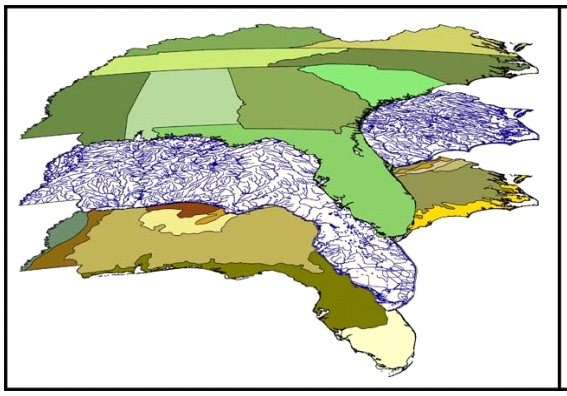


SOUTHEAST GAP ANALYSIS PROJECT

USGS gap BaSIC NARSAL

Species Modeling Report

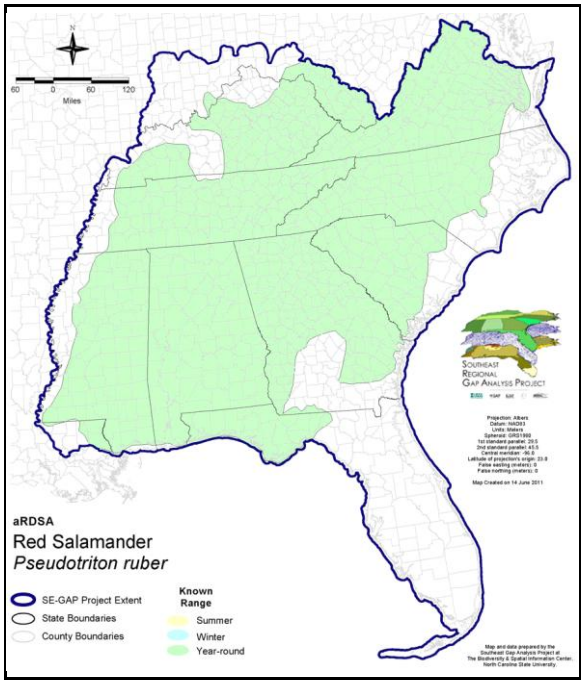
Red Salamander

Pseudotriton ruber

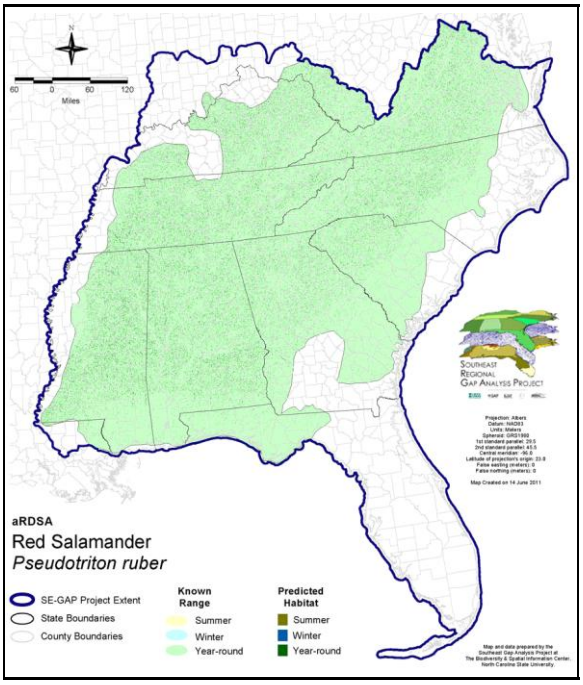
Taxa: Amphibian
Order: Caudata
Family: Plethodontidae

SE-GAP Spp Code: **aRDSA**
ITIS Species Code: 173680
NatureServe Element Code: AAAAD13020

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_aRDSA.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_aRDSA.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=aRDSA
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aRDSA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: KY (N), LA (Prohibited), MS (Non-game species in need of management), NY (GN)

NS Global Rank: G5

NS State Rank: AL (S5), DC (S3), DE (S3), FL (SNR), GA (S5), IN (SNR), KY (S5), LA (S2), MD (S5), MS (S3), NC (S5), NJ (SNR), NY (S3S4), OH (SNR), PA (S5), SC (SNR), TN (S5), VA (S5), WV (S3), ON (SNA)

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	2,290.9	< 1	608.1	< 1	0.0	0	0.0	0
Status 2	4,197.4	< 1	11,134.9	< 1	0.0	0	371.3	< 1
Status 3	136.4	< 1	99,337.1	2	4,640.8	< 1	24,690.3	< 1
Status 4	6.8	< 1	0.0	0	0.0	0	0.0	0
Total	6,631.4	< 1	111,080.1	3	4,640.8	< 1	25,061.7	< 1

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	4,002.9	< 1	0.0	0	0.0	0
Status 2	0.0	0	527.1	< 1	2.3	< 1	0.0	0
Status 3	1,294.9	< 1	7,687.5	< 1	0.0	0	57.0	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	1,294.9	< 1	12,217.6	< 1	2.3	< 1	57.0	< 1

	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	111.9	< 1	9.3	< 1	0.0	0
Status 2	0.0	0	718.0	< 1	23,775.5	< 1	38.8	< 1
Status 3	1,571.9	< 1	7,349.0	< 1	11,359.5	< 1	4,117.6	< 1
Status 4	0.0	0	0.0	0	6,632.4	< 1	0.7	< 1
Total	1,571.9	< 1	8,178.8	< 1	41,776.7	< 1	4,157.1	< 1

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	784.7	< 1	0.0	0	0.0	0
Status 2	38.6	< 1	3,346.8	< 1	2.8	< 1	113.7	< 1
Status 3	0.0	0	573.8	< 1	336.3	< 1	907.2	< 1
Status 4	0.0	0	0.0	0	273.2	< 1	0.0	0
Total	38.6	< 1	4,705.4	< 1	612.3	< 1	1,020.9	< 1

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	7,807.8	< 1
Status 2	0.0	0	0.0	0	44,267.2	1
Status 3	0.5	< 1	0.0	0	164,059.8	6
Status 4	3,916,476.9	92	869.7	< 1	3,930,885.2	93
Total	3,916,477.4	92	869.7	< 1	4,147,020.0	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: Relatively widespread, red salamanders typically inhabit slow-moving springs, seepages, creeks, and spring fed bogs in thick leaf litter or other appropriate cover. They rarely occur near large standing or flowing water bodies (Petranka 1998). Typically, they occur in mesic to relatively dry woodlands, but will also use open sites (Petranka 1998) such as meadows and pastureland. They are somewhat terrestrial, and nonbreeding adults may sometimes be found in forested areas adjacent to streams. Populations occur at elevations ranging from near sea level to greater than 1500 m although specimens are relatively scarce above 1200m (Petranka 1998). In the panhandle, restricted to ravines (Carr 1940). They lay a clutch of 50-100 eggs in fall and the eggs hatch in December-January in South Carolina. Eggs are attached to underside of rocks in water. The aquatic larval period lasts 27-33 months in Blue Ridge and Piedmont populations, 18-23 months in Coastal Plain of South Carolina (Semlitsch 1983). They are sexually mature at 4-5 years, maybe sooner for males. S. Smith 18Feb05

Elevation Mask: < 1500m

Hydrography Mask:

Freshwater Only

Slow Current Only

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

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Pasture/Hay
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 Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Offsite Hardwood Modifier
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	East Gulf Coastal Plain Southern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Southern Mesic Slope Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	Northern Atlantic Coastal Plain Dry Hardwood Forest
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 Coastal Plain Dry Upland Hardwood 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 - Hardwood 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
Wetlands	Atlantic Coastal Plain Sandhill Seep
Wetlands	Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall
Wetlands	East Gulf Coastal Plain Northern Seepage Swamp
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	Southern Appalachian Seepage Wetland
Wetlands	Southern Coastal Plain Herbaceous Seepage Bog
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Southern Piedmont Seepage Wetland
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.