

SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Peaks of Otter Salamander

Plethodon hubrichti

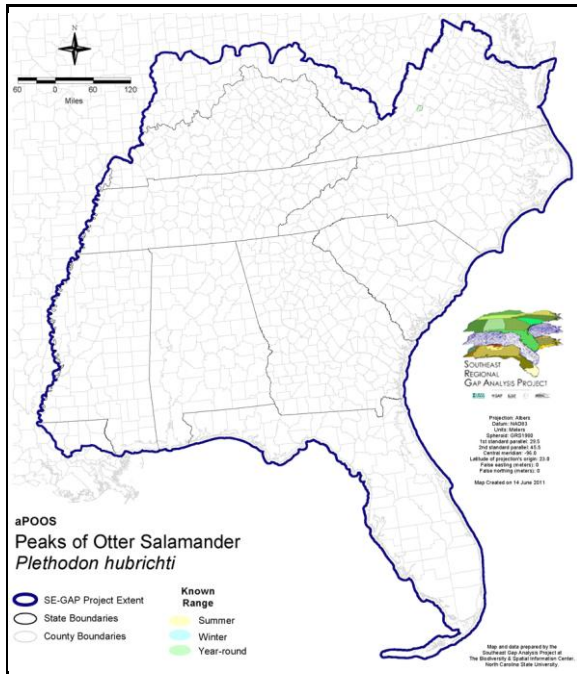
Taxa: Amphibian
 Order: Caudata
 Family: Plethodontidae

SE-GAP Spp Code: **aPOOS**

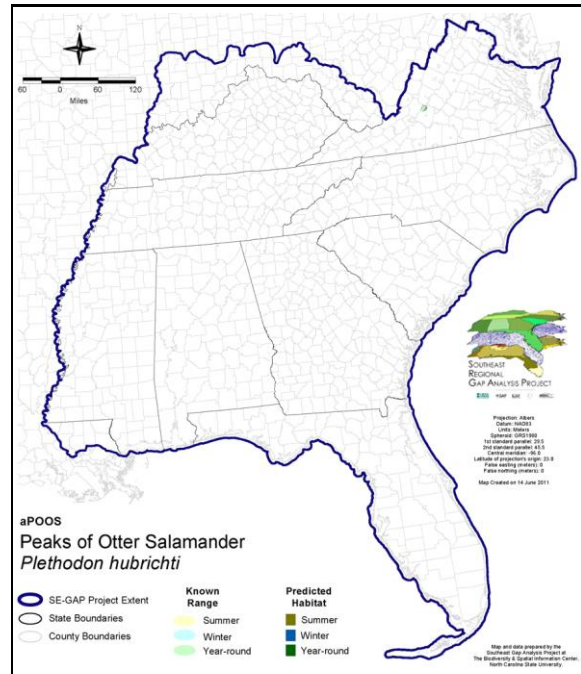
ITIS Species Code: 173658

NatureServe Element Code: AAAAD12290

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/aPOOS_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---
 State Status: VA (SC)
 NS Global Rank: G2
 NS State Rank: 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	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	1,437.8	30	0.0	0	0.0	0
Status 3	0.0	0	1,354.0	28	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	2,791.7	58	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	650.9	14	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	650.9	14	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	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	0.0	0	0.0	0	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	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	0.0	0	0.0	0	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0 0			
Status 2	0.0	0	0.0	0	1,437.8 30			
Status 3	0.0	0	0.0	0	2,004.8 70			
Status 4	6.8	< 1	0.0	0	6.8 < 1			
Total	6.8	< 1	0.0	0	3,449.4 100			

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 Peaks of Otter Salamander is closely related to other relict mountaintop Plethodons (*P. shenandoah* and *P. nettingi*). They are locally abundant in mature hardwood forest, mainly on north-facing slopes and in coves in the Peaks of Otter region of west-central Virginia. They are also found in shaded ravines and rhododendron thickets. They are generally found above 845 m (Petranka 1998). They can be found primarily under downed logs and rocks, and among wet leaf litter, in middle to late successional stages of oak-maple woodland (Bury et al. 1980, Mitchell 1991). They often climb into vegetation, especially ferns, in June-September (Kramer et al. 1993). They may be vulnerable to habitat fragmentation. They are terrestrial breeders. Stacy Smith, 15April05

Elevation Mask: > 845m and < 2500m

Selected Map Units:

Functional Group	Map Unit Name
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

- CITATIONS:** Bury, R. B., C. K. Dodd, Jr., and G. M. Fellers. 1980. Conservation of the Amphibia of the United States: a review. U.S. Fish and Wildlife Service, Washington, D.C., Resource Publication 134. 34 pp.
- Highton, R. 1986. *Plethodon hubrichti*. Catalogue of American Amphibians and Reptiles 393: 1-2.
- Kramer, P., N. Reichenbach, M. Hayslett, and P. Sattler. 1993. Population dynamics and conservation of the Peaks of Otter salamander, *Plethodon hubrichti*. Journal of Herpetology 27:431-435.
- Mitchell, J. C. 1991. Amphibians and reptiles. Pages 411-76 in K. Terwilliger (coordinator). Virginia's Endangered Species: Proceedings of a Symposium. McDonald and Woodward Publishing Company, Blacksburg, Virginia.
- Petranka, J. W. 1998. Salamanders of the United States and Canada. Washington DC: Smithsonian Inst. Press.

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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.