



Species Modeling Report

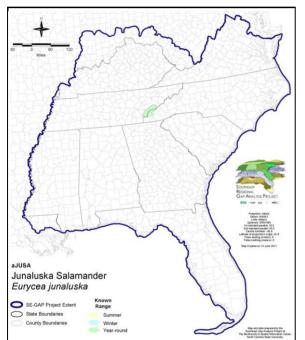
Junaluska Salamander

Eurycea junaluska

Taxa: Amphibian

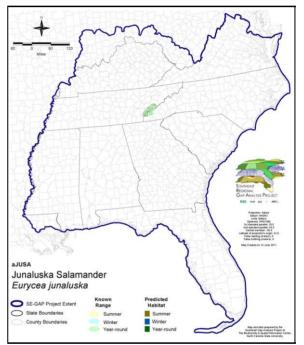
- Order: Caudata
- Family: Plethodontidae

KNOWN RANGE:



SE-GAP Spp Code: **aJUSA** ITIS Species Code: 173690 NatureServe Element Code: AAAAD05020

PREDICTED HABITAT:



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

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

 GAP Online Tool Link:
 http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=aJUSA

 Data Download:
 http://www.basic.ncsu.edu/segap/datazip/region/vert/aJUSA_se00.zip

PROTECTION STATUS:

Federal Status: ---State Status: NC (T), TN (D) NS Global Rank: G3 NS State Rank: NC (S2), TN (S2) Reported on March 14, 2011

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	1,369.6	3	0.0	0	0.0	0
Status 2	0.0	0	1,339.4	3	0.0	0	0.0	0
Status 3	0.0	0	9,033.2	20	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	11,742.2	27	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	11,662.6	26	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	0.0	0	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	11,662.6	26	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	632.0	1	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	0.0	0	0.0	0
Total	0.0	0	0.0	0	632.0	1	0.0	0
	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	3.2	< 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	0.0	0	0.0	0
Total	0.0	0	3.2	< 1	0.0	0	0.0	0
	Private Land - N	lo Res.		Water			Overa	all Total
	ha	%	ha	%			ha	%
Status 1	0.0	0	0.0	0			13,032.2	30
Status 2	0.0	0	0.0	0			1,974.6	4
Status 3	0.0	0	0.0	0			9,033.2	41
Status 4	11,061.2	25	0.9	< 1			11,062.1	25
Total	11,061.2	25	0.9	< 1			35,102.1	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: The Junaluska salamander is a species of special concern, found along the border of Tennessee and North Carolina and is known only from the Cheoah River and its tributaries, Santeetlah Creek and Tallulah Creek in Graham Co. The distribution of this salamander is patchy. It is restricted to lower slopes and valleys of the mountains with populations concentrated around large creeks (Petranka 1998). It shelters under rocks, logs and other debris in moist conditions near streams (Petranka 1998). Adults are found at elevations between about 360-610 m. They can be found on roads on rainy nights. Larval period usually exceeds two years (Bruce 1982). Stacy Smith, 15April05

Elevation Mask: > 359m and < 730m

Hydrography Mask:

Freshwater Only

Utilizes flowing water features with buffers of 120m from and 30m into selected water features.

ected Map Units:					
Functional Group	Map Unit Name				
Forest/Woodland	Appalachian Hemlock-Hardwood 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				
Water	Open Water (Fresh)				
Wetlands	Southern and Central Appalachian Bog and Fen				
Wetlands	Southern Appalachian Seepage Wetland				

CITATIONS: 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.

Bruce, R. C. 1982. Egg laying, larval periods, and metamorphosis of EURYCEA BISLINEATA and E. JUNALUSKA at Santeetlah Creek, North Carolina. Copeia 1982:755-762.

Conant, R. and J. T. Collins. 1991. A field guide to reptiles and amphibians:eastern and central North America. Third edition. Houghton Mifflin Co., Boston, Massachusetts. 450 pp.

Jacobs, J. F. 1987. A preliminary investigation of geographic genetic variation and systematics of the two-lined salamander, EURYCEA BISLINEATA (Green). Herpetologica 43:423-446.

Martof, B. S., W. M. Palmer, J. R. Bailey, and J. R. Harrison, III. 1980. Amphibians and reptiles of the Carolinas and Virginia. University of North Carolina Press, Chapel Hill, North Carolina. 264 pp.

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

Ryan, T. J. 1997. Larva of EURYCEA JUNALUSKA (Amphibia:Caudata:Plethodontidae), with comments on distribution. Copeia 1997:210-215.

Sever, D. M. 1983. EURYCEA JUNALUSKA. Catalogue of American Amphibians and Reptiles 321:1-2.

Sever, D. M. 1989. Comments on the taxonomy and morphology of two-lined salamanders of the EURYCEA BISLINEATA complex. Bulletin of the Chicago Herpetological Society 24:70-74.

Sever, D. M., H. A. Dundee, and C. D. Sullivan. 1976. A new Eurycea (Amphibia:Plethodontidae) from southwestern North Carolina. Herpetologica 32:26-29.

Compiled: 15 September 2011

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

This data was compiled and/or developed by the Southeast GAP Analysis Project at The Biodiversity and Spatial Information Center, North Carolina State University.