

SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

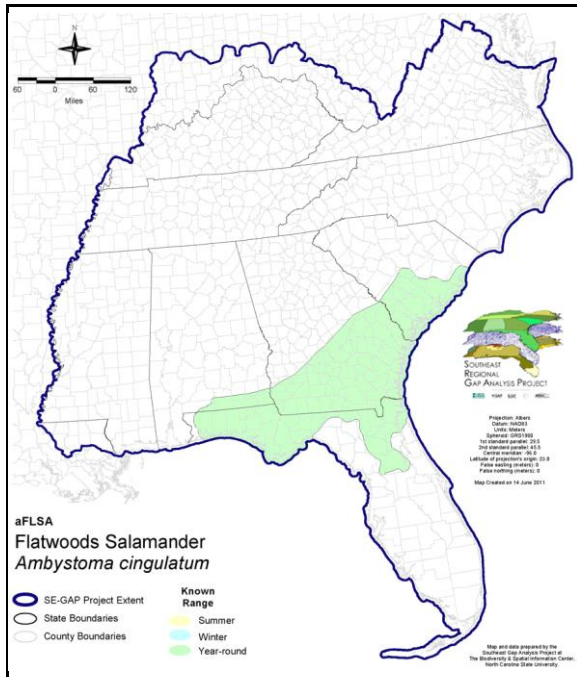
Flatwoods Salamander

Ambystoma cingulatum

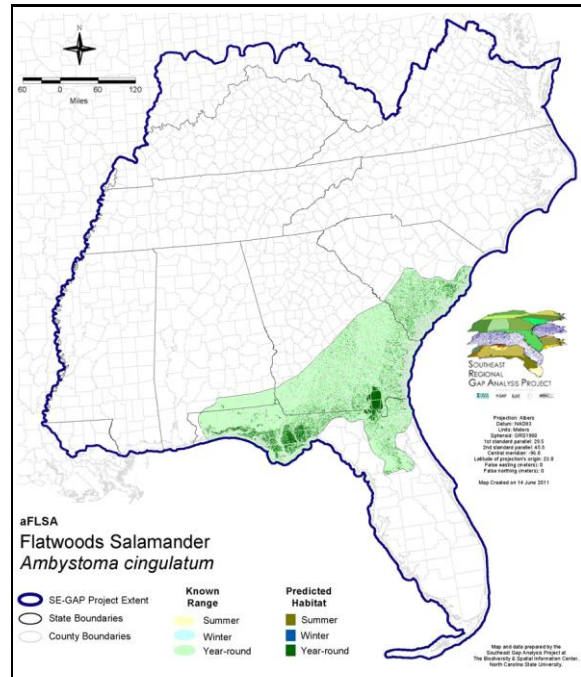
Taxa: Amphibian
 Order: Caudata
 Family: Ambystomatidae

SE-GAP Spp Code: **aFLSA**
 ITIS Species Code: 173596
 NatureServe Element Code: AAAAA01030

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aFLSA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: LT
 State Status: FL (FT), GA (T), SC (SE-Endangered)
 NS Global Rank: G2
 NS State Rank: FL (S2), GA (S2), SC (S1)

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	156,708.1	8	2,468.8	< 1	0.0	0	0.0	0
Status 2	8,318.2	< 1	29,385.3	1	0.0	0	2.3	< 1
Status 3	36.8	< 1	206,773.5	10	0.0	0	56,897.3	3
Status 4	1,329.9	< 1	0.0	0	0.0	0	0.0	0
Total	166,393.0	8	238,627.5	12	0.0	0	56,899.6	3
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	159.8	< 1	11.8	< 1	0.0	0
Status 2	0.0	0	473.8	< 1	715.5	< 1	44.0	< 1
Status 3	350.7	< 1	0.8	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	350.7	< 1	634.4	< 1	727.3	< 1	44.0	< 1
	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	116.9	< 1	23,869.3	1	0.0	0
Status 3	0.0	0	26,981.7	1	373.8	< 1	54,788.2	3
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	27,098.6	1	24,243.0	1	54,788.2	3
	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	56.8	< 1	1,124.6	< 1	0.0	0	268.2	< 1
Status 3	0.0	0	254.2	< 1	3,395.8	< 1	8,325.0	< 1
Status 4	0.0	0	0.0	0	9.3	< 1	0.0	0
Total	56.8	< 1	1,378.8	< 1	3,405.1	< 1	8,593.2	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	159,348.5	8		
Status 2	389.8	< 1	0.0	0	64,764.6	3		
Status 3	1,036.2	< 1	1.0	< 1	359,214.9	27		
Status 4	1,268,076.5	62	109.9	< 1	1,268,195.7	62		
Total	1,269,502.5	62	110.9	< 1	1,851,523.7	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: Habitat generally includes fire-maintained, open-canopied longleaf pine, slash pine savannahs and flatwoods of the southeastern coastal plain. Populations are small and widely scattered. Slash pine flatwoods provide only a small fraction of the habitat occupied by adult flatwoods salamanders. The wetter portion of pine flatwoods and associated seepage bogs, especially near by swamps and cypress strands are preferred habitat. Breeding occurs in ephemeral habitats including pine flatwoods depressions, cypress- or blackgum-dominated swamps, ditches, borrow pits, and marshy pasture ponds. They are also occasionally seen in pitcher plant bogs. These breeding sites are typically associated with longleaf pine, slash pine, and wiregrass. Eggs are laid terrestrially and hatch a few hours after inundated. Most longleaf-wiregrass communities have been destroyed and replaced by slash pine or mixed slash pine-longleaf communities (Petranka). Movements of greater than 1700 m have been recorded away from breeding ponds into surrounding flatwoods and adults regularly move 300 to 500 m from breeding ponds. The adults are fossorial and spend the non-breeding season in crayfish burrows and root channels. Prescribed winter burns may be harmful as the salamanders are near the surface in winter. Harmed by ditching & clear cuts (Ashton 1988). Home range may be about 1500 square m of lowland wet pine or temperate flooded pineland (Ashton 1992). S. Smith 18Feb05

Selected Map Units:

Functional Group	Map Unit Name
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Taxodium/Nyssa Modifier
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Sandhill Seep
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods
Wetlands	Central Florida Herbaceous Seep
Wetlands	Central Florida Pine Flatwoods
Wetlands	East Gulf Coastal Plain Interior Shrub Bog
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Offsite Hardwood Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Open Understory Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Scrub/Shrub Understory Modifier
Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
Wetlands	East Gulf Coastal Plain Treeless Savanna and Wet Prairie
Wetlands	South Florida Dwarf Cypress Savanna
Wetlands	South Florida Pine Flatwoods
Wetlands	Southern Coastal Plain Herbaceous Seepage Bog
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall

Selected Secondary Map Units within 120m of Primary Map Units:

Functional Group	Map Unit Name
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Open Understory Modifier
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Scrub/Shrub Understory Modifier
Forest/Woodland	Atlantic Coastal Plain Fall-Line Sandhills Longleaf Pine Woodland - Loblolly Modifier
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland
Forest/Woodland	Florida Longleaf Pine Sandhill - Open Understory Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Open Understory Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Loblolly Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Pine Modifier
Water	Open Water (Fresh)

CITATIONS: Ashton, R. E., Jr., and P. S. Ashton. 1988. Handbook of reptiles and amphibians of Florida. Part Three. The amphibians. Windward Publ. Co.,

Miami.

Ashton, R.E. 1992. Flatwoods salamander (*Ambystoma cingulatum*). Pages 39-43 in Rare and endangered biota of Florida: reptiles and amphibians (P. Moler, ed.). University Press of Florida, Gainesville.

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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.