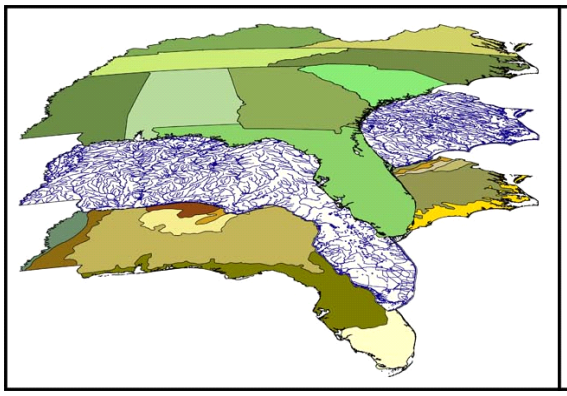


SOUTHEAST GAP ANALYSIS PROJECT

USGS gap BaSIC NARSAL

Species Modeling Report

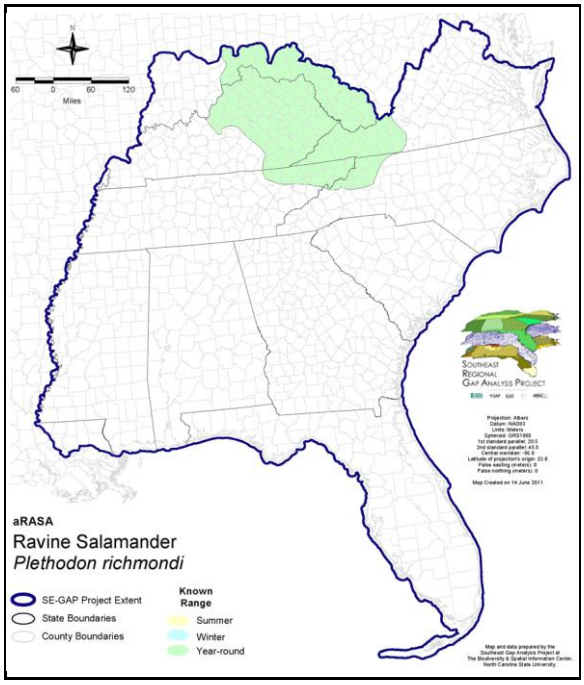
Ravine Salamander

Plethodon richmondi

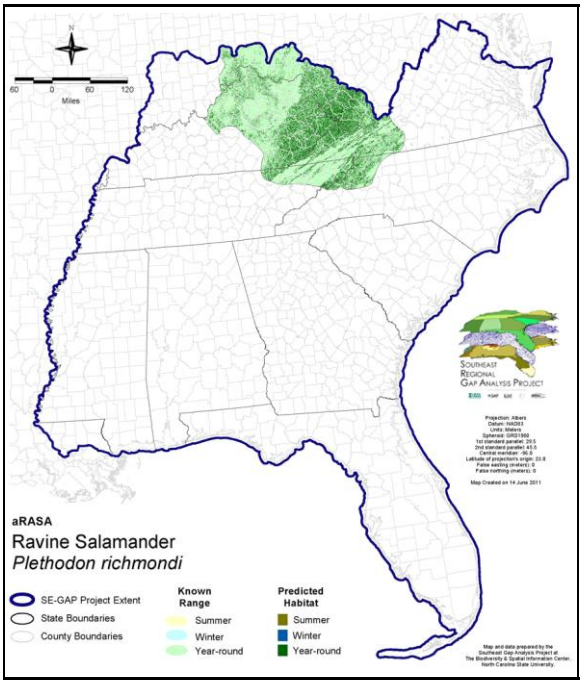
Taxa: Amphibian
Order: Caudata
Family: Plethodontidae

SE-GAP Spp Code: **aRASA**
ITIS Species Code: 173667
NatureServe Element Code: AAAAD12150

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_aRASA.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_aRASA.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=aRASA
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aRASA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---
State Status: KY (N), NC (W2)
NS Global Rank: G5
NS State Rank: KY (S5), NC (S3), TN (S2), VA (S4), WV (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	0.0	0	8,257.8	< 1	0.0	0	0.0	0
Status 2	0.0	0	37,795.5	1	0.0	0	0.0	0
Status 3	0.0	0	201,620.2	7	670.7	< 1	10,749.4	< 1
Status 4	15.4	< 1	0.0	0	0.0	0	0.0	0
Total	15.4	< 1	247,673.4	9	670.7	< 1	10,749.4	< 1

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	5,312.6	< 1	0.0	0	0.0	0
Status 3	0.0	0	7,616.6	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	12,929.2	< 1	0.0	0	0.0	0

	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	0.0	0	29,617.7	1	816.1	< 1
Status 3	0.0	0	8,219.8	< 1	30,158.6	1	4,291.2	< 1
Status 4	0.0	0	0.0	0	4,495.3	< 1	0.0	0
Total	0.0	0	8,219.8	< 1	64,271.5	2	5,107.3	< 1

	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	2,421.5	< 1	0.0	0	0.0	0
Status 2	0.0	0	3,155.5	< 1	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	42.9	< 1	0.0	0
Total	0.0	0	5,576.9	< 1	42.9	< 1	0.0	0

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	10,679.2	< 1
Status 2	0.0	0	0.0	0	76,697.4	3
Status 3	0.0	0	0.0	0	263,326.4	17
Status 4	2,224,608.0	80	256.7	< 1	2,233,898.3	80
Total	2,224,608.0	80	256.7	< 1	2,584,601.3	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: Strongly associated with rocky habitats, the ravine salamander lives in ravines typically covered in deciduous forest (Petranka 1998). They can be locally abundant in and around talus slopes and shaded outcrops. Wooded slopes with friable soil and large flat rocks are good habitat as well. They are rarely found in floodplains or on dry ridgelines (Petranka 1998). They move underground in mid-winter and during summer dry spells. They lay cluster of about 6 eggs in spring under rocks or in underground cavities. The larval stage is passed in the egg. Hatching occurs in August-September. Stacy Smith, 15April05

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	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern 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 Interior Low Plateau Dry-Mesic Oak Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier
Rock Outcrop	Central Interior Calcareous Cliff and Talus
Rock Outcrop	North-Central Appalachian Circumneutral Cliff and Talus
Rock Outcrop	Southern Appalachian Montane Cliff

CITATIONS:

Barbour, R. W. 1971. Amphibians and reptiles of Kentucky. Univ. Press of Kentucky, Lexington. x + 334 pp.

Behler, J. L., and F. W. King. 1979. The Audubon Society field guide to North American reptiles and amphibians. Alfred A. Knopf, New York. 719 pp.

Green, N. B., and T. K. Pauley. 1987. Amphibians and reptiles in West Virginia. University of Pittsburg Press, Pittsburg, Pennsylvania. xi + 241 pp.

Minton, S. A., Jr. 1972. Amphibians and reptiles of Indiana. Indiana Academy Science Monographs 3. v + 346 pp.

Petranka, J. W. 1998. Salamanders of the United States and Canada. Washington DC: Smithsonian Inst. Press.

Wilson, L. A. 1995. The Land Manager's Guide to the amphibians and reptiles of the South. Chapel Hill, NC: The Nature Conservancy.

For more information:: SE-GAP Analysis Project / BaSIC
127 David Clark Labs
Dept. of Biology, NCSU
Raleigh, NC 27695-7617
(919) 513-2853
www.basic.ncsu.edu/segap

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.