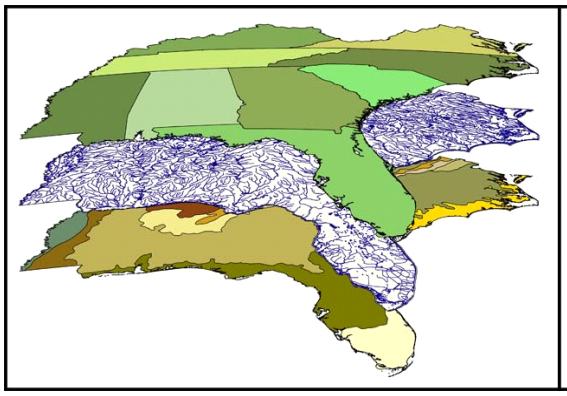


SOUTHEAST GAP ANALYSIS PROJECT

USGS gap BaSIC NARSAL

Species Modeling Report

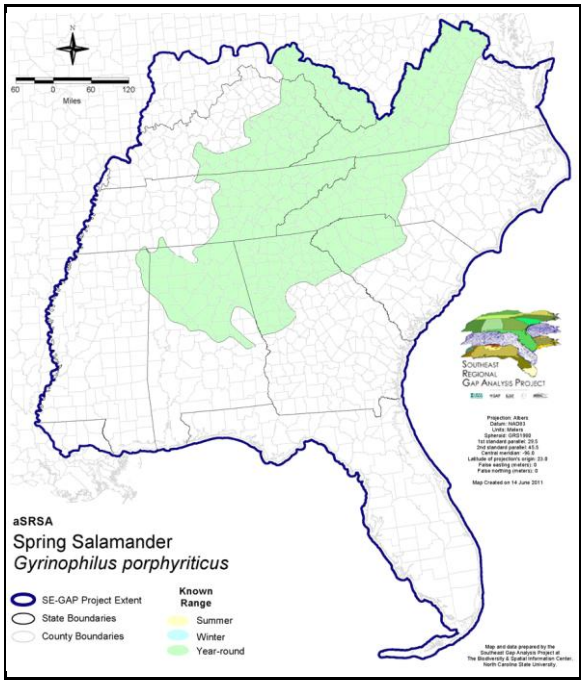
Spring Salamander

Gyrinophilus porphyriticus

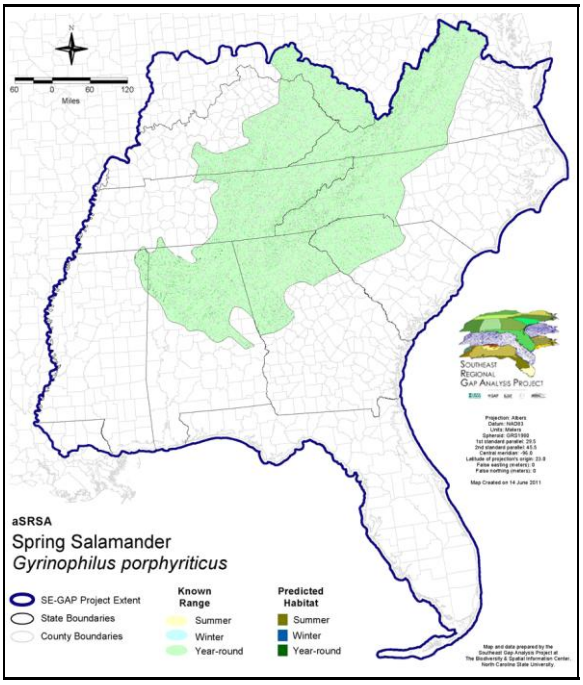
Taxa: Amphibian
Order: Caudata
Family: Plethodontidae

SE-GAP Spp Code: **aSRSA**
ITIS Species Code: 173715
NatureServe Element Code: AAAAD06020

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_aSRSA.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_aSRSA.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=aSRSA
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aSRSA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: CT (T), KY (N), MA (- WL), ME (SC), MS (LE), NY (GN), RI (Concern), ON (EXP), QC (Susceptible)

NS Global Rank: G5

NS State Rank: AL (S4), CT (S2), GA (S4), IN (SNR), KY (S4), MA (S3S4), MD (S4), ME (S3), MS (S1), NC (S5), NH (S4), NJ (SNR), NY (S5), OH (SNR), PA (S5), RI (S1), SC (SNR), TN (S5), VA (S5), VT (S4), WV (S5), ON (SX), QC (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	1,747.3	< 1	2,346.2	< 1	0.0	0	0.0	0
Status 2	40.4	< 1	22,147.1	2	0.0	0	4.1	< 1
Status 3	0.0	0	112,753.4	8	4,084.2	< 1	3,234.2	< 1
Status 4	4.0	< 1	0.0	0	0.0	0	0.0	0
Total	1,791.6	< 1	137,246.8	10	4,084.2	< 1	3,238.3	< 1

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	23,433.9	2	0.0	0	0.0	0
Status 2	0.0	0	474.3	< 1	0.0	0	0.0	0
Status 3	851.0	< 1	5,792.6	< 1	0.0	0	21.0	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	851.0	< 1	29,700.8	2	0.0	0	21.0	< 1

	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	78.0	< 1	3.3	< 1	0.0	0
Status 2	0.0	0	1,364.1	< 1	14,717.4	1	37.3	< 1
Status 3	1,204.7	< 1	4,143.2	< 1	6,585.6	< 1	1,084.3	< 1
Status 4	0.0	0	0.0	0	3,416.3	< 1	0.0	0
Total	1,204.7	< 1	5,585.3	< 1	24,722.6	2	1,121.6	< 1

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	557.1	< 1	0.0	0	0.0	0
Status 2	0.0	0	2,618.9	< 1	1.8	< 1	126.5	< 1
Status 3	0.0	0	178.2	< 1	65.6	< 1	39.7	< 1
Status 4	0.0	0	0.0	0	37.2	< 1	0.0	0
Total	0.0	0	3,354.2	< 1	104.6	< 1	166.2	< 1

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	28,165.9	2
Status 2	0.0	0	0.0	0	41,532.0	3
Status 3	0.0	0	0.0	0	140,037.5	19
Status 4	1,015,392.4	76	76.7	< 1	1,022,338.9	76
Total	1,015,392.4	76	76.7	< 1	1,232,074.3	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 spring salamander is found in hardwood forests in the moist areas near springs, seepages, and small streams that lack predatory fish (Mount 1984). Sometimes this salamander will be found in forested wet areas away from streams. Caves and crevices at the base of damp riparian rockfaces are also used (Martof et al. 1980). Occasionally found in swamps and lake margins. They occur from 100 to 2000m in elevation. Clutch size averages 20-60. Eggs usually are attached to undersides of rocks in running water. The female stays with eggs until hatching (about 3 months). The aquatic larvae metamorphose after about 2-4 years and are probably sexually mature within 1 year after metamorphosis. S. Smith 18Feb05

Elevation Mask: > 100m and < 2000m

Hydrography Mask:

Freshwater Only

Utilizes flowing water features with buffer of 30m from selected water features.

Utilizes wet vegetation features with buffer of unlimited into selected vegetation features.

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	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	East Gulf Coastal Plain Limestone Forest
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Northern Mesic Hardwood Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	South-Central Interior Mesophytic 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 Low Mountain Pine 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 Piedmont Dry Oak-(Pine) Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Hardwood Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Piedmont Mesic Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Rock Outcrop	Central Interior Acidic Cliff and Talus
Rock Outcrop	North-Central Appalachian Acidic Cliff and Talus
Rock Outcrop	North-Central Appalachian Circumneutral Cliff and Talus
Rock Outcrop	Southern Appalachian Montane Cliff
Rock Outcrop	Southern Appalachian Spray Cliff
Rock Outcrop	Southern Interior Acid Cliff
Rock Outcrop	Southern Interior Calcareous Cliff
Rock Outcrop	Southern Interior Sinkhole Wall

Rock Outcrop	Southern Piedmont Cliff
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 Brownwater River Floodplain Forest
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Central Appalachian Riparian - Herbaceous Modifier
Wetlands	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	East Gulf Coastal Plain Northern Seepage Swamp
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	North-Central Appalachian Acidic Swamp
Wetlands	North-Central Appalachian Seepage Fen
Wetlands	North-Central Interior and Appalachian Rich Swamp
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	Southern and Central Appalachian Bog and Fen
Wetlands	Southern Appalachian Seepage Wetland
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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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.