



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

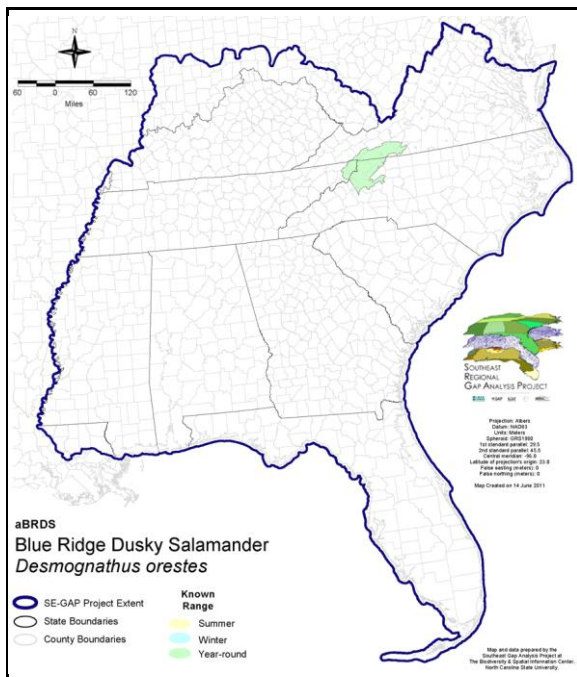
Blue Ridge Dusky Salamander

Desmognathus orestes

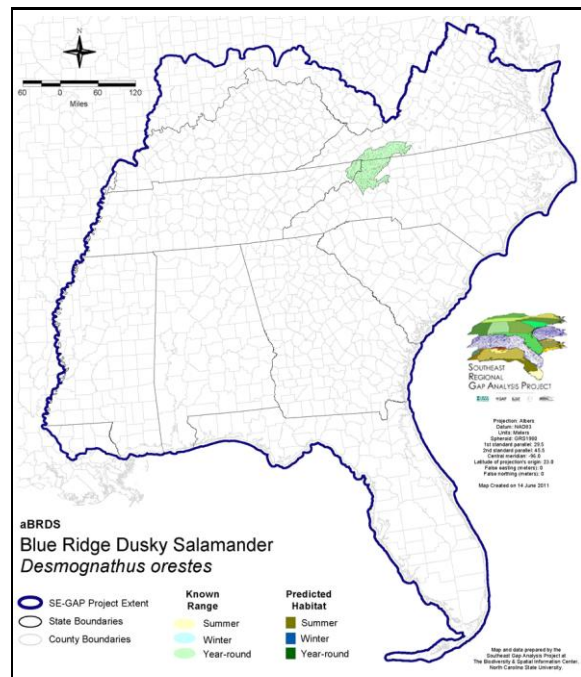
Taxa: Amphibian
 Order: Caudata
 Family: Plethodontidae

SE-GAP Spp Code: **aBRDS**
 ITIS Species Code: 550245
 NatureServe Element Code: AAAAD03150

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aBRDS_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---
 State Status: ---
 NS Global Rank: G4
 NS State Rank: NC (S3S4), TN (S3?), VA (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	0.0	0	674.4	< 1	0.0	0	0.0	0
Status 2	0.0	0	2,539.5	2	0.0	0	0.0	0
Status 3	0.0	0	14,381.6	13	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	17,595.5	16	0.0	0	0.0	0
	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	0.0	0	0.0	0	0.0	0
Status 3	0.0	0	1,564.9	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	1,564.9	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	630.5	< 1	0.0	0
Status 3	0.0	0	1,082.4	< 1	451.7	< 1	172.9	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	1,082.4	< 1	1,082.3	< 1	172.9	< 1
	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	0.0	0	156.6	< 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	11.5	< 1	0.0	0
Total	0.0	0	156.6	< 1	11.5	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	674.4	< 1		
Status 2	0.0	0	0.0	0	3,326.7	3		
Status 3	0.0	0	0.0	0	17,653.5	29		
Status 4	73,344.0	67	1.4	< 1	73,356.9	67		
Total	73,344.0	67	1.4	< 1	95,011.5	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 Blue Ridge dusky salamander inhabits wet rockfaces, seepage areas and the forest floor in and around the headwaters of mountain streams (Petranka 1998). At lower elevations and in winter, this salamander usually concentrates near seepage areas, springs, and small streams, but is more terrestrial at higher elevations and in wet weather. They are characteristic inhabitants of spruce-fir forests. This species is confined to mountainous forested habitats at the most northerly portion of the southern Appalachians in Tennessee, North Carolina and Virginia (Petranka 1998). Within its range, the Blue Ridge dusky salamander occurs on mountain peaks, but lower elevational limits are not well defined. Eggs are laid in wet rock crevices or under rocks, logs, or moss in seepage areas or near small streams. S. Smith 18Feb05

Hydrography Mask:

Freshwater Only

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

Selected Map Units:

Functional Group	Map Unit Name
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Forest/Woodland	Central and Southern Appalachian Spruce-Fir Forest
Forest/Woodland	Central Appalachian Oak and Pine 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 Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
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
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Southern Appalachian Seepage Wetland

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

Tilley, S. G., and M. J. Mahoney. 1996. Patterns of genetic differentiation in salamanders of the DESMOGNATHUS OCHROPHAEUS complex (Amphibia: Plethodontidae). Herpetological Monographs 10:1-41.

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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.