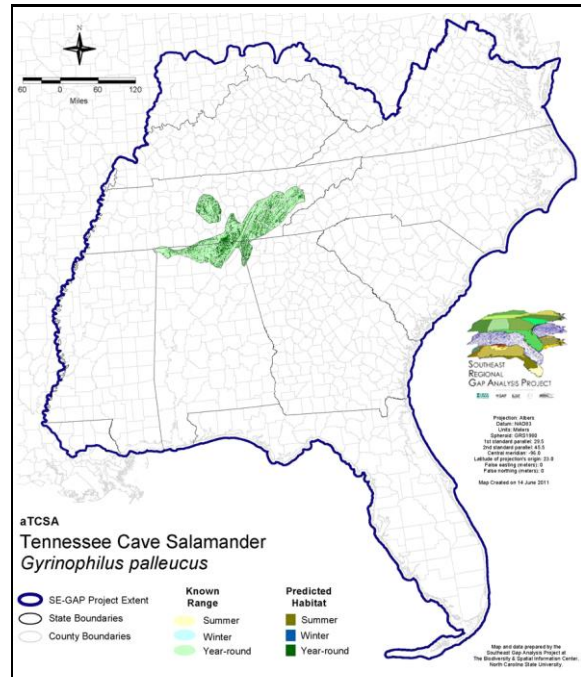
Taxa: Amphibian  
 Order: Caudata  
 Family: Plethodontidae

SE-GAP Spp Code: **aTCSA**  
 ITIS Species Code: 173714  
 NatureServe Element Code: AAAAD06010

#### KNOWN RANGE:



#### PREDICTED HABITAT:



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

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

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/aTCSA\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/aTCSA_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---  
 State Status: AL (SP), GA (T), TN (T)  
 NS Global Rank: G2G3  
 NS State Rank: AL (S2), GA (S1), TN (S2)

**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	4,182.4	< 1	27.3	< 1	0.0	0	0.0	0
Status 2	43.7	< 1	45.3	< 1	0.0	0	0.0	0
Status 3	0.0	0	707.9	< 1	11,522.4	1	8,987.0	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	4,226.0	< 1	780.5	< 1	11,522.4	1	8,987.0	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	103.7	< 1	0.0	0	0.0	0
Status 2	0.0	0	105.0	< 1	0.0	0	0.0	0
Status 3	6,202.7	< 1	933.7	< 1	0.0	0	160.8	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	6,202.7	< 1	1,142.4	< 1	0.0	0	160.8	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	284.4	< 1	53.0	< 1	0.0	0
Status 2	0.0	0	2,355.1	< 1	13,918.1	1	0.0	0
Status 3	0.0	0	4,233.1	< 1	4,500.3	< 1	0.0	0
Status 4	0.0	0	0.0	0	13.9	< 1	0.0	0
Total	0.0	0	6,872.6	< 1	18,485.3	2	0.0	0
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	4,231.5	< 1	0.0	0	0.0	0
Status 2	0.0	0	5,423.7	< 1	0.0	0	530.1	< 1
Status 3	0.0	0	756.5	< 1	248.2	< 1	0.0	0
Status 4	0.0	0	1.6	< 1	4.0	< 1	0.0	0
Total	0.0	0	10,413.3	1	252.2	< 1	530.1	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	8,882.3	< 1		
Status 2	0.0	0	0.0	0	22,421.0	2		
Status 3	0.0	0	0.0	0	38,252.6	4		
Status 4	885,295.8	93	771.1	< 1	886,100.2	93		
Total	885,295.8	93	771.1	< 1	955,656.1	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 Tennessee cave salamander is an aquatic species of cave pools (Mount 1984). It is restricted to limestone caves containing slow running or still water (Mount 1986) in shallow pools in both rock and sandy substrates. These uncommon salamanders have a narrow geographic range and, in addition, a very narrow habitat preference, occurring in only a small percentage of caves within their range. S. Smith  
18Feb05

### 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	Nashville Basin Limestone Glade
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Rock Outcrop	Southern Interior Calcareous Cliff
Rock Outcrop	Southern Interior Sinkhole Wall
Wetlands	South-Central Interior Small Stream and Riparian

**CITATIONS:** Mount, R.H, (ed). 1984 Vertebrate Wildlife of Alabama, Alabama Agricultural Experiment Station, Auburn University, 44 pp.

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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.