



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

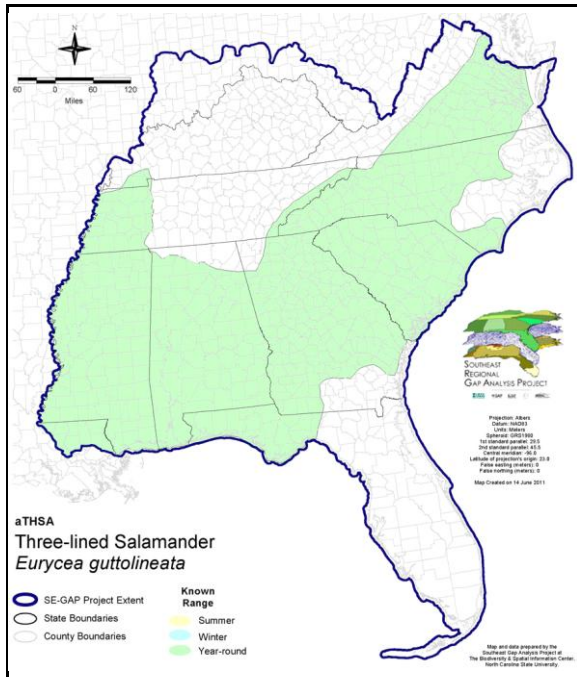
Three-lined Salamander

Eurycea guttolineata

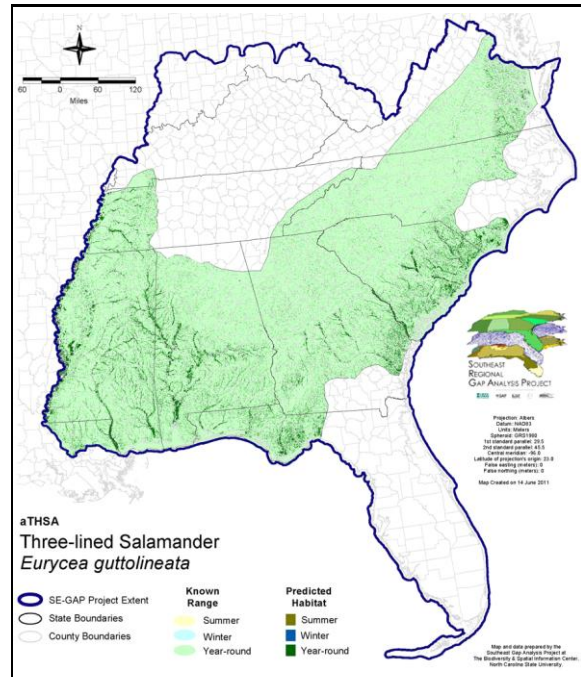
Taxa: Amphibian
 Order: Caudata
 Family: Plethodontidae

SE-GAP Spp Code: **aTHSA**
 ITIS Species Code: 586362
 NatureServe Element Code: AAAAD05290

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aTHSA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (T), MS (Non-game species in need of management)

NS Global Rank: G5

NS State Rank: AL (S5), FL (SNR), GA (S4S5), KY (S2), LA (S4), MS (S5), NC (S5), SC (SNR), TN (S5), VA (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	7,938.2	< 1	6,037.7	< 1	0.0	0	0.0	0
Status 2	66,602.3	< 1	26,107.5	< 1	0.0	0	1,523.1	< 1
Status 3	766.3	< 1	229,886.2	3	3,661.7	< 1	77,701.0	1
Status 4	9.4	< 1	0.0	0	0.0	0	0.0	0
Total	75,316.1	1	262,031.4	4	3,661.7	< 1	79,224.0	1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	13,245.8	< 1	9.4	< 1	0.0	0
Status 2	0.0	0	3.2	< 1	1,285.5	< 1	0.0	0
Status 3	14,304.9	< 1	4,685.3	< 1	0.0	0	983.7	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	14,304.9	< 1	17,934.4	< 1	1,294.8	< 1	983.7	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	125.6	< 1	0.0	0	0.0	0
Status 2	0.0	0	1,153.3	< 1	160,733.1	2	19.8	< 1
Status 3	1,982.5	< 1	66,455.0	< 1	57,628.6	< 1	40,408.2	< 1
Status 4	0.0	0	0.0	0	10,629.2	< 1	5.9	< 1
Total	1,982.5	< 1	67,733.8	< 1	228,990.9	3	40,433.9	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,697.5	< 1	0.0	0	0.0	0
Status 2	532.3	< 1	24,745.6	< 1	0.0	0	126.5	< 1
Status 3	0.0	0	750.5	< 1	1,282.6	< 1	15,836.5	< 1
Status 4	0.0	0	0.0	0	682.7	< 1	0.0	0
Total	532.3	< 1	27,193.6	< 1	1,965.2	< 1	15,963.0	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	29,054.2	< 1		
Status 2	0.0	0	0.0	0	282,832.0	4		
Status 3	347.8	< 1	0.0	0	516,680.7	10		
Status 4	6,132,735.8	85	7,835.9	< 1	6,162,518.7	85		
Total	6,133,083.6	85	7,835.9	< 1	6,991,085.6	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: In the Coastal Plain the preferred habitat of the three-lined salamander is floodplain forest with logs or piles of flood debris. Outside of coastal plain individuals are often found along the margins of streams or in the vicinity of ditches, vernal ponds and bogs that are fed by seepages or springs. They are especially common in forested floodplains, where they spend daylight hours under logs, in burrows, or in piles of damp debris deposited by floods (Mount 1975). Under mesic conditions, they can be found some distance from water (Martof et al. 1980). This salamander is common in the piedmont and coastal plain, and moderately common but restricted to larger valley areas in the mountains (Martof et al. 1980). They are primarily found below 800 m in elevations, but some populations occur sporadically in the southern Appalachians up to 1000 m. Egg deposition occurs in late fall or early winter. They lay several dozen eggs singly or in small clusters in underground crevices associated with springs, temporary pools, and streams. The larvae are aquatic and hatch in 6-8 weeks. Metamorphosis occurs several months. They are sexually mature in 1-2 years. Stacy Smith, 15April05

Elevation Mask: < 1000m

Hydrography Mask:

Freshwater Only

Utilizes flowing water features with buffer of 60m from selected water features.

Utilizes open water features with buffer of 60m from selected water features.

Utilizes wet vegetation features with buffers of 60m from and unlimited into selected vegetation features.

Selected Map Units:

Functional Group	Map Unit Name
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Northern Mesic Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Southern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Southern Mesic Slope Forest
Forest/Woodland	South-Central Interior Mesophytic Forest
Forest/Woodland	Southern and Central Appalachian Cove Forest
Forest/Woodland	Southern Piedmont Mesic Forest
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Forest Modifier
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Herbaceous Modifier
Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Herbaceous Wetland
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Taxodium/Nyssa Modifier
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
Wetlands	Atlantic Coastal Plain Northern Basin Peat Swamp
Wetlands	Atlantic Coastal Plain Northern Basin Swamp and Wet Hardwood Forest
Wetlands	Atlantic Coastal Plain Peatland Pocosin
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall
Wetlands	East Gulf Coastal Plain Interior Shrub Bog
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier
Wetlands	East Gulf Coastal Plain Northern Seepage Swamp
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	Lower Mississippi River Bottomland and Floodplain Forest
Wetlands	Lower Mississippi River Bottomland Depressions - Forest Modifier
Wetlands	Lower Mississippi River Bottomland Depressions - Herbaceous Modifier
Wetlands	Mississippi River Low Floodplain (Bottomland) Forest
Wetlands	Mississippi River Riparian Forest
Wetlands	South-Central Interior Large Floodplain - Forest Modifier

Wetlands	South-Central Interior Large Floodplain - Herbaceous Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	Southern and Central Appalachian Bog and Fen
Wetlands	Southern Appalachian Seepage Wetland
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Herbaceous Seepage Bog
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Southern Coastal Plain Spring-run Stream Aquatic Vegetation
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
Wetlands	Southern Piedmont Seepage Wetland
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest
Wetlands	Southern Piedmont/Ridge and Valley Upland Depression Swamp
Wetlands	Western Highland Rim Seepage Fen

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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.