



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Shovelnose Salamander

Desmognathus marmoratus

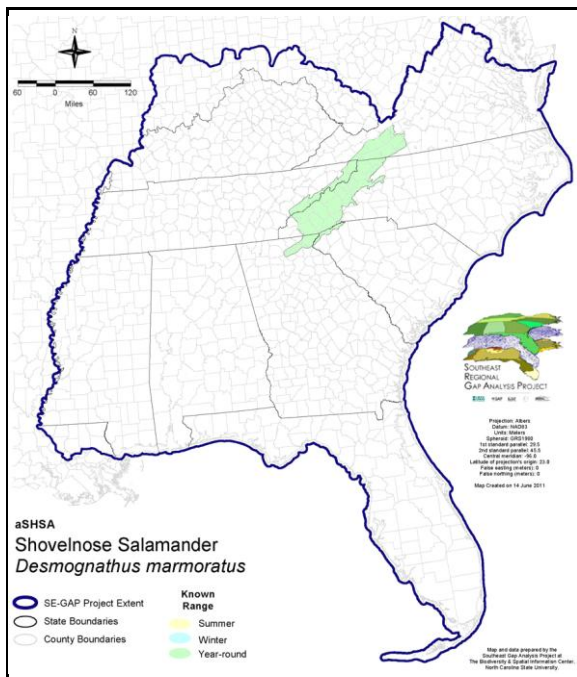
Taxa: Amphibian
 Order: Caudata
 Family: Plethodontidae

SE-GAP Spp Code: **aSHSA**

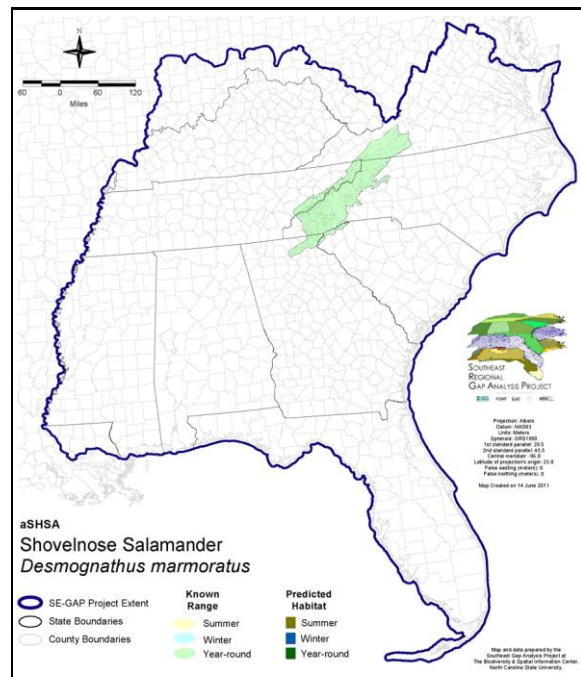
ITIS Species Code: 550398

NatureServe Element Code: AAAAD03170

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aSHSA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---
 State Status: VA (SC)
 NS Global Rank: G4
 NS State Rank: GA (S3), NC (S4), SC (S2), TN (S4), VA (S2)

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	1,002.3	< 1	0.0	0	0.0	0
Status 2	0.0	0	4,074.2	2	0.0	0	0.0	0
Status 3	0.0	0	36,695.8	22	0.0	0	< 0.1	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	41,772.3	25	0.0	0	< 0.1	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	15,320.5	9	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	865.2	< 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	16,185.7	10	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	744.8	< 1	517.4	< 1	0.0	0
Status 3	1,265.3	< 1	830.1	< 1	399.9	< 1	191.1	< 1
Status 4	0.0	0	0.0	0	17.6	< 1	0.0	0
Total	1,265.3	< 1	1,574.9	< 1	934.9	< 1	191.1	< 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	202.3	< 1	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	2.1	< 1	0.0	0
Status 4	0.0	0	0.0	0	4.4	< 1	0.0	0
Total	0.0	0	202.3	< 1	6.5	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	16,322.9 10			
Status 2	0.0	0	0.0	0	5,538.8 3			
Status 3	0.0	0	0.0	0	40,249.4 46			
Status 4	68,985.1	41	3.2	< 1	69,028.0 41			
Total	68,985.1	41	3.2	< 1	131,139.1 100			

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: Shovelnose salamanders are inhabitants of small to medium-sized mountain streams and spring runs. They are most commonly found in riffles and shallow, rocky streams with loose gravel and moderately fast-flowing water provide favorable conditions. Shovelnose salamanders are intolerant of siltation and need clean, cold, fast-flowing water. They are known from only a few watersheds within their geographic range. They lay 2-4 dozen eggs in June or July and attach them to the undersides of rocks or logs in main current of stream. Females stays with eggs during 2.5-month development. Their totally aquatic larvae metamorphose in one to three years. S. Smith 18Feb05

Elevation Mask: > 300m and < 1680m

Hydrography Mask:

Freshwater Only

Fast Current Only

Utilizes flowing water features with buffers of 30m from and unlimited into selected water features.

Selected Map Units:

Functional Group	Map Unit Name
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	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
Water	Open Water (Fresh)

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

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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.